Truncation in Lardil: A Maximal Length Restriction

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Many languages require words to be at least a certain length (see [8] and many others). But rather little work has been done on *maximal* length restrictions: perhaps only [1-3]. Some languages require words to be no more than a foot or a foot plus a syllable (as in Czech: [1]). Truncation may occur to avoid a form that exceeds a language's maximal size restriction. In a stress system that includes the prosodic Markedness constraint PARSE-SYLLABLE (6) and the Faithfulness constraint MAX-V (3), the typology includes languages that show vowel deletion to avoid unparsed syllables. Of those languages, some impose a further restriction of having at most one foot per word, and so the maximum length of any form is a binary foot (3σ → [(σ σ) ϭ]). I propose that in some languages, truncation may occur under this rubric even though it does not yield the maximum length, due to other principled restrictions: in particular, limitations on the amount and kind of deletion that takes place.

One of the most theoretically challenging cases of truncation is found in the nominal paradigm of Lardil [North Queensland, Australia] ([4]; see [5], [6], [7]). Unlike the more familiar type of truncation which yields a truncated form of a fixed size (e.g. Italian nickname formation [8] shows deletion down to a single binary trochee (2), regardless of the length of the base), truncation in Lardil nominals has been interpreted as the deletion of a fixed constituent: a single vowel. The nominative shows final vowel deletion in three-syllable forms and longer (1a-c) while two-syllable forms surface as is (1d), and augmentation occurs in forms less than two syllables (1e). Lardil has initial stress ([1] p. 29); here it is assumed that each word contains a trochee at the left edge followed by any number of unparsed syllables ([(ˈσ σ) σ…]).

(1)

	Schema	Lardil Nominatives [4]
a.	5σ → 4σ	/ɽeltʸiɻatʸiɻ**a**/→ [(ɽél.tʸi.)ɻa.tʸiɽ.]
b.	4σ → 3σ	/yiliyil**i**/→ [(.yí.li).yil.]
c.	3σ → 2σ	/yalul**u**/→ [(.yá.lul.)])
d.	2σ→ 2σ	/wiɻ**e**/→ [(.ˈwi.ɻe.)])
e.	1σ→ 2σ	/wik/→ [(.ˈwi.ka.)]

(2)

	Schema	Italian Nicknames [8]
a.	5σ→ ?	NA
b.	4σ→ 2σ	.Nó.ra. < .E.leo.nó.ra.
c.	3σ→ 2σ	.Cés.ca.< .Fran.cés.ca.
d.	2σ→?	NA
e.	1 σ→ ?	NA

In the proposed analysis, Lardil shows a maximal word restriction: the targeted prosodic word shape is a single binary trochee with no unparsed syllables. I claim that truncation occurs to avoid a form that is longer than a binary trochee (with, independently, following [5], augmentation to avoid a subminimal unary foot). Crucially, in some forms, the target phonological shape is never reached: while final vowels may delete (3σ → 2σ: /yalul**u**/→ [(.ˈya.lul_.)]; non-final vowels may not (4σ → *2σ: /yiliy**i**li/→ *[(.ˈyi.li.)]).

In the analysis, the pattern of truncation and non-truncation in Lardil nominative forms results from an entirely standard *special F» M » general F* interaction. In forms that exceed the maximum length of a binary trochee—i.e. those that contain a string of unparsed syllables—unparsed syllables are avoided by deletion, since PS (6) dominates MX (3). Non-final vowels cannot delete, it is asserted, since PS (6) is dominated by a positional faithfulness constraint MX/NON-FINAL (4), proposed here, which penalizes the deletion of non-final vowels. In suffixed forms, MORPHREAL (7) above MX/NON-FIN predicts non-truncation in the stem. The result is that a familiar two-syllable restriction interacts with other ordinary constraints; this despite the fact that the language shows many words of 3, 4, or even 5 syllables.

The proposed Lardil analysis eliminates Prince and Smolensky's (1993: 123) aberrant *anti*-faithfulness constraint FREE-V 'assign a violation for each form where the final vowel is not deleted', interpreting the phenomenon in terms of ordinary markedness-faithfulness interactions. This analysis resolves a long-standing theoretical anomaly: the intrusion of anti-faithfulness [14] into the lexical grammar.

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Appendix

1.1 Truncation in Lardil nominatives

1.1.1 Con

(3) **MAX-V (MX-V)**
Assign a violation for each input vowel that lacks an output vowel.

(4) **MAX-V/NON-FINAL(MX-V/NON-FINAL)**
Within a morphological word, assign a violation for each non-final vowel that lacks an output correspondent.

(5)

	Input:	/kilau/	MAX-V/NON-FINAL	MAX
	(a)	kil_u	*	*
☞	(b)	kila_		*

(6) **PARSE-SYLLABLE (PS)**
Assign a violation for each syllable that does not belong to a foot.

(7) **MORPHREAL**
Assign a violation for each morpheme that does not have an overt exponent.

1.1.2 Ranking (calculation in OTWorkplace [14])

(8) *Portion of the ranking:* **MAX-V/NON-FINAL » PARSE-SYLL»MAX**
N.B. Not all constraints that are required for Lardil are in the tableau in (9). All candidates are equal on all constraints that dominate MAX-V/NON- FINAL.

(9) Ranking support:

Erc#	Input	Winner	Loser	13:MAXV/NON-FINAL	3:PARSE-SYLL	10:MAX
9.1>3	yiliyili	[(.yí.li.)yil.]	[(.yí.li.)]	**W**	**L**	**W**
12.1>3	yalulu	[(.yá.lul.)])	[(.yá.lu.)lu.])		**W**	**L**

References

1. Ketner, K., *Size Restrictions in Prosodic Morphology*, 2006, University of Cambridge [ROA-1028]: Cambridge.
2. de Lacy, P., *Maximal words and the Maori passive*, in *Proceedings of the Austronesian Formal Linguistics Association (AFLA) VIII*2002, MIT Working Papers in Linguistics: Cambridge, MA.
3. Ussishkin, A., *The Emergence of Fixed Prosody*, 2000, University of California, Santa Cruz: Santa Cruz, CA.
4. Klokeid, T., *Topics in Lardil Grammar*, 1976, MIT: Cambridge, MA.
5. Wilkinson, K., *Prosodic structure and Lardil phonology.* Linguistic Inquiry, 1988. **19**: p. 325-334.
6. Prince, A. and P. Smolensky, *Optimality Theory: Constraint interaction in generative grammar*1993/2004, Malden, MA, and Oxford, UK: Blackwell.
7. Staroverov, P., *Opacity in Lardil*, 2010: Rutgers, The State University of New Jersey.
8. Alber, B., *An Exploration of Truncation in Italian*, 2010: ROA 1095.
9. Horwood, G. *Anti-faithfulness and subtractive morphology*. 1999.
10. Weeda, D., *Word Truncation in Prosodic Morphology*, 1992, University of Texas, Austin.
11. Martin, J., *Subtractive Morphology as Dissociation*, in *The Proceedings of the West Coast Conference on Formal Linguistics 7*1988, Stanford Linguistic Association: Stanford. p. 229-240.
12. Alber, B. and S. Arndt-Lappe, *Templatic and Subtractive Truncation*, in *The Phonology and Morphology of Exponence – the State of the Art*, J. Trommer, Editor 2012, OUP: Oxford. p. 289-325.
13. McCarthy, J. and A. Prince, *Prosodic Morphology I: Constraint Interaction and Satisfaction*, 1993, University of Massachusetts, Amherst, and Rutgers University.
14. Alderete, J., *Dominance effects as transderivational anti-faithfulness.* Phonology, 2001. **18**: p. 201-253.