

VOLUME I

General Issues and Segmental Phonology

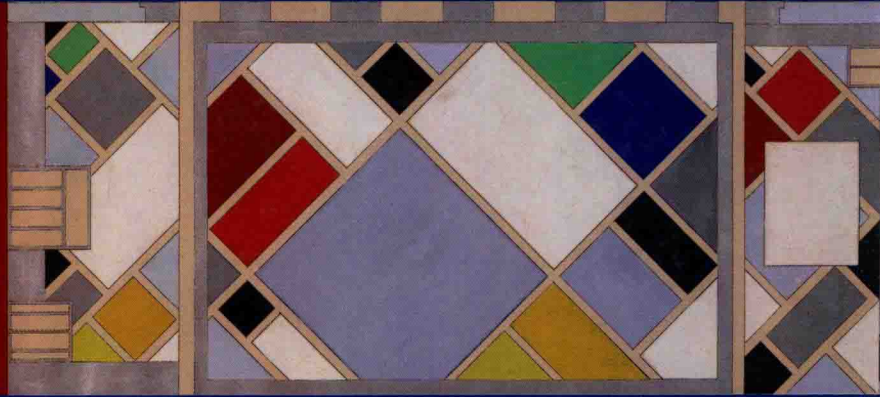
Edited by

Marc van Oostendorp

Colin J. Ewen

Elizabeth Hume

Keren Rice



THE BLACKWELL COMPANION TO

Phonology

The Blackwell Companion to Phonology

Edited by Marc van Oostendorp,
Colin J. Ewen, Elizabeth Hume,
and Keren Rice

Volume I

General Issues and Segmental Phonology



 **WILEY-BLACKWELL**

A John Wiley & Sons, Ltd., Publication

This edition first published 2011
© 2011 Blackwell Publishing Ltd

Blackwell Publishing was acquired by John Wiley & Sons in February 2007. Blackwell's publishing program has been merged with Wiley's global Scientific, Technical, and Medical business to form Wiley-Blackwell.

Registered Office

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom

Editorial Offices

350 Main Street, Malden, MA 02148-5020, USA

9600 Garsington Road, Oxford, OX4 2DQ, UK

The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

For details of our global editorial offices, for customer services, and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com/wiley-blackwell.

The right of Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice to be identified as the authors of the editorial material in this work has been asserted in accordance with the UK Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Library of Congress Cataloging-in-Publication Data

The Blackwell companion to phonology / edited by Marc van Oostendorp . . . [et al.].

p. cm. — (Blackwell companions to linguistics series)

Includes bibliographical references and index.

ISBN 978-1-4051-8423-6 (hardcover : alk. paper)

1. Phonetics. 2. Grammar, Comparative and general—Phonology.

I. Oostendorp, Marc van, 1967–

P217.B53 2011

414—dc22

2010042206

A catalogue record for this book is available from the British Library.

Set in 10/12pt Palatino by Graphicraft Limited, Hong Kong
Printed and bound in Singapore by Fabulous Printers Pte Ltd

MARC VAN OOSTENDORP is Senior Researcher at the Department of Variationist Linguistics at the Meertens Institute of the Royal Netherlands Academy of Arts and Sciences, and Professor of Phonological Microvariation at the University of Leiden. He holds an M.A. in Computational Linguistics and a Ph.D. from Tilburg University.

COLIN J. EWEN is Professor and Chair of English Language and Linguistics at the University of Leiden. He holds an M.A. in English Language and Linguistics and a Ph.D. from the University of Edinburgh. He is editor (with Ellen Kaisse) of the journal *Phonology*.

ELIZABETH HUME is Professor and Chair of the Department of Linguistics at The Ohio State University. She holds a Ph.D. and M.A. in Linguistics from Cornell University, an M.A. in French and Social Psychology of Language from McMaster University, and a B.A. in French from Université Laval.

KEREN RICE is University Professor and Canada Research Chair in Linguistics and Aboriginal Studies at the University of Toronto. She holds an M.A. and Ph.D. in Linguistics from the University of Toronto and a B.A. from Cornell University.

Blackwell Companions to Linguistics series

Series Editors:

Martin Everaert and Henk van Riemsdijk

The Blackwell Companion to Syntax

Edited by Martin Everaert and Henk van Riemsdijk

The Blackwell Companion to Phonology

Edited by Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice

Contributors

Akinbiyi Akinlabi is Professor of Linguistics at Rutgers University, New Brunswick. He is the current President of the World Congress of African Linguistics, and serves on the councils of both the West African Languages Congress and the Annual Conference on African Linguistics (USA). His expertise lies primarily in the phonologies of the Benue–Congo languages of West Africa. He has published articles in leading journals of theoretical and descriptive linguistics, including *Linguistic Inquiry*, *Journal of Linguistics*, and *Journal of African Languages and Linguistics*. His forthcoming book is titled: *Yoruba: A phonological grammar*.

Adam Albright is an Associate Professor (Anshen-Chomsky Professorship in Language, and Mind Career Development Chair) at MIT. His research interests include phonology, morphology, and learnability, with an emphasis on using computational modeling and experimental techniques to investigate issues in phonological theory.

Stephen R. Anderson is Dorothy R. Diebold Professor of Linguistics at Yale University. After receiving his Ph.D. from MIT in 1969, he taught at Harvard, UCLA, Stanford, and Johns Hopkins Universities before coming to Yale in 1994. He is the author of numerous articles and six books, including *Aspects of the theory of clitics* (2005). He has done field research on several languages, most recently the Surmiran form of Rumantsch. In addition to phonology and morphology, his research interests include animal communication systems and the evolution of human language.

Diana Archangeli received her Ph.D. from MIT in 1984. She has been a faculty member at the University of Arizona since 1985 and was a Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford in 2007–8. She co-authored *Grounded phonology* (1994) with Douglas Pulleyblank, and co-edited *Optimality Theory: An overview* (1997) with D. Terence Langendoen. She is Director of the Arizona Phonological Imaging Lab, used for ultrasound study of the articulation of language sounds.

Amalia Arvaniti is an Associate Professor in the Department of Linguistics at the University of California, San Diego. She received her Ph.D. from the University of Cambridge and has held research and teaching appointments at the Universities

of Cambridge, Oxford, Edinburgh, and Cyprus. Her research focuses on the phonetics and phonology of prosody, with special emphasis on the experimental investigation and formal representation of rhythm and intonation.

Bao Zhiming is a linguist working in the Department of English Language and Literature, National University of Singapore. He has two main research interests: Chinese phonology and contact linguistics.

Outi Bat-El is Professor of Linguistics at Tel-Aviv University. She is engaged in the study of Semitic phonology and morphology. In her 1994 *Natural Language & Linguistic Theory* article, she initiated the Semitic root debate, arguing that there is no consonantal root in Semitic morphology. Her subsequent work within the framework of Optimality Theory (*Recherches Linguistiques de Vincennes* 2003) provided further support to this argument. She has also authored articles on Hebrew truncation (*Language* 2002) and reduplication (*Linguistic Inquiry* 2006), on blends (*Phonology* 1996) and hypocoristics (*Phonology* 2005), as well as on language acquisition (*Language Sciences* 2009).

Michael Becker received his Ph.D. from the University of Massachusetts Amherst in 2009, and is currently a lecturer at Harvard University. His work focuses on the grammatical principles that govern lexicon organization, especially as a way to discover Universal biases in the phonological grammar. He also works on the acquisition and learning of lexical patterns.

Ricardo Bermúdez-Otero is Senior Lecturer in Linguistics and English Language at the University of Manchester. He previously held a Postdoctoral Fellowship at the British Academy, followed by a Lectureship in Linguistics at the University of Newcastle upon Tyne. His research focuses on the morphosyntax–phonology and phonology–phonetics interfaces, with particular attention to diachronic issues. His publications include chapters in *Optimality Theory and language change* (2003), *The handbook of English linguistics* (2006), *The Cambridge handbook of phonology* (2007), *Deponency and morphological mismatches* (2007), *Optimality-theoretic studies in Spanish phonology* (2007), and *Morphology and its interfaces* (forthcoming).

Christina Y. Bethin is Professor of Linguistics at Stony Brook University, New York, who works on prosody and syllable structure. She has written numerous articles on the diachronic and synchronic phonology of the Slavic languages, including Polish, Ukrainian, Russian, Belarusian, Serbian and Croatian, Czech, and Slovene, and published two award-winning books, *Polish syllables: The role of prosody in phonology and morphology* (1992) and *Slavic prosody: Language change and phonological theory* (1998).

Geert Booij is Professor of Linguistics at the University of Leiden. He is the author of *The phonology of Dutch* (1995), *The morphology of Dutch* (2002), *The grammar of words* (2005), and *Construction morphology* (2010), and of a number of linguistic articles in a wide range of Dutch and international journals, with focus on the interaction of phonology and morphology, and theoretical issues in morphology.

Anna R. K. Bosch has taught linguistics at the University of Kentucky since 1990, where she is now Associate Dean for Undergraduate Programs and a faculty member of the Linguistics Program and English departments. She has written on

Scottish Gaelic phonology and dialectology, and is currently working on a new project on the history of phonetic transcription in European dialect studies.

Bert Botma is associate professor at the Leiden University Centre of Linguistics (LUCL) and a research fellow at the Netherlands Organization of Scientific Research (NWO). His main research interest is segmental phonology. He has published on such topics as nasal harmony, English syllable structure, and on the phonological contrast between obstruents and sonorants.

Diane Brentari is Professor of Linguistics and Director of the ASL Program at Purdue University. She has published widely in the area of sign language phonology and morphology. She is the author of *A prosodic model of sign language phonology* (1998) and editor of *Sign languages: A Cambridge language survey* (2010). Her current research involves the cross-linguistic analysis of sign languages.

Adam Buchwald is an Assistant Professor at New York University in Communicative Sciences and Disorders. He holds a Ph.D. in Cognitive Science from Johns Hopkins University and had a post doctoral fellowship in the Speech Research Lab at Indiana University. His work is interdisciplinary and spans topics in linguistics, psycholinguistics, and communication sciences.

Eugene Buckley is Associate Professor of Linguistics at the University of Pennsylvania. His research interests include metrical and syllable structure, and the proper locus of phonetic and functional explanation. Much of his work focuses on native languages of North America.

Luigi Burzio is Professor Emeritus, Department of Cognitive Science, Johns Hopkins University. He has also taught at Harvard University, Department of Romance Languages and Literatures. His research interests include syntax, phonology and morphology. He is the author of *Italian syntax* (1986) and *Principles of English stress* (1994).

Patrik Bye is currently a researcher with the Center for Advanced Study in Theoretical Linguistics at the University of Tromsø. He has published scholarly articles on a variety of topics including the syllable structure, quantity, and stress systems of the Finno-Ugric Saami languages, North Germanic accentology, and phonologically conditioned allomorphy. With Martin Krämer and Sylvia Blaho he edited *Freedom of analysis?* (2007).

Charles Cairns is Professor Emeritus of Linguistics at the City University of New York. He received his Ph.D. in linguistics from Columbia University in 1968. Author of a number of articles in phonology, his most recent work is a co-edited volume with Eric Raimy, *Contemporary views on architecture and representations in phonology* (2009).

Andrea Calabrese was born in Campi Salentina in the southeastern tip of Italy. He obtained his Ph.D. in linguistics at MIT in 1988 and is currently teaching at the University of Connecticut. His main interests are phonology, morphology, and historical linguistics. He has published more than 50 articles in books and journals such as *Linguistic Inquiry*, *Linguistic Review*, *Studies in Language*, *Brain and Language*, *Journal of Neuro-Linguistics*, and *Rivista di Linguistica*. His recent book, *Markedness and economy in a derivational model of phonology* (2005), proposes a theory integrating phonological rules and repairs triggered by markedness constraints into a derivational model of phonology.

Roderic F. Casali's interests include phonetics, phonological theory, and descriptive work on the phonology of African languages. His research has focused primarily on vowel phenomena, especially vowel hiatus resolution and ATR vowel harmony. He has done linguistic fieldwork in Ghana with SIL and currently teaches linguistics at the Canada Institute of Linguistics at Trinity Western University in Langley, British Columbia.

Young-mee Yu Cho is Associate Professor of East Asian Languages and Cultures at Rutgers University and author of *Parameters of consonantal assimilation* (1999), *Integrated Korean* (2000), and *Korean phonology and morphology* (forthcoming). She has written on Korean language and culture, theoretical linguistics, and Korean pedagogy.

Abigail C. Cohn is Professor of Linguistics at Cornell University, Ithaca, New York. Her research addresses the relationship between phonology and phonetics and is informed by laboratory phonology approaches. She also specializes in the description and analysis of a number of Austronesian languages of Indonesia. Her published work includes articles in *Phonology* and a number of edited volumes and she is co-editor of the forthcoming *Oxford handbook of laboratory phonology*.

Jennifer Cole is Professor of Linguistics and Computer Science at the University of Illinois at Urbana-Champaign, and is a member in the Cognitive Science group at the Beckman Institute for Advanced Science and Technology. She is the founding General Editor of *Laboratory Phonology*, and has served on the editorial boards of the journals *Language*, *Linguistic Inquiry*, and *Phonology*.

Bruce Connell is based at York University, Toronto. His research interests include the phonetics of African languages, the relationships between phonetics and phonology, historical linguistics, and language endangerment and documentation. He makes regular fieldtrips to Africa for research and is an authority on languages in the Nigeria–Cameroon borderland. He received his Ph.D. in Linguistics from the University of Edinburgh in 1991. His publications include "The perception of lexical tone in Mambila," *Language and Speech* 43, and "Tone languages and the universality of intrinsic F0: Evidence from Africa," *Journal of Phonetics* 30.

Marie-Hélène Côté is Associate Professor of Linguistics at the University of Ottawa. Much of her research in phonology relates to the role of perceptual factors in phonological processes, the status of the syllable, and the treatment of variation. She also specializes in French phonology, with a focus on Laurentian (Québec) French.

Onno Crasborn is a Senior Researcher at the Department of Linguistics of Radboud University Nijmegen, where he heads the sign language research theme of the Centre for Language Studies. After completing a dissertation on phonetic variation in Sign Language of the Netherlands (2001) at Leiden University, he has broadened his research interests beyond sign phonetics and phonology to sociolinguistics, discourse, and corpus linguistics. In 2008 he published the Corpus NGT, the first open access sign language corpus in the world.

Megan J. Crowhurst is an Associate Professor in the Department of Linguistics at the University of Texas at Austin. Her publications in theoretical phonology have concentrated on prosodic phenomena related to word stress and reduplication.

In collaboration with Mark Hewitt, she has also contributed to the literature on constraint conjunction. Her current research, conducted in an experimental paradigm, explores the ways in which humans' perception of rhythm might contribute to the form and frequency of stress patterns found in natural languages.

Stuart Davis is Professor of Linguistics at Indiana University, Bloomington. His primary area of research is in phonology and phonological theory with a secondary area of research in the early history of linguistics in the USA. His work in phonology has especially focused on issues related to syllable structure and word-level prosody. His work has appeared in a wide variety of edited volumes and journals including *Linguistic Inquiry*, *Phonology*, *Lingua*, *Linguistics*, and *American Speech*.

Kenneth de Jong is currently Professor of Linguistics, Cognitive Science and Second Language Studies at Indiana University. He has worked extensively on questions of how prosodic organization pervades the details of speech production, and more generally how speech production and perception interact with one another and how this relates to the phonological system. He is author of more than 50 articles on aspects of phonetic behavior and is currently Associate Editor of the *Journal of Phonetics*.

Paul de Lacy is an Associate Professor in the Department of Linguistics at Rutgers University, an Associate of the Rutgers Center for Cognitive Science, Co-director of the Rutgers Phonetics and Fieldwork Laboratory, and editor of the *Cambridge handbook of phonology*. He works on phonology and its interfaces with syntax, morphology, and phonetics.

Laura J. Downing is a research fellow at the ZAS, Berlin, leading projects on the phonology-focus-syntax interface in Bantu languages. She has published several articles on tone and depressor tone, morphologically-conditioned morphology, syllable structure and prosodic morphology in Bantu languages, and a book, *Canonical forms in prosodic morphology* (2006).

B. Elan Dresher is Professor of Linguistics at the University of Toronto. He has published on phonological theory, learnability, historical linguistics, and West Germanic and Biblical Hebrew phonology and prosody. He is the author of *Old English and the theory of phonology* (1985) and "Chomsky and Halle's revolution in phonology" in the *Cambridge companion to Chomsky* (2005). His recent books include *Formal approaches to poetry: Recent developments in generative metrics* (co-ed., with Nila Friedberg, 2006), *Contrast in phonology: Theory, perception, acquisition* (co-ed., with Peter Avery and Keren Rice, 2008), and *The contrastive hierarchy in phonology* (2009).

San Duanmu is Professor of Linguistics, University of Michigan, where he has taught since 1991. He obtained his Ph.D. in linguistics from MIT in 1990 and from 1981 to 1986 held a teaching post at Fudan University in Shanghai.

Amanda Dye is a graduate student in Linguistics at New York University. She holds a B.A. in Linguistics from Harvard University. Her past work has focused on theoretical and experimental study of the morphophonology and syntax of mutation in Welsh. Her research interests are in experimental phonology, segmental phonology, the study of Welsh, and the phonology-semantics interface.

Mirjam Ernestus is an Associate Professor at Radboud University in Nijmegen. She obtained her Ph.D. from the Free University Amsterdam in 2000 and then held several postdoctoral positions at the Max Planck Institute for Psycholinguistics in Nijmegen.

Kathryn Flack Potts received her Ph.D. in linguistics from the University of Massachusetts, Amherst in 2007. She is a Lecturer in Linguistics at Stanford University.

Stefan A. Frisch is an Associate Professor in the Department of Communication Sciences and Disorders at the University of South Florida. He uses the tools of laboratory phonology to examine frequency effects in the lexicon and in meta-linguistic judgments of well-formedness. He is also interested in speech articulation and the use of experimentally elicited speech errors in the study of speech production processes.

Adamantios I. Gafos is an Associate Professor at New York University's Linguistics Department and a senior scientist at Haskins Laboratories. His interests lie at the intersection of phonology and cognitive science.

Randall Gess is Associate Professor of Linguistics, Cognitive Science, and French, and Director of the School of Linguistics and Language Studies at Carleton University. His research interests are in historical phonology, the phonetics-phonology interface, and French and Romance phonology.

Heather Goad is an Associate Professor in Linguistics at McGill University. She works principally on the acquisition of phonology. Her work has been published in *Linguistic Review*, *Lingua*, *Language Acquisition*, and *Second Language Research*. Her research is currently funded by the Social Sciences and Humanities Research Council of Canada and the Fonds québécois de la recherche sur la société et la culture. She has been an Associate Editor of *Language Acquisition* since 2004.

Matthew Gordon is Professor of Linguistics at the University of California, Santa Barbara. He is the author of *Syllable weight: Phonetics, phonology, typology* (2006) and co-editor of *Topic and focus: Cross-linguistic perspectives on meaning and intonation* (2008). His research focuses on prosody, including stress and intonation, and the phonetic description of endangered languages.

Janet Grijzenhout is Professor of English Linguistics at the University of Konstanz and director of the Baby Speech Lab there. Her research focuses on the phonological representation of voicing and stricture, the phonology-morphology interface, infant speech perception, and the acquisition of prosody and morphology.

Naomi Gurevich received a Ph.D. from the Linguistics Department at the University of Illinois at Urbana-Champaign in 2003. The dissertation was published in the Outstanding Dissertations in Linguistics Series in 2004 under the title *Lenition and contrast: Functional consequences of certain phonetically conditioned sound changes*. Recently Naomi's research interests have shifted from theoretical linguistics to neurologically-based language disorders. She is currently working on a clinical certification in Speech Language Pathology.

Carlos Gussenhoven is Professor of General and Experimental Phonology in the Department of Linguistics at Radboud University, Nijmegen and Professor

of Linguistics in the School of Languages, Linguistics, and Film at Queen Mary University of London. One of his research topics is the prosodic structure of English, including word stress and sentence intonation. Other research has focused on stress and tone in a variety of languages, including Dutch, Japanese, Nubi, and a group of Franconian dialects with a lexical tone contrast. Among his publications are *The phonology of tone and intonation* (2004) and *Understanding phonology* (1998, 2005).

Gregory R. Guy (Ph.D., Pennsylvania) is Professor of Linguistics at New York University, and has been on the faculty at Sydney, Temple, Cornell, Stanford, and York. He has taught at five Linguistic Institutes of the Linguistic Society of America, and three Institutes of the Associação Brasileira de Linguística. He specializes in sociolinguistics and phonological variation and change, and works on Portuguese, English, and Spanish. His current research interests include the treatment of variation in linguistic theory, the relationship between individual and community grammars, and the theoretical treatment of grammatical similarity. His books include *Towards a social science of language* (1996) and *Sociolingüística quantitativa* (2007).

Daniel Currie Hall received his Ph.D. from the University of Toronto in 2007 with a thesis entitled "The role and representation of contrast in phonological theory." He has taught on all three campuses of the University of Toronto and at Queen's University and worked as a researcher at the Meertens Instituut of the Royal Netherlands Academy of Arts and Sciences, and is currently an Assistant Professor at Saint Mary's University in Halifax, Nova Scotia.

Nancy Hall is an Assistant Professor at California State University, Long Beach. She received her Ph.D. from the University of Massachusetts, Amherst in 2003, and has taught at Rutgers University, the University of Haifa, Ben-Gurion University of the Negev, and Roehampton University.

T. A. Hall is Associate Professor of Germanic Studies and Adjunct Associate Professor of Linguistics at Indiana University. He has published widely on a number of topics in general phonological theory and Germanic phonology in journals such as *Linguistics*, *Lingua*, *Natural Language & Linguistic Theory*, *Journal of Germanic Linguistics*, *Phonology*, *Linguistic Review*, *Journal of Comparative Germanic Linguistics*, and *Morphology*.

Michael Hammond is Professor of Linguistics and Department Head at the University of Arizona. He received his Ph.D. in Linguistics from UCLA in 1984. He is the author of numerous books and articles. His research interests are broad, including the metrical theory of stress, Optimality Theory, poetic meter, language games, computational linguistics, psycholinguistics, mathematical linguistics, syllable structure, probabilistic phonotactics, English phonology generally, and Welsh.

S. J. Hannahs is Senior Lecturer in Linguistics at Newcastle University. Co-author of *Introducing phonetics and phonology* (2005), much of his research has focused on prosodic structure, particularly at the interface between phonology and morphology. His recent and ongoing work has concentrated on the phonology and morphophonology of modern Welsh.

John Harris, Professor of Linguistics at University College London, writes on various topics connected with phonology, including phonological theory, the interface with phonetics, language impairment, and variation and change in English. Among his publications are the books *Phonological variation and change* (1985) and *English sound structure* (1994).

Jeffrey Heinz is Assistant Professor in the Department of Linguistics and Cognitive Science at the University of Delaware and has held a joint appointment with the department of Computer and Information Sciences since 2009. He received his Ph.D. in Linguistics from UCLA in 2007 and is keen to help bridge divides between theoretical phonology, computational linguistics, theoretical computer science, and cognitive science.

Ben Hermans is a senior researcher at the Meertens Institute in Amsterdam. He was trained as a Slavist and Germanicist. In 1994 he defended his thesis "The composite nature of accent" at the Free University. He now focuses on the tonal accents of the Limburg dialects, for example, "The phonological structure of the Limburg tonal accents" (2009), and is particularly interested in their formal representation. He also publishes on the history of the phonology of Dutch and its dialects.

José Ignacio Hualde (Ph.D. in Linguistics, 1988, University of Southern California) is Professor in the Department of Spanish, Italian, and Portuguese and the Department of Linguistics at the University of Illinois at Urbana-Champaign. He is author of *Basque phonology* (1991) and *The sounds of Spanish* (2005), co-author of *The Basque dialect of Lekeitio* (1994) and co-editor of *Generative studies in Basque linguistics* (1993), *Towards a history of the Basque language* (1995), *A grammar of Basque* (2003) and *Laboratory phonology 9* (2007), among other books. He has also published a number of articles on synchronic and diachronic issues in Basque and Romance phonology.

Harry van der Hulst is Professor of Linguistics at the University of Connecticut. He has published four books, two textbooks, and over 130 articles, and has edited 20 books and six journal theme issues in areas including feature systems and segmental structure, syllable structure, word accent systems, vowel harmony, and sign language phonology. He has been Editor-in-Chief of the international linguistic journal *The Linguistic Review* since 1990 and he is co-editor of the series *Studies in Generative Grammar*.

Elizabeth Hume is Professor and Chair of the Department of Linguistics at Ohio State University. She holds a Ph.D. and M.A. in Linguistics from Cornell University, an M.A. in French and Social Psychology of Language from McMaster University (Canada), and a B.A. in French from Université Laval (Quebec). Her research interests lie in language sound systems, cognitive science, language variation, and language change. She has published widely on topics including consonant–vowel interaction, feature theory, geminates, markedness, metathesis, sound change, the interplay of speech perception and phonology, and Maltese phonetics and phonology.

Brett Hyde received his Ph.D. in Linguistics from Rutgers University in 2001 and currently has an appointment at Washington University in St. Louis. His primary research interests are in metrical stress theory and related areas.

Larry M. Hyman is Professor of Linguistics at the University of California, Berkeley. He received a Ph.D. in Linguistics from UCLA in 1972. He has published several books (e.g. *Phonology theory and analysis, A theory of phonological weight*) and numerous theoretical articles in such journals as *Language, Linguistic Inquiry, Natural Language & Linguistic Theory, Phonology, Studies in African Linguistics*, and *Journal of African Languages and Linguistics*.

Sharon Inkelas is Professor of Linguistics at the University of California, Berkeley. She specializes in the phonology–morphology interface and has branched out in recent years into child phonology. With co-author Cheryl Zoll she published *Reduplication: Doubling in morphology* in 2005.

Gregory K. Iverson is Professor of Linguistics at the University of Wisconsin–Milwaukee and Research Professor at the University of Maryland Center for Advanced Study of Language. His research interests span the fields of historical linguistics, especially Germanic, the phonetics and phonology of laryngeal systems, especially Korean, and the acquisition of second language phonological patterns.

Jongho Jun is Professor of Linguistics at Seoul National University. His research interests are phonetics in phonology, variation in phonology, and the formal properties of Optimality Theory.

Barış Kabak is currently an Assistant Professor of English and General Linguistics at the University of Konstanz.

Ellen M. Kaisse is Professor of Linguistics at the University of Washington. She has co-edited the journal *Phonology* since 1988. Her research concentrates on the interactions of phonology with morphology and syntax, on distinctive features, and on the phonology of Modern Greek, Turkish, and Spanish.

Yoonjung Kang is an Assistant Professor in the Department of Humanities at the University of Toronto, Scarborough and the Department of Linguistics at the University of Toronto. Her area of specialization is phonology and its interface with phonetics and morphology, with a special focus on Korean.

Shigeto Kawahara is an Assistant Professor in Linguistics and Rutgers Center for Cognitive Science (RuCCs) at Rutgers University. He was awarded his Ph.D. from the University of Massachusetts, Amherst in 2007. His research focuses on the phonetics–phonology interface, experimental investigations of phonological judgments, corpus-based studies of verbal art, and studies on intonation and accents.

Robert Kennedy is a lecturer in the Department of Linguistics at the University of California, Santa Barbara. His areas of expertise include reduplication, prosodic morphology, hypocoristics, vowel systems of English varieties, and articulatory phonology.

John Kingston is a Professor in the Linguistics Department, University of Massachusetts, Amherst. His publications include: “Phonetic knowledge,” *Language* (with R. L. Diehl, 1994); “Lenition,” *Proceedings of the Third Conference on Laboratory Approaches to Spanish Phonology* (2007); “The phonetics–phonology interface,” *Cambridge handbook of phonology* (2007); “On the internal perceptual structure of distinctive features: The [voice] contrast,” *Journal of Phonetics* (with R. L. Diehl, C. J. Kirk, and W. A. Castleman, 2008); “Contextual effects on the perception of

duration," *Journal of Phonetics* (with S. Kawahara, D. Chambliss, D. Mash, and E. Brenner-Alsop, 2009); "Auditory contrast versus compensation for coarticulation: Data from Japanese and English listeners," *Language and Speech* (with S. Kawahara, D. Mash, and D. Chambliss, in press).

Charles W. Kisseberth has just retired from his position as Professor of Linguistics at Tel Aviv University (where he taught from 1996 to 2010) and is also Emeritus Professor at the University of Illinois (where he taught from 1969 to 1996). He is best known for his work in theoretical phonology, where his work on "conspiracies" laid the foundations for Optimality Theory, and his work on Chimwiini prosody helped to lead the way to current studies in the phonology–syntax interface. His work over the last 30 years has focused on Bantu tonal systems, and Optimal Domains Theory has evolved out of that work. He is co-author with Michael Kenstowicz of *Generative phonology* (1979), a standard introduction to classical generative phonology.

Alexei Kochetov is currently an Assistant Professor in the Linguistics Department at the University of Toronto. He received his Ph.D. at the University of Toronto with the thesis "Production, perception, and emergent patterns of palatalization" (published in 2002). His research deals with various issues in the phonetics–phonology interface, cross-language speech production, and Slavic phonology and phonetics.

Astrid Kraehenmann holds a Ph.D. in Theoretical Linguistics from Konstanz University, Germany. Her main research interests are phonology, phonetics, the phonology–phonetics interface, historical linguistics, and Germanic languages.

Haruo Kubozono is Professor and Director at the National Institute for Japanese Language and Linguistics in Tokyo. His main publications include *The organization of Japanese prosody* (1993), "Mora and syllable" (in *The handbook of Japanese linguistics*, 1999), and "Where does loanword prosody come from?" (*Lingua* 116, 2006).

Darlene LaCharité is Professor of Phonetics and Phonology at Laval University. Her areas of research include loanword phonology (in collaboration with Carole Paradis), the L2 acquisition of phonetics and phonology, and creole phonology and morphology (in collaboration with Silvia Kouwenberg). She has published in a variety of linguistics journals, including *Linguistic Inquiry*, *Phonology*, *Journal of Linguistics* and *Journal of Pidgin and Creole Languages*.

William R. Leben is Professor Emeritus of Linguistics at Stanford University. He has worked on the phonology of tone in languages of West Africa and has also co-authored pedagogical works on Hausa. He continues to work on phonology in Kwa languages of Côte d'Ivoire. The second edition of *English vocabulary elements*, a textbook he co-authored, was published in 2007.

Clara C. Levelt is Associate Professor at the Linguistics Department of Leiden University, and affiliated to the Leiden University Centre for Linguistics (LUCL) and the Leiden Institute for Brain and Cognition (LIBC). She received her Ph.D. in 1994, and has worked on child language phonology ever since. In 2007 she received a prestigious research grant from the Netherlands Organization for Scientific Research (NWO), which enabled her to set up a baby lab. Combining insights from perception and production data, phonology and phonetics, she tries to uncover the source of children's deviating productions.

Susannah V. Levi is an Assistant Professor in the Department of Communicative Sciences and Disorders at New York University. She received her Ph.D. in 2004 from the Department of Linguistics at the University of Washington. She then completed a three-year postdoctoral fellowship at Indiana University in the Department of Psychological and Brain Sciences. She has worked on glides, Turkish stress and intonation, and most recently on speech perception and language processing in children and adults.

Yen-Hwei Lin is Professor of Linguistics at Michigan State University, and taught at the 1997 and 2003 Linguistic Society of America Linguistic Institutes. Her research has focused on phonological representations and constraints in the theoretical context of non-linear phonology/morphology and Optimality Theory. She is author of *The sounds of Chinese* (2007) and editor of *Special Issue on Phonetics and Phonology* (*Language and Linguistics* 5.4, 2004).

Anna Łubowicz is Assistant Professor of Linguistics at the University of Southern California. Her research interests lie in the investigation of the role of contrast in phonology and morphology, lexical phonology, and the morphology-phonology interface. She specializes in Slavic languages and holds a Courtesy Appointment in the Department of Slavic Languages at the University of Southern California.

Andrew Martin received his Ph.D. in Linguistics from UCLA in 2007. His research is focused on understanding early phonological and lexical learning. He is also interested in how a language's lexicon changes over time, and how a word's phonological properties affect that word's ability to survive and spread in a speech community. He is currently a post-doctoral researcher at the Laboratory for Language Learning and Development in the RIKEN Brain Science Institute near Tokyo.

Joan Mascaró studied at the Universitat de Barcelona and at MIT where he got his Ph.D. in linguistics in 1976. He has taught at Cornell University and at the Universitat Autònoma de Barcelona, where he is currently full professor. His main research areas are linguistic theory, phonological theory, the phonology-morphology interface, and the phonological and morphological analysis of Romance languages.

April McMahon is Forbes Professor of English Language, and Vice Principal for Planning, Resources and Research Policy, at the University of Edinburgh. She co-edits the journal *English Language and Linguistics*. Her research focuses on the interaction of phonological theory and sound change, and methods for the comparison and classification of accents and languages.

Jacques Mehler is the director of the Language, Cognition, and Development laboratory at the International School for Advanced Studies, Trieste, Italy (SISSA). After obtaining a Ph.D. from Harvard University in 1964, he worked at the National Center for Scientific Research (CNRS) in Paris, France, from 1967 until 2001. In 1972, he founded *Cognition*, an international journal of cognitive science, and acted as Editor-in-Chief until 2007. He became Directeur de Recherche at CNRS in 1980 and was elected Directeur d'Études at the École des Hautes Études en Sciences Sociales in 1982. He has published influential experimental studies of language acquisition in the first year of life, and has also explored early bilingualism. He is a member of the American Academy of Arts and Sciences (2001), the American Philosophical Society (2008) and the Academic Europaea. He was awarded a Doctor Honoris Causa from Utrecht University (2009), and from Université Libre de Bruxelles (1995). His publications are available at: www.sissa.it/cns/lcd/publications.html.

Jeff Mielke is Assistant Professor of Linguistics at the University of Ottawa and Co-director of the Sound Patterns Laboratory. He completed his Ph.D. at Ohio State University in 2004 and undertook postdoctoral research at the Arizona Phonological Imaging Laboratory at the University of Arizona before moving to Ottawa in 2006. His work focuses on the way phonological patterns reflect influences such as physiology, cognition, and social factors. He is the author of *The emergence of distinctive features* (2008).

Amanda Miller is a Visiting Assistant Professor at Ohio State University. Her research focuses on the phonetics and phonology of African languages, particularly Khoesan languages. She has studied gutturals, complex segments (clicks and labial-velars), and contour segments (affricates and airstream contours). She has investigated acoustic voice quality cues and the role of acoustic similarity in a Guttural Obligatory Contour Principle constraint; as well as tongue root retraction in clicks and labial-velars, and its role in C-V co-occurrence patterns. She has also published papers on reduplication and the tonal phonology of Khoesan languages.

Brett Miller is a graduate student at the University of Cambridge. His interests include Indo-European phonology, especially stops; the phonetics-phonology interface; feature contrast, representations, and interaction in rules and constraints; and typology *vis-à-vis* the comparative method.

Bruce Morén-Duolljá is a Senior Researcher at the Center for Advanced Study in Theoretical Linguistics at the University of Tromsø. He has published on synchronic and diachronic phonology, including Slavic palatalization, Icelandic preaspiration and Thai tones. He is the author of *Distinctiveness, coercion and sonority: A unified theory of weight* (2001).

Marina Nespór is Professor of General Linguistics at the University of Milano-Bicocca. She has focused her research on how the phonological shape of an utterance conveys information about its syntactic structure, the so-called theory of prosodic phonology. She has also investigated how prosody is used in comprehension and during language acquisition. Her book *Prosodic phonology* (co-authored with I. Vogel, 1986) is a citation classic and she has numerous articles in peer-reviewed journals.

Andrew Nevins is a Reader in Linguistics at University College London. His research has primarily focused on phonological and morphological theory, and the relations between different modules of the grammar. He has worked on locality, markedness, contrast, reduplication, the nature of underlying representations, and the structure of the morphological component. He is the author of *Locality in vowel harmony* (2010) and the co-editor of two books, with Bert Vaux, *Rules, constraints, and phonological phenomena* (2008), and with Asaf Bachrach, *Inflectional identity* (2008).

David Odden is Professor of Linguistics at Ohio State University. His areas of research specialization include phonological theory and language description, especially the structure of African languages. He served as Editor of *Studies in African Linguistics* from 2003 to 2009 and was Associate Editor of *Phonology* from 1998 to 2008. Recent publications include *Introducing phonology* (2005), "Ordering," in Vaux and Nevins, *Rules, constraints, and phonological phenomena* (2008), and "Tachoni verbal tonology," *Language Sciences* (2009).