

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

THE PHONOLOGY OF CONSONANTS

The most comprehensive work on dissimilation (the avoidance or repair of combinations of similar sounds) to date, this book proposes a novel analysis that handles dissimilation as the avoidance of surface correspondence relationships. It draws on recent work in Agreement By Correspondence to show that dissimilation is a natural outcome predicted by the same theory of Surface Correspondence. The theory is developed in more detail than ever before, and its predictions are tested and evaluated through ten in-depth analyses of diverse languages from Quechua to Kinyarwanda, together with a typological survey of over 150 dissimilation patterns drawn from over 130 languages, from Acehnese to Zulu. The book redefines the core of Surface Correspondence theory to a level of formal specificity and theoretical precision surpassing previous work. The book's findings are made more accessible by numerous examples featuring data from 47 languages from around the world.

WM. G. BENNETT is a senior lecturer in the Department of English Language and Linguistics at Rhodes University, South Africa.

In this series

108 BARBARA DANCYGIER and EVE SWEETSER: *Mental Spaces in Grammar: Conditional Constructions*
 109 HEW BAERMAN, DUNSTAN BROWN and GREVILLE G. CORBETT: *The Syntax-Morphology Interface: A Study of Syncretism*
 110 MARCUS TOMALIN: *Linguistics and the Formal Sciences: The Origins of Generative Grammar*
 111 SAMUEL D. EPSTEIN and T. DANIEL SEELY: *Derivations in Minimalism*
 112 PAUL DE LACY: *Markedness: Reduction and Preservation in Phonology*
 113 YEHUDA N. FALK: *Subjects and their Properties*
 114 P. H. MATTHEWS: *Syntactic Relations: A Critical Survey*
 115 MARK C. BAKER: *The Syntax of Agreement and Concord*
 116 GILLIAN CATRIONA RAMCHAND: *Verb Meaning and the Lexicon: A First Phase Syntax*
 117 PIETER MUYSKEN: *Functional Categories*
 118 JUAN URIAGEREKA: *Syntactic Anchors: On Semantic Structuring*
 119 D. ROBERT LADD: *Intonational Phonology* Second edition
 120 LEONARD H. BABBY: *The Syntax of Argument Structure*
 121 B. ELAN DRESHER: *The Contrastive Hierarchy in Phonology*
 122 DAVID ADGER, DANIEL HARBOUR and LAUREL J. WATKINS: *Mirrors and Microparameters: Phrase Structure Beyond Free Word Order*
 123 NIINA NING ZHANG: *Coordination in Syntax*
 124 NEIL SMITH: *Acquiring Phonology*
 125 NINA TOPINTZI: *Onsets: Suprasegmental and Prosodic Behaviour*
 126 CEDRIC BOECKX, NORBERT HORNSTEIN and JAIRO NUNES: *Control as Movement*
 127 MICHAEL ISRAEL: *The Grammar of Polarity: Pragmatics, Sensitivity, and the Logic of Scales*
 128 M. RITA MANZINI and LEONARDO M. SAVOIA: *Grammatical Categories: Variation in Romance Languages*
 129 BARBARA CITKO: *Symmetry in Syntax: Merge, Move and Labels*
 130 RACHEL WALKER: *Vowel Patterns in Language*
 131 MARY DALRYMPLE and IRINA NIKOLAEVA: *Objects and Information Structure*
 132 JERROLD M. SADOCK: *The Modular Architecture of Grammar*
 133 DUNSTAN BROWN and ANDREW HIPPLEY: *Network Morphology: A Defaults-based Theory of Word Structure*
 134 BETTELOU LOS, CORRIEN BLOM, GEERT BOOI, MARION ELENBAAS and ANS VAN KEMENADE: *Morphosyntactic Change: A Comparative Study of Particles and Prefixes*
 135 STEPHEN CRAIN: *The Emergence of Meaning*
 136 HUBERT HAIDER: *Symmetry Breaking in Syntax*
 137 JOSÉ A. CAMACHO: *Null Subjects*
 138 GREGORY STUMP and RAPHAEL A. FINKEL: *Morphological Typology: From Word to Paradigm*
 139 BRUCE TESAR: *Output-Driven Phonology: Theory and Learning*
 140 ASIER ALCÁZAR and MARIO SALTARELLI: *The Syntax of Imperatives*
 141 MISHA BECKER: *The Acquisition of Syntactic Structure: Animacy and Thematic Alignment*
 142 MARTINA WILTSCHKO: *The Universal Structure of Categories: Towards a Formal Typology*
 143 FAHAD RASHED AL-MUTAIRI: *The Minimalist Program: The Nature and Plausibility of Chomsky's Biolinguistics*

- 144 CEDRIC BOECKX: *Elementary Syntactic Structures: Prospects of a Feature-Free Syntax*
- 145 PHOEVOS PANAGIOTIDIS: *Categorial Features: A Generative Theory of Word Class Categories*
- 146 MARK BAKER: *Case: Its Principles and its Parameters*
- 147 WM G. BENNETT: *The Phonology of Consonants: Harmony, Dissimilation, and Correspondence*

Earlier issues not listed are also available

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

CAMBRIDGE STUDIES IN LINGUISTICS

General Editors: P. AUSTIN, J. BRESNAN, B. COMRIE,
S. CRAIN, W. DRESSLER, C. J. EWEN, R. LASS,
D. LIGHTFOOT, K. RICE, I. ROBERTS, S. ROMAINÉ,
N. V. SMITH

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. BENNETT

Frontmatter

[More information](#)

THE PHONOLOGY OF CONSONANTS

HARMONY, DISSIMILATION,
AND CORRESPONDENCE

WM. G. BENNETT

Rhodes University, South Africa



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107073630

© Wm. G. Bennett 2015

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2015

Printed in the United Kingdom by Clays, St Ives plc

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication Data

Bennett, Wm G., 1984—

The phonology of consonants : harmony, dissimilation and correspondence / Wm G. Bennett, Rhodes University, South Africa.

p. cm. — (Cambridge Studies in Linguistics ; 147)

ISBN 978-1-107-07363-0 (Hardback)

1. Grammar, Comparative and general—Phonology. 2. Consonants. 3. Harmony.

4. Language and languages—Phonology 5. Phonetics. 6. Distinctive features (Linguistics)

I. Title.

P235.B46 2015

414—dc23 2014039485

ISBN 978-1-107-07363-0 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

For Akin, and Alan, and Bruce, and Sharon

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

Contents

	<i>Preface</i>	<i>page</i> xvii
	<i>Acknowledgments</i>	xviii
1	Introduction	1
1.1	Introduction	1
	1.1.1 The core idea: dissimilation from surface correspondence	1
	1.1.2 How it works	3
1.2	Correspondence-driven dissimilation in action	7
1.3	Correspondence, dissimilation, and harmony	10
	1.3.1 Using the same constraints to explain both	10
	1.3.2 Using one correspondence relation for both	11
1.4	Cross-linguistic implications and predictions	14
1.5	Structure and scope of the book	15
	1.5.1 Structure	15
	1.5.2 Scope	16
2	The surface correspondence theory	19
2.1	Introduction	19
	2.1.1 Surface correspondence	19
	2.1.2 Limiting + Correspondence → Dissimilation	20
	2.1.3 Structure of this chapter	21
2.2	The surface correspondence relation	21
	2.2.1 Formal definition of the SCorr relation	21
	2.2.2 The space of possible correspondence structures	21
	2.2.3 Spaces of relevant candidates, and possible optima	26
	2.2.4 Relation to previous formulations of correspondence	28
2.3	Surface correspondence and CON	39
	2.3.1 The types of correspondence-related constraints	39
	2.3.2 The CORR constraints – what they are	40
	2.3.3 The CC-Limiter constraints	51
2.4	How dissimilation arises, and what it means	75
	2.4.1 Typology of dissimilation	77
		xi

xii *Contents*

2.4.2	Where dissimilation happens	77
2.4.3	The relation between dissimilation and harmony	77
2.5	Summary and conclusions, and course of the book	80
3	Kinyarwanda: the effects of domain edges, and the adequacy of a single SCorr relation	81
3.1	Introduction	81
3.2	Proposal	84
3.2.1	Representational preliminaries	84
3.2.2	Sibilant harmony generalizations and their interpretation	86
3.2.3	Dahl's Law dissimilation	90
3.2.4	The complementarity of the two patterns	94
3.2.5	Constraints	95
3.3	Treatment of the basic case	98
3.3.1	Input–output mappings	98
3.3.2	Ranking	100
3.3.3	Analysis	101
3.4	Extensions and discussion	109
3.4.1	The possibility of Dahl's Law in suffixes	109
3.4.2	The option of long-distance sibilant harmony	113
3.4.3	Segmental blocking effects in sibilant harmony	117
3.4.4	Long vowels and blocking of Dahl's Law	126
3.5	Conclusion	127
3.5.1	Summary of proposal	127
3.5.2	Locality and blocking effects	128
3.5.3	The adequacy of a single surface correspondence relation	129
4	Sundanese: complementary assimilation and dissimilation	131
4.1	Introduction	131
4.2	The proposal for Sundanese	133
4.2.1	Representational assumptions	133
4.2.2	Constraints	135
4.2.3	Inputs, outputs, and the candidate space	138
4.2.4	Determining the optimal surface correspondences	139
4.2.5	Ranking	141
4.3	Generalizations and data for Sundanese [ar] and [al]	141
4.3.1	R-dissimilation data	142
4.3.2	L-assimilation data	145
4.4	The surface correspondence analysis	147
4.4.1	L-assimilation	148
4.4.2	R-dissimilation	151
4.5	Conclusion	155

5	Quechua and Obolo: the role of syllable edges	157
5.1	Introduction	157
5.2	CC·EDGE-(σ) in dissimilation: Cuzco Quechua	158
5.2.1	The theory, as applied to Cuzco Quechua	160
5.2.2	Quechua data and generalizations	165
5.2.3	Analysis	169
5.2.4	Quechua: summary and conclusions	177
5.3	CC·EDGE-(σ) in harmony: Obolo	179
5.3.1	The theory, as applied to Obolo	179
5.3.2	Analysis: how the ranking derives the Obolo pattern	187
5.3.3	Obolo: summary and conclusions	191
5.4	Conclusions	192
6	Chol and Ponapean: complete identity effects	194
6.1	Introduction	194
6.2	The SCTD, as applied to Chol	197
6.2.1	Representational preliminaries	197
6.2.2	Complete identity effects in Chol ejectives	198
6.2.3	Correspondence contingent on agreement	200
6.3	The Chol facts, up close	203
6.3.1	Basis for the target generalizations	203
6.3.2	Further details on the reliability of the generalizations	203
6.3.3	Other co-occurrence restrictions in Chol	206
6.4	Analysis of Chol ejectives	206
6.4.1	Place	207
6.4.2	Continuancy	208
6.4.3	Anteriority	209
6.4.4	Section summary	211
6.5	Sufficient identity effects?	211
6.5.1	The prediction	211
6.5.2	Ponapean as a potential example of SIEs	212
6.5.3	Ponapean is not alone	216
6.6	Conclusion	216
7	Zulu labial dissimilation: SCTD and the OCP	218
7.1	Introduction	218
7.2	Applying the SCorr theory to Zulu	220
7.2.1	Representational preliminaries	220
7.2.2	Target of analysis	221
7.2.3	Constraints and ranking	222
7.2.4	The basis for the analysis	224
7.3	The Zulu data, up close	226
7.3.1	About the labial ~ palatal alternation	226

xiv *Contents*

7.3.2	Labial dissimilation: the empirical basis	234
7.3.3	Failure of dissimilation	237
7.3.4	Roots with multiple labials	240
7.4	The SCTD analysis of the pattern	241
7.4.1	Explaining dissimilation	242
7.4.2	Explaining non-dissimilation	243
7.4.3	Explaining both dissimilation and non-dissimilation together	247
7.5	The problems with alternative OCP-based analyses	250
7.5.1	OCP alternative #1: general segmental OCP	250
7.5.2	OCP alternative #2: domain-delimited segmental OCP	253
7.5.3	OCP alternative #3: autosegmental OCP	255
7.6	Summary and conclusions	259
8	Segmental blocking effects in dissimilation	261
8.1	Introduction	261
8.1.1	The phenomenon	261
8.1.2	Two SCTD approaches to segmental blocking	262
8.1.3	The known typology of segmental blocking effects	263
8.1.4	Structure of this chapter	264
8.2	Two kinds of segmental blocking in the SCTD	265
8.2.1	Why blocking is heterogeneous in the theory	265
8.2.2	Blocking as ‘bridged’ correspondence	266
8.2.3	Blocking as double dissimilation	268
8.3	Yidiny: blocking as double dissimilation	269
8.3.1	The Yidiny generalizations	269
8.3.2	The SCTD analysis of Yidiny	272
8.3.3	Yidiny in the empirical landscape	275
8.4	Latin: two kinds of dissimilation blocking	276
8.4.1	The facts and generalizations of Latin	278
8.4.2	Latin Rs: blocking as double dissimilation	286
8.4.3	Latin non-coronals: blocking-by-bridging	291
8.5	Georgian: blocking where intervention is crucial	301
8.5.1	Georgian: the basic R-dissimilation pattern	302
8.5.2	Blocking by intervening L	304
8.5.3	Georgian as double dissimilation?	307
8.5.4	Georgian in the bigger picture	308
8.6	Conclusion	310
9	Typological survey of dissimilation	311
9.1	Introduction	311
9.1.1	The Mismatch property of the SCTD	311
9.1.2	Goals and structure of this chapter	315
9.1.3	Summary of major findings	315

	<i>Contents</i>	xv
9.2	Scope of the inquiry	316
	9.2.1 The phenomenon: long-distance consonant dissimilation	316
	9.2.2 Why leave out segment-adjacent dissimilation?	317
	9.2.3 Survey methodology	322
9.3	The attested typology of dissimilation	329
	9.3.1 Features that dissimilate	329
	9.3.2 Base-level observations about the typology	332
9.4	Dissimilation is not the mirror image of consonant harmony	333
	9.4.1 Match or Mismatch?	333
	9.4.2 Dissimilation and harmony do not have matching typologies	335
	9.4.3 Section summary	339
9.5	Assessing the Mismatch property's predictions	340
	9.5.1 Mismatch predictions and CORR constraints	340
	9.5.2 Support for the mismatch prediction in attested patterns	342
	9.5.3 Unattested patterns that support the mismatch prediction	346
	9.5.4 Where the mismatch prediction seems wrong	347
	9.5.5 Points of unclarity for the mismatch predictions	348
	9.5.6 Mismatch predictions and CC-Limiter constraints	356
	9.5.7 Summary: mismatch predictions are more right than wrong	358
9.6	Comparison to other theories of dissimilation	359
	9.6.1 The Generalized OCP	359
	9.6.2 OCP as self-conjoined markedness	359
	9.6.3 Dissimilating features do not all have temporally extended cues	362
9.7	Conclusion	364
10	Concluding remarks	366
10.1	Summary of proposal	366
10.2	The OCP and anti-similarity constraints	368
10.3	Unresolved issues for future work	371
	10.3.1 Segment-adjacent dissimilation	371
	10.3.2 Correspondence structure when no alternations occur	372
	10.3.3 Directionality	373
	<i>References</i>	376
	<i>Language index</i>	388
	<i>Subject index</i>	391

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)

Preface

This book has its origins in my 2013 dissertation ‘Dissimilation, Consonant Harmony, and Surface Correspondence’. The core theory has not really changed from then, and the core body of data is mostly the same, as is the organizational structure of the work. What has changed to a large degree is the prose and exposition, which was previously full of errors, loose ends, and other various unclarities that impeded understanding of the main points and proposals. The appendix with a database of dissimilation patterns has been changed into an online supplement, which can be found on the book’s website in searchable form.

Acknowledgments

I want to thank first and foremost the dissertation committee that oversaw the creation and development of the work from the start. I am deeply indebted to Akin Akinlabi for his support from the very beginning when I was a first-year PhD student at Rutgers. Without Akin's guidance and help, I would not be the same person, and the work would not be nearly of the same quality it is now. He also showed extraordinary patience as I dabbled in various projects, taking time away from the work on Defaka & Nkɔrɔɔ that I was supposed to be assisting him with. I owe an unspeakably large debt of gratitude to Alan Prince, who provided extremely valuable guidance throughout the development of the work, and shared a lot of wisdom during the process of turning the roughly hewn thesis into the book it was always meant to be. Bruce Tesar provided invaluable help, especially during the early formalization of the theory, and was a supportive presence throughout the process. Sharon Rose was astoundingly patient in reviewing draft after draft of chapter upon chapter, going far above and beyond the call of an external dissertation committee member.

For help collecting and handling and understanding data from various languages, I want to thank: Evi Tanjunk (Sundanese), and Daniel Kaufman for putting me in touch with her; Nqobile Msomi and Freedom Makhathini (Zulu); Peter Fabian (Quechua); Sharon Rose (Ethiopian Semitic lgs); Ümit Atlamaz (Turkish and Kurdish); Sylvia Reed (Latin); Hope McManus (for Australian languages), and Paula Houghton (for sharing her book on Yuwaalaraay that turned out to be much more interesting to me than to her); José Camacho, Carlo Linares, and Teresa Torres Bustamante (Colombian Spanish) and Vera Gor (for help translating Mingrelian glosses from Russian). I am grateful also to Seunghun Lee, Bonny Sands, Bill Foley, and Petr Staroverov for sharing rather large quantities of resources with me, including a lot of the sources where data in the work comes from.

I also want to thank many of my colleagues from Rutgers and elsewhere. Discussions with Paul de Lacy spurred the early stages of the work in very

Cambridge University Press

978-1-107-07363-0 - The Phonology of Consonants: Harmony, Dissimilation, and Correspondence

WM. G. Bennett

Frontmatter

[More information](#)*Acknowledgments* xix

helpful directions. Nick Danis, Hope McManus, and Paula Houghton were especially supportive colleagues and co-workers during the key writing stages of the dissertation; Aaron Braver, Jeremy Perkins, Seunghun Lee, and Sylvia Schreiner were valuable friends who offered support throughout the process. Discussions with Luca Iacoponi were also very useful, and I appreciate his ongoing help in exploring the typological ramifications of surface correspondence theory.

The early versions of the manuscript were quite rough, and polishing them has involved the help of some students at Rhodes, including: Maxine Diemer, Morgan Jander, Justine Kerford, Mikhaela Köhlo, Hazel Mitchley, Tracy Probert, and Siân Rees. I thank Ralph Adendorff too: first for hiring me at Rhodes, and then for being an important encouraging voice in a new and unfamiliar setting where the thesis-to-book metamorphosis took place.

Finally, my wife, Alyson, I thank for keeping me grounded and putting things in perspective, and being a source of great encouragement and support in all ways. The next book will be dedicated to her.

The data and core analysis of Sundanese in Chapter 4, and some portions of the description of surface correspondence in Chapter 2, also appear as part of an article in *NLLT*:

William G. Bennett. (2014). Assimilation, dissimilation, and surface correspondence in Sundanese. *Natural Language and Linguistic Theory*. Available at Springer via <http://dx.doi.org/10.1007/s11049-014-9268-2>.

Portions of the analysis of Obolo in Chapter 5 appear in an article in *SPiL-plus*:

William G. Bennett. (2014). Agreement, dependencies, and Surface Correspondence in Obolo and beyond. *Stellenbosch Papers in Linguistics Plus*, vol. 43. Available via <http://spilplus.journals.ac.za>.