Ineffability and UR constraints in Optimality Theory

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Overview

Phonologically-conditioned ineffability is modeled using UR constraints. Under this account, ineffability results when the grammar blocks UR selection. This is a natural extension of accounts of allomorphy in which phonological constraints select between URs.
UR constraints provide a means to account for exceptions to ineffability, while avoiding the ranking paradoxes of morpheme-specific MPARSE.

Ineffability

Some set of morphosytactic features lacks a surface realization, due to phonological constraints.

Tagalog: Sonorant-labial OCP blocks *-um-* infixation (Orgun & Sprouse 1999: 206)

1a	pejnt	p-um-ejnt	paint
1b	keri	k-um-eri	carry
1c	weijl	*w-um-ejl	wail
1d	meri	*m-um-eri	marry

Lexical exceptions

Ineffability is commonly morpheme-specific and subject to exceptions (Hetzron 1975, Orgun & Sprouse 1999, Fanselow & Féry 2002).

Labial OCP doesn't block ma-prefixation or reduplication (Orgun & Sprouse 1999: 205)

2a	mulat	ma-mulat	have one's eyes opened
2b	wala?	ma-wala?	be lost
2c	mumug	mu-mumug-in	will gargle

Labial OCP doesn't block roots (Orgun & Sprouse 1999: 205)

3a	mumo?		ghost
3b	mumo		particles of cooked rice
3c	mumug-in		gargle-present

Lexical exception with -um- (Zuraw & Lu 2009)

4	wagajwaj	w-um-agajwaj	wave

UR constraints

The input to phonology is not underlying forms (URs), but morphosyntactic features (Wolf 2008 for an overview). UR constraints require a particular set of morphosyntactic features (or meaning) to be realized by a particular UR (Zuraw 2000, Boersma 2001).

Examples: UM→ /um/; CARRY → /keri/; GHOST → /mumo?/

For each meaning, there is a finite set of UR constraints. The set of candidate URs consists of every UR specified in one of those constraints. Each of these is paired with candidate SRs, producing a candidate set of (UR, SR) pairs.

Ineffability with UR constraints

The candidate set contains *candidates in which the meaning is not realized at all.* When one of these deficient candidates is optimal, the result is ineffability. The underscores represent meanings without corresponding URs.

Partial candidate set for UM+MARRY

5a	/um+meri/	[mumeri]	Acceptable
5b	/um/+___	[um]	Ineffable
5c	___+/meri/	[meri]	Ineffable
5d	___+___	Ø	Ineffable

Analysis of Tagalog

	Input: UM+MARRY		MARRY→ /meri/	OCP	UM→ /um/
6a	/um+meri/	[mumeri]		1_W	L
6b	/um/+_____	[um]	1_W		L
6c	_____+/meri/	[meri] ☞			1
6d	_____+_____	Ø	1_W		1

	Input: UM+CARRY		CARRY→ /keri/	OCP	UM→ /um/
7a	/um+keri/	[kumeri] ☞			
7b	/um/+_____	[um]	1_W		
7c	_____+/keri/	[keri]			1_W
7d	_____+_____	Ø	1_W		1_W

Analysis of exceptions

Exceptionality comes from an exceptionally high-ranked UR constraint.

	Input: MA+OPEN		MA→ /ma/	OPEN→ /mulat/	OCP
8a	/ma+mulat/	[mamulat] ☞			1
8b	/ma/+_____	[ma]		1_W	L
8c	_____+/mulat/	[mulat]	1_W		L
8d	_____+_____	Ø	1_W	1_W	L

Alternative: MPARSE

An MPARSE account suffers from ranking paradoxes (MPARSE: Prince & Smolensky 1993/2004; Wolf & McCarthy 2009). If a morpheme surfaces in an OCP environment, its MPARSE constraint will be ranked above OCP. An input containing this morpheme will not be ineffable, an undesirable result.

Reduplication occurs both in and outside of gaps (Orgun & Sprouse 1999)

9a	*m-um-i-misti na (um+RED+misti)	it's misty now
9b	mu-mumug-in (RED+gargle)	will gargle

	INPUT	SR		MPARSE (RED)	OCP
10a	/RED+mumugin/	[mumumugin]	☞		1
10b	/RED+mumugin/	*ineffable*		1_W	L
11a	/um+RED+misti na/	[mumimistina]	💣		1
11b	/um+RED+misti na/	*ineffable*		1_W	L
12a	/um+meri/ … /RED/	[mumeri … RED]	💣		1
12b	/um+meri/ … /RED/	*ineffable*		1_W	L

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