EXISTENTIAL FAITHFULNESS

A Study of Reduplicative TETU, Feature Movement, and Dissimilation

by

Caro Struijke

Revision of
the dissertation submitted to the Faculty of the Graduate School of the
University of Maryland at College Park in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
August 2000

Advisory Committee:

Professor Laura Benua, Chair
Professor Luigi Burzio
Professor Linda Lombardi
Professor John McCarthy
Professor Mary Ellen Scullen
Professor Paul Smolensky
Abstract

The main thesis of this dissertation holds that faithfulness regulates preservation, and faithfulness constraints require input elements be present in the output. They do not demand identity of input and output strings, and are therefore existentially quantified. Preservation is less stringent than identity: only one output correspondent of an input segment needs to reflect the input segment’s feature specifications. Thus, in segmental fission, where an input segment has multiple output correspondents, only one correspondent need resemble the input segment. Other correspondents are free to respond to markedness constraints without violating faithfulness requirements.

The dissertation investigates three empirical domains, all of which constitute ways to improve or satisfy markedness requirements while preserving underlying information. They are reduplicative TETU, feature movement, and dissimilation. Reference is also made to 'distributing diphthongization,' in which different features of a single input segment are preserved on two different output segments.

The dissertation includes three in-depth case studies. The case study of Kwakwala reduplicated words shows that TETU alternations can affect either the reduplicant or the base. The case studies of Sanskrit and Cuzco Quechua show that feature movement and dissimilation often converge to result in a single alternation, and I claim that these two patterns are formally identical.

Chapter 2 argues that reduplication involves segmental fission. Both members of the base-reduplicant pair relate to segments in the input via a general Input-Output faithfulness relation, dubbed 'Broad IO.' The base is in no sense prior to the reduplicant. The strings are of equal status with respect to IO faithfulness, and the existential definition of faithfulness allows TETU alternations affecting either member
of the base-reduplicant pair. The proposed theory makes strong predictions as to which member is affected, depending mostly on the size of the domain evaluated by the emerging markedness constraint.

Chapter 3 deals with both dissimilation and feature movement. I argue that both involve segmental fission where features of an input segment are distributed between two output correspondents. The correspondent preserving the 'moving' or 'dissimilating' marked feature coalesces with another segment. This research is in accord with recent work on dissimilation holding that it is driven by markedness requirements. However, existential faithfulness allows an account in which independently needed markedness constraints are at work, rather than constraints specifically banning multiple instances of a given marked feature (see also de Lacy and Struijke 2000).

Throughout the dissertation I assume that features are attributes of segments, not independent entities. Chapter 4 compares these different approaches with respect to Correspondence Theory. Since $\exists$-IDENT[F] constraints of the first approach and MAX[F] constraints of the second approach are existentially defined, unidirectional, and feature value specific, both can account for the presented phenomena.

Key words: existential faithfulness, Correspondence Theory, reduplication, TETU, feature movement, dissimilation, OCP, cooccurrence restrictions, (distributing) diphthongization, Kwakwala, Sanskrit, Cuzco Quechua
Acknowledgments

Most thanks in these acknowledgments go to my advisor Laura Benua. She has taught me so much, and I hope her advice and insights find a reflection in this work. Her enthusiasm and support have helped me tremendously. I feel proud to be her student.

Many key points in this dissertation were developed during my stay at UMass, where John McCarthy generously shared his wealth of knowledge. I fondly remember many enlightening discussions, fun chats, and reassuring encouragements.

I could simply not have wished for a more wonderful committee. Luigi Burzio taught me that there are endless theoretical possibilities. At the same time, Linda Lombardi held my feet firm on the ground and taught me to be precise in the details. Mary Ellen Scullen was an endless source of great advice and editorial tips, and Paul Smolensky showed the power of theoretical subtleties and was a source of constant support.

I want to thank my classmates, Juan Carlos Castillo, John Drury, Klea Grohmann, Akemi Matsuya, Julien Musolino, and Acrisio Pires for their friendship and for sharing the ups and downs of the graduate experience. Special thanks go to Haruka Fukazawa, Pat Hyronymous, Viola Miglio, Frida Morelli and Bruce Morén for adopting me in their ‘funology’ world and for being there all the way. Lisa Davidson, Matt Goldrick, Mits Ota, and Colin Wilson deserve thanks for making interdepartmental seminars so much fun to attend.

I am grateful to the phonologists and phoneticians at UMass for providing an intellectually stimulating and supportive environment during my dissertation year: in particular Paul de Lacy, John Kingston, Ania Lubowicz, Steve Parker, Joe Pater, Jen Smith, and Lisa Selkirk.
I was fortunate to land a job at University of Toronto, where I revised parts of this dissertation. I want to thank everyone at the linguistics department, in particular those I got to talk phonology with: Peter Avery, Elan Dresher, Greg Guy, Wenckje Jongstra, Arsalan Kahnemuyipour, Sara MacKenzie, Jack Panster, Milan Rezac, Keren Rice, Nicole Rosen, and Tom Wilson. Thanks to Daniel Hall for carefully reading the penultimate draft of this work.

Finally, I want to thank my friends and family for being existentially faithful.
Table of Contents

1 Introduction 1
   1.1 Optimality Theory and classic Correspondence Theory 10
   1.2 Existential Faithfulness 18
      1.2.1 Existential faithfulness constraints defined 19
      1.2.2 Segmental preservation and reduplication 21
      1.2.3 Preservation of feature specifications 23
         1.2.3.1 Preservation of feature specifications and reduplication 25
         1.2.3.2 Preservation of feature specifications and F movement 26
         1.2.3.3 Preservation of feature specifications and dissimilation 28
      1.2.4 Preservation of adjacency and ordering relations 31
   1.3 Fission and surface correspondence 35
   1.4 Conclusion 39

Appendix I: Overview of existential faithfulness constraints 40

2 Reduplicative TETU 45
   2.1 Faithfulness relations in reduplication 48
      2.1.1 Broad input-output correspondence and Output TETU 49
      2.1.2 Root faithfulness and Reduplicant TETU 52
      2.1.3 Base-reduplicant correspondence 53
      2.1.4 Summary 57
   2.2 Reduplicant TETU: Kwakwala case study 58
      2.2.1 Unreduplicated words and the moraic status of codas 59
      2.2.2 The Emergence of WEIGHTPOSITION in reduplicated words 62
      2.2.3 Typological predictions: TETU in red. and lexical affixes 66
   2.3 Output TETU: Kwakwala case study 68
      2.3.1 Unreduplicated words and stress clash 69
      2.3.2 The emergence of *Clash in reduplicated words 73
         2.3.2.1 Type A words 73
         2.3.2.2 Type B and C words 77
   2.4 Realization of reduplicative morphs and phonological reduplication 80
      2.4.1 Non-realization of /RED/ 80
      2.4.2 Forces driving realization of /RED/ 83
      2.4.3 Reduplication in the absence of /RED/ 86
   2.5 Reduplicant size as a predictor of TETU alternations 88
4 \textbf{∃-IDENT[F] and MAX[F] compared} \hspace{1cm} 181

4.1 Correspondence Theory and the status of features \hspace{1cm} 182
4.2 Similarities between \textit{∃-IDENT[F] and MAX[F]} \hspace{1cm} 188
4.3 Phenomena \hspace{1cm} 189
  4.3.1 Distributing diphthongization \hspace{1cm} 189
  4.3.2 Coalescence (and feature stability) \hspace{1cm} 196
  4.3.3 Feature movement \hspace{1cm} 201
  4.3.4 Dissimilation \hspace{1cm} 205
4.4 Conclusion \hspace{1cm} 209

5 Conclusion \hspace{1cm} 211

References \hspace{1cm} 216