

## Subject Positions and Copular Constructions\*

### 1. Introduction

This paper studies the positional options open to preverbal subjects in Hebrew. I am led to cast doubt on the idea that there is a unique, *canonical* subject position. Rather, what emerges is a cartography of subject positions, based on a number of interconnected factors: The referential status of the subject (i.e., whether it is referential, argumental or expletive), the weak/strong distinction and the person features of pronouns.

Evidence from a brand of negative sentences supports the view that there are (at least) two VP-external positions for subjects in Hebrew. Summarizing the results exposed in Shlonsky (1997), the analysis is developed and then extended to the realm of copular constructions. It is argued that the two terms of identity sentences exploit two subject positions. For reasons of brevity, I single out and discuss one long-standing set of problems in the analysis of copular constructions, namely, that of pronominal subjects. Some additional problems and a somewhat speculative set of answers are explored in the last section.

### 2. Subjects above and below negation

When appearing in a sentence with a verbal predicate, the Hebrew negative head *'eyn* can either precede the subject or follow it.<sup>1</sup> When *'eyn* follows the subject, and only

\* Many thanks to Anna Cardinaletti who first suggested this line of research and spent many hours discussing it with me. Her own work on subject positions (in particular Cardinaletti (1997)) has been for me a source of inspiration. I am also grateful to Edit Doron for written comments, to Gulielmo Cinque for lengthy discussions, to Cecilia Poletto, Luigi Rizzi, audiences at the universities of Venice, Geneva, Olomouc, Sienna, Southern California as well as to the participants and organizers of the Dutch Royal Academy colloquium on Interface Strategies in Amsterdam.

<sup>1</sup> *'eyn* is restricted to appear in clauses with a present tense verb or a nonverbal predicate, for reasons discussed in Shlonsky (1997). In its nonexistential, nonpossessive use, *'eyn* is a literary form. Predicates of all tenses can be negated by the particle *lo*, which, unlike *'eyn*, is insensitive to the tense of the predicate or to its lexical category.

when it follows it, it obligatorily manifests an agreement suffix, the form of which alternates in accordance with the gender, number and person features of the clausal subject. The sentences in (1) below illustrate the two formats of *'eyn* sentences. The paradigm of suffixes which appear when *'eyn* follows the subject is tabulated in (2).

- (1) a. *'eyn* Rina mədaberet rusit.  
neg Rina speak:fs Russian  
'Rina does not speak Russian.'  
b. Rina *'eyn-a* mədaberet rusit.  
Rina neg:3fs speak:fs Russian  
'Rina does not speak Russian.'

(2) Agreement Paradigm of *'eyn*

|    | Singular | Plural |
|----|----------|--------|
| 1  | -(ən)i   | -enu   |
| 2m | -xa      | -xem   |
| 2f | -ex      | -xen   |
| 3m | -(ən)o   | -am    |
| 3f | -(ən)a   | -an    |

In Shlonsky (1997), I argue that the alternation illustrated by the sentences in (1) provides evidence for two subject positions in Hebrew, one to the right of and below Neg<sup>0</sup> and one to its left and above it.

It can be shown that the subject below *'eyn*, in (1a), is the specifier of a functional category and is not VP-internal. The argument is indirect but straightforward. The verb in (1a) must precede manner adverbials such as *heitev* 'well', as shown by the contrast in (3). The acceptability of (3) leads to the conclusion that the verb has raised out of VP over that adverbial position. Since the subject appears to the left of the verb, it must be the case that it is not in VP. Rather, it occupies some position in the middlefield, below negation and above VP.<sup>2</sup>

- (3) a. \**'eyn* Rina heitev mədaberet rusit.  
neg Rina well speak:fs Russian  
'Rina doesn't speak Russian well.'  
b. *'eyn* Rina mədaberet heitev rusit.  
neg Rina speak:fs well Russian  
'Rina doesn't speak Russian well.'

In (1a) and (3b), the subject is licensed in some position under negation. The agreement morphology which appears on the verb in these examples is participial agreement (manifesting only number and gender features) and is associated with a participial

<sup>2</sup> *heitev* can also follow the direct object. I assume that in such cases the object is also raised above the adverb, cf. Kayne (1994).

agreement head. The present tense verbal forms are, morphologically, participles and occur as such in periphrastic constructions such as the past habitual (4).<sup>3</sup>

- (4) Rina hayta mādaberet rusit.  
Rina be:PAST speak:fs Russian  
'Rina used to speak Russian.'

The representation of (1b) is more familiar. (1b) can be associated with a conventional phrase marker in which AgrSP dominates NegP and the subject appears in Spec/AgrS.

The range of possible subject-types is restricted both under nonagreeing 'eyn and above the agreeing one. Consider first the 'eyn^subject format.

A referential null subject is ungrammatical under 'eyn, as shown in (5).

- (5) \*'eyn mādaberet rusit.  
neg speak:fs Russian  
'I.f/You.f/She don't/doesn't speak Russian.'

This is due to the fact that the verbal form appearing under 'eyn (a participial form; see above), lacks person features. Person features are necessary for the identification or assignment of the content of the referential null subject. As shown in (6), a null subject cannot appear as the subject of such verb forms, even when 'eyn is absent.

- (6) \*mādaberet rusit.  
speak:fs Russian  
'I.f/You.f/She speak(s) Russian.'

The paradigm in (7)–(11) is more surprising in that it illustrates, for a variety of non-referential null subjects, a contrast between 'eyn sentences and both negative and affirmative sentences employing the same verbal form. Non-referential null subjects (in the sense of Chomsky (1981), i.e., null expletives, quasi-referential or argumental pro, pseudo-existential arbitrary pro (Cinque 1988), etc.) are perfectly licit as subjects of present tense verbs in Hebrew, whether or not the verb is preceded by the negative particle *lo* (see note 1.) Under 'eyn, however, all tokens of such null subjects are robustly ungrammatical.<sup>4</sup>

<sup>3</sup> For recent discussion of the syntax of the Hebrew present tense, see Shlonsky (1997) and Siloni (1997).

<sup>4</sup> Concerning the data in (7a) and (9a), it should be noted that the ungrammaticality of subject inversion (as in the former example) and of arbitrary pro in the latter is suspended when the sentences are interpreted generically. Thus, (7a) contrasts with the acceptable (i) and (9a) with the grammatical (ii).

- (i) 'eyn yordim kan gšamim bə-derex klal.  
neg fall:pl here rains usually  
'Rain doesn't usually fall here.'  
Lit: 'It doesn't usually rain here.'
- (ii) 'eyn moxrim kan sigariot  
neg sell:pl here cigarettes  
'They don't sell cigarettes here.'

- (7) a. \**eyn yored gešem bə-Telaviv.*  
 neg falls rain in Tel-Aviv  
 'Rain doesn't fall in Tel-Aviv.'  
 Lit. 'It isn't raining in Tel Aviv.'  
 b. (lo) *yored gešem bə-Telaviv.*  
 (neg) falls rain in Tel-Aviv  
 'Rain does(n't) fall in Tel-Aviv.'  
 Lit. 'It is(n't) raining in Tel Aviv.'
- (8) a. \**eyn kaše li-lmod rusit.*  
 neg difficult to-learn Russian  
 'It isn't difficult to learn Russian.'  
 b. (lo) *kaše li-lmod rusit.*  
 (neg) difficult to-learn Russian  
 'It is(n't) difficult to learn Russian.'
- (9) a. \**eyn dofkim ba-delet.*  
 neg knock:mpl on-the door  
 'There isn't anyone knocking on the door.'  
 b. (lo) *dofkim ba-delet.*  
 (neg) knock:mpl on-the door  
 'There is(n't) someone/anyone knocking on the door.'
- (10) a. \**eyn carix lə-daber 'it-o.*  
 neg must:3ms to.speak with.him  
 'One shouldn't speak to him.'  
 b. (lo) *carix lə-daber 'it-o.*  
 neg must:3ms to.speak with.him  
 'One should(n't) speak to him.'
- (11) a. \**eyn kar.*  
 neg cold  
 'It isn't cold.'  
 b. (lo) *kar.*  
 (neg) cold  
 'It is(n't) cold.'

I suggest interpreting the contrast between the (a) and (b) examples of (7)–(11) in the following way. Suppose that the subject of the (b) examples occupies a different position from the one in the (a) examples. In particular, suppose that it is the specifier of some functional head which formally licenses null subjects and is able to assign to them the features necessary for a non-referential interpretation.<sup>5</sup>

By a similar logic, the subject under *'eyn* should be taken to be the specifier of a functional head which does not license null subjects. Hence, all types of null subjects,

<sup>5</sup> Argumental *pro* is generally identifiable when the licensing head bears a number specification. An expletive requires no identification. See Rizzi (1986).

whether referential or not, are formally barred from that position. Following Rizzi (1986), take the head formally licensing null subjects to be the head responsible for nominative Case and consider (12).

- (12) The head of which a subject under *'eyn* is the specifier does not have a nominative Case feature.<sup>6</sup>

A different interpretation of the data in (7)–(11) might suggest itself, to the effect that the constraint observed by subjects under *'eyn* is not that they must be overt, but rather that they must be fully referential. This constraint is both too strong and too weak. The constraint is too weak since it fails to rule out (5) and it is too strong since it incorrectly rules out (13) below, where the subject is the impersonal quasi-referential pronoun *ze*, (which in many respects resembles Dutch *het*, as per Bennis (1986), Vikner (1995), among others; viz. Hazout (1994).) (13) should be compared with (8a).

- (13) *'eyn ze kaše lə-daber rusit.*  
 neg it difficult to-speak Russian  
 'It isn't difficult to speak Russian.'

I therefore conclude that there is a subject position under *'eyn* in which nominative Case is not available and since *pro* must be licensed by nominative Case it is ruled out from the subject position under *'eyn*, which can only be filled by a lexical subject. Lexical subjects, I shall argue below, are licensed under *'eyn* by a structural default Case.

Let us turn now to the restrictions which hold of subjects to the left of agreeing *'eyn*. Contrary to the situation obtaining under *'eyn*, referential null subjects are licensed above this negative head. Sentence (14) contains a first person singular null subject.

- (14) *'eyn-(ən)i mədaberet rusit.*  
 neg:1s speak:f Russian  
 'I don't speak Russian.'

All combinations of number and person agreement on *'eyn* yield grammatical null subject sentences, with the exception of third person singular and plural. The ungrammaticality of (15) is indeed, surprising, since the third person agreement features are discretely represented on *'eyn* (see (2).) Third person referential *pro* has a peculiar distribution in Hebrew, which has been treated in different ways by a number of researchers. I set aside the problem posed by the ungrammaticality of (15).<sup>7</sup>

<sup>6</sup> I assume here that in the absence of nominative Case, a subject is assigned a default Case, on which, see below. See Henry (1995) for discussion of nominative subjects which are Case marked by AgrS and non-nominative ones whose Case is assigned by Tense.

<sup>7</sup> For further discussion, see Borer (1986, 1989), Doron (1983), Elisha (1997), Ritter (1995) and Shlonsky (1990, 1997).

H. Borer (p.c.) points out that a third person referential *pro* is admissible as an embedded controlled subject, see below, and patterns, in this respect, with subjects of future tense verbs (see Borer 1989 for further discussion).

- (15) \**ʕyn*-(ən)o mədaber rusit.  
 neg.3ms speak:ms Russian  
 'He doesn't speak Russian.'

The acceptability of (14), however, is sufficient to demonstrate that *pro* is formally licensed in its position above agreeing *ʕyn*. In line with our previous discussion, we can state this in the following terms.

- (16) The head of the projection hosting a subject above (agreeing) *ʕyn* has a nominative Case feature.

If the agreement suffix on *ʕyn* bears a (strong) nominative feature, movement of a nominative DP to its Spec is driven by the need to check this feature in the overt syntax. It is thus correctly predicted that when *ʕyn* bears agreement, the subject must precede *ʕyn* and cannot follow it, as in the contrast between (17a) and (17b).

- (17) a. Rina *ʕyn*-a mədaberet rusit.  
 Rina neg:3fs speak:fs Russian  
 'Rina does not speak Russian.'  
 b. \**ʕyn*-a Rina mədaberet rusit.  
 neg:3fs Rina speak:fs Russian  
 'Rina does not speak Russian.'

The paradigm in (18) below demonstrates that all instances of non-referential *pro* are unacceptable above *ʕyn*. As we have just seen, this generalization cannot be ascribed to the formal illegitimacy of *pro*.

- (18) a. \**ʕyn*-o yored gešem bə-Telaviv  
 neg:3ms falls rain in Tel-Aviv  
 'Rain doesn't fall/isn't falling in Tel Aviv.'  
 b. \**ʕyn*-o kaše li-lmod rusit  
 neg:3ms difficult to-learn Russian  
 'It isn't difficult to learn Russian.'  
 c. \**ʕyn*-am dofkim ba-delet.  
 neg:3mpl knock:mpl on-the door  
 'No one is knocking on the door.'  
 d. \**ʕyn*-o carix lə-daber ʔit-o.  
 neg:3ms must:3ms to-speak with:3ms  
 'One shouldn't speak to him.'  
 e. \**ʕyn*-o kar.  
 neg:3ms cold  
 'It isn't cold.'

Dani ʔamar še *ʕyn*-o mədaber rusit.  
 Dani said that neg.3ms speak:ms Russian  
 'Dani said that he doesn't speak Russian.'

The generalization underlying this paradigm is that only referential subjects are admitted in the subject position above *'eyn*. This is further confirmed by the ungrammaticality of (19), where the subject position to the left of agreeing *'eyn* is occupied by the quasi-referential pronoun *ze* (compare with (13) above.)

- (19) \**ze 'eyn-o kaše lə-daber rusit.*  
 it neg:3ms difficult to-speak Russian  
 'It isn't difficult to speak Russian.'

If the subject in agreeing *'eyn* sentences is in Spec/AgrS and must be referential, then why is it the case that non-referential subjects in sentences without *'eyn* are perfectly acceptable? In other words, how should one explain the contrast between (18a–e) and the (b) examples of (7)–(11)?

The impossibility of non-referential subjects to the left of *'eyn* can be expressed by saying that in contrast to subject agreement morphology on finite verbs, the agreement morphology on *'eyn* (tabulated in (2)) calls for the projection of an (a)rgumental topic position (I thank Luigi Rizzi for discussion of this point). Characterizing the pre-agreeing *'eyn* subject position in this way immediately explains why only fully referential subjects may appear there whereas quasi-arguments and expletives may not.

Some insight into the 'topicality' of this position can be gained by considering the formal identity of the agreement suffixes on *'eyn* (see (2)) and those borne by nouns, prepositions and, with minor phonetic differences, transitive verbs in examples such as (20a–c) below.

- (20) a. *l-o*  
 to:3ms  
 'to him'  
 b. *beit-o*  
 house:3ms  
 'his house'  
 c. *lə-hazmin-o*  
 to-invite:3ms  
 'to invite him'

Roberts and Shlonsky (1996) and Shlonsky (1997) argue that the suffixes in (20a–c) are Agr heads, to which a lexical head adjoins (P, N and V<sub>-FIN</sub>, respectively). The specifier of these Agr heads is *pro*, coindexed with Agr.

One of the properties of these clitic-like suffixes is that they must be associated with fully referential arguments. Verbs like 'lead' in 'this leads to the conclusion that...' have either fully referential or arbitrary (generic) direct objects, see (21a,b). The arbitrarily-referring theme may be realized by e.g. the proform 'one' or it may be lexically saturated, (see Rizzi (1986).)

- (21) a. This leads John to the conclusion that...  
 b. this leads (one) to the conclusion that...

When Hebrew 'movil' bears a direct-object suffix, the theme must be interpreted as fully referential. This is shown by the interpretations under (22b).

- (22) a. ze movil la-maskana še...  
           this leads to-the-conclusion that  
           'This leads to the conclusion that...'  
       b. ze movil-o la-maskana še...  
           this leads:3ms to-the-conclusion that  
           'This leads him to the conclusion that...'  
           \*'This leads one to the conclusion that...'

Similarly, expressions like 'one's home is one's castle', where the nominal possessors are arbitrary and hence quasi-referential can only be rendered periphrastically, as in (23a) (with clitic-doubling) but not as in (23b).

- (23) a. beit-o šel 'adam hu 'armon-o.  
           house:3ms of person it castle:3ms  
           'A person's home is his castle.'  
       b. beit-o hu 'armon-o.  
           house:3ms it castle:3ms  
           'His home is his castle.'  
           \*'One's home is one's castle'

The formal treatment of Semitic clitics proposed by Roberts and Shlonsky(1996) and Shlonsky (1997) is similar to Sportiche's (1996) analysis of Romance clitics as heads of maximal projections, the specifier of which is either a pro, or a (clitic-doubled) argument.

Romance object clitics behave exactly like Semitic ones (and like subjects of agreeing *'eyn*) in that they can only have a fully referential interpretation. Consider the contrast between (24a) and (24b), and the ungrammaticality of (25), where a non-referential interpretation of the clitic is forced.

- (24) a. Cela rend heureux.  
           this makes happy  
           'This makes one happy.'  
       b. Cela le rend heureux.  
           this 3ms makes happy  
           'This makes him/\*one happy.'  
       (25) \*Je le considère probable que tu viennes.  
           I 3ms consider probable that you come  
           'I consider it probable that you come.'

While Sportiche identified the feature associated with the clitic projection with specificity, and argued that the clitic projection houses a specificity feature, Cecchetto (1995) provides (Italian) examples which show that this cannot be entirely correct. For example, generic DPs can be picked up by a clitic in the Clitic Left Dislocation (CLLD) construction, as shown by the example in (26).



- (26) Un Italiano lo                    riconosci sempre al primo colpo.  
       an Italian 3ms-(you) recognize always at first sight  
       ‘An Italian, you always recognize him at first sight.’

A propos of the example in (27), Cecchetto notes that “...What seems to be necessary is a linking between the [CLLD’d] DP and the previously established context of discourse.”

- (27) un pasto Gianni l’ha    fatto.  
       a meal Gianni it-has taken  
       ‘A meal, Gianni has eaten.’

It seems justified, therefore, to think of the property associated with pronominal clitics as topicality. This characterization is sufficient to exclude all the cases of non-referential clitics, of the sort illustrated in (24b) and (25). The subject position of agreeing *’eyn* is an argumental topic position and is thus partially assimilated to the specifier positions of clitic projections in Semitic and Romance.

As opposed to the agreement suffixes on nouns, verbs, prepositions and particles like *’eyn*, subject agreement on finite verbs in Hebrew imposes no restrictions on the referentiality of the subject. We must therefore distinguish a subject position which is a topic and a subject position which is not.<sup>8</sup>

If Hebrew has two subject positions, one below negation and one above it, one wonders whether there are cases when both are used and whether there are additional subject positions in the clause. Both of these questions are taken up in the rest of this article.

### 3. Subjects in copular constructions

Present tense copular sentences in Hebrew are characterized by the absence of a verbal copula, as shown in (28).

<sup>8</sup> Note, in passing, that quantified DPs cannot be topicalized (i.e., clitic left-dislocated), but can appear as subjects of *’eyn*.

- (i) \*iš, hu ’eyn-o mušlam.  
       no one he neg:3ms perfect  
       ‘No one, he’s perfect.’  
 (ii) iš ’eyn-o mušlam.  
       no one neg:3ms perfect  
       ‘No one is perfect.’

If a quantified DP is quantifier-raised in LF from an A’ topic position, as in (i), it would have no variable to bind, since the trace of topicalization in Spec/IP would already be bound by the topic. No such problem arises in (ii), since the specifier of agreeing *’eyn* is at once a topic position and the subject Case position.

- (28) Rina zameret rok.  
 Rina singer rock  
 'Rina is a rock singer.'

There are a variety of circumstances, however, where the string subject^nonverbal predicate is unacceptable or very marginal. A particularly clear example is that of an equative sentence, in which the second term is a proper name.

- (29) a. \*Rina gveret Levi.  
 Rina Mrs. Levi  
 'Rina is Mrs. Levi'  
 b. \*xaver-i ha-tov Dani.  
 friend:1s the-good Dani  
 'My best friend is Dani.'

One way of rendering the equative sentences in (29) grammatical is to introduce an element identical in form to a third person pronoun between the two constituents of the copular construction. Following Rapoport (1987), I shall henceforth refer to this element as H. H appears in (30).

- (30) a. Rina hi gveret Levi.  
 Rina H:fs Mrs. Levi  
 'Rina is Mrs. Levi'  
 b. xaver-i ha-tov hu Dani.  
 friend:1s the-good H:ms Dani  
 'My best friend is Dani.'

Doron (1983), (1986), following Berman and Grosu (1976) established that H is neither the clausal subject nor a verb, but rather the lexicalization of a functional head.<sup>9</sup> The consensus among researchers who have studied Hebrew copular constructions is that the sentence in (28) and those in (30) are associated with different structures. The former is a small clause while the latter constitute full IPs.<sup>10</sup>

<sup>9</sup> The impersonal pronoun *ze* can also serve as a lexicalization of a functional head although not the same head as H. See Sichel (1997).

<sup>10</sup> Rapoport (1987) and Rothstein (1995) observe that the distribution of copular constructions with H and those without it patterns like that of clausal complements to *consider*-type verbs. H is obligatory where a small clause complement is impossible. Thus, compare (28)–(30) with the following

- (i) I consider [Rina a rock singer].  
 (ii) \*I consider [my best friend Dani].  
 (iii) I consider [my best friend to be Dani].

A reduced clause is possible in (i) but a full IP structure, as in (iii), is obligatory when the second term of the copular construction is a name. The generalization, due originally to Doron (1983), seems to be that a full IP structure is necessary whenever the second term of a copular construction cannot be construed and licensed as a predicate. Moro (1997) (see also den Dikken 1997)

Although this characterization is too crude, (the possibility of inserting adverbial material between 'Rina' and 'rock singer' in (28) suggests that the subject appears outside the projection of its predicate,) it is correct in its essence: The subject of (28) is lower than the subject of (30). Let us see if we can be more precise about these positions.

The pair of sentences in (31) show that a predicative sentence which does not require H can be embedded under *'eyn* while an equative sentence in which H is obligatory cannot be embedded under *'eyn*.

- (31) a. *'eyn* Rina zameret rok  
           neg Rina singer rock  
           'Rina is not a rock singer.'  
       b. \**'eyn* Rina (hi) gveret Levi  
           neg Rina (H:fs) Mrs. Levi  
           'Rina is not Mrs. Levi.'

Indeed, the ungrammaticality of (31b) provides additional evidence for the claim that equative sentences require more structure than predicative sentences. Contrasted with the grammatical (32) below, in which there is a subject position to the left of *'eyn*, (31b) demonstrates that the first DP of an equative construction must access a subject position higher than negation.

- (32) Rina *'eyn*-(n)a gveret Levi.  
       Rina neg:3fs Mrs. Levi  
       'Rina is not Mrs. Levi.'

A number of different proposals have been advanced to deal with the distribution of H.<sup>11</sup> A critical assessment of these proposals being beyond the scope of this article, I proceed directly with a presentation of my own views on the matter.

I would like to advance the hypothesis that since equative constructions involve two referential expressions, both must be licensed in specifier positions. Copular constructions, I shall argue, do not make an object position available and the two DPs must therefore make use of the two positions I have earlier identified as subject positions, the nominative (topic position) and the nonnominative one.

Since the subject position in (31b) (under *'eyn*) is filled by one of the two referential

argues that (iii) is an inverted copular construction, with the predicate raised above the subject and adjoined to IP, whence the need for a full IP structure. However, the fact that the same structural requirement holds of copular constructions involving two referential expressions (as in the (a) examples in (29) and (30)) suggests that his analysis is not general enough, as noted by Kroch and Heycock (1996).

With respect to the Hebrew data, Greenberg (1994) shows that Doron's generalization fails to cover predication generic sentences which also require H. Her own generalization, stated in semantic terms, is in turn vitiated by a numerous exceptions, as she herself notes.

<sup>11</sup> See Berman and Grosu (1976), Déchaine (1993), Doron (1983, 1986), Greenberg (1996), Penner (1988), Rapoport (1987), Rothstein (1995) and Sichel (1997).

expressions and since no (additional) subject position is available above non-agreeing *'eyn*, there simply is no position to house the second DP. In (32), however, there are two subject positions available, one below *'eyn* and one above it. Hence, both arguments of the equative sentence can appear in specifier positions.

Let us be more precise. I take it that speakers have a syntactic characterization of referential DPs and that such DPs must appear in a specifier-head configuration with an appropriate functional head in order to be syntactically licensed. In predicative or better still, verbal sentences, the subject is typically in Spec/AgrS where nominative Case licenses it while the object is (at some level of representation) in Spec/AgrO or in some such position, where accusative or objective Case is available.

Equatives contain two DPs but accusative Case is unavailable. This is visible in copular constructions in such diverse languages as Russian, Latin and Classical Arabic which display Case morphologically. The modern Romance languages provide a further argument for the unavailability of objective Case in equative constructions. Direct objects in French or Italian can be cliticized onto the verb, as in (33). These clitics bear the accusative form.

- (33) a. Claire verra Madame Levi.  
           Claire will see Mrs. Levi  
           'Claire will see Mrs. Levi.'  
       b. Claire la verra.  
           Claire her will see  
           'Claire will see her.'

A postcopular DP, however, cannot be cliticized onto 'be', indicating that it is not associated with accusative Case, compare (33) and (34).<sup>12</sup>

- (34) a. Claire et Gaston sont les Levis.  
           Claire and Gaston are the Levis  
           'Claire and Gaston are the Levis.'  
       b. \*Claire et Gaston les sont.  
           Claire and Gaston them are  
           'Claire and Gaston are them.'

If nominative is already assigned to the precopular DP, there must be some other, (structural) nonaccusative and nonnominative Case available. Let us call this Case default Case. In many languages, default Case coincides with the Case associated with the

<sup>12</sup> Non-accusative clitics can certainly appear in such sentences.

- (i) Claire y est.  
       Claire there is  
       'Claire is there.'  
       (ii) Claire n'est pas peintre, Marie l'est.  
           Claire is not painter, Marie it is  
           'Claire is not a painter, Marie is.'

citation form, i.e., accusative in English, nominative in Latin and Arabic, etc.

I would like to argue that postcopular DPs are licensed in the non-nominative position which I have earlier identified under *'eyn* in the Hebrew middlefield. This position is where structural default Case is assigned. To recall, two subject positions were distinguished, a high, nominative position which might be labeled Sub1 and a lower non-nominative position, Sub2.

In Hebrew, the nominative position is the specifier of the agreement head lexicalized by H or by the agreement suffixes on *'eyn*. The lower head is phonetically null but we can expect it to be overt in some other language. In (28), the subject 'Rina' occupies Sub2, the lower position, which is why (28) can be embedded under *'eyn* as in (31a).

Just as speakers have syntactic intuitions as to what a referential expression is, they can identify predicates. The crucial point about syntactic predicates is that they are licensed differently from referential expressions. In particular, they do not occupy the subject position(s) reserved for arguments.<sup>13</sup> Thus, the predicative expression 'rock singer' in (28) is not in Sub2 and consequently 'Rina' is not forced up to Sub1.

<sup>13</sup> A distinction, I think, can be usefully drawn between syntactic predicates and other constituents (including arguments) which are not syntactic predicates but can be interpreted predicatively, by e.g., undergoing a semantic type-shifting operation. For example, French (and German) distinguish determiner-less NPs from indefinite DPs in postcopular position; compare (i) and (ii).

- (i) Cet homme est enseignant.  
this man is teacher.  
'This man is a teacher.'
- (ii) Cet homme est un enseignant.  
this man is a teacher  
'This man is a teacher.'

Pollock (1983) judges (i) as predicative and (ii) as ambiguous between an predicative and an identity reading (though see Reboul and Moeschler (1994) for a more detailed classification.) Syntactically, only the determinerless NP in (i) is a predicate, and cannot be an argument (since a bare NP will not raise into a specifier position; see above.) (ii) is not a syntactic predicate although Pollock's judgement suggests that it can be *interpreted* as such. Only the bare NP 'teacher' in (i) can be cliticized by the predicate clitic *le* (on the rather complex distribution of which, see Sportiche (1995).) Compare (iii) and (iv), with the predicate clitic underlined..

- (iii) Ces hommes ci sont enseignants mais ces hommes là ne le sont pas, enseignants.  
these men here are teachers but these men there neg-PredCl-are neg, teachers.  
'These men are teachers, but those men are not (teachers).'
- (iv) \*Ces hommes ci sont des enseignants mais ces hommes là ne le sont pas,  
these men here are indef.pl teachers but these men there neg-PredCl-are neg,  
des enseignants.  
indef.pl teachers.  
'These men are teachers, but those men are not (teachers).'

Definite DPs can be syntactic predicates, as Williams (1994) argued (see also Fiengo and May 1994, among others). Definite DPs and names (particularly roles) can also function syntactically as non-predicates interpreted predicatively, under appropriate pragmatic conditions, as noted already by Higgins (1979).

#### 4. Pronominal subjects of copular constructions

It has been often noted (e.g., Doron 1983) that pronominal tokens of DPI in equative constructions do not require the presence of H, unlike nonpronominal tokens which require H (recall the contrast between (29) and (30).)

- (35) a. 'ani (hi) gveret Levi.  
I (H:fs) Mrs. Levi  
'I am Mrs. Levi.'  
b. hi (hi) gveret Levi.  
She (H:fs) Mrs. Levi  
'She is Mrs. Levi.'

This section addresses this fact dealing first with the case where H appears and then with the case where it does not.

##### 4.1 *Pronominal subjects with H*

It should first be noted that H is only possible in (35) if the pronominal subject is focalized and bears a special stress. If we set up a context in which the pronoun must be construed as old information, or if the second DP 'Mrs. Levi' is (contrastively) focalized, H becomes plainly impossible. This is shown in (36).<sup>14</sup>

- (36) a. 'ata lo yod'ea mi Rina? hi (\*hi) gveret Levi  
you:ms not know who Rina she (H:fs) Mrs. Levi  
'You don't know who Rina is? She is Mrs. Levi.'  
b. hi (\*hi) gveret LEVI (lo gveret Cohen.)  
she (H:fs) Mrs. Levi (not Mrs. Cohen.)  
'She is Mrs. LEVI (not Mrs. Cohen.)'

Adapting Doron's insight to the effect that the sentences in (35) with H are inverse structures (though not inverse predication structures in the sense of Moro 1997), let us say that 'Mrs. Levi' first appears in Sub1 (i.e. it is the specifier of H) and the pronoun in Sub2. Then, the focalized pronoun is raised above Sub1 to an A' focus position. H, much like I in a finite clause, is marked [+focus] and raises into Foc<sup>0</sup> in order to satisfy the Focus criterion (see e.g. Brody (1990).) (35a) with H is thus derived from (37) by a process akin to English subject-auxiliary inversion (see Heggie (1988).)

- (37) gveret Levi hi 'ani.  
Mrs. Levi H:fs I  
'Mrs. Levi is me.'

<sup>14</sup> Care must be taken not to introduce a pause between the two *hu*'s in (36), to avoid a left dislocated reading of the subject.

Two pieces of evidence can be culled to support this proposal for the derivation of (35). First, note that in (35a), the subject is a first person pronoun while H is specified for third person. Thus they do not agree in  $\phi$ -features. If H, like the agreement suffix on *'eyn* discussed above, must agree in person features with its specifier, (35a) ought to be ungrammatical. Under the proposed derivation of (35), however, H actually agrees in  $\phi$ -features with 'Mrs. Levi' while the pronominal subject need only 'agree' in focus features with H.

The second piece of evidence is due to I. Sichel (p.c.) who notes that while the negative particle *lo* invariably follows H (Doron 1983), it cannot follow it in (35). (38a) below is grammatical, since 'Mrs. Levi' is in Sub1, H is unmoved and *lo* appears below it. In (38b), on the other hand, Sub1 is filled by 'Mrs. Levi', H has been shifted to  $\text{Foc}^0$  above Sub1 and there is no position for negation between  $\text{Foc}^0$  and Sub1.

- (38) a. gveret Levi hi lo 'ani.  
           Mrs. Levi H:fs not I  
           'Mrs. Levi is not me.'  
       b. \*'ani hi lo gveret Levi  
           I H:fs not Mrs. Levi  
           'I am not Mrs. Levi.'

We might ask what prevents (35b) from being assigned a structure similar to that of, say, (30a), with the pronoun in Sub1 and 'Mrs. Levi' in Sub2. After all, that would be a simpler and more economical derivation. ((35a) is no longer relevant, given the lack of  $\phi$ -feature matching with H). This question actually harbors two distinct queries: First, what prevents a non-focalized pronoun from appearing in Sub1 and second, what prevents a focalized one from appearing there?

The first issue concerns the impossibility of non-focalized pronouns in Sub1. It is clarified by the observation that Sub1 may only host strong nominals, that is, non-pronominal DPs and strong pronouns.<sup>15</sup>

Unlike, say, the Romance languages, Hebrew does not morphologically distinguish weak and strong pronouns. Since the weak form is the default form (Cardinaletti and Starke 1996), strong pronouns show up only when they are required. Thus, in the absence of any 'strengthening' mechanism, it is the weak pronoun which is generated and it cannot appear in Sub1. Weak pronouns are rendered strong by coordination (and by focalization, discussed below). Let us therefore consider coordinated pronominal subjects.

The sentences in (39) show that a coordination of pronouns behaves just like a full DP. H is obligatory in (39a), as it is in e.g., (30). In a context where the coordinated pronominal cannot be taken as focus, as in (39b), it must agree with H. The ungrammaticality of this example is due to the lack of person agreement: The pronominal subject is second person while H is third person.

<sup>15</sup> This is precisely the conclusion reached in Cardinaletti (1997).

- (39) a. *hi ve hu \*(hem) ha-Levim*  
           she and he (H:mpl) the-Levis  
           ‘She and he are the Levis.’  
       b. *ʔani və-ʔata (\*hem) ha-LEVIM, (lo ha-Cohenim)*  
           I and-you (H:mpl) the-Levis, not the-Cohens  
           ‘Me and you are the LEVIS, (not the Cohens.)’

The restriction of SubI to strong pronouns is independently motivated in predicational copular constructions. (40a) contrasts with (35b) (repeated as (40b)) in that H is ungrammatical in the former whereas it is optional in the latter, an equative construction.<sup>16</sup>

- (40) a. *hu (\*hu) zamar rok.*  
           he H:ms singer rock  
           ‘He is a rock singer.’  
       b. *hi (hi) gveret Levi.*  
           She (H:fs) Mrs. Levi  
           ‘She is Mrs. Levi.’

Weak pronouns are excluded from SubI, that subject position being reserved for strong elements. We must now ascertain that (40a) cannot be derived via inversion, that is, from an underlying structure in which ‘rock singer’ occupies SubI (such a derivation would parallel the one proposed for the sentences in (35).) (41), the putative pre-inversion structure for (40a) is plainly ungrammatical, contrasting with the fully acceptable (37).

- (41) *\*zamar rok (hu) hu.*  
       singer rock (H:ms) he  
       ‘He is a rock singer.’ Lit: ‘A rock singer is him.’

Doron points out that the ungrammaticality of (41) means that there is no way of putting the predicative DP in SubI. This is quite natural, since SubI is an A-position and ‘rock singer’ is a predicate.<sup>17</sup> To conclude, neither the weak pronoun nor the predicate can appear in SubI and there is hence no grammatical derivation for (40).

Let us now tackle the question of why focalized pronouns may not appear in SubI. The

<sup>16</sup> (40a) is fine under the irrelevant left-dislocation reading, in which the pronoun *hu* is not H but a nominative (resumptive) pronoun.

<sup>17</sup> Matters are more complicated since indefinite DPs cannot appear in SubI — even when they are referential — when the second term is a referential DP. This is independent of whether this second term is a pronoun or not. Thus, both (i) and (ii) are ungrammatical (both are possible with heavy, contrastive stress on the indefinite.)

- (i) *\*yeled hu Dani.*  
       child H:ms Dani  
       ‘Dani is a child.’  
       (ii) *\*yladim hem Rina ve Dani*  
           children H:mpl Rina and Dani  
           ‘Rina and Dani are children.’



discussion in the previous paragraphs actually suggests the contrary. Focalization being one of the ways of rendering a weak pronoun strong, we should expect focalized pronouns to appear in the subject position reserved for strong nominals. Yet we have seen that focalized pronouns to the left of H do not have to agree with H and H cannot be immediately followed by negation, both facts supporting the view that when H is preceded by a focalized pronoun, the pronoun is not in Sub1 but in a (higher) focus position.

Why can Sub1 not host foci? The reason is that like the subject position to the left of *'eyn*, Sub1 is a topic position. I argued that the exclusion of non-referential subjects from the subject position to the left of *'eyn* follows if that subject position is a topic position. I would now like to extend this characterization to the subject position to the left of H.

Doron (1983, pp. 97–98) notes that H is obligatory when the subject of a copular construction is relativized and (optional) when it is questioned by means of a *which NP* expression.<sup>18</sup>

- (42) a. ha-*iš*    še-    \*(hu)    more...  
           the-man that- H:3ms teacher:m  
           'The man who is a teacher...'  
       b. *'eize*    yədida    šelxa (hi)    mora?  
           which friend yours (H:3fs) teacher:f  
           'Which friend of yours is a teacher.'

The common feature of relative clauses and D-linked questions is that both are types of topicalization. Suppose, now, that movement of a D-linked *wh*-expression and of a relative operator (or head, depending on one's analysis of relative clauses) must implicate the topic projection. The obligatoriness of H in (42) should then be related to the triggering of the topic projection. Concretely, assume that subject relatives and subject *wh* questions involve movement through the specifier of H, a topic position.

There is thus reason to believe that Sub1, like the subject position we find in agreeing *'eyn* sentences is a topic position. Being an A topic position, it cannot host foci, pronominal or not.

#### 4.2 *Pronominal subjects without H*

I have discussed equative constructions with pronominal subjects, yet the original motivation for that discussion was the fact that H can be missing in examples such as (35), whereas it is mandatory in equatives with nonpronominal subjects. Consider the nature of the problem: The second DP of (35) can be no lower than Sub2. The pronoun, being weak, cannot appear in Sub1 and yet the sentence is perfectly grammatical.

Let us suppose that in addition to Sub1 and Sub2, UG makes available a subject position which is reserved for weak pronouns (Cardinaletti's (1997) lower subject position).

We have seen that equative constructions cannot be embedded under *'eyn*. The relevant

<sup>18</sup> Doron shows that the distribution of H is different in long interrogation, but this matter is tangential to the present discussion.

example, (31b), is repeated below as (43). I argued that since Sub2 is filled by 'Mrs. Levi', 'Rina' must go to Sub1, above 'eyn.

- (43) \*eyn Rina gveret Levi  
neg Rina Mrs. Levi  
'Rina is not Mrs. Levi.'

(44) with a pronominal subject strikingly contrasts with (43).

- (44) 'eyn hi gveret Levi  
neg she Mrs. Levi  
'She is not Mrs. Levi.'

This contrast receives a straightforward explanation under the hypothesis that there is an additional subject position under 'eyn, above Sub2, which is reserved for pronouns.

The reduced acceptability of (45a), with first or second person singular pronominal subjects and (45b) with first and second plural ones, suggests that the pronominal position is actually reserved for third person pronouns, while first and second person pronouns are associated with a position above 'eyn. (45a,b) contrast with (46a,b).

- (45) a. ??eyn 'ani/'at gveret Levi.  
neg I/you:fs Mrs. Levi  
'I/You am/are not Mrs. Levi.'  
b. ??eyn 'anaxnu/'atem ha-levim  
neg we/you:mpl the-Levis.  
'We/You are not the Levis.'
- (46) a. 'ani/'at 'eyn(ə)-ni/-ex gveret Levi  
I/you:fs neg-1s/2fs Mrs. Levi  
'I/You am/are not Mrs. Levi.'  
b. 'anaxnu/'atem 'eyn-ənu/xem ha-levim  
we/you:mpl neg-1pl/2ms the-Levis.  
'We/You are not the Levis.'

This kind of pronominal split is well-attested in many Italian dialects studied in Poletto (1997) and Manzini and Savoia (in press). For example, in the dialect of Polesano studied by Poletto, first person subject clitics precede negation, while third person clitics follow it.

- (47) a. A no vegno  
scl:1s neg come.  
'I am not coming.'  
b. No la vien  
neg scl:3fs comes.  
'She is not coming.'

The approach taken by the authors cited above is to split the subject clitic field into discrete projections associated each with a particular set of morphosyntactic features. The Hebrew data strongly support this research strategy.

## 5. Further Issues

Copular and *'eyn*-negated sentences in Hebrew provide evidence for a clausal cartography in which several subject positions are distinguished. The following maximal structure emerges from our discussion. Subjects occupy specifier positions associated with heads that I label Agr, neg heads a NegP.<sup>19</sup>

(48)

| Sub1 | Agr                | SubWeak1                      | Agr           | Neg  | SubWeak2                    | Agr | Sub2 | Agr        |
|------|--------------------|-------------------------------|---------------|------|-----------------------------|-----|------|------------|
|      |                    |                               |               |      |                             |     |      |            |
|      | <+NOM><br><+Topic> |                               | <±speak.><br> |      | <+num><br>                  |     |      | <-NOM><br> |
|      |                    |                               |               |      |                             |     |      |            |
| DP   | H                  | DP <sub>+pronominal-1/2</sub> | Ø             | 'eyn | DP <sub>+pronominal-3</sub> | Ø   | DP   | Ø          |

Two assumptions have tacitly underpinned the discussion so far. First, that nonagreeing and agreeing *'eyn* occupy the same base position, namely, Neg<sup>0</sup> and second, that the subject position above agreeing *'eyn* and Spec/H are the same position. By way of a conclusion, I would like to call into question both of these assumptions.

The careful reader will have surely noticed the following problem. If the weak pronoun position housing third person pronouns is below *'eyn*, as (44) suggests, then the possibility of a pronominal subject to the left of agreeing *'eyn*, as in (48) is incorrectly excluded, since the pronoun, I have argued, cannot occupy Sub1.

- (49) hi 'eyn-(n)a gveret Levi.  
 she neg:3fs Mrs. Levi  
 'She isn't Mrs. Levi.'

The grammaticality of (48), in tandem with the fact that unlike H, the agreement suffixes on *'eyn* can express all combinations of number, gender and person, suggests the following conclusion: Agreeing *'eyn*'s initial position is lower than that of nonagreeing *'eyn*. Consider therefore the revised hierarchy of positions in (50) in which two Neg positions are distinguished.<sup>20</sup>

<sup>19</sup> The features appearing in the Agr nodes are merely descriptive. What these features actually mean remains to be determined.

<sup>20</sup> The availability of several positions for negation in a single grammar is independently motivated in much recent work, see Cinque (1998), Manzini and Savoia (1998) and Zanuttini (1997).

(50)

| Sub1 | Agr                | SubWeak1                | Agr       | Neg1 | SubWeak2              | Agr | Neg2     | Sub2 | Agr    |
|------|--------------------|-------------------------|-----------|------|-----------------------|-----|----------|------|--------|
|      |                    |                         |           |      |                       |     |          |      |        |
|      | <+nom><br><+Topic> |                         | <±speak.> |      | <+num>                |     |          |      | <-nom> |
|      |                    |                         |           |      |                       |     |          |      |        |
| DP   | H                  | DP <sub>+pron-1/2</sub> | Ø         | 'eyn | DP <sub>+pron-3</sub> | Ø   | 'eyn+Agr | DP   | Ø      |

Agreeing 'eyn thus has the option of raising to any one of the Agr heads to its left, allowing the full range of referential subjects.<sup>21</sup> There is therefore no single subject position to the left of agreeing 'eyn, but rather three positions, only the highest of which is the topic position identified earlier.

The occurrence of adverbs between the subject and agreeing 'eyn, as in (49), suggests — and under Cinque's (1988) terms — forces the conclusion that agreeing 'eyn does not have to occur in the head position of which the subject to its left is the specifier.<sup>22</sup>

- (49) Rina betax/ kanir'e 'eyn-a mādaberet rusit/ gveret Levi  
 Rina certainly/apparently neg:3fs speak:fs Russian Mrs. Levi  
 'Rina certainly/apparently doesn't speak Russian/isn't Mrs Levi.'

Rather than thinking of agreeing 'eyn as raising to an Agr position in the overt syntax, let us say that it (or its relevant Agr features) raise to one of the Agr heads in LF. Such raising creates a representational chain connecting the clausal subject with its lower positions below Neg.

Unlike agreeing 'eyn, H cannot be separated from its subject by adverbial material since H is the head of the highest projection in the subject field. Contrast (53a) with (49) above.<sup>23</sup>

<sup>21</sup> The impossibility of the quasi argumental *ze* to the left of an agreeing 'eyn (viz. (19)) should be correlated with the fact that unlike personal pronouns, quasi argumental *ze* lacks number and gender features and is hence presumably barred from the pronominal subject position and must be taken to occupy Sub2. Demonstrative *ze*, which has not been discussed in this paper, inflects for gender and number, and being strong and not weak, can occur to the left of 'eyn.

zot 'eyn-(n)a cipor.

this:f neg:3fs bird

'This isn't a bird.'

<sup>22</sup> Such adverbs can also intervene between the subject and a finite verb, a fact with important consequences for Hebrew clause structure.

<sup>23</sup> It is not the case that H must be adjacent to its subject (pace Doron 1983, Rapoport 1987), since parenthetical material may intervene between the two, as in the following example.

Rina, toda la'el, hi zameret rock.

Rina, thank God, H:fs singer rock

'Rina, thank God, is a rock singer.'

- (50) a. \*Rina betax/ kanir'e hi zameret rok.  
 Rina certainly/apparently H:fs singer rock  
 'Rina is certainly/apparently a rock singer.'  
 b. Rina hi betax/ kanir'e zameret rok.  
 Rina H:fs certainly/apparently singer rock  
 'Rina is certainly/apparently a rock singer.'

This analysis can naturally accommodate the fact that H and 'eyn can co-occur, as the grammaticality of (51) establishes.

- (51) Rina hi 'eyn-(ən)a gveret Levi.  
 Rina H:fs neg:3fs Mrs. Levi  
 'Rina is not Mrs. Levi.'

The final difference between H sentences and 'eyn sentences that I wish to dwell upon is that H is only possible in sentences with non-verbal predicates, while no such restriction is imposed on 'eyn sentences. In (1b), repeated below as (52a), a present tense verb appears under 'eyn while its appearance under H in (52b) yields ungrammaticality.

- (52) a. Rina 'eyn-a mādaberet rusit.  
 Rina neg:3fs speak:fs Russian  
 'Rina does not speak Russian.'  
 b. \*Rina hi mādaberet rusit.  
 Rina H:fs speak:fs Russian  
 'Rina speaks Russian.'

Doron (1983) argued that since H is in I, it precludes verb movement to I. As stated, Doron's explanation cannot be incorporated into the present discussion since there is ample evidence that present tense verbs in Hebrew do not have to raise to the highest I projection (see Section 1 and Shlonsky 1997) and so no competition should arise between H and the verb. Indirectly, however, and on a more abstract level, Doron's argument can and should be maintained.

A subject in Spec/H must head a (representational) chain rooted in its base position in VP. In order for such a chain to be formed, H must be coindexed with the verb and the only way to ensure this coindexing is by selection of V by H or movement of V to H. If Chomsky (1995) is right, selection in this case reduces to feature attraction, i.e., a subcase of movement. The ungrammaticality of (52b) can thus be taken care of by (53).

- (53) H does not attract [+V].

Although (53) does not capture the entire gamut of restrictions on the (semantic and aspectual) type of predicates which can follow H, see Greenberg (1994), it expresses the robust categorial restriction illustrated by the ungrammaticality of (52b) and provides a formal anchor for what traditional Hebrew grammar labeled the 'nominal sentence'.

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