Cognitive Processing In Bilinguals

Examines the development and use of representation in children, from the viewpoints of various expert psychologists worldwide. They describe how children develop representations and how these are used in systematic ways to make sense of and interpret the social and physical world and to communicate with others. Coverage includes emotional and social representations, symbolic development, representation of spoken language and more.

This book offers a broad-based account of bilingual processing, drawing on research findings and current thinking from various domains across cognitive science. The theoretical approach adopted is the Modular Cognition Framework in which language processing is characterized as an interaction between dedicated linguistic systems and the other modules of the human mind. The latter provide the 'internal context' of bilingual processing. This internal context involves goals, value, emotion, self, and representations of the external context. The book combines all these elements into a coherent picture of the bilingual's internal context and the way it shapes processing. It then shows how some central concepts in cognitive science and bilingualism fit in with – and follow from – this view. These concepts include working memory, consciousness, attention, effort, codeswitching, and the possible cognitive benefits of being bilingual. The book should be of interest to professionals in the field as well as postgraduate students and advanced undergraduates.

The human mind is a marvelous device that effectively regulates mental activities and facilitates amendable cognitive behaviour across several domains such as attention, memory, and language processing. For multilinguals, the mind also represents and manages more than one language system—a mental exercise which may lead to cognitive benefits. Through an in-depth exploration of these issues, Cognitive Control and Consequences of Multilingualism presents original studies and new perspectives which are cutting-edge and feature traditional and innovative methodologies such as ERPs, fMRIs, eye-tracking, picture- and numeral naming, the Simon, flanker, and oculomotor Stroop tasks, among others. The studies in this book investigate prominent themes in multilingual language control for both comprehension and production and probe the notion of a cognitive advantage that may be a result of multilingualism. The growing number of researchers, practitioners, and students alike will find this volume to be an instrumental source of readings that illuminates how one mind accommodates and controls multiple languages and the consequences it has on human cognition in general.

Lexical Processing and Second Language Acquisition provides a comprehensive overview of research on second language lexical processing, integrating converging research and perspectives from Cognitive Science and Second Language Acquisition. The book begins by introducing the dominant issues addressed by research in the field in cognitive science and discussing the relevant models in the literature. It later moves toward exploring the different factors that impact second language lexical processing as well as cognitive neuroscientific approaches to the study of the issues discussed throughout the book. A concluding chapter offers a global summary of the key issues and research strands, in addition to directions for future research, with a list of recommended readings providing students and researchers with avenues for further study.

The Cambridge Handbook of Bilingual Processing

Bilingual Influence on Cognitive Processes Related to Linguistic Abilities in School-age Children

From Thoughts to Digitalk

Processing and typological perspectives

Cognitive Aspects of Bilingualism

Cognitive Processing in Bilinguals

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.

How does a human acquire, comprehend, produce and control multiple languages with just the power of one mind? What are the cognitive consequences of being a bilingual? These are just a few of the intriguing questions at the core of studying bilingualism from psycholinguistic and neurocognitive perspectives. Bringing together some of the world's leading experts in bilingualism, cognitive psychology and language acquisition, The Cambridge Handbook of Bilingual Processing explores these questions by presenting a clear overview of current theories and findings in bilingual processing. This comprehensive handbook is organized around overarching thematic areas including theories and methodologies, acquisition and development, comprehension and representation, production, control, and the cognitive consequences of bilingualism. The handbook serves as an informative overview for researchers interested in cognitive bilingualism and the logic of theoretical and experimental approaches to language science. It also functions as an instrumental source of readings for anyone interested in bilingual processing.

The study of bilingualism and all of its aspects – from theory and models to social approaches and their practical applications – forms the cornerstone of the 2nd edition of this work. The chapters cover the latest advancements in the domains of psycholinguistics, neuroscience, creativity, and executive functioning. Contributions, new to this edition, offer the reader the most up-to-date research on lifespan and developmental issues. The work also provides insight into how human language is processed by all, not just by bilingual and multilingual speakers. This text is ideal for senior undergraduate and graduate courses in psycholinguistics and the psychology of language, especially those with an emphasis on bilingualism or second language learning.

Sets out state-of-the-art methodological and theoretical advancements to shed light on how bilingual speakers comprehend ambiguous information.

Translanguaging and the Bilingual Brain

Development and Use

The state of the science across its subfields

Bilingualism Across the Lifespan

Cognitive Processing of the Chinese and the Japanese Languages

Language Development and Disorders in Spanish-speaking Children

Cognitive Processing in BilingualsElsevier

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 exposure explained processing speed but did not explain the other measures. We conclude that dual language experience changes the relationship between cognitive processes and language abilities but some cognitive processes such as procedural learning might be less modified by language experience than other cognitive processes such as processing speed. The future studies should focus on whether procedural learning can be used to identify language impairment and whether an advantage of processing speed could be observed in bilingual children with language impairment. These lines of research would help us to develop diagnostic tools as well as intervention in bilingual settings.

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.

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.

Bilingual Lexical Ambiguity Resolution

Language Processing in Bilinguals

Memory, Language, and Bilingualism

To be Or Not to be Bilingual

The Internal Context of Bilingual Processing

For decades, bilingualism has resisted definition. If bilingualism is defined as habitual, fluent, correct and accent-free use of two languages, few individuals would qualify as bilinguals. A more viable approach may be to concede that 'bilingual' can be seen instead as a range of points on a continuum that allows for differences. The psychological study of bilingualism encompasses a wide range of phenomena including the organization and representation of the grammar, the perception and production of language mixing, cerebral lateralization of language functions, and patterns of recovery of aphasic patients. This book collects together an international array of researchers in experimental psychology, linguistics and neuropsychology, who bring their expertise to bear on the critical issues that are raised by the bilingual phenomena.

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.

'Fascinating. . . This engaging book explores just how multiple languages are acquired and sorted out by the brain. . . Costa's work derives from a great fund of knowledge, considerable curiosity and solidly scientific spirit' Philip Hensher Spectator The definitive study of bilingualism and the human brain from a leading neuropsychologist Over half of the world's population is bilingual and yet few of us understand how this extraordinary, complex ability really works. How do two languages co-exist in the same brain? What are the advantages and challenges of being bilingual? How do we learn – and forget – a language? In the first study of its kind, leading expert Albert Costa shares twenty years of experience to explore the science of language. Looking at studies and examples from Canada to France to South Korea, The Bilingual Brain investigates the significant impact of bilingualism on daily life from infancy to old age. It reveals, among other things, how babies differentiate between two languages just hours after birth, how accent affects the way in which we perceive others and even why bilinguals are better at conflict resolution. Drawing on cutting-edge neuro-linguistic research from his own laboratory in Barcelona as well from centres across the world, and his own bilingual family, Costa offers an absorbing examination of the intricacies and impact of an extraordinary skill. Highly engaging and hugely informative,The Bilingual Brain leaves us all with a sense of wonder at how language works. Translated by John W. Schwieter

This book pioneers the study of bilingualism across the lifespan and in all its diverse forms. In framing the newest research within a lifespan perspective, the editors highlight the importance of considering an individual's age in researching how bilingualism affects language acquisition and cognitive development. A key theme is the variability among bilinguals, which may be due to a host of individual and sociocultural factors, including the degree to which bilingualism is valued within a particular context.Thus, this book is a call for language researchers, psychologists, and educators to pursue a better understanding of bilingualism in our increasingly global society.

Reading Comprehension Proficiency, Cognitive Processing Mechanisms, and Deductive Reasoning in Bilinguals

Cognitive and Neural Control in Bilingual Language Processing

Questions and insights

Bilingual Cognition

Psycholinguistic Perspectives

Cognitive Processing in Second Language Acquisition

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.

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 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 neuro-computational 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

To what extent, and in what ways, is a child's cognitive development influenced by their early experience of, and access to, language? What are the affects on development of impaired access to language? This book is the first to consider how possessing an enhanced or impaired access to language influences a child's development.

Inside the Learner's Mind

The Cognitive and Emotional World of Bilinguals

A Mixed Methods Approach to Word-Formation and Language Processing

Bilingual Cognition and Language

The Psycholinguistics of Bilingualism

Theoretical and Applied Approaches

Bilingual Sentence Processing

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.

A collection of papers that explore bilingual children coping with two language systems.

This dissertation takes on an ambitious set of experiments to gain insight into the bilingual language processor. There are approximately 200 countries in the world and more than 4000 languages; you are in the minority if you speak only one language. Furthermore, approximately 55 million Americans are multilingual and that number is growing (census.gov, 2010). It would seem, then, that accounts of language processing should take into consideration these facts. Yet it is the case that very few accounts are sensitive to the issues that occur when participants are bilingual. Bilingual language research can be daunting because of the number of language and developmental factors that must be considered to accurately measure and interpret results. For example, bilinguals have demonstrated elevated cognitive skills when compared to their monolingual peers. As difficult as it is to account for language history and cognitive abilities in a language study, the benefits of such a study are well worth the effort. Monolingual language processing models are founded in studies that examine how and when information is integrated while comprehending sentences. The language studies presented in this dissertation find their origins in monolingual language processing literature. Pupillometry, however, provides time-course information that has been missing in past studies. We use the findings as a foundation for developing bilingual language processing models. A battery of non-linguistic tasks were selected to ensure any language differences were attributable to the language studies and not byproducts of differential cognitive abilities. The dissertation begins with an overview of both monolingual and bilingual language processing to illustrate the differences in language processing models between monolingual and multilingual individuals. This is followed by a description of the cognitive differences that have been observed between bilingual and monolingual individuals. The battery of non-linguistic assessment tools used include : N-Back (working memory), Attentional Network Test (conflict monitoring), Auditory Flanker Task (conflict monitoring), TONI IQ test, Picture naming tasks in Spanish and English and an extensive language questionnaire. The language studies examine tried and true sentence types from the monolingual processing literature including : Garden Path (temporarily ambiguous sentences), Filler-Gap constructions and antecedent-anaphor agreement. Pupillary responses were collected as a continuous index of processing demands. The combination of pupil data and non-linguistic tasks provide an interesting perspective on bilingual sentence processing. The results suggest that age of acquisition and conflict monitoring abilities are associated as both bilingual groups demonstrated reduced conflict monitoring costs. On the other hand, in the language studies sequential bilinguals demonstrated pupillary responses that resemble those of the monolingual control group in one sentential context and not so in others, while the simultaneous bilingual demonstrated unique patterns. Unsurprisingly, age of acquisition is associated with differential cognitive abilities as well as differential online language processing, but the cognitive advantages do not seem to penetrate language processing in the sequential bilinguals. The findings suggest the interaction of language and cognition may be age dependent.

Access to Language and Cognitive Development

Language Processing in Bilingual Children

The Handbook of the Neuroscience of Multilingualism

The Bilingual Brain

Cognitive Processing Skills and Literacy Development in Monolingual English, Emergent Bilingual Zulu and English, as Well as Bilingual Afrikaans and English Speaking Children

Bilingualism and Cognitive Control

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 introduction to the important topics in the psycholinguistic study of bilingualism. The chapters represent a comprehensive and interrelated set of topics that form the core of contemporary research on the psycholinguistics of bilingualism. The issues raised within this perspective not only increase our understanding of the nature of language and thought in bilinguals but also of the basic nature of the mental architecture that supports the ability to use more than one language.

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, psycholinguists, educational psychologists and second language teachers, among others.

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.

The area of cognitive processing of Chinese and Japanese is currently attracting a great deal of attention by leading cognitive psychologists. They aim to find out the similarities and differences in processing the morphosyllabic Chinese and Japanese syllabary as compared with alphabetic language systems. Topics under the processing of Chinese include: the use of phonological codes in visual identification of Chinese words, the constraint on such phonological activation, recognition of Chinese homophones, Chinese sentence comprehension and children's errors in writing Chinese characters. Topics under the processing of Japanese include: the automatic recognition of kanji within an interactive-activation framework, On-reading and Kun-reading of kanji characters, processing differences between hiragana and kanji, the effect of polysemy on katakana script, and the writing behavior of Japanese and non-Japanese speakers. The interactive-activation model provides the phonologic-orthographic links in processing both language systems. The present volume should add greatly to our understanding of this topic. Many of the contributors are internationally known for their experimental psychological work.

Psychology of Bilingualism

Cognitive Processing of Arithmetic in Bilinguals

Bilingualism, Executive Function, and Beyond

Multilingual Cognition and Language Use

The Cognitive Processing of Bilingual Students' Facebook Status Updates

Cognitive Control and Consequences of Multilingualism

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

Bilingual individuals seem to easily speak in just one language, and switch back and forth between languages, suggesting they have powerful mechanisms for controlling activation of their two languages. A prominent theory suggests that cognitive control, and specifically inhibition of the non-target language, enables successful switching. We used behavioral and neuroimaging methods to study Spanish-English bilinguals to determine: 1) if college-aged bilinguals show an advantage in general task-switching ability relative to monolinguals given bilinguals' extensive practice with language switching; 2) if cognitive control regions are recruited in bilingual language comprehension, and 3) if an aging deficit in inhibitory control affects older bilinguals' (age 65+) ability to switch languages. In Study 1 (n = 80 per group; Stasenko et al., 2017) bilinguals exhibited more efficient task-switching, but only when participants had longer preparation time, and the advantage dissipated quickly. These findings suggest that although bilingualism improves the efficiency of task switching, this advantage might be more related to preparing to switch than to switching per se. In Study 2 (n = 24; Stasenko et al., 2020), bilinguals recruited fronto-parietal brain regions (i.e., right frontal inferior gyrus, bilateral middle frontal gyrus, and left supramarginal gyrus) when switching relative to not switching languages even in silent reading of mixed language paragraphs (without producing any switches in their speech). These results suggest that although reading comprehension seems to be passive, it recruits brain regions known to support cognitive control, possibly reflecting a modality-general switch mechanism. Study 3 (ns = 48 and 25; Stasenko et al., submitted) revealed a reversal of language dominance in mixed-language testing blocks, and a transfer of inhibition from a repeated set of items to a new set of items (that was introduced halfway through the task). Both effects were found only in younger but not in older bilinguals. Overall, these findings support the role of domain-general cognitive control and inhibition as an important mechanism in bilingual language control that spans across production and comprehension and exhibits decline in healthy aging.

The definitive guide to 21st century investigations of multilingual neuroscience The Handbook of the Neuroscience of Multilingualism provides a comprehensive survey of neurocognitive investigations of multiple-language speakers. Prominent scholar John W. Schwieter offers a unique collection of works from globally recognized researchers in neuroscience, psycholinguistics, neurobiology, psychology, neuroimaging, and others, to provide a multidisciplinary overview of relevant topics. Authoritative coverage of state-of-the-art research provides readers with fundamental knowledge of significant theories and methods, language impairments and disorders, and neural representations, functions, and processes of the multilingual brain. Focusing on up-to-date theoretical and experimental research, this timely handbook explores new directions of study and examines significant findings in the rapidly evolving field of multilingual neuroscience. Discussions on the bilingual advantage debate, recovery and rehabilitation patterns in multilingual aphasia, and the neurocognitive effects of multilingualism throughout the lifespan allow informed investigation of contemporary issues. Presents the first handbook-length examination of the neuroscience and neurolinguistics of multilingualism Demonstrates how neuroscience and multilingualism intersect several areas of research, such as neurobiology and experimental psychology Includes works from prominent international scholars and researchers to provide global perspective Reflects cutting-edge research and promising areas of future study in the dynamic field of multilingual neuroscience The Handbook of the Neuroscience of Multilingualism is an invaluable resource for researchers and scholars in areas including multilingualism, psycholinguistics, second language acquisition, and cognitive science. This versatile work is also an indispensable addition to the classroom, providing advanced undergraduate and graduate students a thorough overview of the field.

Prominent researchers from the US, Mexico, Chile, Colombia and Spain contribute experimental reports on language development of children who are acquiring Spanish. The chapters cover a wide range of dimensions in acquisition: comprehension and production; monolingualism and bilingualism; typical development, children who are at risk and children with language disorders, phonology, semantics, and morphosyntax. These studies will inform linguistic theory development in clinical linguistics as well as offer insights on how language works in relation to cognitive functions that are associated with when children understand or use language. The unique data from child language offer perspectives that cannot be drawn from adult language. The first part is dedicated to the acquisition of Spanish as a first or second language by typically-developing children, the second part offers studies on children who are at risk of language delays, and the third part focuses on children with specific language impairment, disorders and syndromes.

Bilingual Cognitive and Sentence Processing

And What It Tells Us about the Science of Language

An Introduction to Bilingualism

Language Processing in Bilinguals (RLE Linguistics C: Applied Linguistics)

Systems of Representation in Young Children

Bilingual Sentence Processing

This thought-provoking monograph makes a multidisciplinary case for bilingualism as a possible enhancer of executive function, particularly cognitive control. Its central focus is the cognitive operations of the bilingual brain in processing two languages and whether they afford the brain a greater edge on neuroplasticity—in short, a cognitive advantage. Major issues and controversies in the debate are analyzed from cognitive neuroscience, psycholinguistic, and integrative perspectives, with attention paid to commonly and rarely studied domains at work in bilingual processing. The author also pinpoints future areas for improved research such as recognizing the diversity of bilingualism, not simply in languages spoken but also in social context, as seen among immigrants and refugees. Included in the coverage: The evolution of bilingualism. What goes on in a bilingual mind? The core cognitive mechanisms. Cognitive advantage of bilingualism and its criticisms. Neuroscience of bilingualism. Bilingualism, context, and control. Attention, vision, and control in bilinguals.

With its cogent takes on ongoing questions and emerging issues, Bilingualism and Cognitive Control is of immediate interest to bilingual researchers and practitioners interested in understanding the behavioral aspects and neurobiology of bilingualism and the dynamic character of the bilingual/multilingual/second language learner's mind, as well as the growing number of advanced undergraduate and graduate students interested in the psychology/psycholinguistics of bilingualism, bilingual cognitive psychology, cognitive science, and cognitive neuroscience.

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.

Multilingual classrooms and online communication are becoming increasingly linguistically diverse due to globalization and new discourse patterns are emerging. Many of these patterns include the use of linguistic resources from multiple languages in the same utterance. Translanguaging, a recent theoretical framework, is gaining prominence among scholars interested in studying these multilingual discursive practices and the concept of a unitary language system for lexical processing. The aim of this book is to gain a better understanding of the bilingual brain and how words and sentences that use features from socially distinct languages are processed. Using examples provided by multilingual study participants, a categorization of the various forms of translanguaging is developed to build a translanguaging model. Psycholinguistic methods such as eye tracking are combined with conventional sociolinguistic survey methodology to provide rich qualitative and quantitative data that address the cognitive effects of translanguaging and the underlying structure of translingual word-formations. This monograph shows how language biography, exposure, and attitude towards multilingual discursive practices all affect cognitive processing. It also demonstrates how multilingual speakers are setting the patterns for novel word-formations to be produced, thus having a social, cultural, and cognitive impact on how we communicate.

Factors Moderating Language Proficiency

Tutorials in Bilingualism

An Introduction

Lexical Processing and Second Language Acquisition

Bilingualism and cognitive control

Psycholinguistic and Neuropsychological Perspectives