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

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

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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 discoursal 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 discoursal 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

Constraints and their first appearance:		*Definitions*
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.
$\text{DROPTOPIC}_{\text{rel}}$ ($\text{DropT}_{\text{rel}}$)	(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
Ø	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
wh-	class of words or phrases beginning with *wh-* in English (e.g. *who*, *what*, *which*, *why*, *which ones*)
XP	full phrase projection