

Nonactive voice in Hebrew and elsewhere: Between unaccusativity and agentivity

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1. The focus of this paper is the nonactive Hebrew verbal template *hitpa'el*, in which three root consonants are arranged in the basic form *hitXaYYeZ* (citation form, M.SG). In this kind of root-and-pattern morphology, the middle consonant is geminated, the root is prefixed with *hit-* and certain vowels are inserted. *HitXaYYeZ* verbs are never transitive; **empirically**, I explain the possible interpretations of different Hebrew roots under this nonactive morphology. **Theoretically**, I explore the different argument structure alternations that might arise through nonactive morphosyntax; these alternations run the gamut from true anticausatives to volitional verbs such as reflexives. I also specify the functional heads that derive the different structures.

2. The *hitXaYYeZ* template is derived using two functional heads (Doron 2003; Kastner 2014). The first is v_{ACT} , which types the event as an Action (volitional) in the semantics and geminates the middle consonant in the phonology. This head is attested elsewhere in the verbal system, namely in the "intensive" template whose verbs denote agentivity or direct causation. The second is a functional head which blocks the introduction of an external argument in the syntax and which adds a prefix in the phonology. This head can be either $Voice_{\emptyset}$, a Middle Voice head (Doron 2003; Alexiadou and Doron 2012; Kastner 2014), or p_{\emptyset} , the functional head introducing a PP. The subject of a prepositional phrase is merged in the specifier of pP , unless the head is p_{\emptyset} (Kastner 2014; Svenonius 2007; Wood, to appear): [$VoiceP \dots [v_P [v [v \sqrt{Root}] [p_P DP [p [P DP]]]]]$]

3. The important thing to note about the different nonactive verbs in *hitXaYYeZ* is that some seem more volitional than others, just like unaccusative *break* is less volitional than unaccusative *arrive* (Irwin 2012 posits different structures for the English pair). Following this intuition, I will claim that there are two main types of *hitXaYYeZ* verbs. These will be analyzed as having two different underlying structures, each of which gives rise to the same template: internally-triggered change of state *hitXaYYeZ* verbs (**internal COS**) are volitional at least to some extent and derived using v_{ACT} and p_{\emptyset} . Externally-triggered change of state *hitXaYYeZ* verbs (**external COS**) are derived using v_{ACT} and $Voice_{\emptyset}$. But the structure also interacts with the lexical semantics of the root, constraining the meaning of the resulting verb. Alexiadou (to appear) argues that some roots are inherently reflexive (\sqrt{SHAME}), some are naturally reflexive/reciprocal (\sqrt{WASH}) and some are naturally disjoint (\sqrt{HATE}). External COS verbs are unaccusative, and their interpretation varies depending on the root. Internal COS verbs always take a prepositional phrase complement. The table in (1) summarizes.

(1)	Inherently reflexive	Naturally reflexive	Naturally disjoint
External COS, $v_{ACT} + Voice_{\emptyset}$	Reflexive/reciprocal	Reflexive/reciprocal	Anticausative
Internal COS, $p_{\emptyset} + v_{ACT}$	Internal COS + pP	Internal COS + pP	Internal COS + pP

External COS verbs are derived by taking an existing "active" v_{ACT} verb and merging $Voice_{\emptyset}$, in effect detransitivizing it. For **anticausatives**, this results in inchoative alternations as in (2).

(2) *pirek* 'took apart' ~ *hitparek* 'broke down' *bišel* 'cooked' ~ *hitbašel* 'got cooked'

Tests such as incompatibility with agent-oriented adverbs show that these verbs are indeed anticausative. Yet a number of anticausative verbs lack an "active" counterpart and appear root-derived. These can be accounted for by positing a semantically null v_{ACT} which contributes morphophonological material but not agentive entailments (Anagnostopoulou and Samioti 2013, to appear; Marantz 2013). In fact, v_{ACT} seems to be semantically null in all anticausatives. Whereas v_{ACT} verbs always require an Agent, never a Cause, anticausatives are fine with causes, (3)-(4). They simply do not have an overt EA due to $Voice_{\emptyset}$. **Reflexives/reciprocals** have the same structure, but the root dictates a reflexive/reciprocal meaning, (5). I return to the question

of their nonactive structure below.

(3) *dani hit'ateš me-ha-avak* Danny sneezed from-the dust 'Danny sneezed because of the dust'

(4) *yosi hit'alef me-ha-xom* Yossi fainted from-the-heat 'Yossi fainted due to the heat'

(5) *hitgaleax* 'shaved' *hitraxec* 'washed' *hitxabek* 'hugged' *hitnašek* 'kissed'

Internal COS verbs might denote an action (*hitmared neged* 'rebelled against'), motion (*histare'a al-* 'sprawled himself over') or coming into being of an emotional state (*hit'acben al-* 'got mad at'). A standard Voice head introduces the external argument (Kratzer 1996), which is interpreted as coreferential with the null subject of the pP and hence as the subject of the preposition. v_{ACT} ensures that Causes are not allowed, unlike with external COS verbs:

(6) * *hu hit'ahev me-yofi-a* he fell.in.love from-beauty.hers '(*He fell in love due to her beauty)'

(7) * *hitmaker me-ha-ye'uš* he got.addicted from-the-despair '(*He got addicted due to despair)'

There is room to refine these notions. *hitmaker* 'got addicted' and *hit'ahev* 'fell in love' may or may not be volitional, strictly speaking, but the grammar seems to treat them as such. And it is perhaps telling that the indirect object of *hit'ahev* 'fell in love' can be dropped more easily than with more “canonical” internal COS verbs. The goal here is, as first step, to combine the morphological, syntactic and semantic cues indicators of internal and external argumenthood.

4. I test these predictions against a database of 800 verbs in *hitXaYYeZ*. There is one immediate counterexample, transitive *yictarex* 'will need'. Since the transitive use is limited to the future form of the verb, I treat it as a true exception which must be learned independently.

5. The argument structure of reflexives and reciprocals poses a puzzle: one DP seems to have two thematic roles. Recently, Alexiadou and Schäfer (2013), Alexiadou (to appear) and Spathas et al. (to appear) have argued that Greek morphological reflexivity is the result of combining Middle Voice and a bound anti-assistive intensifier, *afto-*, or the reciprocal *alilo-*. As in Hebrew, a bound agentive morpheme attaches to a nonactive structure in order to derive reflexive/reciprocal readings. While some work has argued that reflexivizers reduce the arity of a predicate (Reinhart and Siloni 2005), others have argued against dedicated reflexivizers, at least in some languages (Lidz 2001 and the works cited above). The Hebrew data provide an additional argument for distinguishing reflexive interpretations from the notion of a dedicated reflexivizer.

6. I have proposed that nonactive verbs in Hebrew are either external COS or internal COS. Both cases lead to nonactive morphology, but only external COS verbs actually have nonactive (unaccusative) syntax. This analysis can also handle reflexives and reciprocals, as in recent work on Greek. One may now ask whether these supposed unaccusative verbs really do pass unaccusativity diagnostics. The one robust diagnostic in Hebrew, verb fronting (Shlonsky 1987; Gafter 2014 and Linzen 2014 give arguments against the possessive dative test), succeeds for anticausatives but fails for all other *hitXaYYeZ* verbs. Yet the consequence is unclear: perhaps this test only diagnoses surface unaccusativity (VO). As argued for by Alexiadou (to appear) and Embick (2004:142), “[T]he unaccusative analysis of reflexives holds that reflexives and unaccusatives have some properties in common; not that they are identical”, whereas COS is a tell-tale characteristic of an internal argument. The unaccusativity of reflexives debate goes back at least to Kayne (1975); see Doron and Rappaport-Hovav (2009) and Sportiche (2014) for recent contrasting views. The question this paper attempts to answer is how thematic roles get distributed between external and internal arguments, as reflected by the morphology, bearing on the question of unaccusativity vs unergativity as well.

References: Alexiadou (to appear). In *The Syntax of Roots and The Roots of Syntax* || Doron (2003). *NLS* 11 || Gafter (2014). *LI* 45 || Kastner (2014). In *NELS* 45 || Linzen (2014) *Linguistics* 52. || Spathas, Alexiadou and Schäfer (to appear). *NLLT* || Wood (to appear). *NLLT*