Two Pronominal Copulas and the Syntax of Hebrew Nonverbal Sentences

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The lexicon of Hebrew includes a pronominal element "Ze", appearing in a variety of constructions, as in (1):1

- (1) a. Dina katva et ha-shir ha-**ze.**dina wrote et the-song the-<u>Z</u>-m,s
 "Dina wrote this song."
 - b. **Ze** lo oved. <u>Z</u>-m,s neg works "It doesn't work."
 - c. (Ze) barur she-dina katva et ha-shir.
 Z-m,s obvious that dina wrote et the-song
 "It is obvious that dina wrote the song."
 - d. Eix lixtov shir ze barur lanu. how to-write a song Z-m,s obvius to-us "How to write a song is obvious to us."
 - e. Dina zot xavera haxi tova sheli. dina Z-f,s friend-f,s most good-f,s mine "Dina is my best friend."
 - f. ha-hitpar'uyot ha-axronot **zot** ha-siba la-ma'acarim. the-riots the-recent **Z**-f,s the-reason-f,s to-the-arrests "The recent riots are the reason for the arrests."

In (1a) "Z" is interpreted as a (proximal) demonstrative; in (1b) it is a referential inanimate pronoun; in (1c), it is an optional expletive, and in (1d)-(1f) it is interpreted as a copula: with clausal subject as in (1d), with an agreeing pre-copular DP as in (1e), and with an agreeing post-copular DP as in (1f). Previous analysese of "Z" (Borer, 1986;

i. Yeladim ze simxa. children Z-m,s hapiness-f

"Children are happiness."

ii. Shtayim ve-od shtayim ze arba.
two-f plus two-f Z-m,s four-f
"Two plus two is four."

I will not discuss these constructions here, since they seem to fall under a special class of "metalinguistic expressions": mathematical formulae, dictionary definition, and metaphorical extensions of these.

¹Included here are masculine (="ze"), and feminine (="zot") forms. "Ze" inflects for masculine singular, feminine singular, and plural (="ele"). Following Rapoport's (1987) notation for the pronominal "hu", it will henceforth be referred to as "Z" in the glosses and text.

²Alongside (1e) and (1f), there exists a non-agreeing copular "Z", as in:

Shlonsky, 1987; Hazout, 1993) have focussed on the expletive construction in (1c), agreeing at least that "Z" is a pronominal maximal projection, similar to English expletive "it". In this paper I will argue that the occurence of "Z" in copular constructions of the type in (1e) and (1f) is not as a maximal projection in an A-position; rather it is the spell-out of a hierarchically low functional head, Agr_{O.} (Kayne, 1989; Chomsky, 1993). 4

The analysis of "Z" in (1e) and (1f) will proceed via comparison with a better understood pronominal copula in Hebrew, "hu". As can be seen from the following contrast, the pronominal "hu" is possible with a wider range of postcopular categories: 6

(2) a. Rina hi talmid-a / xaxam-a / ba-bayit / giveret cohen rina H-f,s student-f,s / intelligent-f,s / at home / mrs. cohen

Rina zot *talmid-a / *xaxam-a / *ba-bayit / xaver-a sheli / giveret cohen.
 rina Z-f,s *student-f,s / *intelligent-f,s / *at home / friend f,s mine / mrs. cohen

While the pronominal "Z" in its copular occurence has been scarcely studied since originally mentioned in the generative literature (Berman and Gruso, 1976), it has been argued very convincingly that the pronoun "H", found with nonverbal predicates, as in (2a), is a realization of Infl (Doron, 1983; Rapoport, 1987; Greenberg, 1994; Rothstein, 1995). Extending Doron's original insight that the pronominal in (2a) is not in subject position, but rather the spell-out of Infl which may be realized as an independent morpheme in the absence of a verb, the possibility of two types of pronominal copulas in nonverbal Hebrew sentences correlates with the existence of two Infl nodes, the higher one associated with subject agreement and case, the lower with object agreement and case. It will be shown that differences in the distribution of the two copulas can be accounted for straightforwardly as a difference in functional category. "H" is a realization of Agr_S, and "Z" a realization of Agr_O.

The analysis of copular "Z" to be presented crucially relies on the assumption that nonverbal predicates such as nominals, adjectives and prepositional phrases raise from their initial position to a functional head - in (2b) this movement is blocked by "Z", hence its restriction to DP constituents. The prediction, then, is that Hebrew matrix small clauses, as in (3), cannot be "bare" lexical projections in the sense of Stowell (1989):

(3) Rina talmid-a / xaxam-a / ba-bayit. rina student-f,s / intelligent-f,s / at home "Rina is a student / intelligent / at home."

³But see Hazout (1994) for the view that it is closer to the "it" appearing in English object position, as in "I regret it that John left early", in the sense that it is assigned a theta-role.

⁴For reasons of convenience the analysis is carried out in the framework of Chomsky (1993).

Alternatively, and closer in the spirit to Chomsky (1995), "Z" may be a realization of the nominal counterpart of "lower-case v", perhaps the category D^o. Since no concrete arguments for this claim, or for the proposal that Hebrew is an Agr-type language (as in the parametrized proposals for certain Germanic languages (Bobaljik and Thrainsson, 1997; Rohrbacher, 1997)), emerge from the following discussion, I leave these as open questions.

Which includes four inflectional possiblities: "hu" (=masculine singular); "hi" (=feminine singular); "hem" (=masculine plural); "hen" (=feminine plural), henceforth referred to as "H" in the glosses and text.

⁶The term "pronominal" refers to the fact that, like "Z" in 1, "H" appears as subject pronoun and as demonstrative.

The paper is organized as follows: in part 1 independent evidence for the claim that matrix SCs, as in 3, are headed by an Agr node is presented. Based on a correlation with transitive objects, I conclude that the subject in sentences such as (3) is assigned accusative case by Agr₀.⁷ In part 2 I will argue that copular sentences with "Z" are not left-dislocations, but that the subject is in an A-position, and "Z", like "H", realizes an Agr node. It will be shown that this conclusion, together with the analysis of matrix SCs as headed by Agr, immediately excludes the possibility of adjectival and nonspecific nominal predicates with "ze". In addition, a "strong" Agr₀ compatible with two DP's suggests a certain analogy with verbal sentences and the syntax of argument raising. To pursue this analogy, when Agr₀ is realized as "Z" the pre- and post-copular expressions must be realized as inflectionally independent DPs; the DP generated lower raises first, similar to transitive objects. Finally, it is shown that predictions concerning the interaction of word order and directionality of agreement are borne out by the data.

1. Agro Heads Matrix SC's

Consider first a nonverbal sentence with the pronominal copula "H", as in (4):

- (4) a. Dina **hi** meSorer-et. dina <u>H</u>-f,s poet-f,s "Dina is a poet."
 - b. Dani **hu** meSorer. dani H-m,s poet-m,s "Dani is a poet."

In the sentences in (4) two elements agree with the subject: the pronominal copula "H" and the nominal predicate "poet", which varies in phi-features depending on the choice of subject. In this sense, these sentences are similar to constructions in which both the auxiliary and the participle agree with the subject as in the following Italian example:

(5) Maria è arrivata. maria be-3rd arrived-f,s "Maria has arrived."

Following proposals for an Agr_O node associated with past participle agreement (Kayne, 1987, 1993), I take the inflection on the predicate nominals in (4) to be the result of spec-head agreement in the domain of Agr_O , and the inflection on "H" to result from spec-head agreement with the subject in spec- Agr_S , as in the following derivation:⁸

In Hebrew, however, as opposed to Italian, the participle may appear without the Agrs layer, in which case a pronoun is not generated. In keeping with (6), the structure for a "pronominal-less" nominal sentence is as in (7):

⁷Giving rise to an absolutive pattern in these sentences. Although Hebrew appears not to be absolutive in verbal sentences, it does not seem unreasonable to assume that this parameter is not set per language, once and for all. For a similar proposal for a class of Irish nominal sentences, see Carnie (1993).

sentences, see Carnie (1993). ⁸But see Friedmann & Siloni (1993) for the view that participial agreement in Hebrew is not directly related to Agr_o.

(7) [AgroP Dina₁ [Agro' meSorer-et₂ [XP t₁ [t₂]]]] dina poet-f,s

Previous analyses of Hebrew matrix SC's (Doron, 1983; Rapaport, 1987; Greenberg, 1994; Rothstein, 1995) have taken the clause in (7) not to be headed by an Agr node. Rapoport (1987), for example, follows Stowell (1989) in taking the head of a sentence such as (7) to be the lexical N^o, as in 8a, and the counterpart with a pronoun to be headed by I^o, as in (8b):⁹

(8) a. [NP Dina [N' meSorer-et]]
dina poet-f,s
b. [IPRina1 [I' hi [NP t1 [N' talmida]]]]
dina H-f,s poet-f,s

The evidence for the structure in (7) is of two kinds. First, I follow an argument raised in Moro (1995) for the absence of an Agr node in Italian SC's, but arrive at the opposite conclusion for the Hebrew data: in the absence of agreeing inflection on the predicate, a pronominal copula is required to realize an Agr node. Second, I argue that subjects of matrix SC's do correlate with transitive objects with respect to a definiteness effect, lending further support to the idea that they are assigned Case by a low Agr, that normally associated with transitive objects.

1.1. Applying Moro's Argument to Hebrew SC's

In trying to determine whether Italian SC complements are headed by an Agr node or not, Moro (1995) reasons that if a non-agreeing predicate nominal is licensed in a small clause, agreement is not required, and if not required, an Agr node does not head the clause: if it did, agreement between a predicate nominal and its subject would be obligatory. And in fact, agreement between the predicate nominal and its subject is not obligatory in Italian, as the following example shows:

(9) Gianni ritiene [sc[questi libri] [la causa della rivolta]] gianni believes these book-m,pl the cause-f,sg of the riot "Gianni believes these books to be the cause of the riot."

In the SC complement in (9) the subject is masculine plural, and the predicate feminine singular, yet the sentence is perfectly grammatical. In Hebrew, however, such clauses seem to be generally impossible: the translation of the embedded clause of (9)

⁹The proposal does, however, acknowledge the role of morphological agreement on the nominal in assigning (nominative) Case to the subject: "When agreement is part of predication, Case is also part. Thus, along with the theta-role, Case is assigned by the predicate" (Rapoport, 1987, p. 75). The proposal developed here aims to systematize this observation by correlating nominal inflection with an Agr node which heads the clause.

¹⁰The correct analysis is undoubtedly more abstract than this, since PP's do not show agreement morphology (with the subject), though they are possible SC predicates, as in (3). The problem of nonagreeing P^O doesn't seem unsurmountable, however, assuming that P^O, a functional head, may assign its Case, in absolutive fashion, to the subject of the clause, rather than to its complement, which is not an argument here. Since the relationship of P^O and Agr^O would take us too far afield, I continue to call the relevant functional node "Agr" and mention PP predicates only to show that they pattern with adjectival and nominal heads.

happens to involve, as in Italian, 2 DP's with different phi-features (as in 10), and as a matrix SC it is (quite) ungrammatical without an agreeing pronominal copula:11

- (10) a. ??Ha-sfarim ha-ele (ha-) siba la-hafixa. the-book-m,p the-these (the-) reason-f,s to-the-riot
 - b. Ha-sfarim ha-ele **hem** (ha-) siba la-hafixa. the-book-m,p the-these <u>H</u>-m,p (the) reason-f,s to-the-riot "These books are the reason for the riot."
 - c. ha-sfarim he-ele **zot** (ha-) siba la-hafixa. the-book-m,p the-these Z-f,s (the) reason-f,s to-the-riot "These books are the reason for the riot."

The head of the post-copular expression in (10a), "reason" is lexically specified for feminine gender, as such it cannot alternate depending on choice of subject, unlike verbs and adjectives, which do. 12 As a result, the nominal "reason" cannot check its features through head raising to Agr. Instead, Agr is realized as a pronominal copula, either "H" or "Z" (10b and 10c). 13 Not all nouns, though, are like "reason": used predicatively, some Hebrew nouns do inflect like adjectives and verbs, as in 4 above. These are usually nouns with animate referents, such as family members, professions, animals: 14

(11)	a.	Inflecting Nouns:			
		more	"teacher-m" "teacher-f"	xatul xatula	"cat-m" "cat-f"
		mora			
		dod	"uncle		
		doda	"aunt"		

¹¹Informants have judged examples (10a), (12a), and (12b) as pretty bad; not as good as adjectival SC's, but not as bad as identity statements. They seem possible with an intonation break between pre and post-copular expression in certain registers, as journalistic headlines or conclusions, and in substandard Hebrew. Though the curious status of these sentences requires further clarification, I will take the intonation break to indicate the presence of a functional head, which may remain phonologically empty in a restricted set of registers and contexts.

¹² See Ritter (1991) for a more detailed analysis of Gender on nouns being derivational, but inflectional on verbs and adjectives.

13In other words, I argue that the factor determining when a pronominal copula is required is syntactic, concerning the status of inflection on the postcopular expression, rather than semantic, as argued in previous proposals: Doron (1983) claims that a post-copular referential expression requires "H" for theta-role assignment; Rapoport (1987) that an argument interpretation of the post-copular expression requires "H" to assign Case for Visibility; Rothstein (1995), that a post-copular argument requires "H" to mediate the predication relation. Greenberg (1994) claims that "H" makes a semantic contribution by inducing an "inherent" interpretation of the post-copular expression. From this perspective, "H" is required whenever the inherent interpretation is the only one possible.

¹⁴Proper names would fall under the category in (11b), "inflecting", or raising DP-internally (Longobardi, 1994), hence:

i. *Dani mar cohen dani mr. cohen

However, as Doron (1983) points out, (i) is grammatical when the name denotes a transitory role, such as when uttered in a play rehearsal. This fact falls out of Greenberg's (1994) inherentness analysis straightforwardly. Possibly the interaction of syntactic and semantic requirements in equatives is "relaxed" in some sense, compared to predicatives; it is also possible to interpret as temporary sentences with "H", as the following example attributed to Doron shows:

 Hayom ha-axot ha-toranit hi rina. today the-nurse on duty H-f,s rina "Today the duty nurse is Rina." b. Noninflecting Nouns
be'aya "problem-f"
siba "reason-f"
sugiya "issue-f"
inyan "matter-m"
sefer "book-m"

sipur

"story-m"

I am proposing, then, that predicate nouns such as those in (11b) cannot enter into a checking relation as predicative heads - there is nothing for them to check against. As a result, the subject remains without Case and the sentence is ungrammatical. Since they do not enter the checking relation as inflecting heads, they are licensed as DP maximal projections. This is so regardless of the particular phi-feature specification a noun has - the status of the sentence does not improve upon selection of two lexically specified nouns which happen to be both feminine, as in (12a). Nor is this a peculiarity of singular DP's, as shown in (13a)

(12) a. ha-be'aya Se-hizkarta ??(hi / zot) sugiya mefursem-et. the-problem-f,s that you-mentioned (H-f,s / Z-f,s) issue-f,s famous-f,s "The problem that you mentioned is a famous issue."

b. ha-be'aya Se-hizkarta ??(hi / ze) inyan mesubax. the-problem-f,s that you-mentioned(H-f,s / Z-m,sg) matter-m,s complicated/m,sg
"The problem that you mentioned is a complicated matter."

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- (13) a. Ha-Se'elot Sel rina *(hen) be'ayot biSvilenu. the-question-f,p of rina *(H-f,p) problems-f,p for-us "Rina's questions are problems for us."
 - Ha-Se'elot Sel rina (hen) kaSot.
 the-question-f,p of rina (H-f,p) difficult-f,p
 "Rina's questions are difficult."

From the lack of contrast between (12a) and (12b) we can conclude that "accidental" agreement, as in (12a), is not sufficient to assign Case to the subject; what is required is inflectional morphology dependent on the subject phi-features, as provided by the pronominal realization of Agr. In (13a), "problem", though semantically a predicate as is "difficult" in (13b), requires the realization of a pronominal copula because it is a noun lexically specified for feminine gender. The structures for "H" copular sentences with inflecting nouns and with lexically specified nouns are given respectively: 17

(14) a. [AgrsP Dina1 [Agrs' hi [[[AgroP' t1 [meSorer-et [XP t1 [t2]] dina H-f,s poet-f,s
b. [AgrsP Ha-be'aya ...1 [Agrs hi [[[Agro' [Agro [XP t1 [DP inyan...]]] the-problem H-f,s issue-m,s

The subject in (14a) raises to spec-Agr_O where it checks the features of the raised nominal predicate, and subsequently raises to spec-Agr_S, where the features of "H" are checked.

¹⁵The examples are adapted from the discussion in Berman and Gruso (1976) of the contrast between "H" and "Z" in directionality of agreement.

¹⁶With plurals the result is absolutely ungrammatical, as in (13a). I have no explanation for this difference (cf. 12a and 12b).

¹⁷See part 2 for the structure of "Z" copular sentences.

(14b) is similar to a transitive sentence: two independent DP's must raise to specifiers of functional heads. Since Agr_O is empty it has no specifier creating a potential minimality violation, and the subject raises directly to spec-Agr_S, followed by subsequent raising of the lower DP to spec-Agr_O, perhaps at LF.

So far we have followed Moro's argument, concluding that Hebrew matrix SC's are headed by an Agr node. If so, "H" must be generated higher, in Agr_s. If "H" is a realization of Agr_s, it is expected it to be sensitive to person features (Kayne, 1993). Since it is obviously possible with DP subjects (see (10b), (12), (13)), it must be specified for 3rd person. In fact, 1st and 2nd person pronouns with "H" are restricted to DP predicates:

- (15) a. At **hi** giveret cohen / ha-mora.
 you-f <u>H</u>-f,s mrs. cohen / the teacher-f,s
 "You are mrs. cohen / the teacher."
 - b. *At **hi** nexmada. you-f <u>H</u>-f,s nice-f,s
 - c. *At **hi** talmida. you-f <u>H</u>-f,s student-f,s
 - d. *At **hi** ba-bayit. you-f <u>H</u>-f,s at-home

(15b)-(15d) are ungrammatical because "H", specified for 3rd person, cannot agree with a 2nd person pronoun. In (15a), on the other hand, "H" agrees with the expression to its right, a full DP. ¹⁸

1.2. Subjects with Object Properties

We have seen that matrix SC's are headed by an Agr node, and that "H" is generated higher, in Agr_S. What evidence is there that the Agr dominating SC's is in fact lower than Agr_S, that these clauses are, in fact, small? In keeping with the phrase-structure proposed in Chomsky (1993), a lower Agr must be associated with objects, given assumptions about equidistance and that objects are generated lower than subjects. If so, a correlation between subjects of matrix SC's and transitive objects is expected. One property distinguishing subjects from objects is that definite objects are marked by the particle "et" (16d, e), but no special marking is found on definite or indefinite transitive subjects (16a):

- (16) a. (Kol)(Ha-) yeladim bishlu aruxat cohorayim.
 (all)(the-) children cooked lunch
 "(All the) children cooked lunch."
 - b. Raiti yeladim. saw-1st,s children "I saw children."
 - c. Raiti me'at yeladim. saw-1st,s few children "I saw few children."
 - d. Raiti et ha-yeladim. saw/1st,sg et the-children "I saw the children."

 $^{^{18}}$ The analysis of 15a follows Doron (1983) who claims that the pronoun is actually the predicate, and that this sentence is derived from:

Ha-mora hi at the-teacher-f,s H-f,s you-f

e. Raiti et kol ha-yeladim. saw et all the-children "I saw all the children."

I will assume that the mechanism of objective Case assignment distinguishes definites from indefinites: definite objects, including strong quantifers, are assigned Case structurally, and indefinites and weak quantifiers are assigned a lexical Case by the category V^o (Belletti,1988; Shlonsky, 1987). "Et" then is a manifestation of structural Case assignment, and structural Case assignment by Agro requires a definite argument. To account for the possibility of indefinite objects with unaccusative verbs, Belletti (1988) proposes that only structural Case assignment is suspended in unaccusatives, hence the restriction to indefinites. In nominal sentences, on the other hand, it is the verbal category which is "suspended", hence we predict only structural objective Case to be possible. ¹⁹ In fact, subjects of SC's appear to be restricted to definites and "strongly" quantified DPs:

- (17) a. Ha-yeladim xamudim. the-children cute-m,p "The children are cute."
 - b. Dina ba-kita.dina in-class"Dina is in class."
 - c. Kol ha-menahalim shotrim.all the-principals policemen"All (the) principals are policemen."
- (18) a. *Yeladim xamudim. children cute/m,pl
 - b. *Me'at (me'od) morim shotrim few (very) teachers policemen
 - c. ?Shtei banot al ha-gag two girls on the-roof²⁰

This effect is neutralized when "H", in Agrs, is introduced:

- (19) a. Yeladim **hem** xamudim. children <u>H</u>-m,p cute-m,p "Children are cute."
 - b. Me'at (me'od) morim **hem** shotrim. few (very) teachers <u>H</u>-m,pl policemen "Very few teachers are policemen."
 - c. Shtei banot **hen** al ha-gag. two girls <u>H</u>-f,p on the-roof "Two girls are on the roof."

oblivious to this choice.

20 The status of this sentence improves with a "specific" interpretation, so I will assume that LF raising to a higher subject position, in the spirit of Diesing (1992), is available. Crucially, though, an existential interpretation is never possible for indefinite and weak quantifiers in

SCs, which is unexpected under a straightforward extension of Diesing (1992).

¹⁹In nominal sentences "et" itself does not appear, the nominal inflection on the predicates fulfilling its function. The question of this complementarity resembles that discussed earlier in the context of Pos, and as yet it remains unclear why "et" is not realized in verbless sentences, but prepositions are. What is relevant to the present discussion is that the definiteness effect is oblivious to this choice

This is expected if, as proposed, "H" is a realization of Agrs and nominative Case is not sensitive to the definiteness of its receptor, as seen in (16a).²¹

2. Copular "Z"

2.1. Copular "Z" is Not the Subject

In (1b), (1c), and (1d), we have seen instances of "Z" as maximal projections in A-position: an inanimate subject, an expletive subject, and an expletive subject with intra-posed Wh-clause, respectively. Before turning to the analysis of "Z" as a pronominal head in copular sentences it is worth considering the possibility that here too "Z" is in A-position. This, however, doesn't seem to be the case, as various tests show. One argument against a left-dislocation analysis is that "Z" agrees with the expression to its right when a difference is discernable, as in (1f) above, repeated in (20):

(20) Ha-hitpar'uyot ha-axronot **zot** ha-siba la-ma'acarim. the-riots the-recent \underline{Z} -f,s the-reason-f,s to-the-arrests "The recent riots are the reason for the arrests."

There is no intonation break after "Z", were we to take this as evidence for right-dislocation. Furthermore, to follow Rizzi's (1986) argument against subject clitics in certain Italian dialects being in A-position, quantifiers are possible with "Z" (21b), but not in verbal sentences with left-dislocation as in (21a):

- (21) a. Kol hitpar'ut, (*zot / *hi) movila le-ma'acar. every riot-f,s (*Z-f,s / *H-f,s) leads to-arrest "Every riot leads to arrest."
 - b. Kol hitpar'ut **zot** siba le-ma'acar. every riot-f,s Z-f,s reason-f,s to-arrest "Every riot is a reason for arrest."

To follow Berman and Gruso (1976) and Doron's (1983) argument against a left-dislocation analysis of "H", questioning out of a dislocation sentence is ungrammatical, but fine in a "Z" clause:

(22) a. *Mai moSe, hu ohev ti what moSe, he likes
b. Mii ze moSe ti who Z-m,s moSe "Who is Moshe?"

Finally, the pronoun "Z" is never used as a resumptive pronoun in verbal sentences (23a) or verbal relative clauses (23b):

(23) a. Ha-kli Se-kaniti, **hu / *ze** oved mecuyan. the-tool-m,s that-bought-1st, <u>H</u>-m,s / *<u>Z</u>-m,s works perfectly "The tool that I bought, it works perfectly."

²¹Greenberg (1994) analyzes the obligatoriness of "H" with indefinites as the requirement for "H" when the sentence describes an inherent property, or an intensional property as in these generic cases. Since strong quantifiers do not require "H", her distinction is between quantified and nonquantified DPs, but in fact weak quantifiers pattern with indefinites. Generic subjects in Hebrew may also be definite, in which case no pronominal is required, a problem recognized in Greenberg (1994).

b. [DpHa-kli Se-kiviti Se- hu / *ze ya'avod mecuyan] the tool that-hoped-1st that- H-m,s / *Z-m,s will work perfectly "The tool that I hoped would work perfectly."

2.2. The Syntax of Copular Z

Having established that copular "Z" is not in A-position we turn to its syntax. The occurence of "Z" in nonverbal sentences is much more restricted than that of "H":

- /ba-bayit/giveret cohen (24)Rina hi talmid-a / xaxam-a rina H-f,s student-f,s / intelligent-f,s / at home / mrs. cohen
- (25)Rina zot *talmid-a / *xaxam-a / *ba-bayit / xaver-a sheli / giveret cohen rina Z-f,s *student-f,s / *intelligent-f,s / *at home / friend-f,s mine / mrs. cohen

The assumption that "Z" is a realization of Agr_O immediately accounts for its distribution: "Z" prevents heads with agreeing inflection from checking their features, since "Z" in Agr_O agrees with the argument in its specifier. Nominals licensed as maximal projections, on the other hand, are compatible with "Z": having independent phi-features they are more similar to arguments, and licensed via raising to a specifier. Prior to raising, a "Z" sentence will have the following structure:

(26)[AgrsP [Agrs' [AgroP [Agro' Z [XP DP1 [X' DP2]]]]]

Let us assume that DP's within "XP" are distinguished hierarchically, as are arguments within VP: DP1 is a specifier, DP2 a complement. If so, let us further assume that these DP's are assigned structural positions within XP in a principled way, as are subjects and objects: a predicative nominal is generated lower than its subject.²² If both DP's must raise to specifier positions, as I am assuming, DP2 necessarily raises to spec-Agr₀; head-movement of "Z" to Agr_s allows DP₁ to raise to spec-Agr_s, crossing DP₂ in spec-Agr_O. (1f) with rightwards agreement, repeated in (27), is so derived:²³

- (27)Ha-hitpar'uyot ha-axronot zot ha-siba la-ma'acarim. the-recent Z-f,s the-reason-f,s to-the-arrests "The recent riots are the reason for the arrests."
- $[A_{grsP} \stackrel{ha-hitpar'uyot}{}_{1}.[A_{grs'} \stackrel{\textbf{zot}}{}_{3} [A_{groP} \stackrel{ha-siba}{}_{2} [A_{gro'} \stackrel{t}{}_{3} [XP \stackrel{t}{}_{1} [\stackrel{t}{}_{2}]]]]]$ (28)

Raising DP₁ to spec-Agr_S, along with inversion of "Z" around DP₂ in spec-Agr_O yields, semantically speaking, subject-predicate order. But if "subject" is also, and independently, defined syntactically as the "agreeing DP", the subject of the sentence is in predicate

²²If neither DP is predicative, "Epistemic priority" (Williams, 1997) determines that the direct

aquaintance is higher than the indirect aquaintance. ²³Moro (1993) analyzes rightward agreement with predicate raising in Italian as involving a predicative pro in spec-IP, which inherites the phi-features of the SC subject:

I. [La causa della rivolta] [IP proi sono [SC [le foto del muro] ti]] Notice, though, that in Italian rightward agreement appears in Pred-Subj order; agreement is always with the subject. In (27), rightward agreement is found with Subj-Pred order and appears to be with the predicate. To apply Moro's analysis to (27) would imply a subject pro, i.e. a leftdislocation analysis, which does not seem to be correct. In addition, it is conceptually undesirable for a subject pro to agree with its predicate. Finally, the effect of rightward agreement in Hebrew is a result of "Z" raising to Agr_s, independently motivated for DP₁ raising.

position, and is, in fact, the predicate. The possibility of a nominal predicate in a SC becoming the subject of a copular sentence in English has been argued for previously in Heycock (1992); Hebrew "Z" clauses present additional evidence for this view, with a twist, the linear effect of predicate raising being completely neutralized by further raising of the subject.

3. Conclusion

I have argued that among the different functions of the pronominal "Z", as a copula it appears in functional head position, similar to "H". Beyond this similarity, though, robust distributional differences between the two suggest a syntactic distinction in terms of hierarchical position. The comparison with "Z" shows, indirectly, that there must be syntactic conditions on the realization of "H", allowing it to appear with agreeing predicates, albeit with interpretive effects. An advantage of the proposed analysis is that "H" is not optional, technically speaking: subjects of "H" clauses are nominative, subjects of SC's are accusative. The analysis of "Z" as occupying a position internal to the SC, in turn suggests that these SC's include a functional position. In the analysis presented, this position is derivable syntactically from the requirement on Case assignment to be mediated by a functional head.

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