SOUND CORRESPONDENCES IN HEBREW BLENDS AND PUNS: ASYMMETRY AND STRESS

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This talk presents and accounts for sound correspondence findings from a corpus of 950 Hebrew blends and imperfect puns that constitute a phonological and orthographic minimal pair with one of their bases (e.g. *sexting* in English): one base (B_1) is identical to the item in all but one sound and grapheme, and the second base (B_2) is segmentally and orthographically fully integrated in the item. This allows to "boil down" each item into a single correspondence between two different sounds ($S_1 \rightarrow S_2$):

(1) Examples

	blend/pun		B_1		B_2		
1.	**ts**élfi	shadow selfie	**s**élfi	selfie	**ts**él	shadow	s→ʦ
2.	**s**áv níndʒa	athletic elderly	**ts**áv níndʒa	ninja turtle	**s**áv	grandpa	ʦ→s
3.	xolé néfe**ts**	warmonger	xolé néfe**ʃ**	mentally ill	néfe**ts**	explosion	ʃ→ʦ
4.	xómer néfe**ʃ**	drugs	xomér néfe**ts**	explosives	néfe**ʃ**	soul	ʦ→ʃ
5.	x**i**túl basák	leaky diaper	x**a**túl basák	pig in a poke	x**i**túl	diaper	a→i
6.	m**í**ntʃiz	post-sex munchies	m**á**ntʃiz	munchies	m**í**n	sex	á→í

I assume that blends prefer to be as similar as possible to their bases in all phonal aspects, prosodic and segmental alike (Gries 2012 and references therein), and I assume the same of puns (Kawahara 2009 and references therein). The sound correspondence findings are thus taken to reflect speakers' perception of similarity between sounds.

The first finding I discuss is a consonant correspondence asymmetry among s–ʦ and ʃ–ʦ, whereby s→ʦ and ʃ→ʦ are more over-represented than ʦ→s and ʦ→ʃ:

(2) s–ʦ and ʃ–ʦ correspondence asymmetry

	pair	_→ʦ	O	O/E	ʦ→_	O	O/E
1.	s–ʦ	s→ʦ	27	5.28	ʦ→s	11	2.85
2.	ʃ–ʦ	ʃ→ʦ	9	4.88	ʦ→ʃ	3	1.81

O is the Observed value, how many times each correspondence is observed in the corpus, and O/E is the Observed/Expected ratio, how well represented each correspondence is relative to how many times it is Expected to occur if the correspondences were random.

I take the preference for s→ʦ over ʦ→s to mean that given the input /s_1, $ʦ_2$/ and the need to represent both consonants as one in the output, [$ʦ_{1,2}$] is preferable to [$s_{1,2}$]. I argue that this is due to a phonal similarity asymmetry whereby [s] sound more like [ʦ] than [ʦ] sounds like [s]. I review four possible conceptions of a such an asymmetry:

Confusability: a confusability experiment (Lakretz et al. in progress) reveals that [s] is more confusable with [ʦ] than the other way around.

Feature faithfulness: [$ʦ_{1,2}$] maintains both the closure and frication acoustic components of /s_1, $ʦ_2$/, but [$s_{1,2}$] is unfaithful to the closure component (anonymous reviewer).

Neighborhood size: ʦ→s is less over-represented because [ʦ] is "spread thinner" across a larger neighborhood of correspondents. The three most over-represented correspondents of [s] are the stridents [ʦ], [ʃ] and [z], whereas the five most over-represented correspondents of [ʦ] are the stridents [s], [ʃ] and [z] *and* the stops [t] and [d].

Frequency: the relative frequency of [ʦ] in Hebrew is less than that of [s] (Schocken 2008), meaning that [ʦ] is more lexically informative due to it occurring in a smaller subset of Hebrew's lexicon; [ʦ$_{1,2}$] is preferable because it involves less loss of lexical information.

Confusability does not carry over to accounting for the ʃ–ʦ asymmetry, because the confusability experiment reveals that [ʃ] and [ʦ] are equally as confusable with one another. The three other conceptions however do carry over to accounting for ʃ–ʦ the asymmetry.

The second finding I discuss is the effect of stress on [a] correspondences, whereby stress decreases more drastically the [a] correspondences with high vowels:

(3) [a] correspondences

	unstressed	O/E	stressed	O/E
1.	a→e	1.25	á→é	1.32
2.	a→o	1.11	á→ó	1.20
3.	a→i	0.98	á→í	0.78
4.	a→u	0.73	á→ú	0.48

I present an Optimality-theoretic (OT; Prince & Smolensky 1993/2004) model of the [a] correspondences, with constraints weighing (Pater 2009) as much as their violation decreases the O/E ratio. The model uses three constraints: ROUND, penalizing adding roundedness to [a], HIGH(a), penalizing changing the [–high] feature of [a], and HIGH(á), penalizing changing the [–high] feature of [á]:

(4) OT model of [a] correspondences

O/E		a	0.32 HIGH(a)	0.2 ROUND	MODEL
1.25	a)	e			1.31
1.11	b)	o		*	1.11
0.98	c)	i	*		0.99
0.73	d)	u	*	*	0.79

O/E		á	0.32 HIGH(a)	0.31 HIGH(á)	0.2 ROUND	MODEL
1.32	a)	é				1.40
1.20	b)	ó			*	1.20
0.78	c)	í	*	*		0.77
0.48	d)	ú	*	*	*	0.57

The need to introduce a separate HIGH constraint for [á] follows directly from the assumption that blends and puns prefer to be as phonally similar as possible to their bases: a high vowel corresponding with [á] is more perceptible than when corresponding with unstressed [a], because stressed vowels in Hebrew are significantly longer and more intense (Silber-Varod et al. 2016). It remains to be explained why [a] correspondences with round vowels are not affected by stress in this way.

Selected References

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