Hebrew Present-Tense Copular Constructions:

The View from Parallel Syntax*

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1. Overview

The analysis of Hebrew present tense copular constructions presents descriptive challenges. The thesis of this study is that the contradictions inherent in the data, and therefore in the analyses, can be resolved if the construction is analyzed utilizing the insights of a theory in which syntax has a parallel architecture.

We start with the basic data:

(1) a. Pnina nora xamuda.
Pnina awfully cute.F
'Pnina is awfully cute.'

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

(2) a. Pnina hi nora xamuda.
Pnina PRON.FSG awfully cute.F
'Pnina is awfully cute.'

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

(3) a. Pnina yešna b- a- bayit.
Pnina YEŠ.3FSG in- the- house
'Pnina is (exists) in the house.'

b. Pnina hayta b- a- bayit.
Pnina be.PST.3FSG in- the- house
'Pnina was in the house.'

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(4) a. Pnina eynena b- a- bayit.
Pnina EYN.3FSG in- the- house
'Pnina 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 in the house.'

(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), *yeš* (3, 5, 7), and *eyn* (4, 6, 8).[1] In this introductory section, we will focus on Pron.

Despite the evidence of paradigmatic contrast in (2), which suggests that Pron is the present tense of the verb *haya*, it has become standard to deny this. Instead, it is usually taken to be a realization of agreement features (Berman 1978, Doron 1983,

[1]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'.

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.[2]

(9)

Form	Use as pronoun	Use as copula	Comparable verb form
hu	personal pronoun: 3rd person masculine singular 'he'	masculine singular	hove
hi	personal pronoun: 3rd person feminine singular 'she'	feminine singular	hov-a
hem	personal pronoun: 3rd person masculine plural 'they.M'	masculine plural	hov-im
hen	personal pronoun: 3rd person feminine plural '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*. (Particularly interesting is the non-standard but not infrequent use of the demonstrative *ze* as a Pron form, since, unlike the personal pronouns, it does not even share an initial /h/ with *haya*.) Other facts also militate against this analysis of Pron. An often noted point is the position of *lo* 'not', which precedes tensed verbs, including verbs in the present tense, but not Pron.

(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.'

[2]Morphologically, *haya* belongs to the class of verbs ending in orthographic *h* (historically, and possibly underling, /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/).

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.'

Since its position is different from that of verbs, there is good reason to deny that Pron is a present tense verb. Nevertheless, the only use of Pron is in present tense 'be' sentences, so the most straightforward analysis would state that Pron, even if it is not a verbal element, functions as the present tense of *haya*. Under any other analysis, it is a coincidence that Pron never shows up except in contexts where we would expect the present tense of 'be'.

The upshot of these observations is that the Pron forms display a strange array of properties, one which we will argue later is shared by *yeš* and *eyn*. 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

Such an analysis involves a mismatch between category and function. Formalizing it requires a theoretical architecture which dissociates categorial information from a representation of function; i.e. in which syntax is conceived of as involving parallel representations of function and category. Parallel architecture allows for such mismatches between the levels (Jackendoff 2002), and thus will be able to express the mismatch between the functional and categorial nature of Hebrew present tense copulas. Of course, even in a parallel-architecture theory mismatches will be marked, but at least they are allowed.

Structurally, the Hebrew present-tense copulas have a mixed status. Being categorially nominal, they have a structural nominal nature, which is reflected in the distributional differences between present-tense copulas and verbs, such as the distribution of negative *lo* mentioned above. 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.

2. LFG: Parallel Syntax and Mixed Categories

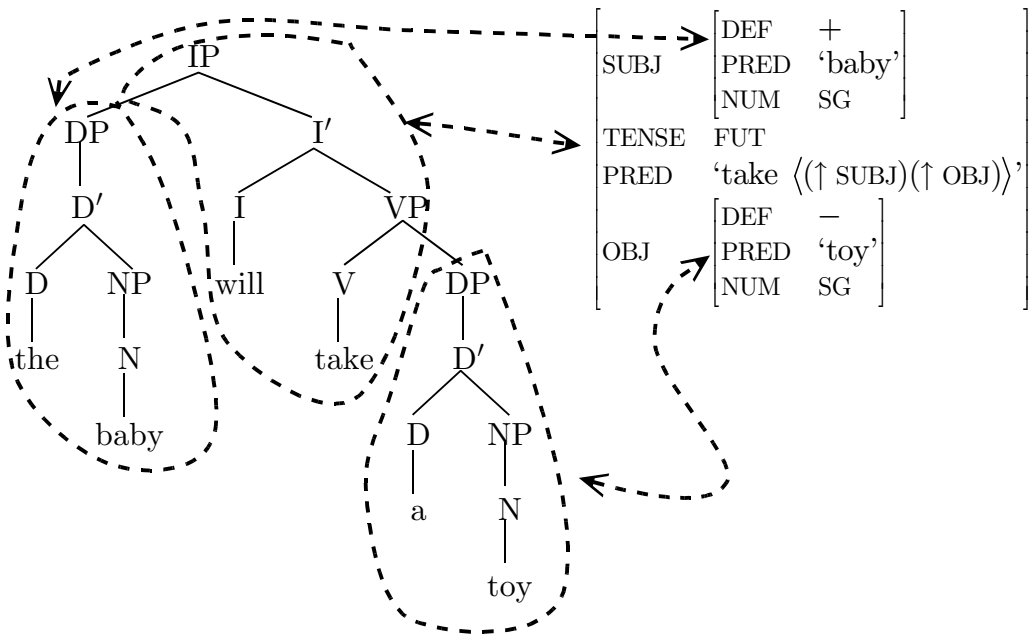
The theoretical framework within which we propose to analyze Hebrew present tense copulas is Lexical-Functional Grammar (LFG: Bresnan 2001, Falk 2001a, Dalrymple 2001). In this section, we will outline the features of LFG which allow it to

provide an insightful analysis of the copula constructions.

2.1. Basics

In the first place, LFG is based on a parallel architecture in which category and function are represented at distinct levels, thus enabling us to express our central observation about Hebrew present tense copulas. The representation of category is a component of a conventional immediate constituency representation, called c-structure, which is licensed by language-specific rules and is subject to the LFG implementation of $\bar{\text{X}}$ theory. We will have more to say about c-structure shortly. Functional information is represented at a level called f-structure, which is a table-like representation of grammatical functions and features and their values. A sample c- and f-structure of a simple sentence in English are presented in (11), showing the correspondences between the two levels.

(11)



The correspondence constraints licensing the relation between these two levels are expressed as equations annotated in lexical entries and on the daughter nodes in phrase structure rules. The following illustrate this with the phrase structure rule for I′, a simplified phrase structure rule for VP, and a lexical entry for the determiner *a*; the symbol ↑ means ‘the f-structure corresponding to the mother node’ and the symbol ↓ means ‘the f-structure corresponding to the daughter node.’ The annotation ‘↑=↓’ indicates that the mother and daughter nodes unify, i.e. map to the same f-structure. This annotation appears on a constituent that functions as head. (The phrase structure rules here are valid for both English and Hebrew.)

(12) a. $\text{I}' \rightarrow \underset{\uparrow=\downarrow}{\text{I}} \quad \underset{\uparrow=\downarrow}{\text{VP}}$

b. VP → V NP …
↑=↓ (↑ OBJ) =↓

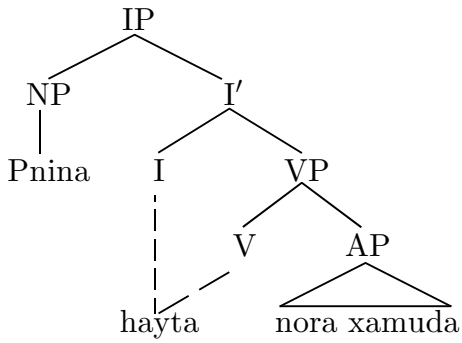
c. *a* D (↑ DEF) = −
(↑ NUM) = SG

The LFG theory of constituent structure differs from that of transformational theory in several ways. The role of constituent structure in the overall theoretical architecture is different. In transformational theory, constituent structure is taken to be the heart of syntax; all syntactic operations are stated in terms of constituent structure. LFG models constituent structure as the overt external form which reflects the deeper properties of other dimensions of representation; it is merely the "user interface" of the syntactic system. This has several important consequences. In the first place, it is monostratal. A sentence has a single constituent structure, rather than a derivationally linked series of constituent structures. Second, since c-structure models the overt form of a sentence as it is built out of words, most or all of the empty elements and sublexical feature nodes which appear in transformational constituent structures have no place in LFG's conception of c-structure.[3] Inter alia, this means that clausal structure in LFG is flatter than in current transformational research: while the functional categories I and C are well motivated on lexical grounds (at least in many languages), other functional categories (agreement, transitivity, aspect, etc.) are not.

2.2. Head Sharing and Mixed Categories

Endocentricity in c-structure is understood differently in LFG than in transformational theory, partially because of the phenomenon of head sharing. Consider a verbal sentence in Hebrew, such as (2b). Tensed verbs in Hebrew occupy the structural position of infl (Doron 2000 and references cited there). *Hayta* can be said to be the head of both the IP and the VP; alternatively, the IP and VP can be said to share a head. Informally, this is shown in the following tree.

(13)

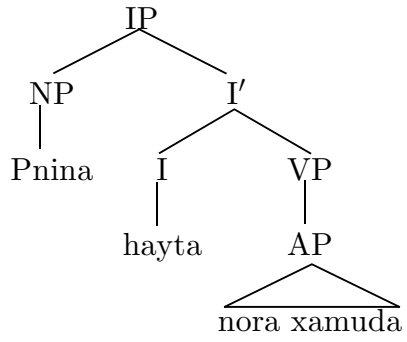


Head sharing has been formalized in different ways by different theoretical frameworks. In transformational theory, a derivational relationship is hypothesized between the two positions, with the shared head initially in the lower position and then moving to the higher position. In LFG, head sharing constructions have been taken to be evidence that

[3]The one possible case of empty c-structure in LFG is in some or all gap sites in long-distance dependency constructions. This is controversial in contemporary LFG, but it is irrelevant to our interests here.

endocentricity is to be understood functionally rather than categorially. *Hayta* is lexically a member of the category infl (Falk 1984) and thus appears in the structural position of infl; the c-structure of (2b) hypothesized in LFG is thus:

(14)

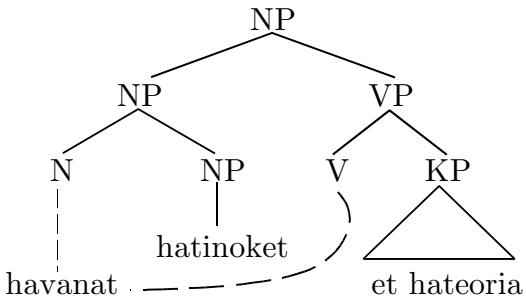


The VP in (14) has no categorial head, but its "extended" head is the infl *hayta*, since the IP and VP unify in f-structure (as indicated in the phrase structure rule (12a)). This is not the place to discuss the differences between the transformational and LFG formalizations of head-sharing; for one interesting phenomenon that can be better expressed using the LFG formalization (involving distributed exponence of the feature TENSE in the Australian language Wambaya), see Bresnan (2001).

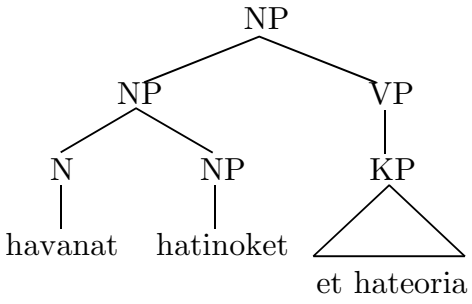
Related to the notion of head-sharing is the analysis of mixed categories, as originally proposed by Bresnan (1997). An example of a mixed category is the Hebrew action nominal. Mixed categories, elements with mixed categorial properties, are widely attested; one in-depth analysis (for Kikuyu) is given by Mugane (2003). The Hebrew action nominal is a mixed category in that, although it is a noun, it can take verb-type arguments which are part of a VP embedded in the NP that the action nominal heads (Hazout 1995, Falk 2001b). The following is the c-structure proposed by Falk (2001b), both using the informal head-sharing notation and the actual c-structure.

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

b.



c.



Syntactically, this is licensed by a phrase structure rule allowing VP to adjoin to an NP with which it unifies at f-structure:

(16) NP → NP VP
↑=↓ ↑=↓

Lexically, it is the result of a process of morphological derivation in which a verb, an element with a verbal argument structure, becomes incompletely nominalized; the argument structure retains a verbal nature. Informally, we can represent the argument structure of *havana(t)* as follows:

(17) 'understanding $\langle_{n} \langle_{v} x, y\rangle\rangle$'

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

(18) VP ∈ CAT (↑)

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.

2.3. Sentence Architecture

2.3.1. S and IP

We turn now to the LFG view of the architecture of the sentence.[4] Generative syntactic theory has displayed a certain ambivalence between two distinct views: one of them is a very traditional view which treats the sentence as a special kind of construction (S); the other is an $\bar{X}$ theory inspired approach which views the sentence as having a structure completely parallel to other phrase types, projected either from the lexical category Verb or from the functional category Infl (auxiliary).

Traditional grammar considers the sentence to be a sui generis construction, one which does not parallel other types of syntactic elements. The earliest work in generative

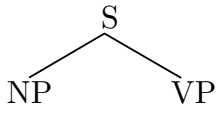
[4]We are making a terminological distinction between "sentence" and "clause". We are not interested here in the structure of the clause: a full CP (or S).

syntax adopted this traditional view of the sentence. Chomsky (1957: 29) characterizes the phrase structure rule component of the grammar as being "defined by a finite set Σ of initial strings and a finite set F of 'instruction formulas' of the form X→Y …", and describes phrase structure grammars as [Σ, F] grammars. The concept of an initial string, or initial symbol, is thus taken to be part of the definition of the phrase structure component of the grammar. This initial symbol is the sentence. The advent of $\bar{X}$ theory did nothing to change this. Although it is often supposed today that acceptance of $\bar{X}$ theory requires the sentence to be assimilated to other phrase types, this was not assumed in the early work on $\bar{X}$ theory. Chomsky (1970) states the "initial rule" of the base to be:

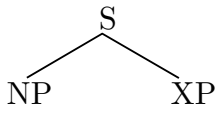
(19) $S \rightarrow N'' \; V''$

No attempt is made there to incorporate the sentence into the $\bar{X}$ system. This position is explicitly argued for by Hornstein (1977). Abstracting away from differences between the analyses, the basic structure of the sentence according to the S approach is essentially (20a), or, allowing for non-verbal predicates, (20b).

(20) a.



b.

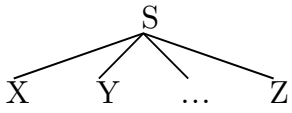


An analysis of the sentence as S is also apparent in early studies of non-configurational languages, such as Hale (1981),[5] originally distributed in 1978 and cited approvingly by Chomsky (1981). Hale distinguishes there between "X-bar" and "W-star" languages; in the latter, the basic phrase structure rule is taken to be:

(21) $S \rightarrow W^*$ (where W="word")

This results in sentences with flat structures.

(22)



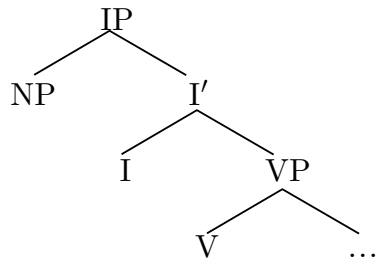
This is a significant point: the sui generis analysis of the sentence opens the possibility of it having a wider variety of structures than other phrase types. This wider variety is supported empirically by non-configurational languages.

While the analysis of the sentence as a sui generis S is consistent with (at least some versions of) $\bar{X}$ theory, it was probably inevitable that $\bar{X}$ theory would give rise to

[5] See also Hale (1973).

a new view of the sentence: one which sees the it as simply another $\bar{X}$ phrase. An analysis of this kind (with the sentence as the maximal projection of the verb) was first proposed by Jackendoff (1977). The view of the sentence as maximal projection of infl (IP), emerged out of several strands of research in the 1980s. Such an analysis was mentioned as a possibility, although not explicitly adopted, by Chomsky (1981). Using different notation, it was argued for by Falk (1984) on the grounds that some auxiliaries display head-like behavior. The version which has been generally adopted is that of Chomsky (1986), in which the analysis of sentence as IP (and clause as CP) were proposed without argument. This implementation has the advantage over earlier attempts of providing a full $\bar{X}$ specifier-head-complement structure to the sentence (and also the clause).

(23)



There is thus a tension in generative syntax between the idea that clauses are sui generis (S) and the idea that they are $\bar{X}$ phrases. However, these approaches need not be in conflict. It is logically possible that both structures for sentence exist, and that languages can choose one or the other, or both. Hypothesizing the existence of both types of sentences in languages of the world allows us to make better sense of the cross-linguistic variability in sentential structure. For some languages, like English, the $\bar{X}$ approach results in a better understanding of the elements of the sentence,[6] while for others ("nonconfigurational" languages) the analysis is less than insightful.[7] This dual approach is the one adopted in most work in LFG.

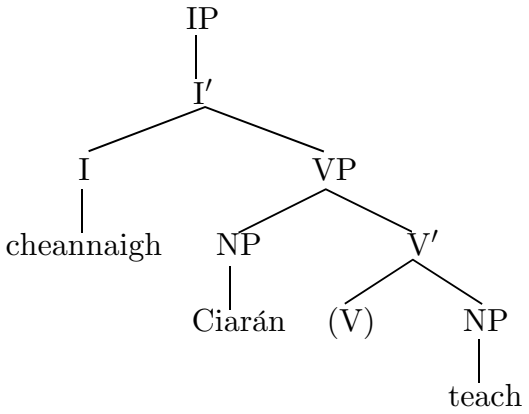
It has also been argued in the LFG literature that structures incorporating both S and IP are possible. These are cases where other analyses propose VP-internal subjects. For example, the structure of an Irish sentence like (24a) is often taken to be (24b) (McCloskey 1991; 1997), while in the LFG literature they have been given the structure (24c).

(24) a. Cheannaigh Ciarán teach.
bought Ciaran house
'Ciaran bought a house.'

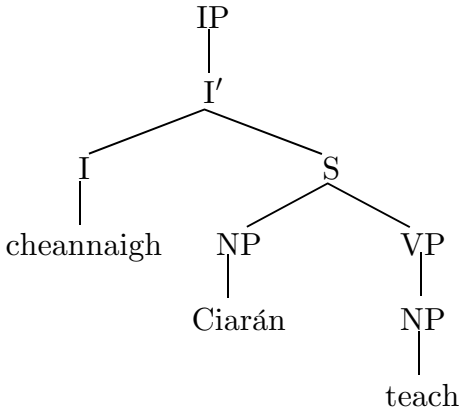
[6]Even in English, some sentences (such as ones without auxiliaries) may be S.

[7]This requires some non-configurational approach to grammatical functions, as is hypothesized in theories like LFG. As shown by Nordlinger (1998), structural attempts to account for non-configurationality are inadequate.

b.



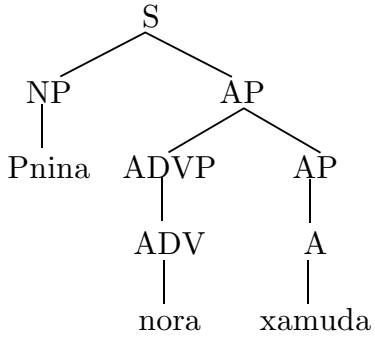
c.



Explicit arguments for the IP-over-S analysis as opposed to an analysis in terms of VP-internal subjects have been made by Kroeger (1993) on the basis of clitic-placement facts in Tagalog. Bresnan (2001) proposes that VP-internal subjects universally do not exist, a view which has become standard in LFG work, and for which, we will show, there is evidence in Hebrew.

In Hebrew, both S and IP exist. The distinction between them corresponds to the distinction drawn in traditional grammar between nominal sentences and verbal sentences respectively (Blau 1968). A nominal sentence is a sentence with the ∅ realization of the present tense copula: it involves direct predication by the predicate nominal/adjective without the need for a mediating verb. The c-structure of (1a) is as follows. We also provide an f-structure.

(25)

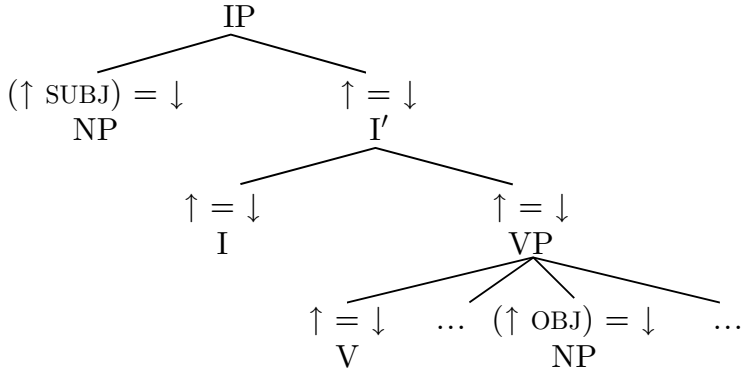


$$\begin{bmatrix} & \begin{bmatrix} \text{PRED} & \text{'Pnina'} \\ \text{NUM} & \text{SG} \\ \text{GEND} & \text{F} \end{bmatrix} \\ \text{SUBJ} & \\ \text{PRED} & \text{'cute } \langle(\uparrow \text{SUBJ})\rangle\text{'} \\ \text{ADJ(UNCT)} & \begin{bmatrix} \text{PRED} & \text{'awfully'} \end{bmatrix}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

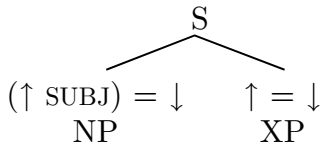
We therefore have two structures for basic Hebrew clauses. We present them here with

the equations (constraints) indicating the functions of the elements.

(26) a. **Verbal clause (SVO)**



b. **Nominal clause**



2.3.2. Triggered Inversion

We propose that Hebrew also has IP-over-S structures, in what has come to be known as the Triggered Inversion construction. 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.

(27) 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 or S). 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.

(28) 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[8] 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).

(29) 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.

(30) a. Be yaldut- o patar Eli be kalut targil- ey
in childhood- his solve.PST.MSG Eli in ease exercise- PL
matematika.
mathematics

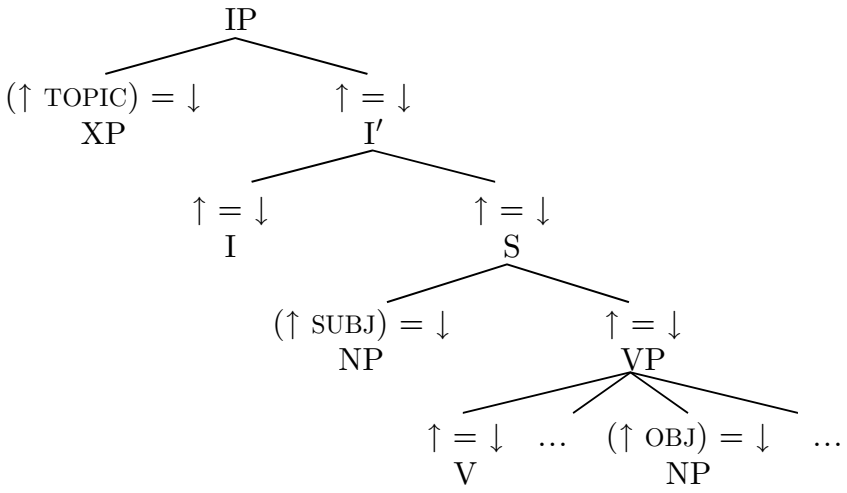
b. *Be yaldut- o patar be kalut Eli targil- ey
in childhood- his solve.PST.MSG in ease Eli exercise- PL
matematika.
mathematics

'In his childhood, Eli solved math exercises easily.'

The LFG analysis captures what is essentially correct in both of these analyses. As discussed in the previous section, LFG rejects the existence of VP-internal subjects; instead, it is hypothesized that a subject-predicate structure (S) can be embedded as the structural complement of an infl. Translating Borer's analysis into LFG would thus require replacing the VP-internal subject structure with an IP-over-S structure.

[8]Other considerations have been invoked in the debate on the structure of Triggered Inversion. For example,Shlonsky and Doron (1992) discuss the islandhood of Triggered Inversion clauses. Since islandhood has been shown (e.g. in Kaplan & Zaenen 1989) to be a result of the functional, rather than the structural, environment, these facts cannot be evidence for a structural configuration.

(31) **Verbal XVSO (or XISVO) clauses**



This structure correctly places the topicalized element in [SPEC, IP], the verb in infl, and the SUBJ outside the VP, and thus captures the essential insights of both analyses. This structure is the direct result of the LFG rejection of the existence of VP-internal subjects, and thus provides evidence that this hypothesis is correct.

S is thus licensed by the following two phrase structure rules in Hebrew.

(32) a. $$\underset{}{\mathrm{C}'} \rightarrow \underset{\uparrow=\downarrow}{\mathrm{C}} \quad \underset{\uparrow=\downarrow}{\begin{Bmatrix}\mathrm{IP}\\ \mathrm{S}\end{Bmatrix}}$$

b. $$\underset{}{\mathrm{I}'} \rightarrow \underset{\uparrow=\downarrow}{\mathrm{I}} \quad \underset{\uparrow=\downarrow}{\begin{Bmatrix}\mathrm{VP}\\ \mathrm{S}\end{Bmatrix}}$$

Its distribution partially overlaps that of IP and partially that of VP.

2.4. Looking Ahead

We conclude this section by returning to present tense copulas. The architecture of LFG allows us to express the basic idea that forms like *yeš*, Pron, and *eyn* are functionally verbs but categorially nouns. The basic properties of these elements will follow from the theoretically sanctioned expression of this idea, while the differences between them will follow from individual lexical properties, such as argument structure. Specifically, we claim that the present tense copulas are mixed categories. However, unlike other cases of mixed categories, the status of the present tense copulas is a stipulated lexical property: functionally they are purely verbal, but categorially they are nouns.

3. Pron

3.1. Analysis

We begin with the pronoun-like form of the copula, as in(2a), repeated here.

(2) a. Pnina hi nora xamuda.
Pnina PRON.FSG awfully cute.F
'Pnina is awfully cute.'

Historically, this construction derives from a topicalization (or left dislocation) construction, in which the initial NP is a topic and the pronoun (*hi* in this case) is a resumptive element functioning as the SUBJ. In contemporary Hebrew, the Pron construction is no longer a kind of topicalization,[9] although a trace of the historical source as a topic remains in the inability to focus Pron (as shown by its unstressability).[10]

The Pron element will have the following in its lexical entry:

(33) *hi*: N $(\uparrow \text{PRED}) = \text{'be}\ \langle(\uparrow \text{XCOMP})\rangle\ (\uparrow \text{SUBJ})\text{'}$
$(\uparrow \text{TENSE}) = \text{PRES}$
$(\uparrow \text{SUBJ GEND}) = \text{F}$
$(\uparrow \text{SUBJ NUM}) = \text{SG}$
$\text{VP} \in \text{CAT}\ (\uparrow)$
$\neg\ (\text{FOCUS}\ *_{\iota})$

That is to say, *hi* is a lexical element belonging to the category Noun, and expressing the present tense of the predicate 'be'. Its subject is feminine singular, and VP must be present in the extended projection associated with *hi*. Finally, as noted above, *hi* cannot be focused (formally, the information-structure element corresponding to *hi*—represented formally as $*_{\iota}$—cannot be the value of the FOCUS attribute).

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

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[9]This statement represents a near-universal consensus (although a dissenting view is expressed by Chayen and Dror 1976) A topicalization construction 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.'

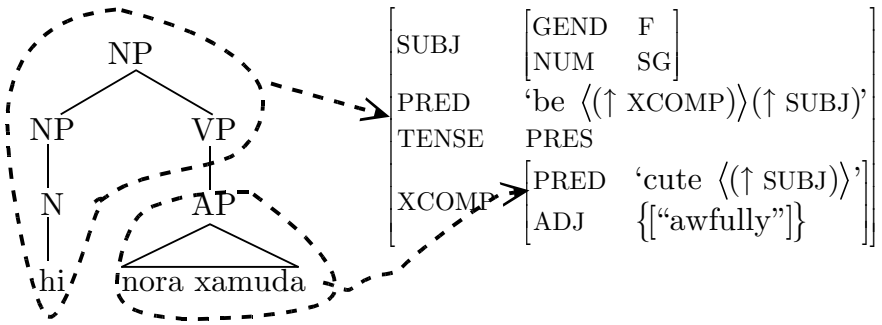
(iii) a Pnina, hi ohevet ledaber.
Pnina, she love.PRES.FSG talk.INF
'Pnina, she loves to talk.'

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

[10]I am indebted to Nomi Erteschik-Shir (personal communication) for suggesting this explanation for the unstressability of Pron.

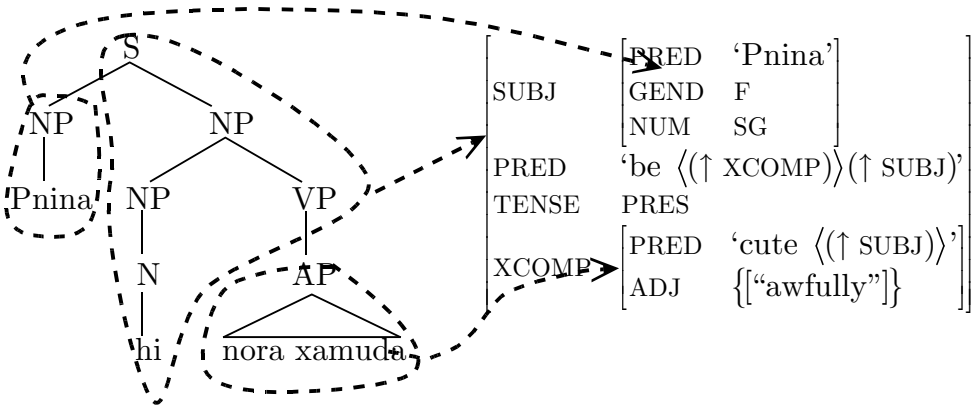
requirement that its extended projection include the category VP. Pron's predicative complement (XCOMP in standard LFG terminology)[11] is a daughter of the VP node. The VP itself shares a head with the NP in which it is embedded, the N serving as its extended head.

(34)



This sentence is incomplete, since the SUBJ has no content. By embedding the NP under S, we can provide it with a SUBJ.

(35)



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.

Another property of the construction which follows automatically from this analysis is the constituent order. As noted above, although Hebrew is an SVO language, XVSO order is possible (though stylistically marked), and called Triggered Inversion. Triggered Inversion is not available for Pron sentences.

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[11]For the sake of readability, we are abstracting away from several details of the analysis of predicative complements. In the first place, we will not show the functional control of the subject of the predicatve complement, which is the formal syntactic expression of predication. Second, we are ignoring some recent work proposing to expand the class of predicative complement functions; for some discussion, see Butt, King, Niño, and Segonde (1999), Dalrymple, Dyvik, and King (2004), and Falk (2005).

(36) 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 haya Yoni nora xamud.
before many years be.PST.3MSG Yoni awfully cute.MSG
'Many years ago, Yoni was awfully cute.'

(37) 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. As discussed earlier, we take the Triggered Inversion construction to involve using [SPEC, IP] position for the topic, and embedding an S as the sister of I to host the SUBJ. If the present tense copula were an infl, as in the conventional analysis, one would expect a similar configuration to be grammatical with Pron. However, under the analysis proposed here, the present tense copula is not an infl. Nothing licenses an S instead of the XP in predicate position. The post-Pron constituent is a VP, but under the LFG analysis VP cannot host SUBJ. There is therefore no available post-Pron position for the SUBJ.

The inability of Pron to be preceded by *lo* ((10) above, repeated here as (38)) also follows from the present analysis.[12]

(38) 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.'

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[12]The distribution of the emphatic positive particle *ken* is the same as the distribution of *lo* in this respect: it precedes tensed verbs but not Pron, instead it follows Pron.

(i) a. Gabi KEN haya ayef.
Gabi POS was tired
'Gabi WAS tired.'

b. *Gabi KEN hu ayef.
Gabi POS PRON.MSG tired
'Gabi IS tired.'

c. Gabi hu KEN ayef.
Gabi PRON.MSG POS tired
'Gabi IS tired.'

We take it that *ken* and *lo* are licensed by the same phrase structure rule, and the same principles thus govern the distribution of both. For simplicity of presentation, the analysis here simply refers to *lo*.

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.'

We analyze clause-negation *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 (structurally) 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. The two types of negation are licensed by the following phrase structure rules (where [+V] = V or I):

(39) a. Clausal negation

$$[+\mathrm{V}] \rightarrow \underset{(\uparrow \mathrm{POL}) = \mathrm{NEG}}{lo} \quad \underset{\uparrow=\downarrow}{[+\mathrm{V}]}$$

b. Constituent negation

$$\mathrm{XP} \rightarrow \underset{\substack{(\uparrow \mathrm{POL}) = \mathrm{NEG} \\ (\mathrm{FOCUS} *>_{\iota})}}{lo} \quad \underset{\uparrow=\downarrow}{\mathrm{XP}}$$

In both cases, *lo* is adjoined to the element it negates; in the case of constituent negation, it also focuses the element to which it is adjoined. This is why constituent negation is often best in contrastive contexts. Here are some examples of constituent negation.

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

b. Yoni nira lo be meitav- o
Yoni seemed not at best- his
'Yoni seemed not at his best.'

c. Pnina niret li paota ve lo tinoket.
Pnina seems me.DAT toddler and not baby
'Pnina seems to me (to be) a toddler and not a baby.'

The same construction is used for what is semantically clausal negation in copula-less sentences.

(41) a. Gabi lo ayef.
Gabi not tired
'Gabi is not tired.'

b. Pnina lo tinoket
Pnina not baby
'Pnina is not a baby.'

Lo cannot be adjoined to the NP headed by Pron, however, because the subclausal negation construction requires the element negated to be focused, as shown in the annotated phrase structure rule. Pron, as noted above, cannot be focused; it therefore cannot be used in the subclausal negation construction.

3.2. Pron vs. Ø

Our analysis provides us with an account of the distinction between sentences with Pron and those with Ø. In the latter, as we have seen, we have direct predication between the subject and the predicate, while in the former, the predication is mediated by 'be'. So the difference between (1) and (2) is analogous to the following in English:

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

The 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 cannot be predicative on its own.

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

(44) 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 predicate is itself an embedded clause. As a closed element with its own SUBJ, it cannot be used predicatively. Here again, Hebrew and English act the same way.

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

(46) 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.'

The copula mediates the predication in cases like these.

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.

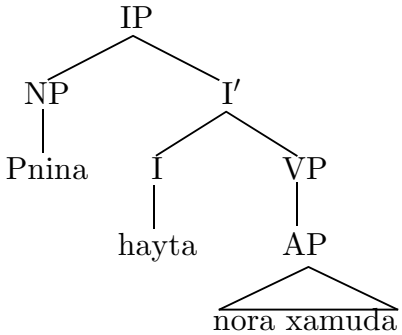
(47) a. Ha- dinozaur hu šikor.
the- dinosaur PRON.MSG drunk.MSG
'The dinosaur is a drunkard.'

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 structurally identical, differ functionally.

(48) a. c-structure for both (=14)



b. f-structure for (1b)

$$\begin{bmatrix} \text{SUBJ} & [\text{“Pnina”}] \\ \text{TENSE} & \text{PAST} \\ \text{PRED} & \text{‘cute } \langle(\uparrow \text{SUBJ})\rangle\text{’} \\ \text{ADJ} & \{[\text{“awfully”}]\} \end{bmatrix}$$

c. f-structure for (2b)

$$\begin{bmatrix} \text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`Pnina'} \\ \text{GEND} & \text{F} \\ \text{NUM} & \text{SG} \end{bmatrix} \\ \text{PRED} & \text{`be } \big\langle (\uparrow \text{XCOMP}) \big\rangle (\uparrow \text{SUBJ})' \\ \text{TENSE} & \text{PAST} \\ \text{XCOMP} & \begin{bmatrix} \text{PRED} & \text{`cute } \big\langle (\uparrow \text{SUBJ}) \big\rangle' \\ \text{ADJ} & \big\{ [\text{“awfully”}] \big\} \end{bmatrix} \end{bmatrix}$$

4. *Yeš* and *Eyn*

We turn now to the other realization of present tense copula in Hebrew: *yeš* (and its negative *eyn*).

4.1. *Yeš*/*Eyn* as Mixed Category

The present tense copular element *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). Despite the obvious motivation for this (the paradigmatic relation between *haya* and *yeš*), it is clear that *yeš* is not a verb. Verbs in Hebrew (as in other Semitic languages) have forms which conform to one of a limited set of morphological templates. Neither *yeš* nor *eyn* conforms to any of the Hebrew verbal templates. Distributional properties, such as the impossibility of appearing with the negative *lo*, also appear to point to a non-verb analysis for *yeš*.

The inflectional properties of *yeš* and *eyn* are also not verbal. First of all, they have non-agreeing forms. The existence of a non-agreeing form is a nominal property: in verbs, an unsuffixed form is (third person) masculine singular. Second, even when *yeš* and *eyn* agree with the subject, the paradigms resemble the possessor agreement paradigm for nouns. The following chart includes the paradigm of a noun (*gan* 'garden') for comparison:[13]

[13]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.

(49)

no agreement	yeš	eyn	gan
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 *(e)n* augment in some of the forms, the suffixes on *yeš* and *eyn* are clearly identical to the nominal suffixes. The same suffixes can appear as (undoubleable) incorporated pronominal objects on prepositions and (in very high register speech) on verbs, but the suffixes on *yeš* and *eyn* are subject agreement, not incorporated object pronouns; this is thus the nominal use of these suffixes. Inflection thus provides additional evidence that *yeš* and *eyn* are nouns.

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). 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.)

(50) 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.'

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* and *eyn*, since present tense verbs in Hebrew do not exhibit person agreement.

The observations in this section point in the same direction as our earlier discussion of Pron. *Yeš* and *eyn* are categorially nominal and functionally verbal. They therefore should receive the same mixed-category analysis as Pron.

We conclude this section with a comment about *eyn*. Contrary to what we have been assuming here, *eyn* is generally not analyzed as the negative form of *yeš*. This despite the clear positive/negative contrast associated directly with the use of *yeš* and *eyn*. In addition to the examples above, note the following halves of a single Biblical verse (Deuteronomy 29:14), in which the contrast is quite clear.

(51) a. kī ʔeṯ ʔăšer yešnō pō ʕimmānū ʕōmēḏ hayyōm …
COMP with REL YEŠ.3MSG here with.us standing today
'but with he who is here with us, standing today …'

b. wə ʔēṯ ʔăšer ʔeynennū pō ʕimmānū hayyōm.
and with REL EYN.3MSG here with.us today
'and with he who is not here with us today'

While there is one constituent-order difference between *yeš* and *eyn*, to which we will return, the main reason for this denial appears to be the existence of another *eyn*, which serves as sentential negation in the present tense: a prescriptively preferred but rarely used alternative to the usual negation *lo*.

(52) a. Pnina lo roca lišon.
Pnina not want.PRES.FSG sleep.INF
b. Eyn Pnina roca lišon.
NEG Pnina want.PRES.FSG sleep.INF
c. Pnina eyna/eynena roca lišon.
Pnina NEG.3FSG want.PRES.FSG sleep.INF
'Pnina does not want to sleep.'

While this *eyn* is clearly related to the *eyn* which is the negative of *yeš* (note the fact that it also takes nominal inflection and that it agrees with a preceding NP but not a following one), there are some interesting differences, which lead to the conclusion that

it is not the same lexical item. There is the difference in register: clausal negation *eyn* is associated with a highly normative non-colloquial register, while copular *eyn* is widely found in all registers. More relevant is the morphological difference (Schwarzwald 1982, Glinert 1989); as we see above, copular *eyn* has one form for the third person feminine singular, *eynena*, while clausal negation *eyn* has two, *eynena* and *eyna.*, the latter lacking the nasal augment. This is also true for other forms with a nasal augment, and must be attributed to clausal negation *eyn* being a distinct lexical item from negative copula *eyn*. We will have nothing more to say about clausal negation *eyn*.

4.2. Properties of *Yeš*/*Eyn*

Yeš/*eyn* joins Pron as the expression of the present tense of the verb *haya*. Since they are not interchangeable, a theory of Hebrew present tense copulas needs to account for the usage of the two alternative present tenses. *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), but rather obliques.[14] Thus, despite the c-structure similarities, (53a) and (54a) have very different f-structures. (We henceforth refer to the XCOMP-taking 'be' as 'be$_1$', and the non-XCOMP-taking variety as 'be$_2$'.)

(53) a. Pnina is very cute.

b.
$$\begin{bmatrix} \text{SUBJ} & [\text{“Pnina”}] \\ \text{TENSE} & \text{PRES} \\ \text{PRED} & \text{‘be}_1\ \langle(\uparrow \text{XCOMP})\rangle(\uparrow \text{SUBJ})\text{’} \\ \text{XCOMP} & \begin{bmatrix} \text{PRED} & \text{‘cute}\ \langle(\uparrow \text{SUBJ})\rangle\text{’} \\ \text{ADJ} & \{[\text{“very”}]\} \end{bmatrix} \end{bmatrix}$$

(54) 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* are

[14]Since in Hebrew, locative PPs can occur in Ø and Pron constructions, the XCOMP and predicational analyses must be open to them as well. Locative expressions with *yeš* and those with Pron/Ø are interpreted slightly differently: the ones with *yeš* have something of an existential feel to their interpretation. We take this existential feel to be the consequence of the existence of the simpler Pron/Ø construction to express simple location combined with the fact that *yeš* has an existential use.

a consequence of the different argument-selection properties.

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. What unites different theories' accounts of unaccusativity is that the core argument of an unaccusative verb has the potential of being realized as either SUBJ or OBJ, as opposed to the sole argument of an unergative, which has to be SUBJ. In many languages, including English, the usual realization is as SUBJ unless there is some other SUBJ, as in existential and presentational constructions. However, Hebrew allows the sole core argument of an unaccusative to be realized as either SUBJ or OBJ.

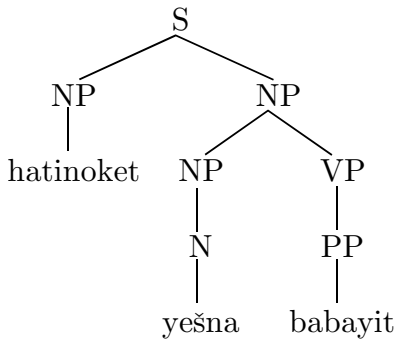
(55) a. Ha- orxim higiu.
the- guests arrive.PST.3PL
'The guests arrived.'

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 possibly even between verbs.[15] Even when it is realized as OBJ, the argument triggers verb agreement. We take this to be a result of its potential for being the SUBJ, i.e. its status as an unaccusative argument. All things being equal, we expect *yeš* to exhibit the same behavior as any other unaccusative verb; and it does.

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

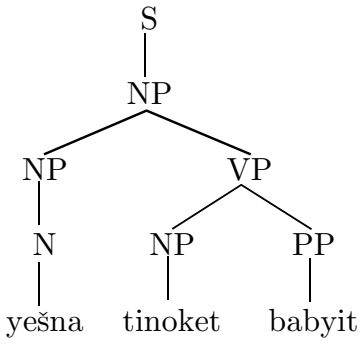
b.



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

[15] Shlonsky (1997) claims that there is an absolute definiteness effect at work, with no definite OBJs allowed. This does not match the judgments of my informants.

(57) a. Yešna tinok- et b- a- bayit.
YEŠ.3FSG baby- F in- the- house
'A baby is in the house.'

b. 

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 (56), 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 Pron since the nonthematic argument of 'be$_1$' cannot be realized as OBJ. Note, however, that the structure in (57) 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.

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

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

(59) 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.'

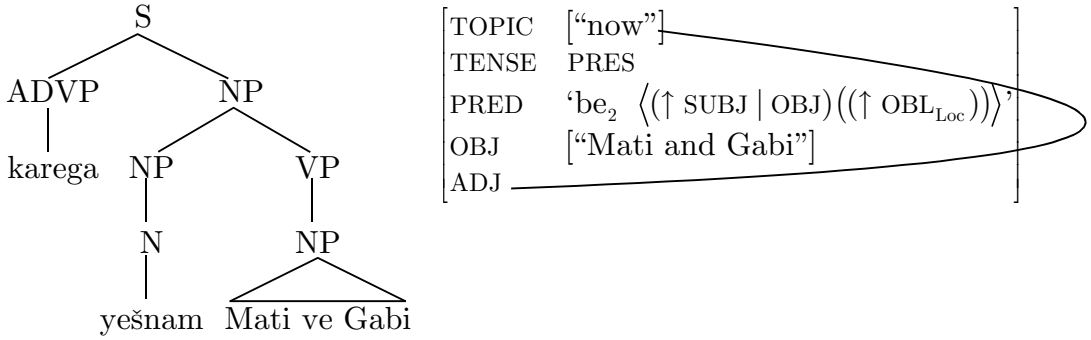
This is the word-order difference alluded to above, which has been cited as an argument that *eyn* is not the negative form of *yeš*. From our perspective, it is an idiosyncratic lexical property of *eyn*. However, this difference between *yeš* and *eyn* is revealing in accounting for what appears to be a case of Triggered Inversion in *yeš* sentences. It will be recalled that Pron cannot occur in Triggered Inversion (XVSO) sentences, and our analysis explained this through the lack of a post-predicate subject position, an automatic consequence of the LFG theory of sentence architecture. We predict that *yeš* and *eyn* should also be ungrammatical in Triggered Inversion sentences, for the same reason. Yet, Doron (1983) observes that, while *eyn* is ungrammatical in such sentences, it appears that *yeš* is possible.

(60) 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.'

We maintain that this is not a case of Triggered Inversion. Instead, we propose that this is merely a case where the Theme of *yeš* is realized as OBJ instead of SUBJ.

(61)



This analysis is confirmed by the ungrammaticality of such a construction with *eyn*, since *eyn* does not allow the expression of its 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, and *eyn* provides evidence in favor of our claim.

As in many other languages, 'be$_2$' also has an existential use—in Hebrew, a much more common use of 'be$_2$'. In the existential construction, the Theme has a discourse status (roughly speaking) of new information, a discourse status which generally precludes subjecthood (Bresnan 1994). 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 existential Theme cannot be realized as SUBJ, but simply as OBJ; therefore, it 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 but almost obligatory in ordinary

speech.

(62) a. Yeš tinok- et.
YEŠ baby- F
'There is a baby.'

b. Eyn tinok- et.
EYN baby- F
'There is no baby.'

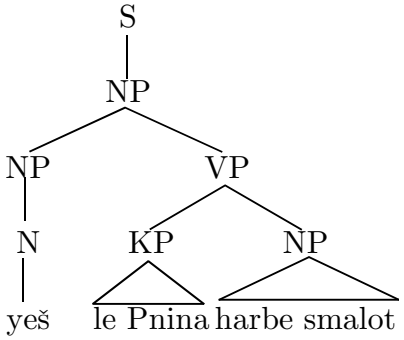
c. Yeš et ha- caacua ha- ze b- a- xanut šelanu.
YEŠ ACC the- toy the- this in- the- store ours
'This toy exists in our store.' / 'We have this toy in our store.'

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 secondary object (OBJ_{Dat}).

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

b.



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

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. The existence (and frequent use of) nonagreeing forms is a nominal property. The lack of participation in the Triggered Inversion construction is a consequence of being nominal. The very existence of *eyn* as the negative of *yeš* is

a non-verb-like property.[16] On the other hand, their functional 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*.

(64) 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. Consider the following data from Ziv (1976).

(65) 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.'

(66) 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.'

[16]There is no morphological negative form for verbs in Hebrew. Nouns, on the other hand, can be negated morphologically (by the prefix *i-*); we can think of *eyn* as suppletive for *i+yeš*. We take the impossibility of **lo yeš* to be a blocking effect due to the existence of *eyn*. Unlike the situation with **lo* Pron, the impossibility of *lo yeš* is not mirrored by the emphatic positive *ken*.

As these data show, both the prescriptively correct agreeing forms[17] 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 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).

(66) a. Ravii kelaa kʰaaegaa.
Ravi(M) banana(M) eat.FUT.MSG
'Ravi will eat a banana.'

b. Ravii roṭ̣ii kʰaaegaa.
Ravi(M) bread(F) eat.FUT.MSG
'Ravi will eat bread.'

c. Niinaa roṭ̣ii kʰaaegii.
Nina(F) bread(F) eat.FUT.FSG
'Nina will eat bread.'

d. Niinaa kelaa kʰaaegii.
Nina(F) banana(M) eat.FUT.FSG
'Nina will eat a banana.'

(67) a. Ravii baalak ko uṭ̣ʰaaegaa.
Ravi(M) boy(M) ACC lift.FUT.MSG
'Ravi will lift up the boy.'

b. Ravii baalikaa ko uṭ̣ʰaaegaa.
Ravi(M) girl(F) ACC lift.FUT.MSG
'Ravi will lift up the girl.'

c. Niinaa baalikaa ko uṭ̣ʰaaegii.
Nina(F) girl(F) ACC lift.FUT.FSG
'Nina will lift up the girl.'

d. Niinaa baalak ko uṭ̣ʰaaegii.
Nina(F) boy(M) ACC lift.FUT.FSG
'Nina will lift up the girl.'

(68) a. Ravii ne kelaa kʰaayaa.
Ravi(M) ERG banana(M) eat.PERF.MSG
'Ravi ate a banana.'

b. Ravii ne roṭ̣ii kʰaayii.
Ravi(M) ERG bread(F) eat.PERF.FSG
'Ravi ate bread.'

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

c. Niinaa ne roṭii kʰaayii.
Nina(F) ERG bread(F) eat.PERF.FSG
'Nina ate bread.'

d Niinaa ne kelaa kʰaayaa.
Nina(F) ERG banana(M) eat.PERF.MSG
'Nina ate a banana.'

(69) a. Ravii ne baalak ko uṭʰaayaa.
Ravi(M) ERG boy(M) ACC lift.PERF.MSG
'Ravi lifted up the boy.'

b. Ravii ne baalikaa ko uṭʰaayaa.
Ravi(M) ERG girl(F) ACC lift.PERF.MSG
'Ravi lifted up the girl.'

c. Niina ne baalikaa ko uṭʰaayaa.
Nina(F) ERG girl(F) ACC lift.PERF.MSG
'Nina lifted up the girl.'

d. Niinaa ne baalak ko uṭʰaayaa.
Nina(F) ERG boy(M) ACC lift.PERF.MSG
'Nina lifted up the boy.'

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*.

5. Conclusion

We have shown that the view from parallel syntax provides an insightful perspective on the problem of Hebrew present-tense copulas. By treating structure and function as distinct, though mutually constraining, representations, we have been able to achieve an analysis which does not need to deny the obvious. We can express both the verbal and nominal natures of Hebrew present tense copulas. The resulting analysis is simple, direct, and requires very little idiosyncratic stipulation.

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