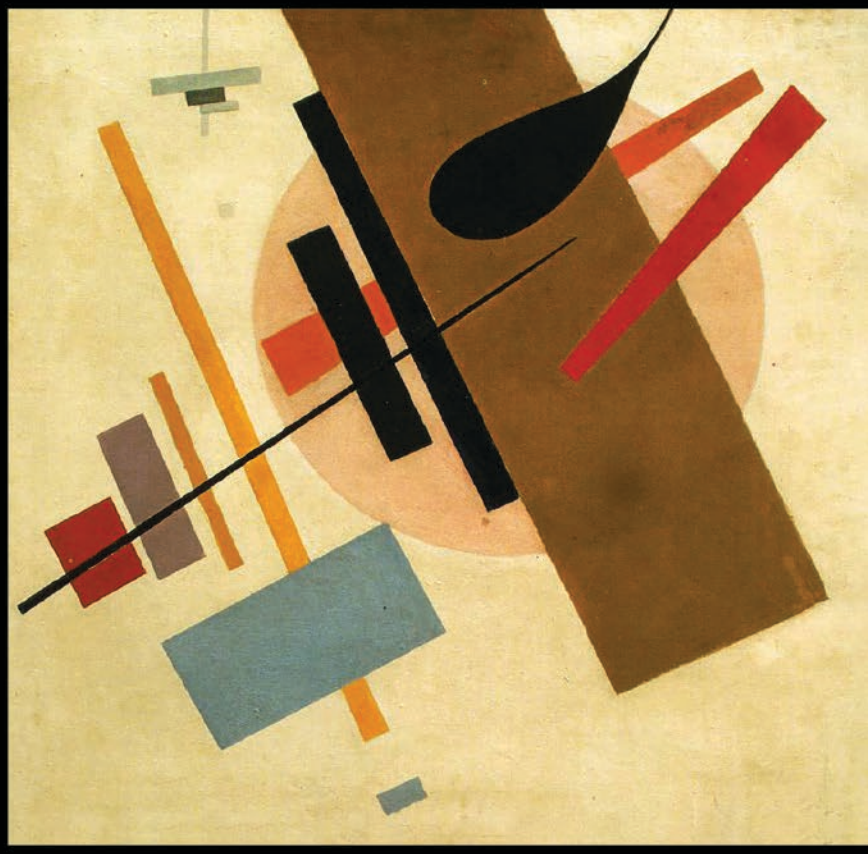
The Handbook of Clinical Linguistics

Second Edition



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The Handbook of Clinical Linguistics

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Alison Ferguson, PhD, was, prior to her retirement, Professor of Speech Pathology at University of Newcastle, Australia. Her research explored the applications of sociolinguistic analyses to the assessment and treatment of communication disorders. Her published research demonstrated the application of Conversation Analysis to working with partners of people with aphasia (an acquired language disorder). Systemic Functional Linguistics proved to be a rich resource to illuminate the role of supervisor feedback in speech pathology education, as well as to explore the use of metaphor by people with aphasia and their partners in their talk about their goals for rehabilitation.

Francesca Foppolo is Associate Professor of Linguistics and Psycholinguistics in the Department of Psychology of the University of Milan-Bicocca, Italy. She is a member of the advisory board of the international network Bilingualism Matters based in Edinburgh (UK) and participated in several European funded research networks. She is currently Associate Editors of *Applied Psycholinguistics*, Cambridge University Press. Her research focuses on language processing in typically and atypically developing children, bilinguals, and adults by means of off-line and on-line techniques, particularly eye-tracking in visual context and reading.

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Davida Fromm is a research professor in psychology at Carnegie Mellon University. Previously, she taught in the Communication Sciences and Disorders department at the University of Pittsburgh and the Speech Pathology department at Duquesne University. She has conducted research on aphasia, dementia, apraxia of speech, and other neurologically based communication disorders in adults. Currently, her focus is on the adult clinical language banks in the

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Robin Gransier is a postdoctoral researcher at Experimental ORL, department of Neurosciences, KU Leuven, Belgium. His research focusses on unraveling how the acoustically and electrically stimulated auditory pathway processes sound based on electrophysiological measures, and how these insights can be used to develop novel neuro-inspired electrical stimulation strategies to restore hearing with cochlear implants. He is also involved in several studies that investigate the limitations of the human brain to process speech in challenging listening conditions, the effects of electrical stimulation on the nervous system, and how anthropogenic noise affects the hearing and behavior of marine mammals. He has published over fifty scientific journal articles in the field of audiology and hearing research, and is currently board member of the Belgian Scientific Society of Audiology (B Audio).

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Eleanor Gulick is a doctoral student pursuing a degree in communication sciences and disorders at Bowling Green State University. In 2020 she obtained her Master's degree in speech-language pathology from Bowling Green State University. She is currently practicing clinically in an urban hospital and has work in a variety of medical facility in rural and urban communities. Eleanor works in the Interactional Aphasiology Lab under Dr Brent Archer. Her research interests include aphasia and other cognitive communication disorders with a focus on enhancing conversation and life participation.

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Solène Hameau is a lecturer in Speech Pathology at the Catholic University of Louvain-La-Neuve (BE). She began her career as a clinical speech pathologist in France before moving to research. She holds a Masters in Linguistics from the University of Toulouse (FR) and a PhD in Cognitive Science from Macquarie University, where she currently has an additional research position. She is interested in factors affecting word production in different populations (monolinguals and bilinguals with and without aphasia), with a focus on how the similarity of words in the lexicon(s) of a speaker influence language processing.

Barry Heselwood is Honorary Senior Lecturer in the School of Languages, Cultures, and Societies at the University of Leeds, UK. Since retiring he has continued to do research and has published on aspects of the phonetics of atypical speech, on phonetic transcription, and on the phonetics and phonology of Arabic and the Modern South Arabian languages Mehri and Shehret.

Alison Holm is an associate professor of speech pathology at the University of Tasmania in Australia. She has previously worked in Queensland (Australia) and the United Kingdom. Alison is an associate editor of the *International Journal of Speech Language Pathology*. She has published widely in speech sound disorders, and language and literacy acquisition and disorders, particularly for multilingual children. Alison is one of the authors of the *Diagnostic Evaluation of Articulation and Phonology* (DEAP) a widely used speech pathology clinical assessment.

Sara Howard is Emeritus Professor of Clinical Phonetics in the Division of Human Communication Sciences at the University of Sheffield, UK. Sara has published and presented widely in the area of clinical phonetics and phonology, focusing particularly on children with developmental speech difficulties and individuals whose speech has been affected by a cleft palate. She has specific interests in the analysis of connected speech and the production of speech in conversation, using both perceptual and instrumental phonetic techniques. Sara is an ex-president of the International Association of Clinical Phonetics and Linguistics.

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Julie M. Liss is associate dean of the College of Health Solutions and professor of speech and hearing science at Arizona State University. She has served as editor-in-chief for the Journal of Speech, Language and Hearing Research (speech section), and currently serves as the Senior Editor for Registered Reports for Speech and Language for the American Speech-Language-Hearing Association (ASHA). She has published widely in communication disorders, acoustic and perceptual characterization of disordered speech, and speech intelligibility. She is a fellow of ASHA and currently lives in Arizona.

John Local is Emeritus Professor of Phonetics and Linguistics at the University of York. His research over the past 40 years has engaged with non-segmental phonology and phonetic interpretation, speech synthesis, and, latterly, phonetics and talk-in-interaction. This work developed out of a close study of Firthian Prosodic Analysis (FPA) and an attempt to elaborate an impressionistic parametric phonetics supported by instrumental findings. Some of the results of this research, conducted with his colleague John Kelly, were presented in their book, *Doing Phonology* (Manchester University Press, 1989). In recent years he has worked on phonetic variability in the "liquid" system of English and the phonetic and interactional features of attitude in everyday conversation (supported by grants from the Economic and

Social Research Council). He was awarded a two-year British Academy Readership, on an interactionally grounded analysis of the phonetics of everyday talk.

Brian MacWhinney is Teresa Heinz Professor of Psychology, Computational Linguistics, and Modern Languages at Carnegie Mellon University. His Unified Competition Model analyzes first and second language learning as aspects of a single basic system. He has developed a series of 14 TalkBank open access online databases for the study of language learning, multilingualism, and language disorders. The databases for language disorders include AphasiaBank, ASDBank, DementiaBank, FluencyBank, RHDBank, and TBIBank. These databases provide transcriptions of spoken language linked to audio and video media, along with programs for analysis and linguistic profiling. His other research topics include methods for online learning of second language vocabulary and grammar, neural network modeling of lexical development, fMRI studies of children with focal brain lesions, ERP studies of between-language competition, and the role of embodied perspectival imagery in sentence processing.

Theodoros Marinis is professor of linguistics and the director of the Centre for Multilingualism at the University of Konstanz in Germany. His research focuses on language acquisition and processing across monolingual and multilingual populations of typically and atypically developing children and adults and aims to uncover the nature of language processing in typical and atypical language development. He has conducted studies on a large range of languages, including Arabic, Dutch, English, Farsi, German, Greek, Italian, and Turkish. He has published widely in language processing, multilingualism, developmental language disorders, and autism.

Glenda Mason, PhD is a Canadian registered and certified Speech-Language Pathologist, and a Lecturer and Research Associate in the School of Audiology and Speech Sciences at the University of British Columbia, Canada. Dr Mason conducts research regarding typical and disordered speech sound development of school-aged children, using in-person and online data collection methodologies. Her particular interest is in phonological development in multisyllabic words. She has developed a whole word nonlinear phonological metric and analysis which have been automated in Phon (MNLA; Hedlund & Rose, 2020).

Greta Mazzaggio is currently an assistant professor of linguistics at the University of Florence, Italy. She previously won the Swiss Confederation Excellence Scholarship, working for one year at the University of Neuchâtel (Switzerland) and then she moved to the University of Nova Gorica, Slovenia. She also spent research periods in France (CNRS, Lyon) and the USA (University of Notre Dame, Indiana). Her main research interests focus on three interconnected topics: experimental pragmatics, clinical linguistics, and bilingualism. She is the author of the first Italian introductory book on experimental pragmatics.

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Lucie Ménard is the Founder and Director of the "Phonetics Laboratory at Université du Québec à Montréal" and Adjunct-director of the "Center for Research on Brain, Language, and Music—CRBLM." Full professor at the University of Québec à Montreal, Dr Menard has been engaged in a sustained program of studies of the development of speaker strategies for reaching intelligible multisensory speech goals. Her research has used a combination of instrumental measures (ultrasound imaging, optical and electromagnetic tracking of orofacial articulators), acoustic measures, and modeling in sensory-deprived young children and adults. To support this work, her lab has devised methods of obtaining and analyzing accurate ultrasound data on the tongue movements of children as young as two years old. Most recently, Prof Ménard has been involved in the development of clinical assessment tools (ultrasound imaging and virtual reality) for children with neuromuscular disease at the Living Lab Ste-Justine Pediatric Hospital, as a researcher.

Nicole Müller is Professor of Speech and Hearing Sciences at University College, Ireland. She also holds a visiting professorship at Linköping University, Sweden. In the past, she has held academic appointments in England, Wales, the USA, and Sweden. Her research interests are in clinical linguistics and phonetics, multilingualism, and adult-acquired impairments of communication and cognition, for example in consequence to neurodegeneration, brain injury, or stroke. She is a legacy editor of the journal *Clinical Linguistics and Phonetics*.

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Lyndsey Nickels is professor in the School of Psychological Sciences, Macquarie University, Sydney. She graduated as a Speech and Language Therapist from Reading University, UK and completed a PhD at Birkbeck College, University of London. Taking a psycholinguistic and cognitive neuropsychological approach, her research has focused on informing theories of language processing, its breakdown in aphasia, treatment of language impairment in aphasia and methodological rigor in single case experimental design. She has published widely in all these areas, including a monograph, five edited volumes and over 200 journal articles. She is a fellow of the Academy of Social Sciences of Australia.

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Michael (Mick) Perkins is Emeritus Professor of Clinical Linguistics in the Division of Human Communication Sciences at the University of Sheffield, UK. He has published and presented widely in clinical linguistics, pragmatics, semantics, and language development, with a more recent focus on the interactions between semantics, pragmatics and cognition in a wide range of developmental and acquired communication disorders. He was a founder member of the International Clinical Phonetics and Linguistics Association (ICPLA), was its Vice-President from 2000 to 2006 and is an honorary fellow of the Royal College of Speech and Language Therapists.

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Francesco Possemato completed his PhD at the University of Sydney (2018). By using the methods of Conversation Analysis and Interactional Linguistics, his research addresses language and social interaction in a variety of contexts. Francesco has worked on the *Conversational Interaction in Aboriginal and Remote Australia* (CIARA) project (Macquarie University-University of Melbourne-University of Queensland), and is currently a Postdoctoral Associate in the Communication and Assistive Device Laboratory (CADL) – Department of Communicative Disorders and Science (State University of New York (SUNY) at Buffalo). Francesco is Honorary Research Fellow at Macquarie University, where he is also the co-investigator for the *Aphasia, correction, and micro-collaboration* project (Macquarie University) addressing interactions involving people with aphasia. Francesco is also the external investigator for the *Students' flourishing through Italian classroom interaction* project (La Trobe University). While in Sydney he was the coordinator for the Conversation Analysis in Sydney (CAIS) group – Australasian Institute of Ethnomethodology and Conversation Analysis (AIEMCA). Francesco has published on Italian L2 teaching, atypical interaction, and pragmatic typology.

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Theresa Schölderle, PhD, is an academic speech-language-therapist. Currently, she has a postdoctoral position at the Clinical Neuropsychology Research Group (EKN) at the Institute of Phonetics and Speech Processing, Ludwig Maximilian University, Munich, Germany. Her research focus is on dysarthrias acquired early in life (e.g., in children and adults with cerebral palsy).

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Joseph Stemberger, PhD, is Professor Emeritus of Linguistics at the University of British Columbia. He is primarily interested in phonology, morphology, and their interaction. Most of his research is in adult psycholinguistics and in first language acquisition and investigates the nature of cognitive representations. He is also involved in a study of first language acquisition by monolingual Zapotec-learning children in Mexico, and a similar study on Slovene. His theoretical orientations are toward Optimality Theory, and toward connectionist models.

His current research tends to focus on the degree to which phonological and morphological information is concentrated in particular lexical items vs. the degree to which lexical processing is supplemented with system-general information. Other languages he has worked on include Choctaw, Cambodian, and Ojibwe, and Seri and German (collaborating with other scholars).

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Austin Thompson is an assistant professor at the University of Houston. Prior to his current appointment, Austin earned his PhD at Florida State University. His research focuses on motor control of speech production in speakers with and without dysarthria, instrumental analysis of speech using acoustic and kinematic methods, and linguistic influences on speech production in bilingual or multilingual speakers. Additionally, he is a licensed and certified speech-language pathologist with a clinical interest in diagnosing and treating speech deficits in individuals with dysarthria secondary to neurodegenerative diseases like Parkinson's disease and amyotrophic lateral sclerosis.

Mark Tiede, PhD, is a phonetician specializing in speech production and instrumental methods for studying it. He earned a doctorate in Linguistics from Yale, and has been part of the ATR Human Information Processing Laboratory (Kyoto) and MIT-RLE Speech Communication groups. Currently he is associated with Haskins Laboratories and the Brain Function Laboratory in the Yale Dept. of Psychiatry. His current research interests are focused on identifying characteristic patterns of speech articulatory movements as they evolve under changes in rate and prosodic influence.

Martha Tyrone is an Associate Professor in the Speech-Language Pathology program at Gallaudet University. For 15 years, she was a Senior Research Scientist at Haskins Laboratories, where she was awarded multiple research grants from the National Institutes of Health. Her research deals with the relationship between motor control, language, and communication in clinical and non-clinical populations. She uses instrumented techniques, such as motion capture and electromagnetic articulography, to examine the structure of speech, gesture, and sign language in deaf and hearing adults. Dr Tyrone teaches courses on Speech Science, Research Methods, Neuroanatomy, and Motor Speech Disorders.

Traci Walker is a Senior Lecturer in the Department of Human Communication Sciences, University of Sheffield. Her research uses the methodology of Conversation Analysis (CA) to investigate the function and use of linguistic structures (both syntactic and phonetic) in both typical and atypical communication. She has published on topics including repetition

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Jocelynne Watson is visiting professor at the University of St Mark and St John, Plymouth having previously held the positions of Senior Lecturer and Clinical Director for the Speech and Hearing Sciences Department at Queen Margaret University, Edinburgh. Jocelynne has a particular interest in developmental Speech Sound Disorder and its implications for literacy development. Jocelynne's publications focus on etiology, vowel disorder, assessment, and treatment. She is co-author of two speech assessment tools: PPSA (Phonetic and Phonological Systems Analysis) and CAV-ES (Clinical Assessment of Vowels – English Systems).

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