## **Cognitive Processing In Bilinguals**

This book sets a high standard for rigor and scientific approach to the study of bilingualism and provides new insights regarding the critical issues of theory and practice, including the interdependence of linguistic knowledge in bilinguals, the role of socioeconomic status, the effect of different language usage patterns in the home, and the role of schooling by single-language immersion as opposed to systematic training in both home and target languages. The rich landscape of outcomes reported in the volume will provide a frame for interpretation and understanding of effects of bilingualism for years to come.

The overall aim of the current study was to investigate 1) whether typically-developing monolingual/bilingual children share the same cognitive processes for language performance and whether the children employ these cognitive processes to the same degree, and 2) whether these shared mechanisms differ by language experience (monolingual exposure as opposed to bilingual exposure). This work will contribute to efforts to determine which cognitive processes underlie language abilities, and how these processes are influenced by language experiences in bilingual environments. The findings may serve to further determine which cognitive processes could identify language impairment in bilingual children and determine whether bilingualism would be beneficial for bilingual children with language impairment. Typically developing children at two different locations, State College and Toronto, participated in the cross-sectional study. One group of these children was 22 monolinguals (N = 15 in State College and N = 7 in Toronto). The other group was 20 bilinguals (N = 7 in State College and N = 13 in Toronto). Accuracy and reaction times were obtained from three cognitive tasks: the Serial Reaction time task, Attention Network Test, and Visual Choice Decision task. Each task was used to measure procedural learning, attention, and processing speed ability, respectively. Hierarchical linear regression models suggested that Procedural Learning predicted Core Language Score and Concepts and Following Directions scores in the bilingual group but not in the monolingual group. Among the three attentional network measures, Orienting predicted Word Classes-Receptive across groups in a similar manner. Processing Speed predicted Recalling Sentences in monolingual children but not in bilingual peers. These cognitive processes did not differ by language experience, in comparison between the two groups. However, a post hoc analysis suggested that within the bilingual group, variability of dual language experience changes the relationship

This collection of 33 papers represents the most current thinking and research on the study of cognitive processing in bilingual individuals. The contributors include well-known figures in the field and promising new scholars, representing four continents and work in dozens of languages. Instead of the social, political, or educational implications of bilingualism, the focus is on how bilingual people (mostly adults) think and process language.

This volume provides a multifaceted view of certain key themes in multilingualism research today and offers future directions for this research area in the context of the multilingual development of individuals and societies. The selection of studied languages is eclectic (e.g. Amondawa, Cantonese, Bulgarian, Dene, Dutch, Eipo, Frisian, German, Mandarin Chinese, M?ori, Russian, Spanish, and Yukatek, among others), they are typologically diverse, and they are contrasted from a variety of perspectives, such as cognitive development, aging, acquisition, grammatical and lexical processing, and memory. This collection also illustrates novel insights into the linguistic relativity debate that multilingual studies can offer, such as new and revealing perspectives on some well-known topics (e.g. colour categorisation or language transfer). The critical and comprehensive discussions of theoretical and methodological considerations presented in this volume are fundamental for numerous current, future, empirical and interdisciplinary studies of linguistic diversity, linguistic typology, and multilingual processing.

The Handbook of Bilingualism provides state-of-the-art treatments of the central issues that arise in consideration of the phenomena of bilingualism ranging from the representation of the two languages in the bilingual individual's brain to the various forms of bilingual education, including the status of bilingualism in each area of the world. Provides state-of-the-art coverage of a wide variety of topics, ranging from neuro- and psycho-linguistic research to studies of media and psychological counseling. Includes latest assessment of the global linguistic situation with particular emphasis on those geographical areas which are centers of global conflict and commerce. Explores new topics such as global media and mobile and electronic language learning. Includes contributions by internationally renowned researchers from different disciplines, genders, and ethnicities.

The aim of this volume is to integrate the most recent research in the cognitive processing of Chinese and related Asian languages (i.e. Japanese and Korean) into a single academic reference. Because so much more was learned about the topic over the past several years, the proposed volume is intended to provide something like a state-of-art review and to capture what is currently going on in a new and rapidly expanding field.

During the last years a significant number of papers, books, and monographs devoted to speech and language impairments in bilingual children have been published. Different aspects and questions have been approached and today we have a relatively good understanding of the specific characteristics of the speech and language difficulties potentially observed in bilingual and multilingual children. This interest has been significantly resulted from the potential developmental and educational consequences of bilingualism. Our understanding of the communication disorders in adult populations is notoriously more limited, even though over 50% of the adult population can speak at least another language in addition to his/her native language. That simply means that over 50% of the communication disorders observed in adults are bilingual speech and language disorders: bilingual aphasias, bilingual dementias, bilingual stuttering, etc. This book was written with the specific purpose of filling this gap. The major purpose of this book has been to integrate the state of the art on the different aspects of the communication disorders observed in adult bilinguals. The book is organised in such a way that an integrated perspective of bilingualism is presented: from the normal conditions to the pathology; from the clinical descriptions to the rehabilitation issues; from the biological factors to the cultural variables.

The collected essays in this volume present an overview and state-of-the-field of traditional and recently developed methodological approaches to the study of bilingual reading comprehension. It critically reviews and examines major findings from classical behavioral approaches such as the visual moving window, rapid-serial visual presentation (RSVP), and eye-tracking, as well as newly developing neuropsycholinguistic methodologies such as Event-Related Potentials (ERPS), and Functional Magnetic Resonance Imaging (fMRI). Written to address a timely topic, Methods in Bilingual Reading Comprehension Research updates the field of bilingual reading by critically examining the contributions of the various behavioral and technologically-based reading techniques used to understand psychological processes underlying written language comprehension. Each topic is covered first from a theoretical, and then from an experimental, viewpoint. Moreover, the volume contributes to the development and establishment of Bilingual Reading as a subfield of bilingual sentence processing and fills a significant gap in the literature on bilingual language processing and thought. Significantly, Methods in Bilingual Reading Comprehension Research presents an overall view of some of the typical psycholinguistic techniques and approaches, as well as proposing other possible tasks that may prove viable in investigating such theoretical issues as bilingual lexical ambiguity resolution, or how bilingual speakers might resolve multiple sources of potentially conflicting information as they comprehend sentences and discourse during the communicative process. In addition, to aid reader comprehension and encourage readers to acquire "hands on" experience in the creation and development of experiments in the realm of bilingual reading research, each chapter includes a list of key words, suggested student research projects, and questions to both help the reader review the chapter and expand upon the reading. With its comprehensive coverage of a cruc

This work has a uniquely cognitive-functional perspective on bi-lingualism. This means that it makes a clear distinction between real world and projected world. Information conveyed by language must be about the projected world. Both the experimental results and the systematic claims in this volume call for a weak form of whorfianism. The authors examine too some relatively unexplored issues of bilingualism, such as, among others, gender systems in the bilingual mind, synergic concepts, and ontological categorization. A collection of papers that explore bilingual children coping with two language systems.

The Psycholinguistics of Bilingualism presents a comprehensive introduction to the foundations of bilingualism, covering language processing, language acquisition, cognition and the bilingual brain. This thorough introduction to the psycholinguistics of bilingualism is accessible to non-specialists with little previous exposure to the field Introduces students to the methodological approaches currently employed in the field, including observation, experimentation, verbal and computational modelling, and brain imaging Examines spoken and written language processing, simultaneous and successive language acquisition, bilingual memory and cognitive effects, and neurolinguistic and neurocomputational models of the bilingual brain Written in an accessible style by two of the field's leading researchers, together with contributions from internationally-renowned scholars Featuring chapter-by-chapter research questions, this is an essential resource for those seeking insights into the bilingual mind and our current knowledge of the cognitive basis of bilingualism

This book includes a basic overview of areas of cognition and language processing relevant to the field of communication disorders and provides examples of theoretical approaches to problems and issues in communication disorders.

A new model of bilingualism unifying psycholinguistics and sociolinguistics that explains how multiple factors interact within and across bilingual minds.

This volume of proceedings contains papers, posters, and summaries of symposia presented at the leading conference that brings cognitive scientists together to discuss issues of theoretical and applied concern. For researchers and educators in the field.

Arturo Hernandez presents the results of 25 years of research into the factors that might help us to understand how two (or more) languages are stored in one brain. It is clear that the brain is not egalitarian—some languages are privileged and others are not, but why?

In the past 30 years, the study of bilingualism processing has been conducted independently by two fields, psycholinguistics and sociolinguistics. This volume merges these two fields, addressing one of the tough problems dividing researchers in bilingualism, conceptually as well as methodologically. Joel Walters proposes a new approach to bilingualism processing--the Sociopragmatic-Psycholinguistic (SPPL) Model--which presents language as a social phenomenon. The author accomplishes this by identifying and organizing evidence from a wide range of linguistic disciplines, merging sociopragmatics, discourse analysis, and ethnography with social cognition, psycholinguistics, and neuroscience. By extension, the author offers convincing explanations of how related fields can profit from a comprehensive bilingual processing model. As a result, Joel Walters delivers a well-organized, comprehensive model that is thought through at every level. This book appeals to graduate students, scholars in the fields of linguistics, bilingualism, second language acquisition, psycholinguistics, and sociolinguistics. It is useful to researchers for its comprehensiveness and methodological acumen and may be appropriate as a supplementary textbook for graduate-level courses in bilingualism or for seminars on similar topics.

First Published in 1996. Routledge is an imprint of Taylor & Francis, an informa company.

How are words organized in the bilingual mind? How are they linked to concepts? How do bi- and multilinguals process words in their multiple languages? The first aim of this volume is to offer up-to-date answers to these questions. Its second aim is to provide readers with detailed step-by-step introductions to a variety of methodological approaches used to investigate the bilingual lexicon, from traditional neurocognitive and psycholinguistic approaches to the more recent ones that examine language use in context.

This edited volume covers an array of the most relevant topics in translation cognition, taking different approaches and using different research tools. It explores theoretical and methodological issues using case studies and examining their practical and pedagogical implications. It is a valuable resource for translation studies scholars, graduate students and those interested in translation and translation training,

enabling them to conceptualize translation cognition, in order to enhance their research methods and designs, manage innovations in their translation training or simply understand their own translation behaviours.

The aim of this volume is to integrate the current literature about the psychological dimensions of bilingualism: that is, to analyze psychological, subjective, and internal perspectives on bilingualism. What is the internal world of bilinguals like? How do they perceive the world and how do they think? What are the advantages and disadvantages of being bilingual? How does bilingualism interact with personality? In what way does being bilingual impact the aging mind? Renowned and emerging scholars alike explore these questions in the collected chapters. The organization of the book features four main component parts: (1) the inner cognitive world of the bilingual mind (2) bilingual language representation, and (3) bilingualism across the lifespan, and 4) bilingual cognitive and personality dimensions. Taken collectively, the included chapters provide a multidimensional and up-to-date perspective on bilingual studies, specifically concentrating on the cognitive and emotional dimensions of the individual. Chapter topics include: Conceptual Metaphor Theory Bilingual Figurative Language Processing Aging in Bilinguals Psychopathology in Bilinguals Personality Traits in Bilinguals Addressing the growing demand for bilingual research, this collection provides a timely and much needed perspective on the bilingual as an individual, exploring his/her internal world and a range of phenomena, including emotional word processing, personality traits, language effects on the mind, and cognitive effects of bilingualism. As such, it will appeal to a wide range of readers across various intellectual and professional arenas, including cognitive psychologists, personality psychologists, psychologists, educational psychologists and second language teachers, among others.

How is language acquired when infants are exposed to multiple language input from birth and when adults are required to learn a second language after early childhood? How do adult bilinguals comprehend and produce words and sentences when their two languages are potentially always active and in competition with one another? What are the neural mechanisms that underlie proficient bilingualism? What are the general consequences of bilingualism for cognition and for language and thought? This handbook will be essential reading for cognitive psychologists, linguists, applied linguists, and educators who wish to better understand the cognitive basis of bilingualism and the logic of experimental and formal approaches to language science.

The study of bilingualism has charted a dramatically new, important, and exciting course in the 21st century, benefiting from the integration in cognitive science of theoretical linguistics, psycholinguistics, and cognitive psychology (especially work on the higher-level cognitive processes often called executive function or executive control). Current research, as exemplified in this book, advances the study of the effects of bilingualism on executive function by identifying many different ways of being bilingual, exploring the multiple facets of executive function, and developing and analyzing tasks that measure executive function. The papers in this volume (21 chapters), by leading researchers in bilingualism and cognition, investigate the mechanisms underlying the effects (or lack thereof) of bilingualism on cognition in children, adults, and the elderly. They take us beyond the standard, classical, black-and-white approach to the interplay between bilingualism and cognition by presenting new methods, new findings, and new interpretations.

Psycholinguistics – the field of science that examines the mental processes and knowledge structures involved in the acquisition, comprehension, and production of language – had a strong monolingual orientation during the first four decades following its emergence around 1950. The awareness that a large part of mankind speaks more than one language – that this may impact both on the way each individual language is used and on the thought processes of bilinguals and multilinguals, and that, consequently, our theories on human linguistic ability and its role in non-linguistic cognition are incomplete and, perhaps, false – has led to a steep growth of studies on bilingualism and multilingualism since around 1995. This textbook introduces the reader to the field of study that examines language acquisition, comprehension and production from the perspective of the bilingual and multilingual speaker. It furthermore provides an introduction to studies that investigate the implications of being bilingual on various aspects of non-linguistic cognition. The major topics covered are the development of language in children growing up in a bilingual environment either from birth or relatively soon after, late foreign language learning, and word recognition, sentence comprehension, speech production, and translation processes in bilinguals. Furthermore, the ability of bilinguals and multilinguals to generally produce language in the "intended" language is discussed, as is the cognitive machinery that enables this. Finally, the consequences of bilingualism and multilingualism for non-linguistic cognition and findings and views regarding the biological basis of bilingualism and multilingualism are presented. The textbook's primary readership are students and researchers in Cognitive Psychology, Linguistics, and Applied Linguistics, but teachers of language and translators and interpreters who wish to become better informed on the cognitive and biological basis of bilingualism and multilingualism will also benefit from it.

The past fifteen years have witnessed an increasing interest in the cognitive study of the bilingual. A major reason why psychologists, psycholinguists, applied linguists, neuropsychologists, and educators have pursued this topic at an accelerating pace presumably is the acknowledgment by increasingly large numbers of language researchers that the incidence of monolingualism in individual language users may be lower than that of bilingualism. This alleged numerical imbalance between monolinguals and bilinguals may be expected to become larger due to increasing international travel through, for instance, tourism and trade, to the growing use of international communication networks, and to the fact that in some parts of the world (i.e., Europe), the borders between countries are effectively disappearing. In addition to the growing awareness that bilinguals are very common and may even outnumber monolinguals, there is the dawning understanding that the bilingual mind is not simply the sum of the cognitive processes associated with each of the two monolingual modes, and that the two languages of bilingual may interact with one another in complicated ways. To gain a genuinely universal account of human cognition will therefore require a detailed understanding of language use by both pure monolinguals as well as bilinguals, unbalanced and balanced, and of the representations and processes involved. These two insights, that bilingualism is a common human condition and that it may influence cognition, were presumably instrumental in putting bilingualism on the agendas of many researchers of cognition and language in recent years. But other reasons may have played a role too: The study of bilingualism also provides a unique opportunity to study the relation between language and thought. A final reason for the growing interest in this area of research is the awareness that bilingualism may confer the benefit of broadening one's scope beyond the limits of one's own country and culture. This book serves as an excellent int

This volume provides an overview of a relatively neglected branch of connectionism known as localist connectionism. The singling out of localist connectionism is motivated by the fact that

some critical modeling strategies have been more readily applied in the development and testing of localist as opposed to distributed connectionist models (models using distributed hidden-unit representations and trained with a particular learning algorithm, typically back-propagation). One major theme emerging from this book is that localist connectionism currently provides an interesting means of evolving from verbal-boxological models of human cognition to computer-implemented algorithmic models. The other central messages conveyed are that the highly delicate issue of model testing, evaluation, and selection must be taken seriously, and that model-builders of the localist connectionist family have already shown exemplary steps in this direction.

\*\*Honored as a 2013 Choice Outstanding Academic Title\*\* Comprising state-of-the-art research, this substantially expanded and revised Handbook discusses the latest global and interdisciplinary issues across bilingualism and multilingualism. Includes the addition of ten new authors to the contributor team, and coverage of seven new topics ranging from global media to heritage language learning Provides extensively revised coverage of bilingual and multilingual communities, polyglot aphasia, creolization, indigenization, linguistic ecology and endangered languages, multilingualism, and forensic linguistics Brings together a global team of internationally-renowned researchers from different disciplines Covers a wide variety of topics, ranging from neuro- and psycho-linguistic research to studies of media and psychological counseling Assesses the latest issues in worldwide linguistics, including the phenomena and the conceptualization of 'hyperglobalization', and emphasizes geographical centers of global conflict and commerce

This edited volume represents state of the field research linking cognition and second language acquisition, reflecting the experience of the learner when engaged in noticing, input/output processing, retrieval, and even attrition of target forms. Contributions are both theoretical and practical, describing a variety of L1, L2 and L3 combinations from around the world as observed in spoken, written, and computer-mediated contexts. The book relates conditions of language, task, medium or environment to how learners make decisions about language, with discussions about the application or efficacy of these conditions on linguistic success and development, and pedagogical implications.

Written as an introductory text from a crossdisciplinary perspective, this book covers individual and societal concepts in minority and majority languages.

A comprehensive and interdisciplinary approach to the study of memory, language and cognitive processing across various populations of bilingual speakers.

This important text provides a general overview of the methods and theories used in the broad domain of bilingualism. The unique interdisciplinary approach, which is reflected in the various topics covered, gives students a global picture of the field. Topics range from early childhood intellectual development to educational and social-cognitive challenges to the maturing bilingual brain. Important developing areas such as cognitive aging, creativity, the social and cultural context perspective, communication disorders and sentence processing are also covered within the volume. This text is aimed towards undergraduate courses and graduate courses in psycholinguistics, especially those with an emphasis on bilingualism or second language learning. This collection brings together leading names in the field of bilingualism research to celebrate the 25th anniversary of the Studies in Bilingualism series. Over the last 25 years the study of bilingualism has received a tremendous amount of attention from linguists, psychologists, cognitive scientists, and neuroscientists. The breadth of coverage in this volume is a testament to the many different aspects of bilingualism that continue to generate phenomenal interest in the scholarly community. The bilingual experience is captured through a multifaceted prism that includes aspects of language and literacy development in child bilinguals with and without developmental language disorders, language processing and mental representations in adult bilinguals across the lifespan, and the cognitive and neurological basis of bilingualism. Different theoretical approaches – from generative UG-based models to constructivist usage-based models – are brought to bear on the nature of bilingual linguistic knowledge. The end result is a compendium of the state-of-the-art of a field that is in constant evolution and that is on an upward trajectory of discovery.

How and why do all children learn language? Why do some have difficulties while others are early language learners? What are the consequences of early bilingualism? Is it possible to reach native-like competence in a foreign language? Although we still cannot fully answer these questions, research during the last two decades has begun to solve some pieces of the puzzle. This book proposes an interdisciplinary collection of writings from some of the best specialists across several fields in cognitive science, offering a wide sample of recent advances in the study of first language acquisition, bilingualism, second language acquisition, and disorders of oral language. It is addressed to all researchers and students interested in language acquisition, as well as to teachers, clinicians and parents, who will find therein many new findings and varied methodological approaches, as well as challenging questions that are still debated and in need of further research.

Cognitive Processing in BilingualsElsevier

Research on bilingual language processing reveals an important role for control processes that enable bilinguals to negotiate the potential competition across their two languages. The requirement for control that enables bilinguals to speak the intended language and to switch between languages has also been suggested to confer a set of cognitive consequences for executive function that extend beyond language to domain general cognitive skills. Many recent studies have examined aspects of how cognitive control is manifest during bilingual language processing, how individual differences in cognitive resources influence second language learning and performance, and the range of cognitive tasks that appear to be influenced by bilingualism. However, not all studies demonstrate a bilingual advantage in all tasks that tap into cognitive control. Indeed, many questions are unanswered that are critical to our understanding of bilingual control: What aspects of cognitive control are enhanced for proficient bilinguals? How are individual differences in cognitive control related to language acquisition, proficiency, or professional translation skill? How does the language environment affect concurrent processing? How exactly does language control come about in tasks such as speech production, switching between languages, or translation? When and how does inhibitory processing support language control? The focus of this Research Topic is on executive control and bilingualism. The goal is to have a broad scope that includes all of these issues. We seek empirical contributions using different methodologies including behavioral, computational and neuroscience approaches. We also welcome theoretical contributions that provide detailed discussion of models or mechanisms that account for the relationship between bilingualism and cognitive control. We aim to provide a platform for new contributions that represent a state-of-the art overview of approaches to cognitive control in bilingualism. We hope that this Research

Topic will enable the field to formulate more precise hypotheses and causal models on the relation between individual differences, cognitive control and bilingual language processing. Foundations of Bilingual Memory provides a valuable update to the field of bilingual memory and offers a new psychological perspective on how the bilingual mind encodes, stores, and retrieves information. This volume emphasizes theoretical issues, such as classic memory approaches, Compound-Coordinate Bilingualism, Bilingual Dual Coding Theory, and Working Memory, about which relatively little has been written in the bilingual domain. Also covered are: • The neuropsychology of bilingual memory • Applied issues (such as false memories and bilingualism, emotion and memory) • Empirical findings in support of the uniqueness of the different memory systems of the bilingual individual • Connectionist models of bilingualism The volume represents the first book of its kind, in stressing a memory perspective with regards to bilingual speakers. It can serve as an advanced text for both undergraduate and graduate level students and it will be of great interest to the growing number of bilingual teachers and university classes interested in understanding the bilingual mind, as well as in preparing teachers to work with the bilingual individual.

Copyright: b0ad1d89cc7bb3e1af769c2a6eeb4e53