Exceptions Encoded at the Segmental Level

This paper demonstrates the need for a treatment of exception at the segmental, rather than lexical, using a case of exceptions to spirantization in Modern Hebrew.

In Modern Hebrew, due to degemination and some historical mergers, spirantization occurs in a very limited set of stops: [b], [p], and [k]. These stops alternate with their fricative counterparts in allophonic distribution, with fricatives occurring in postvocalic position and stops occurring elsewhere.

However, even within these three stops, there are some cases of underapplication where stops occur in postvocalic position, as in (2a). There are also cases of apparent overapplication of spirantization, where fricatives occur in word-initial position, as in (2b).

This paper provides an Optimality Theoretic account for paradigms in which spirantization underapplies and overapplies in Modern Hebrew, including both non-alternating fricatives and stops. An Optimality Theoretic account is presented for segments which do not spirantize, showing cases in which treating these exceptions at the word level would yield the wrong result.

Following Idsardi (1997) and building on Inkelas, Orgun, and Zoll (1997), I propose an analysis where the segment can be either prespecified or unspecified for a feature (in this case [+cont], [-cont], or [øcont]), a possibility predicted by Richness of the Base. Unlike analyses that treat lexical exceptions at the word level, this segmental analysis is crucial due to the existence of words with both alternating and non-alternating segments. These words, found in (3), provide support for the need for encoding exceptionality at the segmental level.

Word-level analyses, such as those proposed by Itô and Mester (1999), fail to account for forms such as those in (3) by dealing with exceptions as whole-word phenomena. Analyzing such words using Itô and Mester's analysis would predict the wrong output, since the status of the word as an exception, along with the highly-ranked corresponding faithfulness constraint would not allow for *any* alternation of any segment in the input.

To provide an accurate analysis for segmental exceptionality, using prespecified and unspecified segments, the faithfulness constraint IDENT[cont] must be highly ranked, with unspecified segments incurring violations of this constraint whether they are instantiated as stops or spirants in the output. A contextual markedness constraint prohibiting post-vocalic stops, *V-STOP, will be ranked lower than faithfulness so as to not prohibit the fully faithful, prespecified segment from incurring a fatal violation. The context free constraint *[+cont, -spir] prevents the more marked spirants from surfacing. The constraint ranking is schematized in the tableau below.

/kBr/ + inf. | [-cont] *'to bury'*	IDENT[cont]	*V-STOP	*[+cont, -spir]
☞a. likbor	*	*	
b. lixbor	**!		*
c. lixvor	**!		**
d. likvor	*	*	*!

(1) Regularly alternating stop ~ fricative pairs in MH

	root	3rd person sing. past		infinitive	
[p] → [f]	/**p**rs/	[paras]	→	[li**f**ros]	'to spread'
[b] → [v]	/**b**nh/	[bana]	→	[li**v**not]	'to build'
[k] → [χ]	/**k**tb/	[katav]	→	[li**χ**tov]	'to write'

(2) Non-alternation stops and spirants in MH

	Segment	Word-initial		Word-medial	
Non-alternating fricatives	[f] (<*borrowed)	[**f**aʃla]	'mistake'	[le**f**aʃel]	'to make a mistake'
	[v] (<*w)	[**v**iter]	'conceded'	[le**v**ater]	'to concede'
	[χ] (<*ħ)	[**χ**alam]	'dreamt'	[la**χ**lom]	'to dream'
Non-alternating stops	[k] (<*q)	[**k**avar]	'burried'	[li**k**bor]	'to burry'
	singleton stops {[p], [b], [k]} (<*geminates)	[si**p**er]	'told'	[lesa**p**er]	'to tell'
		[χa**b**ala]	'sabotage'	[leχa**b**el]	'to sabotage'

(3) Words containing both alternating and non-alternating segments in MH

root	3rd person sing. past		infinitive	
/**kbr**/	[**k**a**v**ar]	→	[li**kb**or]	'to burry'

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