

### Modern Hebrew agentive *-an* and the prosodified root

Suffixation of the agentive morpheme *-an* to both nouns and verbs is a productive process in Modern Hebrew (MH) morphology. This talk aims to define and analyze the selection patterns of this suffix. The case-study of the agentive suffix is shown to have implications on the analysis of the general architecture of verbs and the different realizations of the discontinuous root in MH. The conclusions drawn suggest that MH makes a distinction between a simple discontinuous root, and a more elaborate “prosodified” root, derived from the simpler one.<sup>1</sup> In adding prosody to the root level, the proposal establishes a similarity between concatenative and non-concatenative morphologies.

Suffixation of *-an* yields an agentive noun with the approximate meaning of “someone who actively does V a lot/ regularly”.

(1) Deverbal *-an* forms

<i>Binyan</i>	<i>past</i>	<i>participle</i>	<i>-an</i>	<i>gloss</i>
KaTaL	a. <i>cavat</i>	<i>covet</i>	<i>cavtan</i>	‘pinch’
	b. <i>kalat</i>	<i>kolet</i>	<i>koltan</i>	‘absorb’
KiTTel	c. <i>diber</i>	<i>medaber</i>	<i>dabran</i>	‘talk’
	d. <i>sirev</i>	<i>mesarev</i>	<i>sarvan</i>	‘refuse’
iKTiL	e. <i>ifsid</i>	<i>mafsid</i>	<i>mafsidan</i>	‘lose’
	f. <i>itxil</i>	<i>matxil</i>	<i>matxilan</i>	‘start’

The form of the agentive’s stem depends on the original binyan (=verbal paradigm): KaTLan or KoTLan for verbs originating in the first (1a,b), KaTTLan for those of the KiTTel binyan (1c,d), and maKTiLan for those of causative iKTiL (1e,f). I argue that in the first pattern, use is made of the special KaTLan template (see Bolozky 1999), alongside KoTLan, which is derived from the participial KoTeL. The example in (2c), however, cannot be derived with the same KaTLan template: it guards the plosive allomorph [b] of the verb, which otherwise should surface as [v]. The form *dabran* thus must make reference to a real form. This form cannot be the participle, since the prefix *m-* is not there in the related agentive. Notice that agentives related to causative iKTiL *do* appear to be built on the present participle maCCiC, including the *m* prefix. Concatenation to the participial form is thus possible in KaTaL and iKTiL, but not in KiTTel (\**medabran*).

Denominal *-an* items show the same two patterns: sometimes the template KaTLan surfaces, whereas other cases are purely concatenative, like (1e,f). I turn to characterize the selectional properties of the *-an* suffix with respect to both nouns and verbs. The following questions are raised: 1) Why is the special template KaTLan used in some cases and not in others? 2) What is the form that reference is made to in (1c,d), if it isn’t the participle? and 3) Why doesn’t MH have the forms *mitKaTTLan* (<mit-KaTTel, a fourth binyan) and *meKaTTLan* (<meKaTTel), if the participial form is a legitimate stem (cf. maKTiLan forms)?

The analysis takes an approach according to which morphology is syntactic in nature, along the lines of Distributed Morphology (Marantz 1997). It makes use of Doron (2003), where MH verbal morphology is analyzed syntactically, and Faust (in progress), where a single template of the form CV-CVCVCV is proposed for all verbs and the syntactic structure of basic MH nouns is defined. As is less frequent in such morphosyntactic studies, this talk explores the effects that syntactic selection restrictions have on the spelled-out form, and conversely the way that this form points to its own syntactic structure.

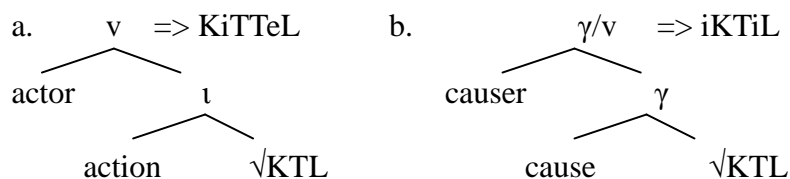
First, I make the analogy between participles and nouns, and suggest that the agentive noun-head may select any nP, participial or not. This accounts for concatenative deverbal and denominal cases. Next, I move to Doron 2003, where she derives the verbs in KaTaL directly from the consonantal root, with no additional intermediate projections. Thus, the environment for activation of the KaTLan template is defined: it is first merge, or direct merger with the root (in other words, this environment entails the interdigitation of the root with [a] in V<sub>1</sub>). All occurrences of *denominal -an* agentives that surface as KaTLan must be cases of such merger, and this is shown to be predicted by

<sup>1</sup> Such a proposal is implicit in the analysis in Goldenberg (1994).

the analysis in Faust (in progress).

I then turn to the question as to the base of KiTTeL agentives. Doron's analysis of the two other verbal binyanim above, shown in (2), involves action heads: an "intensive" action head for KiTTeL and a cause one for iKTiL.

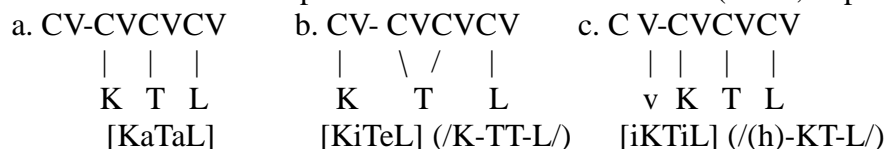
(2) KiTTeL and iKTiL (Doron 2003 simplified)



A purely syntactic account might add the head  $\iota$  in (2a) to the list of complements of the agentive noun, thus having a binyan-specific form to refer to. But this is nothing more than an ad-hoc solution.

To further investigate the matter, I move on to present the CV-CVCVCV template mentioned above. The root's consonants occupy the template in the following manner:

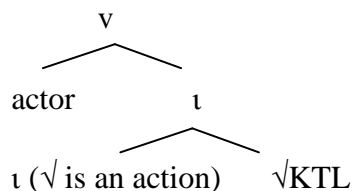
(3) Satisfaction of the template in the different verb forms (Faust, in progress)



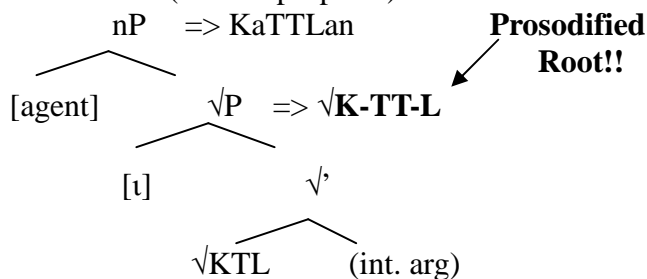
After showing that a strictly morphological account is equally unmotivated, I relate the activation of this verbal template to Doron's structures in (2), with one difference: in my account, the action head  $\iota$  is internal to a root projection  $\sqrt{P}$ , and yields a prosodified root (by activating the template in (3b) at the root level). The two proposals are compared in (4), with (4b) showing the derivation of KaTTLan from K-TT-L :

(4)  $\iota$  is internal to the  $\sqrt{P}$

a. KiTTeL (Doron 2003)



b. KaTTLan (current proposal)



The proposal allows for a unified account of the complements of the agentive head: those are either nP (in participles or complex nouns) or  $\sqrt{P}$  (in KaTTLan), a category in which the bare root is also included. The attachment of **-an** to the participle of iKTiL is thus unsurprising, and there is no need to add either  $\iota$  or  $\gamma$  to the list of complements of the agentive head.

If K-TT-L indeed has root status, it should be apparent in other environments and have other manifestations. This prediction is born out. First, I show that the semantics of KaTTLan is freer than one would expect if it weren't root-derived. Second, I show that the stem of the middle verbs' hitKaTTeL template is best viewed as being K-TT-L and having root status, as it presents the special phonological phenomenon of metathesis. Then, I show a variety of *nominal* contexts where the same root is used even though no KiTTeL verb exists.

This talk has two general conclusions: 1. treatments of morphological phenomena must take into account both syntactic structure *and* phonological form; and 2. Semitic roots come in (at least) two types: the discontinuous type, which is almost exclusive to Semitic, and the prosodified type built on it, which can be found more easily in other families of languages.

## References

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Annex: A picture of an agentive (sub)cat

