The Hebrew Present-Tense Copula
as a Mixed Category

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Abstract
Hebrew has several ways to express the present tense equivalent of the copular verb *haya* 'to be'. None of these forms is verbal in nature; Aside from the Ø realization, they are nominal. It is argued that the functional verbal nature and categorial nominal nature of these forms combine to make the present-tense copular forms mixed-category constructions, and that this accounts for the peculiar syntactic properties displayed by present tense copulas.

1. Overview

Hebrew present tense copular constructions display an interesting set of properties. The claim to be made here[1] is that they are profitably analyzed as mixed-category constructions. This, in turn, has theoretical repercussions.

We start with the basic data:

(1) a. Pnina {nora   xamuda / tinoket / b- a-   bayit}.
         Pnina {awfully cute.F   / baby.F / in- the- house}
         'Pnina is {awfully cute / a baby / in the house}.'
     b. Pnina hayta   {nora   xamuda / tinoket / b- a-   bayit}.
         Pnina be.PST.3FSG {awfully cute.F   / baby.F / in- the- house}
         'Pnina was {awfully cute / a baby / in the house}.'

(2) a. Pnina hi   {nora   xamuda / ha- tinoket / ...}.
         Pnina PRON.FSG {awfully cute.F   / the- baby.F / ...}
         'Pnina is {awfully cute / the baby / ...}.'
     b. Pnina hayta   {nora   xamuda / ha- tinoket /   ...}.
         Pnina be.PST.3FSG {awfully cute.F   / the- baby.F /   ...}
         'Pnina was {awfully cute / the baby / ...}.'

(3) a. Pnina yešna   (b- a-   bayit).
         Pnina YEŠ.3FSG   (in- the- house)
         'Pnina is (t)here / is (exists) in the house.'
     b. Pnina hayta   (b- a-   bayit).
         Pnina be.PST.3FSG   (in- the- house)
         'Pnina was (t)here / was (existed) in the house.'

(4) a. Pnina eynena   (b- a-   bayit).
         Pnina EYN.3FSG (in- the- house)
         'Pnina isn't (t)here / isn't (in existence) in the house.'
     b. Pnina lo   hayta   (b- a-   bayit).
         Pnina not be.PST.3FSG (in- the- house)
         'Pnina wasn't (t)here/ wasn't in the house.'

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(5) a.   Yeš tinok- et b- a-   bayit.
           YEŠ baby- F   in- the- house
           'There is a girl baby in the house.'
     b.   Hayta   tinok- et b- a-   bayit.
           be.PST.3FSG baby- F   in- the-   house
           'There was a girl baby in the house.'

(6) a.   Eyn tinok- et b- a-   bayit.
           EYN baby- F   in- the- house
           'There isn't a girl baby in the house.'
     b.   Lo   hayta   tinok- et b- a-   bayit.
           not be.PST.3FSG baby- F   in- the- house
           'There wasn't a girl baby in the house.'

(7) a.   Yeš le-   Pnina caacuim meacbenim.
           YEŠ DAT- Pnina toys   annoying.MPL
           'Pnina has annoying toys.'
     b.   Hayu   le-   Pnina caacuim meacbenim.
           be.PST.3PL DAT- Pnina toys   annoying.MPL
           'Pnina had annoying toys.'

(8) a.   Eyn le-   Pnina caacuim meacbenim.
           EYN DAT- Pnina toys   annoying.MPL
           'Pnina doesn't have annoying toys.'
     b.   Lo   hayu   le-   Pnina caacuim meacbenim.
           not be.PST.3PL DAT- Pnina toys   annoying.MPL
           'Pnina didn't have annoying toys.'

As can be seen by perusing the examples, all of the past (and future) tense sentences use a form of the verb *haya* 'be'; it is this that makes them all copular. However, in the present tense, four different forms are used: Ø (1), the pronominal forms which we will call

Pron[2] (2), *yeš* (3, 5, 7), and *eyn* (4, 6, 8). (Not all the forms are equally natural; as shown in the examples, an indefinite predicate nominal prefers Ø and a definite one prefers Pron. Not unsurprisingly, Ø is generally unmarked if the sentence is sufficiently easy to parse. The preference for Pron with definite nominals may be a result of the possible parse as an appositive 'Pnina, the baby'.) Previous analyses have run into problems with the analysis of these present tense forms.

Despite the evidence of paradigmatic contrast in (2), it has become standard in transformational analyses of Pron to deny that it is the present tense of the verb *haya*. Instead, it is usually taken to be a realization of agreement features (Berman 1978, Doron 1983, Shlonsky 1997). The arguments for denying Pron the status of the present tense of *haya* are not inconsiderable. In the first place, the forms are pronouns, not verbs. This is shown in (9), where we contrast the forms of Pron with the theoretical dictionary present tense of *haya*, forms which are not actually used, but demonstrate what a present tense verbal paradigm for *haya* would look like.[3] Particularly interesting is the non-standard but not infrequent use of the demonstrative as a neuter form, since, unlike the personal pronouns, it does not even share an initial /h/ with *haya*.

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[2]Appearances (and history) notwithstanding, there is near-universal agreement (although a dissenting view is expressed by Chayen and Dror 1976) that the construction with Pron is not a variety of topicalization or left-dislocation. Such a construction is possible, but has distinctly different properties from the Pron construction. For example, there is an intonational break between the dislocated element and the subject pronoun (i).

(i)   Pnina, hi   nora   xamuda.
        Pnina, she awfully   cute.F
        'Pnina, she is awfully cute.'

In contrast to the Pron construction, the left-dislocation construction can be used in conjunction with 'be' in other tenses (ii) or other verbs in the present tense (iii).

(ii)   a.   Pnina, hi   hayta   nora   xamuda.
                Pnina, she be.PST.3FSG   awfully   cute.F
                'Pnina, she was awfully cute.'

        b.   *Pnina hi   hayta   nora   xamuda.
                Pnina   PRON.FSG   be.PST.3FSG   awfully   cute.F
                'Pnina was awfully cute.'

(iii)   a   Pnina, hi   ohevet   ledaber.
                Pnina, she love.PRES.FSG talk.INF
                'Pnina, she loves to talk.'

        b.   *Pnina hi   ohevet   ledaber.
                Pnina   PRON.FSG   love.PRES.FSG talk.INF
                'Pnina loves to talk.'

Some of the properties of the Pron construction to be discussed below, particularly the contrast with the Ø construction, also show that a left-dislocation analysis is incorrect. Most importantly, sentences with Pron do not exhibit the pragmatic effects one would expect from topicalization or left dislocation.

[3]Morphologically, *haya* belongs to the class of verbs ending in orthographic *h* (historically, and perhaps underlyingly, /y/). This manifests itself in two ways: the masculine singular ends in the present-tense template vowel /e/ which is deleted in the other forms (in more regular verbs this /e/ is followed by the final root consonant), and the suffix for the feminine singular is -*a* rather than the more common -*et*. One interesting feature of the theoretical present tense of *haya* is the replacement of the stem /y/ with /v/ (historically /w/).

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(9)

Form	Use as pronoun	Use as copula	Comparable verb form
hu	personal pronoun: 3rd pers masc sg 'he'	masculine singular	hove
hi	personal pronoun: 3rd pers fem sg 'she'	feminine singular	hov-a
ze	demonstrative: 'this'	non-standard neuter singular	
hem	personal pronoun: 3rd pers masc pl 'they.M'	masculine plural	hov-im
hen	personal pronoun: 3rd pers fem pl 'they.F'	feminine plural	hov-ot

Pron thus appears to be (pro)nominal rather than verbal, and therefore not plausibly the present tense of *haya*. Other facts also militate against analyzing Pron as the present tense of *haya*. An often noted point is the position of *lo* 'not', which precedes tensed verbs, including verbs in the present tense, but not Pron. Instead, sentences with Pron are negated by placing *lo* before Pron's complement.

(10) a.   Gabi lo   haya   ayef.
            Gabi not   be.PST.3MSG   tired.M
            'Gabi wasn't tired.'
      b.   Gabi lo   nire   ayef.
            Gabi not   seem.PRES.MSG   tired.M
            'Gabi doesn't seem tired.'
      c.   *Gabi lo   hu   ayef.
            Gabi   not   PRON.MSG   tired.M
            'Gabi isn't tired.'
      d.   Gabi hu   lo   ayef.
            Gabi PRON.MSG   not tired.M
            'Gabi isn't tired.'

There is thus good reason to deny that Pron is the present tense of *haya*. Nevertheless, it is clear that Pron functions as the present tense of *haya*, and an analysis of Pron ought to reflect this.

On the other hand *yeš* is often analyzed as if it were a verb, either the present of *haya* or something essentially equivalent (Chayen and Dror 1976, Berman 1978, Doron 1983, Shlonsky 1997). While the motivation is clear (the paradigmatic relation between *haya* and *yeš*), it is also obviously the case that *yeš* is not a verb. It appears to be a noun, as does its negative *eyn*. The subject agreement paradigms for *yeš* and *eyn* resemble the

possessor agreement paradigm for nouns:[4]

(11)

no agreement	yeš	eyn	gan 'garden'
1st pers. sing.	(yeš- n- i)	(eyn- en- i)	gan-i
2nd pers. sing. masc.	(yeš- xa)	(eyn- xa)	gan-xa
2nd pers. sing. fem.	(yeš- n- ex)	(eyn- ex)	gan-ex
3rd pers. sing. masc.	yeš- n- o	eyn- en- o	gan-o
3rd pers. sing. fem.	yeš- n- a	eyn- en- a	gan-a
1st pers. plural	(yeš- n- enu)	(eyn- enu)	gan-enu
2nd pers. plural masc.	(yeš- xem)	(eyn- xem)	gan-xem
2nd pers. plural fem.	(yeš- xen)	(eyn- xen)	gan-xen
3rd pers. plural masc.	yeš- n- am	eyn- am	gan-am
3rd pers. plural fem.	yeš- n- an	eyn- an	gan-an

Aside from the unique *(e)n* "infix" in some of the forms, the suffixes on *yeš* and *eyn* are clearly identical to the nominal suffixes. On the other hand, the non-third-person forms are very rare, especially for *yeš* (Schwarzwald 1982); it is striking that they are all listed in the prescriptively oriented dictionary Even-Shoshan (1985), but the non-third-person forms of *yeš* are not included in the descriptively oriented dictionary Choueka (1997).[5] Speakers of Hebrew typically use circumlocutions to avoid these forms, but occasionally the third person forms are used with non-third-person subjects. (Examples a–c are spoken examples reported by Schwarzwald 1982, and d is a song lyric.)

(12) a.
Todi'i   le-   baalex   lakaxat et ha- oto hayom,
inform.IMP DAT- husband.2FSGposs take.INF ACC the- car today
ki   maxar   ani eyneno.
because tomorrow I   EYN.3MSG
'Tell your husband to take the car today, because tomorrow I'm not in.'

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[4]The dictionary form for the third person masculine singular of *eyn* is *eynenu*, not *eyneno*, and it is often transcribed as *eynenu* in linguistic examples. However, it is usually pronounced *eyneno* in spoken Hebrew. This is presumably a regularization of the paradigm.

[5]There is also a clausal-negation *eyn*, used prescriptively in place of *lo* in present-tense clauses. While there is clearly a relation between the two *eyn*'s, since both are negative, they are not the same lexical item. They are associated with different registers, and there are some differences in the agreement morphology. However, dictionaries (and many analyses) do not distinguish between the two *eyn*'s. Since the clausal-negation *eyn* has all the agreement forms, Choueka lists them under the one entry for *eyn*.

b. Im ata   yešno   b- a-   bayit, ani af paam lo
   if you.MSG YEŠ.3MSG in- the- house I   never   not
   mit'oreret   b- a-   layla kše   ha- yeladim boxim.
   wake.up.PRES.FSG in- the- night when the- children cry.PRES.MPL
   'If you're in the house, I never wake at night when the children cry.'

c. A: Kše   at   yešna,   ani lo nogea   b- a-   tinok.
      when you.FSG YEŠ.3FSG I   not touch.PRES.MSG in- the- baby
      'When you're present, I don't touch the baby.'
   B: Ve kše   ani eynena   ?
      and when I   EYN.3FSG
      'And when I'm not present?'

d. Ani pašut   yešno.
   I   simply YEŠ.3MSG
   'I just am.'

Schwarzwald suggests, plausibly, that the non-use of the non-third-person forms may be a result of the present-tense function of *yeš*, since present tense verbs in Hebrew do not exhibit person agreement. Nevertheless, the forms are clearly nominal forms. In fact, the existence of a non-agreeing form is also a nominal property rather than a verbal one: in verbs, an unsuffixed form is (third person) masculine singular. Distributional properties, such as the impossibility of appearing with the negative *lo*, also appear to point to a non-verb analysis for *yeš*.

The upshot of these observations is that Pron, *yeš*, and *eyn* display a strange array of properties. On the one hand, they function as the present tense of the verb *haya*; on the other hand, they are categorially nominal forms. The correct analysis of present tense copular constructions in Hebrew will simultaneously express both aspects of these elements:

- Hebrew present-tense copulas are **functionally** verbal (present tense of 'be')
- Hebrew present-tense copulas are **categorially** nominal

Structurally, the Hebrew present-tense copulas have a mixed status. Being categorially nominal, they have a structural nominal nature. But they also have a structural verbal nature. This can be seen in the nature of the arguments they take: predicative complements, accusative objects, and the like. These arguments are realized structurally within a VP. Furthermore, the copulas head constituents with clausal distribution. Unlike the structural nominal nature of the present tense copulas, which appears to be a stipulated property of category, these verbal properties are a consequence of their functional nature as verbal elements.

This informal characterization of the present-tense copulas bears some similarity to the concept of mixed categories, in the sense of Bresnan (1997). Such mixed categories are widely attested; one in-depth analysis (in Kikuyu) is given by Mugane (2003). An example of a mixed category in Hebrew is the action nominal. It is a mixed category in that, although it is a noun, it takes verb-type arguments which are part of a VP embedded in the NP that the action nominal heads (Hazout 1995, Falk 2001). (In the case of the Hebrew action nominal, the taking of verb-type arguments is optional.)

(13) a.   havanat   ha- tinoket   et   ha- teoria
             understanding the- baby(F) ACC the- theory
             'the baby's understanding of the theory'

     b.

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                    NP
                  /    \
               NP       VP
              /  \       |
             N    NP     KP
             |    |      /\
         havanat hatinoket /  \
                       et hateoria
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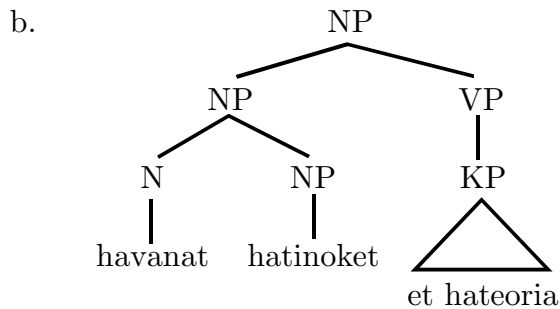
Lexically, it is the result of a derivational process in which a verb, an element with a verbal argument structure, becomes incompletely nominalized; the resulting form is categorially nominal, but the argument structure retains a verbal nature. Informally, we can represent the argument structure of *havana* as follows:

(14)   'understanding $\langle_n \langle_v x, y \rangle \rangle$'

Although *havana* itself is a noun, the verbal part of the argument structure results in a lexical requirement of a VP in the extended projection; formally:

(15)   VP $\in$ CAT ($\uparrow$)

An action nominal in Hebrew is thus functionally a mixed verbal/nominal entity. Categorially, it is a noun (this point is made very strongly by Siloni 1997, who denies the verbal element), but the functional verbal properties give rise to structural verbal properties within its extended projection.

      Hebrew present-tense copulas differ in one important detail from action nominals: the copula is functionally completely verbal, while action nominals have a mixed nominal/ verbal nature at the functional level. The mixed-category status of present-tense copulas is thus a purely stipulated property. Nevertheless, the similarities between the copular forms and mixed categories are suggestive. If the analysis is correct, the basic properties of Pron and *yeš/eyn* will follow from the theory of mixed cartegories, while the differences between them will follow from individual lexical properties, such as argument structure. We will argue that this is, in fact, the case.

2. Pron
2.1. Analysis
   Let us consider (2a). The Pron element will have the following in its lexical entry:[6]

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[6]For convenience, we are assuming the analysis of predicative complements proposed in Butt, King, Niño, and Segonde (1999), under which the complement of 'be' bears a closed function called PREDLINK, rather than the more traditional analysis in which it bears the open complement function XCOMP. As pointed out by Butt et al., not all copular complements can be analyzed as XCOMP; this is particularly true when the complement is a full clause. The overall relationship between "PREDLINK" and "XCOMP" needs to be worked out, but this lies beyond the scope of the present paper; for some thoughts on the subject, see Dalrymple, Dyvik, and King (2004). 'Be' predicates may take both types of argument structure.

(16)　*hi*:　　N　　$(\uparrow \text{PRED}) = \text{'be} \langle (\uparrow \text{SUBJ})(\uparrow \text{PREDLINK}) \rangle\text{'}$
　　　　　　　　$(\uparrow \text{TENSE}) = \text{PRES}$
　　　　　　　　$(\uparrow \text{SUBJ GEND}) = \text{F}$
　　　　　　　　$(\uparrow \text{SUBJ NUM}) = \text{SG}$
　　　　　　　　$\text{VP} \in \text{CAT}(\uparrow)$

Pron has a verbal argument structure, but, idiosyncratically, is categorized as a noun. As in action nominals, the verbal argument structure has, as a consequence, the requirement that its extended projection include the category VP. Pron's PREDLINK argument is a daughter of the VP node. The VP itself shares a head with the NP in which it is embedded, the N serving as its extended head.

(17)
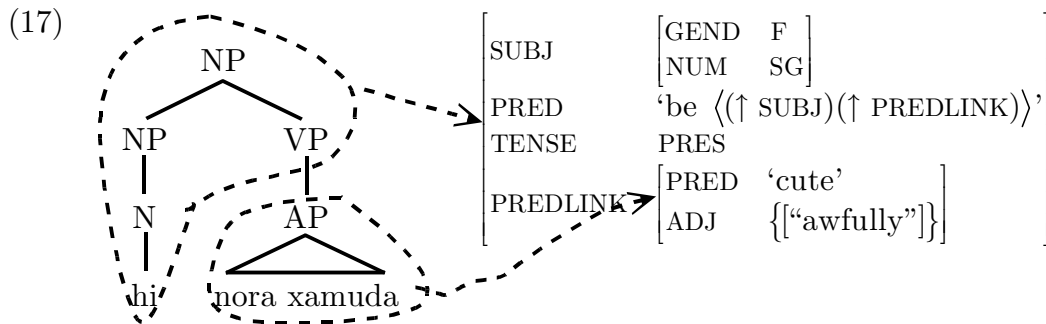
But this f-structure is incomplete, since the SUBJ has no content. By embedding the NP under an S, we can provide it with a SUBJ.

(18)
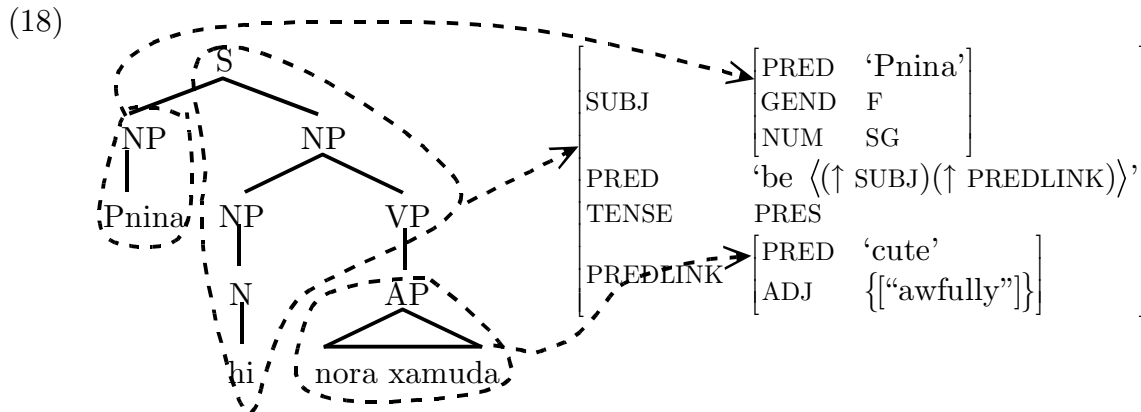
　　This analysis embodies most of the properties of Pron (and of other copular constructions as well). First of all, our analysis correctly expresses the fact that present tense copulas are morphologically nominal elements and that they have verbal argument structure. The mixed c-structures are a consequence of the mixed nature of the copulas. The argument types are ones that are typical of VP constituents because they *are* VP constituents. The fact that the distribution of present-tense copula constructions is that of S/IP also follows from this analysis, since the NP headed by the present tense copula must be embedded under S.

　　The inability of Pron to be preceded by *lo* ((10) above) also follows from the present analysis. We analyze *lo* as being left-adjoined to verbal elements; this is essentially the (surface) analysis of Shlonsky (1997), who refers to *lo* as affixal. Since Pron is not

(categorially) a verbal element, it cannot combine with *lo*. Instead, sentences with Pron are negated by placing the *lo* before the predicative complement of Pron; we hypothesize that this is structurally constituent negation rather than clausal negation: i.e. that the use of *lo* in cases like (10)is similar to the following:

(19) Mati kibel   haftaa   lo   neima.
     Mati received surprise not pleasant
     'Mati got an unpleasant surprise.'

Another interesting property of Pron which follows from the proposed analysis is its inability to occur in the Triggered Inversion construction. Triggered Inversion is discussed in the appendix.

Pron has other, more idiosyncratic properties. The fact that it cannot take contrastive stress, for example, is not derivable from any other property, and presumably must be marked lexically. The usual ungrammaticality of Pron in a sentence with a pronominal subject may be a morphological effect, disallowing two adjacent pronominal forms under most circumstances. However, the majority of Pron's properties follow without additional stipulation from the mixed-category analysis proposed here.

2.2. Pron vs. Ø

Our analysis provides us with an account of the distinction between Pron and Ø. In sentences with the Ø realization of the present tense copula, traditionally called nominal sentences, there is no reason to hypothesize any copular element. Instead, such sentences are most naturally analyzed as involving an exocentric S, with direct predication by the non-verbal element.

(20)

$$
\begin{bmatrix}
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{'Pnina'} \\ \text{NUM} & \text{SG} \\ \text{GEND} & \text{F} \end{bmatrix} \\
\text{PRED} & \text{'cute } \langle(\uparrow \text{ SUBJ})\rangle\text{'} \\
\text{TENSE} & \text{PRES} \\
\text{ADJ} & \{[\text{PRED} \quad \text{'awfully'}]\}
\end{bmatrix}
$$

S
├── NP
│   └── Pnina
└── AP
    ├── ADVP
    │   └── ADV
    │   └── nora
    └── AP
        └── A
            └── xamuda

This contrasts with sentences with Pron, which have a 'be' predicate:

(21)

$$
\begin{bmatrix}
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{'Pnina'} \\ \text{GEND} & \text{F} \\ \text{NUM} & \text{SG} \end{bmatrix} \\
\text{PRED} & \text{'be } \langle(\uparrow \text{ SUBJ})(\uparrow \text{ PREDLINK})\rangle\text{'} \\
\text{TENSE} & \text{PRES} \\
\text{PREDLINK} & \begin{bmatrix} \text{PRED} & \text{'cute'} \\ \text{ADJ} & \{[\text{"awfully"}]\} \end{bmatrix}
\end{bmatrix}
$$

S
├── NP
│   └── Pnina
└── NP
    ├── NP
    │   └── N
    │   └── hi
    └── VP
        └── AP
            └── nora xamuda

Both are possible because most non-predicational elements can be lexically extended to be used predicationally (Bresnan 2001). So the difference between (1) and (2) is analogous to the following in English:

(22) a.   Pnina seems very cute.
      b.   Pnina seems to be very cute.

The only difference between Hebrew and English is that the latter does not allow 'be'-less sentences in tensed clauses.

Most of the time, clauses with 'be' and those without are essentially synonymous. However, as noted by Doron (1983), there are situations where, in both English and Hebrew, the 'be' predicate is necessary. Her example involves a case where the complement is referential, and thus not predicative.

(23) a.   Pnina considers her favorite brother to be Yoni.
      b.   *Pnina considers her favorite brother Yoni.

(24) a.   Ha- student hu   Eli.
              the- student PRON.MSG Eli
      b.   *Ha- student Eli.
              the- student Eli
              'The student is Eli.'

Another such case is when the complement is itself a sentence. As a closed element with its own SUBJ, it cannot be used predicatively. Here again, Hebrew and English act the same way.

(25) a.   The danger seems to be that the hamster will eat the cat.
      b.   *The danger seems that the hamster will eat the cat.

(26) a.   Ha- sakana hi   še   ha- oger   yoxal
              the- danger PRON.FSG that the- hamster eat.FUT.3MSG
              et   ha- xatul.
              ACC the- cat
      b.   *Ha- sakana še   ha- oger   yoxal   et   ha- xatul.
              the- danger that the- hamster eat.FUT.3MSG ACC the- cat
              'The danger is that the hamster will eat the cat.'

In both of these situations, a copula+PREDLINK construction is possible, since PREDLINK is not a predicative (open) function.

A case which is different from English is noted by Shlonsky (1997): Pron is used with individual-level predicates and Ø with stage-level predicates.

(27) a.   Ha- dinozaur hu   šikor.
              the- dinosaur PRON.MSG drunk.MSG
              'The dinosaur is a drunkard.'

b.   Ha- dinozaur šikor.
     the- dinosaur drunk.MSG
      'The dinosaur is drunk.'

This indicates that Pron has aspectual content, not unusual for a 'be'-type predicate.

   We thus disagree with analyses that see Pron and Ø as essentially stylistic variants, and consider *haya* to always be a mere carrier of tense information (Blau 1968, Rubinstein 1969, Berman 1978). On the other hand, we do conjecture that the predicative content of *haya* is optional, thus making it functionally equivalent to both Pron and Ø. The use of *haya* as an auxiliary suggests that it is sometimes devoid of content. Sentences (1b) and (2b), although c-structurally identical, differ functionally.

(28) a.   c-structure for both

b.   f-structure for (1b)   c.   f-structure for (2b)
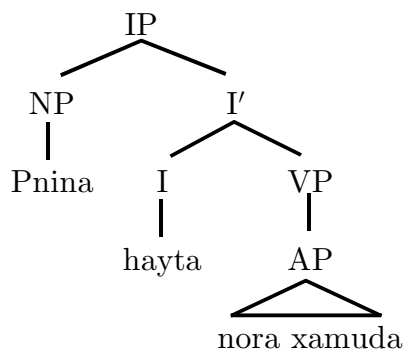
$$\begin{bmatrix} \text{SUBJ} & [\text{``Pnina''}] \\ \text{TENSE} & \text{PAST} \\ \text{PRED} & \text{`cute } \langle(\uparrow \text{SUBJ})\rangle\text{'} \\ \text{ADJ} & \{[\text{``awfully''}]\} \end{bmatrix}$$

$$\begin{bmatrix} \text{SUBJ} & [\text{``Pnina''}] \\ \text{TENSE} & \text{PAST} \\ \text{PRED} & \text{`be } \langle(\uparrow \text{SUBJ})(\uparrow \text{PREDLINK})\rangle\text{'} \\ \text{PREDLINK} & \begin{bmatrix} \text{PRED} & \text{`cute'} \\ \text{ADJ} & \{[\text{``awfully''}]\} \end{bmatrix} \end{bmatrix}$$

3. *Yeš* and *Eyn*

   We turn now to the other realization of present tense copula in Hebrew: *yeš* (and its negative *eyn*). *Yeš* is used in locative, existential, and possessive constructions. We will discuss these in order.

   Primarily on the basis of analysis of the locative inversion construction (Bresnan 1994), Bresnan (2001) proposes that, unlike other complements of *be*, locatives in English are not predicative complements (XCOMP in Bresnan's implementation, PREDLINK in ours), but rather obliques.[7] Thus, despite the c-structure similarities, (28a) and (29a) have very different f-structures. (We henceforth refer to the PREDLINK-taking 'be' as 'be₁', and the non-PREDLINK-taking variety as 'be₂'.)

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[7]Since in Hebrew, locative PPs can occur in Ø and Pron constructions, the PREDLINK and predicational analyses must be open to them as well.

(29) a.   Pnina is very cute.

b.

$$\begin{bmatrix} \text{SUBJ} & [\text{``Pnina''}] \\ \text{TENSE} & \text{PRES} \\ \text{PRED} & \text{`be}_1\ \langle (\uparrow \text{SUBJ})(\uparrow \text{PREDLINK}) \rangle\text{'} \\ \text{PREDLINK} & \begin{bmatrix} \text{PRED} & \text{`cute'} \\ \text{ADJ} & \{[\text{``very''}]\} \end{bmatrix} \end{bmatrix}$$

(30) a.   Pnina is in the house.

b.

$$\begin{bmatrix} \text{SUBJ} & [\text{``Pnina''}] \\ \text{TENSE} & \text{PRES} \\ \text{PRED} & \text{`be}_2\ \langle (\uparrow \text{SUBJ})(\uparrow \text{OBL}_{\text{Loc}}) \rangle\text{'} \\ \text{OBL}_{\text{Loc}} & \begin{bmatrix} \text{PRED} & \text{`in}\ \langle (\uparrow \text{OBJ}) \rangle\text{'} \\ \text{OBJ} & [\text{``the house''}] \end{bmatrix} \end{bmatrix}$$

We propose that while the Hebrew verb *haya* exhibits the same ambiguity as the English *be*, expressing both 'be$_1$' and 'be$_2$', the two are distinguished in the present tense. While both are realized idiosyncratically as nouns in the present tense, 'be$_1$' is realized as Pron while 'be$_2$' is realized as *yeš*. The differences between Pron and *yeš* should be a consequence of the different arguments selected by the two.

One of the keys to understanding *yeš* is that, as observed by Shlonsky (1997), 'be$_2$' is an unaccusative predicate: its sole core argument is non-Agentive. Hebrew allows the sole core argument of an unaccusative to be realized as either SUBJ or OBJ.

(31) a.   Ha- orxim higiu.
           the- guests arrive.PST.3PL
           'The guests arrived.'

b.   Higiu   orxim.
           arrive.PST.3PL guests
           'Guests arrived.'

As reflected in these examples, there is a preference for definite arguments to be expressed as SUBJ and indefinite arguments as OBJ, mirroring the universal preference for definite topical SUBJs, although the strength of this preference appears to differ between speakers, and may even be based on the verb.[8] Whether SUBJ or OBJ, the unaccusative argument triggers verb agreement. All things being equal, we expect *yeš* to exhibit the same behavior; and it does.

(32) a.   Ha- tinok- et yešna   b- a-   bayit.
           the- baby- F YEŠ.3FSG in- the- house
           'The baby is in the house.'

---

[8]Shlonsky (1997) claims that there is a clear Definiteness Effect at work, with no definite OBJs allowed. This does not match the judgments of my informants.

b.

```
              S
          /       \
        NP          NP
         |        /    \
      hatinoket  NP     VP
                  |      |
                  N      PP
                  |      |
                yešna  babayit
```

c.

$$\begin{bmatrix} \text{PRED} & \text{'be}_2 \ \langle(\uparrow \text{SUBJ})(\uparrow \text{OBL}_{\text{Loc}})\rangle\text{'} \\ \text{TENSE} & \text{PRES} \\ \text{SUBJ} & [\text{"the baby"}] \\ \text{OBL}_{\text{Loc}} & [\text{"in the house"}] \end{bmatrix}$$
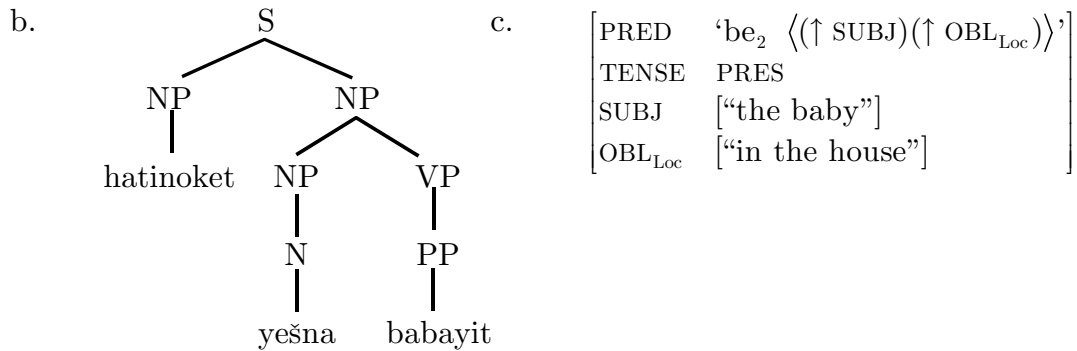
(33) a. Yešna   tinok- et b- a-   bayit.
         YEŠ.3FSG baby- F   in- the- house
         'A baby is in the house.'

b.

```
              S
              |
              NP
          /        \
        NP           VP
         |         /    \
         N        NP     PP
         |        |      |
       yešna   tinoket  babyit
```

c.

$$\begin{bmatrix} \text{PRED} & \text{'be}_2 \ \langle(\uparrow \text{OBJ})(\uparrow \text{OBL}_{\text{Loc}})\rangle\text{'} \\ \text{TENSE} & \text{PRES} \\ \text{OBJ} & [\text{"a baby"}] \\ \text{OBL}_{\text{Loc}} & [\text{"in the house"}] \end{bmatrix}$$
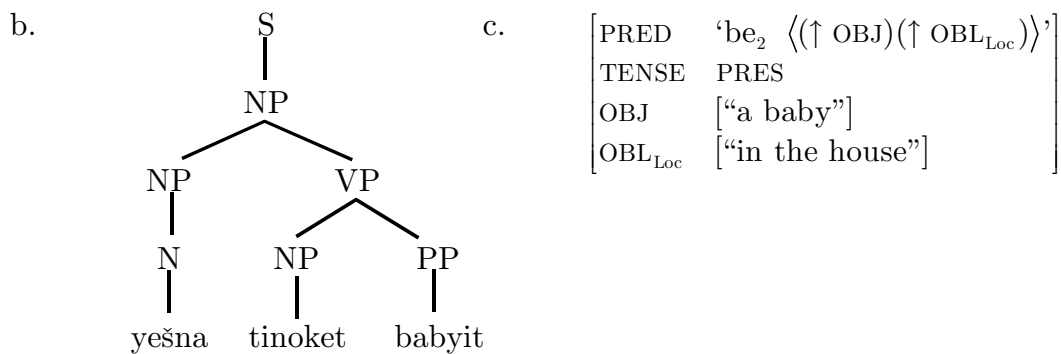
When the Theme argument of 'be$_2$' is realized as SUBJ (31), the structure is exactly the same as in sentences with Pron. When it is realized as OBJ, it is naturally different; a structure with OBJ is not available for 'be$_1$'. Note, however, that the structure in (32) is still an S, even though it is not needed to make the clause functionally complete. We conjecture that, like the VP constituent, this is a consequence of the functional status of *yeš* as verb-like. Since the present-tense copulas are functionally completely verbal, the c-structural expression must be a clausal constituent, unlike the nominal constituent headed by action nominals.

(34) *yešna*: N $(\uparrow \text{PRED}) = \text{'be}_2 \ \langle(\uparrow \text{SUBJ}|\text{OBJ})((\uparrow \text{OBL}_{\text{Loc}}))\rangle\text{'}$
               $(\uparrow \text{TENSE}) = \text{PRES}$
               $(\uparrow \text{SUBJ}|\text{OBJ GEND}) = \text{F}$
               $(\uparrow \text{SUBJ}|\text{OBJ NUM}) = \text{SG}$
               $(\text{VP} \in \text{CAT} (\uparrow))$
               $\text{S} \in \text{CAT} (\uparrow)$

Unlike *yeš*, *eyn* idiosyncratically requires its core argument to be realized as SUBJ.

(35) a. Ha- tinok- et eynena   b- a-   bayit.
         the- baby- F EYN.3FS in- the- house
         'The baby is not in the house.'
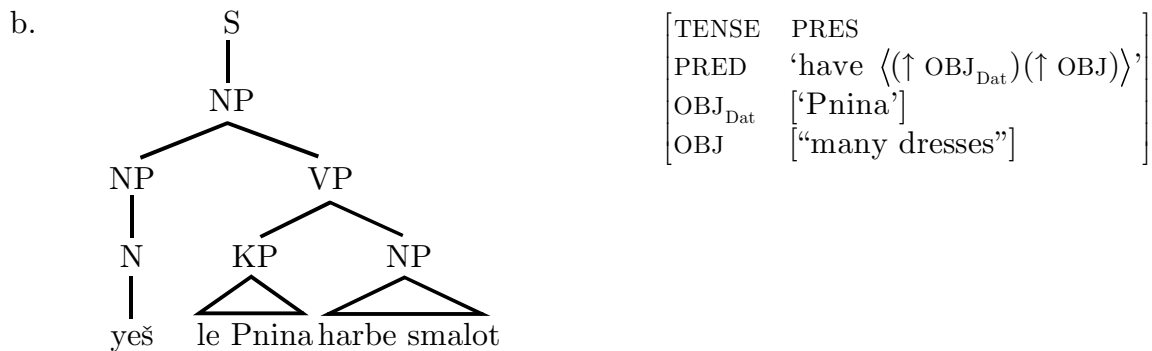
b.   *Eynena   tinok- et b- a-   bayit.
     EYN.3FSG baby- F in- the- house
     'A baby is not in the house.'

As in many other languages, 'be₂' also has an existential use—in Hebrew, a much more common use of 'be₂'. In the existential construction, the Theme has a discourse status (roughly speaking) of new information, a discourse status which generally precludes subjecthood. In English, where subjects are required in all clauses, the result is an expletive *there* as SUBJ, and the realization of the Theme as OBJ. In Hebrew, an expletive SUBJ is not required, and the Theme is simply realized as OBJ; with the existential construction, this is even true for *eyn*, which does not allow its Theme to be realized as OBJ in its locative version. The Theme is not a true unaccusative argument, since it cannot be realized as SUBJ, but simply as OBJ. The existential Theme therefore does not control agreement with *yeš* and *eyn*. If it is definite, it can even be marked with accusative Case in colloquial Hebrew, a usage frowned upon by prescriptivists.

(36) a.   Yeš tinok- et.
           YEŠ baby- F
           'There is a baby.'
      b.   Eyn tinok- et.
           EYN baby- F
           'There is no baby.'
      c.   Yeš et   ha- caacua ha- ze   b- a-   xanut šelanu.
           YEŠ ACC the- toy   the- this in- the- store ours
           'This toy exists in our store.' / 'We have this toy in our store.'
      d.   Eyn et   ha- caacua ha- ze   b- a-   xanut ha- mitxara
           EYN ACC the- toy   the- this in- the- store the- competing
           'This toy does not exist in the competing store.' / 'The competition doesn't have this toy in their store.'

As in many other languages, the possessive construction in Hebrew is derived historically from the existential, and thus shares many properties with it (Berman 1978). Like the existential, the possessive is a subjectless construction: the possessed element is an OBJ, colloquially marked accusative when definite, and the possessor is a dative-marked element which we hypothesize is a restricted object (OBJ$_{Dat}$).

(37) a.   Yeš le   Pnina harbe smalot.
           YEŠ DAT Pnina many dresses
           'Pnina has many dresses.'

b.

```
                    S
                    |
                   NP
                 /    \
               NP      VP
               |      /   \
               N     KP    NP
               |    /\    /  \
              yeš le Pnina harbe smalot
```

$$\begin{bmatrix} \text{TENSE} & \text{PRES} \\ \text{PRED} & \text{'have } \langle (\uparrow \text{OBJ}_{\text{Dat}})(\uparrow \text{OBJ}) \rangle \text{'} \\ \text{OBJ}_{\text{Dat}} & [\text{'Pnina'}] \\ \text{OBJ} & [\text{"many dresses"}] \end{bmatrix}$$

c. Eyn le   Pnina et   ha- simla ha- zot.
    EYN DAT Pnina ACC the- dress the- this
    'Pnina doesn't have this dress.'

In all of their uses, *yeš* and *eyn* conform to our claim that they are categorially nouns but functionally verb-like. They cannot be negated by *lo*; instead, *yeš* is negated by being replaced by *eyn*. The existence (and frequent use of) nonagreeing forms is also a nominal property. And, as discussed in the appendix, they do not participate in the Triggered Inversion construction. On the other hand, their functional properties (f-structural and f-structure–based c-structural properties) are verbal: they carry tense information, they take verbal arguments, and they head clausal constituents.

As one would expect, *yeš* and *eyn* share their verb-like properties with their present and future equivalents, forms of the verb *haya*, in all three uses. Even the realization of the arguments is identical. The nominal properties, on the other hand, are not shared. For example, *haya* is negated by a left-adjoined *lo*.

(38) a. Ha- tinoket lo   hayta   b- a- bayit.
         the- baby   not be.PST.3FSG in- the- house.
         'The baby wasn't in the house.'
     b. Lo hayta   tinok- et.
         not be.PST.3FSG baby- F
         'There was no baby.'
     c. Lo haya   le   Mati et   ha- sefer ha- naxon.
         not be.PST.3MSG DAT Mati ACC the- book the- right
         'Mati didn't have the right book.'

The agreement facts for *haya* in the subjectless existential and possessive constructions are relevant in this context. Recall that *yeš* and *eyn* do not agree with the Theme in these constructions. As a verb, *haya* lacks non-agreeing forms; the unmarked form, though, is the masculine third person singular: past tense *haya* and future tense *yihye*. Prescriptively, in the subjectless constructions *haya* agrees with the OBJ; this is markedly different from the nominal present tense forms. Colloquially, the situation is a little more complex. Both the prescriptively correct agreeing forms[9] and the neutral third person masculine singular forms are possible. The preference, however, is for the use of agreement to be correlated with the absence of Case marking, i.e. for the non-accusative object to agree and for the accusative object not to agree. This is shown in the following data from Ziv (1976).

---

[9]But it should be noted that the accusative Case forms are not prescriptively correct.

(39) a.   Hayta   li   mexonit kazot.
          be.PST.3FSG DAT.1SG car(F)   such

    b.   ?Haya   li   mexonit kazot.
          be.PST.3MSG DAT.1SG car(F)   such
          'I had such a car.'

(40) a.   ?Hayta   lanu   et   ha- mexonit ha- zot od kše
          be.PST.3FSG DAT.1PL ACC the- car(F)   the- this still when
          garnu   be Tel Aviv.
          live.PST.1PL in   Tel Aviv

    b.   Haya   lanu   et   ha- mexonit ha- zot od kše
          be.PST.3MSG DAT.1PL ACC the- car(F)   the- this still when
          garnu   be Tel Aviv.
          live.PST.1PL in   Tel Aviv
          'We had this car when we were living in Tel Aviv.'

This type of pattern is attested for verbs in other languages; one striking example is Hindi, where both SUBJ and OBJ can be either Case marked or not Case marked. If the SUBJ is not Case marked, the verb agrees with it; if the SUBJ is Case marked but the OBJ is not, the verb agrees with the OBJ; if both are Case marked, the verb does not agree (Mohanan 1994). The preferred colloquial pattern of agreement is thus clearly a verbal pattern, contrasting sharply with the nominal pattern of (non)agreement found with *yeš* and *eyn*.

4. Conclusion

       The analysis of Hebrew present tense copulas as mixed categories provides an understanding of their peculiar properties, and is a result of their peculiar lexical status as functionally verbal but categorially nominal. The theory of mixed categories needs to be extended to allow such elements.

5. Appendix: Triggered Inversion

       Another construction in which present-tense copulas have special properties is the Triggered Inversion construction. This appendix describes the construction, proposes an analysis, and shows how the construction interacts with present-tense copulas.

       We begin by noting that an element with discourse prominence can be placed at the beginning of a Hebrew clause. The most common way to do this involves setting this fronted element off from the clause intonationally; the clause itself has a normal structure.

(41) Be yaldut-   o   , Eli patar   targil-   ey matematika
      in childhood- his , Eli solve.PST.3MSG exercise- PL mathematics
      be   kalut.
      in   ease
      'In his childhood, Eli solved math exercises easily.'

In this construction, the fronted element is presumably adjoined to the clausal node —IP for a verbal sentence (as discussed in Doron 2000 and references cited there, Hebrew is a V-to-I language, in which the tensed verb is Infl) or S for a nominal sentence. However, there is another, stylistically marked, implementation in which there need not be an

intonational break after the fronted element. In this version, the Triggered Inversion construction, the verb (or auxiliary) precedes the subject.

(42) a.   Be yaldut-   o   patar   Eli targil-   ey matematika
           in childhood- his solve.PST.3MSG Eli exercise- PL mathematics
           be kalut.
           in ease
           'In his childhood, Eli solved math exercises easily.'

     b.   Be yaldut-   o   haya   Eli poter   targil-   ey
           in childhood- his AUX.PST.3MSG Eli solve.PART.MSG exercise- PL
           matematika   be kalut.
           mathematics in ease
           'In his childhood, Eli would solve math exercises easily.'

In the transformational literature, two analyses have been proposed for the Triggered Inversion construction. In one (e.g. Borer 1995) the topicalized element occupies the position of [SPEC, IP] and the SUBJ is VP internal; the verb is in Infl. In the other (e.g. Shlonsky and Doron 1992, Shlonsky 1998) the topicalized element is in [SPEC, CP] and the SUBJ is outside the VP (in [SPEC, IP]); the verb is in the complementizer position. The distributional evidence suggests that both analyses are partially correct. In subordinate clauses (i.e. clauses with an overt complementizer) the fronted element intervenes between the complementizer and the remainder of the clause, suggesting a [SPEC, IP] position for the fronted element (and the usual Infl position for the tensed verb).
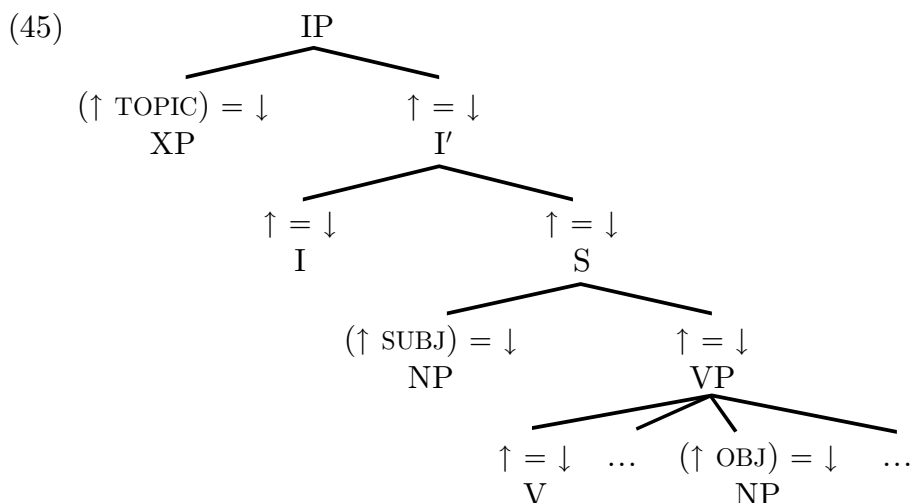
(43) Sipru   li   še   be yaldut-   o   patar   Eli
       tell.PST.3PL me.DAT that in   childhood- his solve.PST.3MSG Eli
       targil-   ey   matematika be kalut.
       exercise- PL mathematics in ease
       'I have been told that in his childhood, Eli solved math exercises easily.'

On the other hand, VP-adjuncts cannot intervene between the verb in Infl and the SUBJ, but must follow the SUBJ, suggesting that the SUBJ is not internal to VP.

(44) a.   Be yaldut-   o   patar   Eli be kalut targil-   ey
           in childhood- his solve.PST.MSG Eli in ease   exercise- PL
           matematika.
           mathematics
     b.   *Be yaldut-   o   patar   be kalut Eli targil-   ey
           in childhood- his solve.PST.MSG in ease   Eli exercise- PL
           matematika.
           mathematics
           'In his childhood, Eli solved math exercises easily.'

The standard LFG analysis of "VP-internal subjects", under which the constituent which contains the SUBJ is S rather than VP, provides a way to capture what is essentially correct in both of these analyses. Under this analysis, Triggered Inversion has the following

structure in Hebrew.

(45)

```
                            IP
                 _____/_____
        (↑ TOPIC) = ↓              ↑ = ↓
             XP                      I′
                            _____/_____
                        ↑ = ↓              ↑ = ↓
                          I                  S
                                    _____/_____
                               (↑ SUBJ) = ↓        ↑ = ↓
                                    NP               VP
                                          _____/ | _____
                                      ↑ = ↓   …  (↑ OBJ) = ↓   …
                                        V              NP
```

This structure correctly places the topicalized element in [SPEC, IP], the verb in Infl, and the SUBJ outside the VP.

   Triggered Inversion is not available for Pron sentences.

(46) a   Yoni haya   nora   xamud.
            Yoni be.PST.3MSG awfully cute.MSG
            'Yoni was awfully cute.'
      b.   *Haya   Yoni nora   xamud.
            be.PST.3MSG Yoni awfully cute.MSG
            'Yoni was awfully cute.'
      c.   Lifney harbe šanim, Yoni haya   nora   xamud.
            before many years Yoni be.PST.3MSG awfully cute.MSG
            'Many years ago, Yoni was awfully cute.'
      d.   Lifney harbe šanim haya   Yoni nora   xamud.
            before many years be.PST.3MSG Yoni awfully cute.MSG
            'Many years ago, Yoni was awfully cute.'

(47) a.   Kše hi mexayexet,   Pnina hi   nora   xamuda.
            when she smile.PRES.FSG Pnina is.FSG awfully cute.FSG
            'When she smiles, Pnina is awfully cute.'
      b.   *Kše hi mexayexet   hi   Pnina nora   xamuda.
            when she smile.PRES.FSG is.FSG Pnina awfully cute.FSG
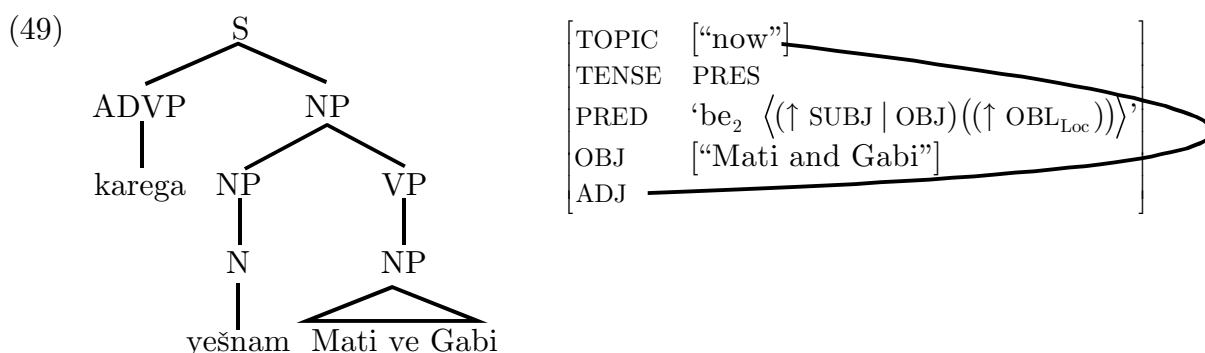   'When she smiles, Pnina is awfully cute.'

The inability of present tense copulas to occur in the Triggered Inversion construction is a consequence of the analysis. Under the analysis proposed here, the present tense copula is not an Infl, so it cannot take an S complement. Nothing licenses an S instead of the XP in predicate position, nor would we expect an S to be licensed there, since S is not a predicative category (Bresnan 1982); there is therefore no available post-Pron position for

the subject.[10]

It has been claimed by Doron (1983) that, while *eyn* is ungrammatical in Trigered Inversion sentences, *yeš* is possible.

(48) a.   Karega yešnam   Mati ve Gabi.
            now   YEŠ.3MPL Mati and Gabi
            'Right now, Mati and Gabi are here.'
      b.   *Karega eynam   Mati ve Gabi.
            now   EYN.3MPL Mati and Gabi
            'Right now, Mati and Gabi are not here.'

Under our analysis, however, there is an analysis available for the *yeš* sentence which does not involve Triggered Inversion: *Mati ve Gabi* could be an OBJ.

(49)

$$\begin{bmatrix} \text{TOPIC} & [\text{``now''}] \\ \text{TENSE} & \text{PRES} \\ \text{PRED} & \text{`be}_2 \; \langle (\uparrow \text{SUBJ} \,|\, \text{OBJ})((\uparrow \text{OBL}_{\text{Loc}})) \rangle\text{'} \\ \text{OBJ} & [\text{``Mati and Gabi''}] \\ \text{ADJ} & \end{bmatrix}$$

This analysis is confirmed by the ungrammaticality of such a construction with *eyn*, since locative *eyn* does not allow the expression of its Theme argument as an OBJ. Contrary to appearances, then, *yeš* is not a counterexample to our claim that Triggered Inversion is impossible with Hebrew present tense copulas.

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[10]This explanation of the ungrammaticality of Triggered Inversion would not be possible if we treated the constituent that hosts the subject as a VP.

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