

Oxford Handbooks Online

Preface

The Oxford Handbook of Neurolinguistics

Edited by Greig I. de Zubicaray and Niels O. Schiller

Print Publication Date: May 2019 Subject: Linguistics Online Publication Date: Mar 2019

Preface

NEUROLINGUISTICS is a highly interdisciplinary field, with influences from psycholinguistics, psychology, aphasiology, (cognitive) neuroscience, and many more. A precise definition is elusive, but often neurolinguistics is considered to cover approximately the same range of topics as psycholinguistics, that is, all aspects of language processing, but approached from various scientific perspectives and methodologies. Twenty years ago, when the first *Handbook of Neurolinguistics*, edited by Harry Whitaker and Brigitte Stemmer, was published, it was relatively easy to identify the contributions from individual disciplines, with the dominant evidence base and approach being clinical aphasiology. Today, neurolinguistics has progressed such that individual researchers tackle topics of interest using multiple methods, and share a common sense of identity and purpose, culminating in their own society and annual conference. The *Society for the Neurobiology of Language* will have its tenth anniversary in 2018, and its annual meeting now regularly exceeds 700 attendees.

When we first proposed to collate and edit this *Handbook* of 35 chapters, we knew we were undertaking a challenging task given the rapid expansion of the field and pace of progress in recent years. We envisaged a mix of chapters from established and emerging researchers, with contributions covering the contemporary topics of interest to the field of neurolinguistics. We wanted more than the mere acknowledgment of the multilingual brain featured in previous handbooks, and to encourage varied perspectives on how language interacts with broader aspects of cognition and emotion. Responses to our invitations were mostly generous. By and large, we believe we have achieved much of what we set out to accomplish.

The scope and aim of this new *Oxford Handbook of Neurolinguistics* is to provide students and scholars with concise overviews of the state of the art in particular topic areas, and to engage a broad audience with an interest in the neurobiology of language. The

Preface

chapters do not attempt to provide exhaustive coverage, but rather present discussions of prominent questions posed by a given topic.

Following an introductory chapter providing a brief historical perspective of the field, Part I covers the key techniques and technologies used to study the neurobiology of language today, including lesion-symptom mapping, functional imaging, electrophysiology, tractography, and brain stimulation. Each chapter provides a concise overview (p. x) of the use of each technique by leading experts, who also discuss the various challenges that neurolinguistic researchers are likely to encounter.

Part II addresses the neurobiology of language acquisition during healthy development and in response to challenges presented by congenital and acquired conditions. Part III covers the many facets of our articulate brain, its capacity for language production—written, spoken, and signed—again from both healthy and clinical perspectives. Questions regarding how the brain organizes and represents meaning are addressed in Part IV, ranging from word to discourse level in written and spoken language, from perception to statistical modeling. The final Part V reaches into broader territory, characterizing and contextualizing the neurobiology of language with respect to more fundamental neuroanatomical mechanisms.

Our thanks go to the authors of the chapters, without whom the *Handbook* would not have been possible. Their commitment, expertise, and talent in exposition are rivaled only by their patience with the editorial process. Thanks also go to Peter Ohlin, Hannah Doyle, and Hallie Stebbins at Oxford University Press, who encouraged and ensured the publication of *The Oxford Handbook of Neurolinguistics*.