

## Agreement features and non-agreeing copulas in Modern Hebrew

Interactions between agreement and interpretation have always posed a theoretical challenge, particularly to the Minimalism approach which views agreement as a purely syntactic operation. This paper proposes an analysis of copular clauses in Modern Hebrew where the copula does not agree with the subject, arguing that the underlying syntax of (non)-agreement has predictable interpretational consequences.

The literature dealing with the copula in Modern Hebrew has distinguished two major types of copula: a copula that is homophonous to nominative 3rd person pronouns (often referred to as ‘PronH’); and a copula that is homophonous to demonstratives/impersonal pronouns (‘PronZ’).

- (1)   dina           hi                   saxkanit    muxšeret.  
Dina(FM.SG) PronH.FM.SG actor.FM.SG talented.FM.SG  
‘Dina is a talented actor.’
- (2)   ugat           gezer ze                   macxik.  
cake(FM.SG) carrot PronZ.MS.SG funny.MS.SG  
‘A carrot cake is funny.’

Unlike PronH, which always agrees, PronZ often surfaces with default agreement (MS.SG), as in (2). While various works have attempted to characterize the semantic correlates of PronZ having default agreement, no previous studies have proposed explicit analyses of the underlying syntactic representation of non-agreeing PronZ sentences or of the reason why non-agreement is tied to the observed semantics. The often implicit assumption has been that failure to agree, as well as the associated semantics, are two lexical properties of a special ‘non-agreeing’ PronZ. Below we argue that while PronZ indeed lacks agreement features in this case, there is a principled reason why the subject must also lack certain features.

Cast in Minimalist terms, the typical analysis of PronZ clauses can be summarized as follows: The subject enters the derivation with a set of valued  $\phi$ -features. There are 2 types of PronZ: one that enters the derivation with unvalued  $\phi$ -features, and one that lacks agreement features (or comes specified for default values). Selecting the 2nd type of PronZ, which does not function as a Probe, leads to lack of agreement. Non-agreeing PronZ is also associated with certain semantic properties: the denotation of its subject may be ‘shifted’ from its basic referent, as in (3); see Heller (1999) and Greenberg (2008).

- (3)   yeladim       ktnanim       ze                   avoda       kaša.  
children(MS.PL) small.MS.PL PronZ.MS.SG work(FM.SG) hard.FM.SG  
‘(Raising/dealing with) small children is hard work.’

This analysis suffers from at least two shortcomings: First, it offers no explanation of the relation between the syntactic and the semantic properties of PronZ, instead stipulating each of them separately. Second, it wrongly predicts that, other than its denotation, the subject of non-agreeing PronZ would behave in all respects like subjects of other types of sentences. One fact that shows that subjects of PronZ are in fact different is that, unlike other subjects, they may not bind anaphors:

- (4)   tipšim       hem           / \*ze                   ha-oyvim       šel acmam.  
fools(MS.PL) PronH.MS.PL / PronZ.MS.SG the-enemies.MS.PL of self.MS.PL  
‘Fools are their own enemies.’

One apparent explanation for this fact, as well as for the fact that PronZ subjects trigger no agreement, would be to claim that the pre-copular DP is not really the subject but a left-dislocated topic. This analysis can be ruled out based on, among other things, word order when the predicate undergoes *wh*-movement; as shown in (5), this DP then follows the fronted predicate and PronZ, as expected from a subject and not from a topic:

- (5)   kama       avoda ze       yeladim ktnanim?  
how.much work PronZ children small  
‘How much work is raising/dealing with small children?’

Alternatively, we might consider the possibility that PronZ subjects, despite their morphological marking, do not carry any syntactically active/visible  $\phi$ -features, which would account for their failure to participate in agreement and in binding, two operations that crucially depend on a nominal's  $\phi$ -features. This simple analysis would fail to account, however, for the fact that subject-internal concord is obligatory when the subject of non-agreeing PronZ is modified by an attributive adjective, as in (3).

Nevertheless, we would like to argue that failure to bind indeed shows that non-agreeing PronZ subjects are deficient in terms of their features. Our analysis rests on the hypothesis that subjects of PronZ carry only the features needed for subject-internal concord, but not those needed for external agreement. This may be formalized in two ways: either by claiming that these subjects contain an abstract D which, unlike typical D, carries no  $\phi$ -features and hence makes it impossible for the features of N and/or intermediate functional projections below DP to participate in DP-external operations (see e.g. Danon, to appear); or, if we adopt a distinction between two sets of agreement features, as in Wechsler and Zlatić (2003) and other work within the HPSG framework, it can be proposed that PronZ subjects contain only the set of CONCORD features, which trigger concord, but not the INDEX features needed for external agreement.

If indeed both PronZ and its subject are deficient in agreement features, there are two questions that must be answered: (i) Why must the subject be deficient in the presence of deficient PronZ? (ii) Why does this have the observed semantic consequences?

As to the first question, we propose that this can be derived from the Minimalist assumption that agreement is a necessary condition for structural Case. In the absence of  $\phi$ -features on PronZ, it cannot act as a Probe and hence cannot value Case on the subject; the subject is therefore Caseless. Borrowing somewhat from the GB Visibility Condition, it could be proposed that Case is required for licensing D- $\phi$ /INDEX features, and hence subjects of non-agreeing PronZ must lack these features.

As to the semantic question, the fact that non-agreeing PronZ subjects may get a 'shifted' interpretation, as in (3), now seems to follow: Non-agreeing subjects lack D- $\phi$ /INDEX features, which are associated with referentiality and which are also typically linked to the noun's features. Thus, we would expect such subjects to be non-referential (e.g., get a generic reading) or to have a reference which is not tied to N's lexical properties. As noted by Heller (1999) and Greenberg (2008), this is indeed the case.

Finally, this analysis also explains why 'featureless' subjects are restricted to copular constructions with PronZ, i.e., why subject-verb agreement isn't an optional operation throughout the grammar, with lack of agreement correlating with potentially 'shifted' readings of the subject.

- (6) \*yeladim ktanim ya'avid oto kaše.  
 children(MS.PL) small.MS.PL make.work.FUT.MS.SG him hard  
 (Cannot mean: 'Raising/dealing with small children will make him work hard.')

If we assume that Caseless DPs could be grammatical, but only if they lack D- $\phi$ /INDEX features, (6) is ungrammatical because the verb *ya'avid* must have a thematic subject, which would be identified by exactly those features; subjects of PronZ, on the other hand, are not arguments of any verbal predicate, and as such do not require such features. Thus, the picture that emerges is one in which the standard assumption in Minimalism that Case *must* be valued turns out to be too strong; our analysis supports the view that Case is not merely a meaningless symbol that must be eliminated but a feature that serves a function in licensing other features of DP arguments.

## References

- Danon, G.: To appear, 'Agreement and DP-Internal Feature Distribution'. *Syntax*.
- Greenberg, Y.: 2008, 'Predication and equation in Hebrew (nonpseudocleft) copular sentences'. In: S. Armon-Lotem, G. Danon, and S. Rothstein (eds.): *Current Issues in Generative Hebrew Linguistics*. Amsterdam: John Benjamins, pp. 161–196.
- Heller, D.: 1999, 'The Syntax and Semantics of Specificational Pseudoclefts in Hebrew'. Master's thesis, Tel Aviv University.
- Wechsler, S. and L. Zlatić: 2003, *The Many Faces of Agreement*. Stanford: CSLI Publications.