[lo kaze aj-aj-aj]¹: Haplology in Modern Hebrew plural marking

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In Modern Hebrew, nouns appear in two "states": the Free State, which is the citation form, and the Construct State, which is the form of the noun when it is the head of a nominal compound $N_{head}+N_{modifier}$. As can be seen in (1), in both States the masculine singular does not carry any overt marking. Feminine singular nouns appear with one of several overt markers; this talk will only be concerned with the most common of these markers, namely *-a*. In the Construct State, this feminine singular marker appears with an additional [t]: *sus-at*. Masculine plural is exponed by a suffix *-im* in the Free State and by a suffix *-ot* in both States. Note further that the feminine plural marker *-ot* is added directly to the stem, rather than to the singular form with the suffix *-at*.

(1)	Singular		Plural	
_	Free State	Construct State	Free State	Construct State
masculine	sus	sus ets	sus-im	sus-ej ets
feminine	sus-a	sus-at ets	sus-ot	sus-ot ets

The goal of this talk is to account for two cases of asymmetry between masculine and feminine exponence. The first appears in (2) and concerns possessive suffixes: when a suffix *-ey*-, marking the plurality of the possessed, is added to a masculine noun, it is concatenated to the singular form. But when it is added to a feminine noun, it is concatenated to the plural base. The same plurality is thus marked twice on possessed feminine nouns (marking plural number only once is ungrammatical: **sus-ot-xem* or **sus-at-ey-xem*):

(2)	possessed is singular		possessed is plural	
masculine	sus-xem	'your _[mpl] horse'	sus-ey-xem	'your _[mpl] horses'
feminine	sus-at-xem	'your _[mpl] mare'	sus-ot-ey-xem	'your _[mpl] mares'

The second case of double plural marking exhibits the same asymmetry. It is found in the formation of *new* dual nouns (Schwarzwald 2002). As shown in (3), the dual suffix $-\dot{a}j$ -im attaches to the masculine singular base, but to the feminine *plural* base.

(3)	singular	dual
masculine	sus	sus-áj-im
feminine	sus-a	sus -ot- áj-im

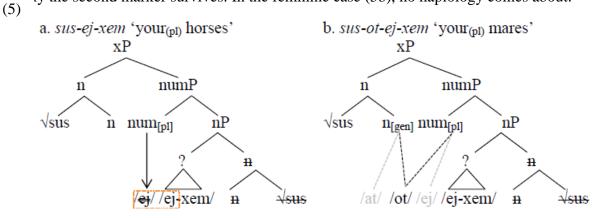
The talk presents an analysis of these cases based on haplology, i.e. the omission of one of two adjacent, similar exponents (for ample evidence for haplology, see Nevins (2012)). It is claimed that in both (2) and (3), a masculine plural marker is also expected to be present, but its realization is blocked because it is too similar to the following adjacent marker. Thus, [sus-ej-xem] and [sus-áj-im] are actually /sus-ej-ej-xem/ and /sus-ej-aj-im/ respectively. The first /ej/ is deleted because of haplology. In the feminine cases, haplology does not apply because the exponents are different /sus-ot-ej-xem/ and /sus-ot-aj-im/.

The analysis, conducted within Distributed Morphology (e.g. Embick (2010)), proceeds in two steps. First, a set of Vocabulary Items is proposed, formalizing the generalizations regarding number exponence in (1). The two important VIs are presented in (4a,b). Masculine is assumed to be the absence of a gender feature. Accordingly, (4a) assumes that /im/ and /ej/ are two allomorphic realizations of a plural feature only, /im/ realizing this

feature only at the right edge of the phonological word. (4b) designates /-ot/ as a portmanteau morpheme, realizing both gender and number. I follow Svenonius (2016) in assuming that such VIs take precedence over VIs that are specified for each feature separately (e.g. 4a, 4c).

(4)	a. [plural]	\Leftrightarrow	/-im/	/]PhonWord
			/-ej/	
	b. [plural, gender]	\Leftrightarrow	/-ot/	
	c. [gender]	\Leftrightarrow	/-at/	

The second step in the analysis establishes the syntactic structures of the two constructions in (2,3). Beginning with the possessive construction, I argue that the plural possessive suffixes are contained entirely under spec,nP, as in (5). While this does establish a parallel with the Construct State forms such as [sus-ej ets], note the crucial difference: in [sus-ej ets], /ej/ realizes the feature [pl] on the *num* head, while in (5) it is part of the suffix. As a result, the feature [pl] on the *num* head will seek to be realized. According to (4a) above, the expected exponent is /ej/. However, in the masculine case in (5a) insertion of /ej/ creates haplology, and the second marker survives. In the feminine case (5b), no haplology comes about.



For opponents of Distributed Morphology, it is shows that the analysis in no way depends on that theory's basic assumptions, and can be easily expressed in other theories.

Next, the talk considers two views of the suffix *-aj-* of new duals: i) a marker of dual inflection on *num* or ii) a realization of an additional, derivational nominal layer. Both of these views are shown to make wrong predictions. It cannot be a dual marker specifically because there is no dual inflection in MH; and while this fact can be explained through impoverishment, that explanation is both unconstrained and completely ad-hoc. Conversely, *-aj* cannot be an additional nominal layer because that predicts that all new duals with *-aj-im* should have the same gender, where in fact the gender of the base is preserved.

Instead, it is proposed that *-aj-im* is analogous to a *pluralia tantum* noun such as [nisu?-im] 'marriage', which in addition always occupies the modifier position of a construct state, namely spec, nP: $[[_{num}[pl][[aj-im]_xP[sus]_n]_{nP}]_{num}]_{numP}$. Because of the dual meaning of *-aj*, the *num* head of the base noun must always bear a plural feature (in bold in the structure in the previous sentence).¹ This view gives the following linearizations: /sus-ej-aj-im/ and /sus-ot-aj-im/. Only the former is a case of haplology, and the same solution is applied as in (5a), giving /susajim/ and /susotajim/.² It is then shown that this analysis of new duals not only predicts correctly with respect to agreement, but can also account for the absence of such duals from the N+N construction: *[sus-ot-ej ets] 'two wooden mares'.

¹ Just like in English one cannot say *a couple of *week*.

² Two adjacent -Vj- suffixes have been shown to be problematic in Bat El (2009), too, regardless of V quality.

To summarize, by formalizing the basic VIs of inflection and setting the syntactic structures of the two constructions, the analysis manages to motivate the two asymmetries under discussion through the use of the concept of haplology. The talk concludes with a call for morphologists to look for good reasons for absent exponents, rather than resort to unconstrained mechanisms like impoverishment.

References

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