

**THE PRO-DROP PARAMETER IN SECOND LANGUAGE ACQUISITION
REVISITED: A DEVELOPMENTAL ACCOUNT**

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Acknowledgments

A great many people have contributed to this dissertation. I first seriously contemplated pursuing a doctoral degree in linguistics as a result of the extraordinary faculty of Old Dominion University in Norfolk, Virginia. Janet Bing, John Broderick, Carole Hines, and Charles Ruhl all lent so much support and encouragement to me, not only then, but also throughout the years that followed, that I found the courage to change careers and enter into the world of academia. My sincerest thanks go to each of them.

My years at the University of South Carolina brought me into contact with some outstanding scholars, mentors, and colleagues who have enriched my life in numerous ways. Of them, Rachel Hayes and Rakesh Bhatt deserve special mention. Rachel and Rakesh first sparked my interest in Optimality Theory and served as coauthors of two papers that spawned the larger concept pursued in this dissertation. Without their initial ideas and continued collaboration, this dissertation would have never been written. Thanks to Rakesh for remaining a member of my committee after joining the faculty of the University of Illinois at Urbana-Champaign

Special thanks also go to Barbara Hancin-Bhatt, whose teaching first opened up to me the field of second language acquisition, and whose frank suggestions and astute guidance went into creation of this dissertation's initial proposal. Barbara's continued friendship and mentoring have been important for my academic and professional growth.

Laura Ahearn, Anne Bezuidenhout, and Ramona Lagos all graciously agreed to be members of this committee. All three brought to the dissertation a keen awareness of discursal aspects of texts and conversations. Ramona provided me access to her classrooms to collect data and was herself important to me as a native speaker informant. Laura and Anne have both taught classes I have taken, and it was a result of these classes and my subsequent interactions with them that I grew to deeply appreciate their perceptive minds and kind spirits. Anne and Laura have always strongly supported me personally, and they have continually improved the quality of my work with their insightful comments.

Numerous others became involved in various aspects of the dissertation. I am grateful to John Grego of the University of South Carolina Statistics Laboratory for his help on test design and statistical analyses, and to Sean Barnette for his assistance in entering a massive amount of data into Excel. I deeply appreciated the efforts of my son, Gabriel LaFond, who labored intensively to help me construct the table of contents and other front matter, as well as the references for the dissertation. I am also indebted to a dear colleague from Old Dominion, Julie Moberly, who was kind enough to copy edit the entire dissertation once it was complete. Paul Boersma, Matt Ciscel, Don Cooper, Dorothy Disterheft, Stan Dubinsky, Kurt Goblirsch, Jane Grimshaw, Juana Liceras, Hyeson Park, Benjamin Slade, and Ana Teresa Pérez-Leroux all commented on certain aspects of my research during the last of couple years, and for their critiques, suggestions, and friendship, I am thankful.

Thanks to Lizette Laughlin, Roberto Irizarry, Beatriz Kellogg, Alexandra Rowe, and especially Carolyn Hansen (who assisted me in more ways than there is space to

mention here) for access to their classrooms to collect data. Special thanks go to all of my research subjects, both at the University of South Carolina and at the Pennsylvania State University. In this regard, I must also especially thank Jacqueline Toribio who was personally responsible for collecting all of the data from the Pennsylvania State University simply because I asked. Jacqueline's efforts doubled the number of informants for the grammaticality judgment task and greatly improved the dissertation.

My deepest gratitude goes to my dissertation adviser, Eric Holt, who somehow always found the time to patiently guide and collegially discuss every step of the dissertation process. Eric's knowledge, professionalism, and valuable suggestions not only assisted me with the dissertation — he also enthusiastically supported every aspect of my professional development in my final year of graduate school, providing important support for my teaching, presenting, publishing, and job search. Eric clearly demonstrated to me that excellence in academic research does not need to involve either an overblown ego or a sacrifice of one's humanity.

Finally, I wish to thank my closest friend — my wife, Deb. More than anyone, Deb was most directly affected by my decision to pursue this goal, and she endured the process with unusual grace. I owe what remains of my sanity to her, because she never allowed the pressures of the urgent to cause me to lose sight of the important. My dissertating year would have been far more painful had I not yielded to her wise demand that it include time to dance, recreate, and love. Her unwavering support and encouragement has blessed me more than I can express.

Abstract
The pro-drop parameter in second language acquisition revisited:
A developmental account

Larry LaFond

This dissertation applies a particular theory of language acquisition and representation, Optimality Theory (Prince and Smolensky 1993, Grimshaw 1997), and a particular learning algorithm within this theory, the Constraint Demotion Algorithm (Tesar and Smolensky 2000), to the problem of how second language acquisition of pro-drop takes place for learners whose first language does not instantiate the grammatical properties traditionally associated with pro-drop.

The overarching goal of this study is to provide an account of the developmental stages in the second language learning of three grammatical properties: null subjects, inversion, and *that-trace*. Although there is no lack of such accounts from earlier generative perspectives, the need remains for a comprehensive developmental account from an Optimality-theoretic perspective. This dissertation begins to address that need.

The study here is based on several empirical tests (a translation task, a pilot study, and a grammaticality judgment task) that were administered to 370 adult native English speakers studying Spanish at the University of South Carolina or the Pennsylvania State University. Each task was designed to investigate learner competencies regarding null subjects, inversion, and *that-trace*. A key conclusion from these studies is that the acquisition of Spanish by native speakers of English involves a reranking of universal syntactic and discorsal constraints in these languages. Specifically, this dissertation argues that acquisition of Spanish occurs through the demotion of certain syntactic constraints in the English native grammar so that these constraints are dominated by discorsal constraints in the Spanish second language grammar.

This cross-sectional study tracks learners through developmental stages, but it is also theory driven, because the theory of grammar used in this dissertation permits specific predictions about the interaction and relative importance of constraints in Spanish and English and, ultimately, of the acquisitional route learners take. The application of Optimality Theory to interactions between discourse and syntax in second language learning represents a new and potentially productive line of inquiry that may advance our understanding of both second language learning and grammatical theory.

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List of Constraints

<i>Constraints and their first appearance:</i>	<i>Definitions</i>
AGR(x) (p. 38)	A tensed verb hosts spec-head agreement between an agreement feature x and a nominal constraint.
ALIGNFOCUS-RIGHT (AF-RT) (p. 7)	Align the left edge of focus constituents with the right edge of a maximal projection.
CONTROL (p. 38)	A null pronoun must be controlled in its control domain.
DROPFOCUS (DROPF) (p. 49)	Leave arguments coreferent with the focus structurally unrealized.
DROPSUBJECT (DROPS) (p.186)	Requires covert realization of subjects.
DROPTOPIC (DROPT) (p. 7)	Leave arguments coreferent with the topic structurally unrealized.
DROPTOPIC _{rel} (DropT _{rel}) (p. 37)	Arguments with topic antecedents must be realized only minimally.
FAITH[SUB] (p. 7)	The output value of [SUB] (for ‘subordination’) must be the same as the input value.
FREEPRONOUN (p. 37)	A pronoun must be free in its governing category.
FULL INTERPRETATION (FULLINT) (p. 32)	Parse lexical conceptual structure.
LEFTEDGE(CP) (LE(CP)) (p. 7)	The first (leftmost) pronounced word in CP must be the complementizer.
MAX(PRO) (p. 38)	If pro occurs in the input, its output correspondent is pro.
NO PHI-FEATURES (p. 38)	Avoid agreement features.
PARSE (p. 7)	Parse input constituents.
RECOVERABILITY (REC) (p.204)	that requires that the semantic content of unpronounced elements be recoverable from the local context.
SUBJECT (SUBJ) (p. 7)	The highest A-specifier in an extended projection must be filled.
TELEGRAPH (TEL) (p.202)	Do not realize function words
T-GOV (p. 40)	Trace is governed.
T-LEX-GOV (p. 40)	Trace is lexically governed.

List of Abbreviations

1, 2, 3	first person, second person, third person
∅	null element
*	ungrammatical form or constraint violation
!	fatal constraint violation
K	optimal candidate
solid line or »	dominance relationship
dotted line or ,	non-ranking
AGR	agreement element
AUX	auxiliary element
C, CP	complementizer, complementizer phrase
CDA	Constraint Demotion Algorithm
CV	consonant-vowel
cl	clitic
D-structure	abstract level of syntactic structure, 'deep structure'
EVAL	Evaluator that selects the optimal candidate GEN produces
fut	future
GEN	Generator that creates a candidate set of potential outputs
GB	Government and Binding Theory
iff	'if and only if'
imperf	imperfect
infin	infinitive
INFL or I, IP	verbal inflection of a clause, inflectional phrase
L1	first language
L2	second language
LF	Logical Form
MP	Minimalist Program
MUH	Morphological Uniformity Hypothesis
N, NP	noun, noun phrase
OT	Optimality Theory
part	participle
perf	perfect
PF	Phonetic Form
pst	past
pl	plural
PRO, pro	phonetically null elements, 'empty categories'
prs	present
RIP	Robust Interpretive Parsing
S	sentence
S-structure	abstract level of syntactic structure, surface structure
sg	singular
SLA	second language acquisition
Spec	specifier
SUBJ	Subject

t	trace element
TNS	tense
UG	Universal Grammar
V, VP	verb, verb phrase
<i>wh-</i>	class of words or phrases beginning with <i>wh-</i> in English (e.g. <i>who, what, which, why, which ones</i>)
XP	full phrase projection