

Tel Aviv University
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**The Syntax and Semantics
of Specificational Pseudoclefts in Hebrew**

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by:

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ABSTRACT

Pseudocleft sentences are copular sentences with a free relative subject, as in (1):

- (1) what John saw was a cat.

Higgins (1973) distinguished predicational and specificational pseudoclefts, and showed that, unlike predicational pseudoclefts, specificational pseudoclefts exhibit a variety of syntactic and semantic connectivity effects, i.e. the post-copular phrase behaves in some ways as if it ‘sits’ inside the free relative subject.

In this thesis I give a syntactic-semantic analysis of specificational pseudoclefts in Hebrew. I show that Hebrew makes a lexical distinction between predicational and specificational pseudoclefts in the choice of the copula, and that Hebrew specificational pseudoclefts have an identifiable subset that do not exhibit connectivity. I use these data to argue (a) that specificational pseudoclefts are equative sentences (also known as identity statements) and not, as suggested in Williams (1983), an instance of inverse predication; (b) that connectivity is not an effect of syntactic reconstruction or copying as assumed in a lot of syntactic literature, but rather a semantic effect as suggested in Jacobson (1994) and Sharvit (1997, to appear); and (c) that connectivity is a by-product of equation at high semantic types.

As is well known since the work of Berman & Grosu (1976) and Doron (1983), Hebrew uses personal and impersonal pronominal copulas instead of a present-tense verbal copula that does not exist in Hebrew. The impersonal pronominal copula (pronZ) was not given much attention in the generative literature, as opposed to the personal pronominal copula (pronH). I show, using tests developed for pronH, that pronZ is indeed a copula, rejecting its analysis as a subject pronoun. In pseudoclefts, both pronominal copulas are possible, as in (2):

- (2) a. ma Se-ani macbi'a alav hu xatul
 what that-I point on-it H cat
- b. ma Se-ani macbi'a alav ze xatul
 what that-I point on-it Z cat

“What I’m pointing at is a cat.”

(adapted from Higgins, p.212)

I show that a pronH pseudocleft is predicational and a pronZ pseudocleft is specificational, following Higgins’ (1973) battery tests for distinguishing between predicational and specificational pseudoclefts. A closer look at pronZ pseudoclefts reveals that there are two kinds of pronZ – agreeing and non-agreeing (neutral) – and they differ with respect to connectivity effect. Although all these pseudoclefts behave like specificational pseudoclefts on Higgins’ tests, neutral pronZ pseudoclefts exhibit all the connectivity effects (opacity, binding, agreement of predicates and case marking) but agreeing pronZ pseudoclefts do not.

My analysis of specificational pseudoclefts involves two assumptions. First, I use the overt distinction between predicational and specificational pseudoclefts to argue that specificational pseudoclefts are best analyzed not as inverse predication, as suggested in Williams (1983) for English and in Moro (1997) for Italian, but rather as equatives (identity statements), as suggested in Heycock & Kroch (1996, 1997). This means that while pronH is a ‘BE of predication’, pronZ is a ‘BE of identity’ (in the sense of Partee 1987).

Second, I discuss connectivity effects in specificational pseudoclefts. The fact that some specificational pseudoclefts do not exhibit connectivity effects serves as strong evidence against a syntactic analysis of connectivity by means of reconstruction, since the reconstruction account wrongly predicts that both types of specificational pseudoclefts would exhibit connectivity. I assume that the difference between agreeing and neutral pronZ is in the type at which the equation takes place: agreeing pronZ equates individuals

(type e) only, while neutral pronZ equates non-individuals only. I show how this predicts that agreeing pronZ pseudoclefts would not exhibit connectivity, and I use the analysis of Sharvit (1997) to account for the connectivity effects in neutral pronZ specificational pseudoclefts, pointing out that the high type equation is what allows for connectivity.

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Chapter 1

Introduction: Two Pronominal Copulas in Hebrew

In traditional Hebrew linguistics sentences with a non-verbal predicate are referred to as “nominal sentences”. Unlike past or future nominal sentences that contain a verbal copula, present-tense nominal sentences may either lack any copula or employ a personal or impersonal pronoun in this role (the impersonal pronouns are identical in form to demonstratives). The nature and the distribution of these pronominal copulas are rather well studied in the generative framework in the work of Berman & Grosu (1976), Berman (1978), Doron (1983), Rapoport (1987), Rothstein (1995, to appear), Greenberg (1994, 1998) and Sichel (1997). The personal pronominal copula sentences were studied in comparison to copula-less sentences in Doron (1983), Rapoport (1987) and Rothstein (1995, to appear) who related this alternation to the predication/identity distinction, and in Greenberg (1994, 1998) who analyzed the personal pronominal copula in predicative sentences as a marker of genericity. The impersonal pronominal copula was not given much attention in the literature; usually it was either ignored or assumed to be a stylistic variant of the personal pronominal copula, although syntactic analyses are found in Berman & Grosu (1976) and Sichel (1997). It is this impersonal pronominal copula which is the subject of this thesis.

This chapter introduces the phenomenon of pronominal copulas and it is organized as follows: section 1.1 introduces the pronominal copula construction and argues that the pronoun is indeed a copula; section 1.2 reviews the literature on the nature and the distribution of the personal pronominal copula, and section 1.3 introduces some important facts about the impersonal pronominal copula.

1.1 THE PRONOMINAL COPULA CONSTRUCTION

The pronouns Hebrew employs in copular role in present-tense nominal sentences are of two kinds: 3rd person personal pronouns, as in (1a), and impersonal pronouns, as in (1b) (where the impersonal pronouns are identical in form to demonstratives):

(1) a. Personal Pronouns (3 rd person)			b. Impersonal / Demonstrative Pronouns		
	Singular	Plural		Singular	Plural
Masculine	<i>hu</i>	<i>hem</i>	Masculine	<i>ze</i>	<i>ele</i>
Feminine	<i>hi</i>	<i>hen</i>	Feminine	<i>zot</i>	<i>ele</i>

I adopt the terminology of Doron (1983) and refer to these elements as *pron*, but in order to distinguish between the personal and the impersonal *prons* I will refer to them as pronH and pronZ respectively (H and Z in the glosses). An example of the pronominal copula construction is given in (2):

- (2) a. dan hu ha-Saxen mimul
 Dan H the-neighbor from-across
- b. dan ze ha-Saxen mimul
 Dan Z the-neighbor from-across
- both: “Dan is the next-door-neighbor.”

Two alternative analyses were considered in the literature for pronH. The first analysis is that pronH is a present-tense suppletive form of the copular verb. This is attractive, because the 3rd person pronouns are somewhat similar in form to the copular verb *h.y.y*. However, the verbal analysis was rejected on the basis of tests showing that pronH behaves differently from the past/future copular verb, as well as from present-tense verbs. The tests, which I will not reproduce here, show that: (i) *h.y.y* but not pronH can carry contrastive stress; (ii) *h.y.y* but not pronH can be inverted with the subject; (iii) *h.y.y* but not pronH can be stranded in the end of a clause (in a question or a relative clause); (iv) Adverbials, such as *behexlet* “definitely” and *lo* “no” and parenthetical material such as *nidme li* “seems to me” precede

the verb *h.y.y* but must follow *pronH*; and (v) A sentence with a present-tense verb but not with *pronH* can be negated using *eyn* (see Berman & Grosu (1976, pp. 278-279) and Doron (1983, pp. 99-100) for details). On the assumption that both the personal and the impersonal prons are of the same nature, the verbal analysis becomes even less attractive, since the impersonal elements do not resemble the copular verb.

On the other hand, the fact that both pronominal copulas look like pronouns suggests that they may indeed be subject pronouns. So the second analysis considered for *pronH* is Left Dislocation (LD, henceforth) where it is analyzed as a subject pronoun. This analysis was convincingly rejected for *pronH* in Berman & Grosu (1976) and Doron (1983), and it was briefly discussed for *pronZ* in Sichel (1997). In the rest of this section I argue against analyzing *pronZ* sentences as LD, and then I reject a second analysis of the impersonal element as a subject pronoun given for sentences with infinitival subjects in Hazout (1994), concluding that the impersonal element, like the personal element, is a copula.

1.1.1 Against Left Dislocation

The basic difference between a *pron* sentence and an LD sentence is in their intonation pattern. Berman & Grosu (1976) point out that an LD sentence carries a special intonation pattern – a pause after the dislocated element or, more accurately, “high initial followed by a drop and rising in the end” (Berman & Grosu, p.276). (3a) is an LD sentence, where the pause is orthographically marked by a comma, and (3b) is the *pronH* version which is not characterized by this intonation:

- (3) a. *dani, hu more*
 Danny he teacher
 “(As for) Danny, he is a teacher.”

- b. *dani hu more*
 Danny H teacher
 “Danny is a teacher.”

(Doron 1983, p.105)

We find the same contrast with the impersonal element. (4a) has the LD intonation pattern, whereas (4b) does not carry any special intonation:

- (4) a. dani, ze Sem yafe

Danny *ze* name pretty

“(As for) Danny, it is a pretty name.”

- b. dani ze Sem yafe

Danny *ze* name pretty

“Danny is a pretty name.”

Having presented the different intonation pattern, I will argue that these are two separate constructions by showing grammatical differences between LD and (what I argue to be) pronZ sentences, following the arguments developed for pronH. Specifically, I show that pronZ sentences, like pronH sentences, differ from LD in their subjects and predicates as well as in their general structural behavior.

First, as mentioned above, pronH only occurs with the so-called nominal predicates and never with verbs, whereas LD does not restrict the possible predicates of the resumptive pronoun. The same argument holds of the impersonal element: when we have a “flat” intonation, we only get nominal predicates. This is exemplified in (5-6), where a verbal predicate is impossible with a “flat” intonation:

- (5) a. tel aviv, hi [_{VP} xogeget yom huledet 90] / [_{NP} ‘ir yafa] / [_{AP} gdola] / [_{PP} be-israel]

Tel Aviv she celebrates day birth 90 / city nice / big / in-Israel

“(As for) Tel Aviv, it is celebrating its 90’s birthday / is a nice city / is big / is in Israel.”

- b. tel aviv hi * [_{VP} xogeget yom huledet 90] / [_{NP} ‘ir yafa] / [_{AP} gdola] / [_{PP} be-israel]

Tel Aviv H celebrates day birth 90 / city nice / big / in-Israel

“Tel Aviv is celebrating its 90’s birthday / a nice city / big / in Israel.”

- (6) a. rimon, ze [_{VP} ose li carevet] / [_{NP} pri ekzoti] / [_{AP} ta'im] / [_{PP} mi-Siv'at ha-minim]

pomegranate *ze* makes to-me heartburn / fruit exotic / tasty / from-seven the-species

“Pomegranate, it gives me heartburn / is an exotic fruit / is tasty / is one of the seven species.”

- b. rimon ze *[_{VP} ose li carevet] / [_{NP} pri ekzoti] / [_{AP} ta'im] / [_{PP} mi-Siv'at ha-minim]
 pomegranate ze makes to-me heartburn / fruit exotic / tasty / from-seven the- species
 "Pomegranate gives me heartburn / is an exotic fruit / is tasty / is one of the seven species."

The second element to be considered is the (purported) subject of pronZ sentences in comparison to the dislocated element in LD. Berman & Grosu (1976) show that although quantificational NPs are impossible as the dislocated element in LD, as in (7a), they may occur with pronH, as in (7b):

- (7) a. *kol exad Se-lo gonev, hu tipeS
 every one that-not steal he foolish
 "Anyone who doesn't steal, he is foolish."
 b. kol exad Se-lo gonev hu tipeS
 every one that-not steal H foolish
 "Anyone who doesn't steal is foolish." (Berman & Grosu, p.277)

Turning to the impersonal element, we find the same pattern: the LD version in (8a) is ungrammatical, but (8b) is perfectly acceptable (Sichel (1997) uses similar data to make the same point for pronZ following "Rizzi's (1986) argument against subject clitics in certain Italian dialects being in A-position"):

- (8) a. *kol diyun be-balSanut, ze makor le-xilukey de'ot
 every discussion in-linguistics ze source to-disagreement
 "Every discussion in linguistics, it is a source of disagreement."
 b. kol diyun be-balSanut ze makor le-xilukey de'ot
 every discussion in-linguistics ze source to-disagreement
 "Every discussion in linguistics is a source of disagreement."

A second element that may occur with the impersonal element but not as the dislocated element is a human-denoting NP. The proper name *Dr. Wilensky* is impossible as the dislocated element in (9a), but may serve as the subject of *ze* in (9b)¹:

¹ A demonstrative (impersonal) pronoun can have a human antecedent when this antecedent is "intermediately accessible", in the sense of Ariel (1990), but in the LD context the dislocated element is "highly accessible".

- b. *le-mi rimon, ze ose carevet ? cf. le-mi rimon ose carevet?
 to-whom pomegranate *ze* makes heartburn to-who pomegranate makes heartburn
 “To whom does pomegranate give heartburn?”

(13) a. rimon ze pri ekzoti
 pomegranate *ze* fruit exotic
 “Pomegranate is an exotic fruit.”

- b. ma ze rimon ?
 what *ze* rimon
 “What is pomegranate?”

Another argument that is used against LD is the agreement behavior of the personal pronoun. However, I will show that the different agreement behavior of the personal and the impersonal pronouns makes this argument irrelevant for the impersonal elements. Rothstein (to appear), explicating an argument from Doron (1983), claims that the resumptive personal pronoun in LD must agree in person, number and gender with the dislocated element. This explains the ungrammaticality of (14a), where the dislocated element is a 1st person pronoun and the resumptive pronoun is 3rd person; but we see in (14b) that this is not the case for pronH, which agrees with its subject only in number and gender:

- (14) a. *ani, hu ha-more
 I he the-teacher
 “*As for me, he is the teacher.”
- b. ani hu ha-more
 I H the-teacher
 “I am the teacher.” (Rothstein, ch. 6 ex. 21)

Sichel (1997) uses (15) to argue that unlike the resumptive pronoun in LD which is expected to agree with the dislocated element to its left, pronZ agrees with the element to its right:

- (15) ha-hitpar'uyot ha-axronot *ele/zot ha-siba la-ma'acarim
 the-riots(f,pl) the-recent Z(pl)/Z(f,s) the-reason(f,s) to-the-arrests
 “The recent riots are the reason for the arrests.” (Sichel's 20)

But note that (16) shows that the agreement of the impersonal element to the right is found in LD as well:

- (16) a. le-hikaSel ba-mivxan, zot be'aya
 to-fail in-the-exam Z(f) problem(f)
 “To fail the exam, this is a problem.”
 b. iSun sigaryot, zot sakana
 smoking(m) cigarettes Z(f) danger(f)
 “Smoking cigarettes, this is a danger.”

So the agreement behavior of the impersonal element, unlike the personal element, cannot be used to argue against LD. In this chapter I generally assume that the impersonal element agrees to the right, even though its agreement behavior is more complex. In the next chapter I come back to this issue in detail.

To summarize: since we saw four grammatical differences between LD and (what I argue to be) pronZ sentences, we cannot use an LD construction to analyze these sentences. In the next section I consider the suitability of a second analysis for sentences with the impersonal pronoun.

1.1.2 Hazout's (1994) Analysis

Hazout (1994) gives a unified analysis for the three sentences in (17) that involve that impersonal pronoun:

- (17) a. [_{CP} li-lmod polanit] ze [_{AP} kaSe]
 to-learn Polish ze difficult
 b. ze [_{AP} kaSe] [_{CP} li-lmod polanit]
 ze difficult to-learn Polish

c. [_{AP} kaSe] [_{CP} li-lmod polanit]

difficult to-learn Polish

all: “It is difficult to learn Polish.”

In (17a-b) Hazout analyzes the impersonal element as a subject pronoun, the AP as the predicate of the pronoun and the CP as an adjunct – a secondary predicate on the subject pronoun. In (17c), where there is no impersonal element, the CP is analyzed as the complement of the AP. The motivation for this analysis comes from the following extraction facts:

(18) a. *ma [li-lmod _] ze kaSe

what to-learn _ ze difficult

b. *ma ze kaSe [li-lmod _]?

what ze difficult to-learn _

c. ma kaSe [li-lmod _]?

what difficult to-learn _

all: “What is it difficult to learn?”

When *ze* is present, it is impossible to extract out of the CP, but when *ze* is absent such extraction is possible. Hazout ties this behavior to what is generally known about extraction out of adjuncts and complements respectively; specifically to the formalization in Chomsky (1986a). Note that the extraction in (18a) is expected to be ungrammatical also if the CP is analyzed as the subject of the clause.

The relevant question for us is not whether this is the right account of Hebrew “tough”-constructions, but whether we can use Hazout’s analysis to account for our sentences. The problem is that the full paradigm in (17) is restricted: when the CP is a complement (as in 17c), it can only be a complement of certain APs, and when it is an adjunct to the right (as in 17b), the other XP can be an NP or an AP; but when the order of the elements is like in (17a), we find other options for both elements. An example with two NPs is given in (19):

- (19) a. [_{NP} rimon] ze [_{NP} pri ekzoti]
 pomegranate ze fruit exotic
- b. ??? ze [_{NP} pri ekzoti] [_{NP} rimon]
 ze fruit exotic pomegranate
- c. *[_{NP} pri ekzoti] [_{NP} rimon]
 fruit exotic pomegranate
- all: “Pomegranate is an exotic fruit.”

While (19a) is a grammatical sentence, (19b) has the intonation of Right Dislocation which does not characterize (17b), and (19c) is ungrammatical. Thus, there is no motivation to reduce (what I argue to be) pronZ sentences to Hazout’s construction.

To conclude section 1.1: I have presented two attempts to analyze the impersonal element as a subject pronoun and I have shown that these are unsuccessful. Thus, we have to assume that there exists a third construction, and I suggest that this is a copular construction and that the impersonal pronoun, like the personal pronoun, has a second grammatical function and serves as a copula in present-tense nominal sentences.

1.2 REVIEWING PRON-H

In this section I review the existing analyses for pronH. First, I present Doron’s (1983) analysis of the nature of pronH as a realization of agreement features and how it is related to its agreement behavior. I then turn to the predication/identity generalization for distribution of pronH and how it is accounted for in the work of Doron (1983), Rapoport (1987) and Rothstein (1995, to appear). I will briefly discuss the inherent/non-inherent generalization for predicative pronH sentences from Greenberg (1994, 1998).

1.2.1 The Nature of pronH

After rejecting the possibility that pronH is a subject pronoun or a suppletive form of the copular verb, Doron (1983) concludes that it is a copula located in Infl. Specifically, she

analyzes pronH as unattached agreement features – the same features that would show up on a present-tense verb, and in the absence of a verb they are realized independently. To explain why this is only possible in present-tense, Doron suggests that the Infl node in Hebrew contains sets of the features [tense] and [past]: PAST is associated with {[+tense],[+past]}, FUTURE with {[+tense],[–past]}, and {[–tense]} characterizes infinitivals. The so-called “present-tense” is marked neither by [\pm tense] nor by [\pm past], so Infl may either not be generated, as in the case of copula-less sentences, or be generated containing only agreement features, which are realized as pronH.

The agreement behavior of pronH follows directly from this analysis: like present-tense verbs, pronH always agrees with the subject in number and gender (but see Doron (1983) and Rothstein (to appear) for a different view). This is exemplified in (20a) for a feminine NP subject with an inflecting AP predicate (which is also feminine), in (20b) for a pronoun subject, and in (20c) for a masculine NP subject, both with non-inflecting predicates:

(20) a. rut hi nexmada

Ruth H(f) nice(f)

“Ruth is nice.”

b. ani hu/hi mi Se-racax et ha-melex

I H(m)/H(f) who that-murdered Acc the-king

“I am the person who murdered the king.”

c. makor ha-xayim hu/*hi ha-SemeS

origin(m) the-life H(m)/*H(f) the-sun(f)

“The origin of life is the sun.”

1.2.2 The Distribution of pronH

The distribution of pronH was studied in the literature, and sentences with pronH were compared to the copula-less sentences. The first descriptive generalization for the distribution of pronH was made in Doron (1983). Her observation is that pronH is optional in

predicational sentences, as in (21a), but obligatorily present in identity sentences, as in (21b):

(21) a. dani (hu) more

Danny H(m) teacher(m)

“Danny is a teacher.”

b. dani *(hu) mar kohen

Danny H(m) Mr. Cohen

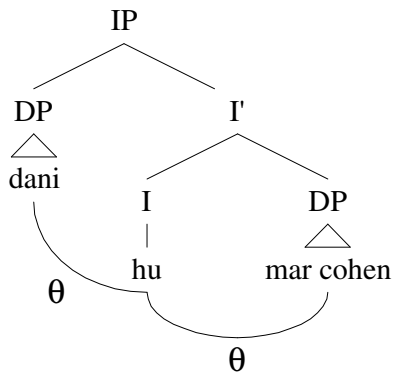
“Danny is Mr. Cohen.”

Under Higgins’ (1973) definitions of the two types of copular sentences – predicational and identity, the difference between them is in the nature of the post-copular phrase: it is a semantic predicate in a predicational sentence and a referential argument in an identity sentence. Assuming this difference in the post-copular phrase, Doron (1983), Rapoport (1987) and Rothstein (1995, to appear) aim to assign pronH a role that will explain why it is optional in predicational sentences and obligatory in identity sentences.

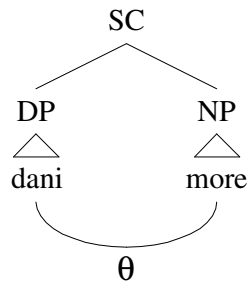
1.2.2.1 Doron’s (1983) Analysis

For Doron (1983), the difference between an argument and a predicate is in their need for a thematic role. While a predicate assigns a thematic role and thus cannot be assigned one itself, an argument NP must be assigned a thematic role in order to be licensed. Accordingly, she assigns pronH the role of a theta-role assigner. In an identity sentence, as in (22a), there are two argument NPs (=DPs) which require a theta-role in order to be licensed, so pronH assigns a theta-role to both of them. In a predicational sentence, as in (22b), the predicate assigns a theta-role to the subject argument, so pronH is not needed to license it, and thus can be absent:

(22) a. Identity

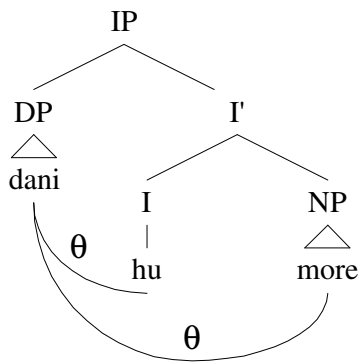


b. Predicational



Rothstein (to appear) points out that this analysis is problematic for the pronH version of predicational sentences. In these cases, there are two candidates for assigning a theta-role to the subject argument: the predicate, like in copula-less sentences, and pronH, like in identity sentences. This is illustrated in (23):

(23)



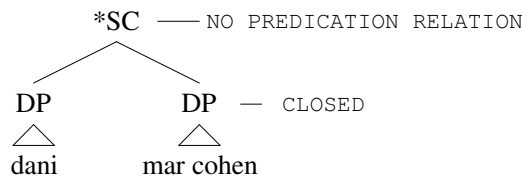
Since it is impossible that both elements would assign a theta-role to the same argument, we are forced to assume that, like in copula-less predicational sentences, the predicate is the one that assigns the theta-role to the subject, so in these cases pronH cannot be a theta-role assigner. That is, pronH turns out to be ambiguous between a theta-role assigner (in identity sentences) and an empty element (in predicational sentences), and this takes us back to Russell's ambiguity of BE between 'BE of identity' and 'BE of predication', which is an unattractive result.

A second problem pointed out by Rothstein (to appear) is conceptual. She claims that it is

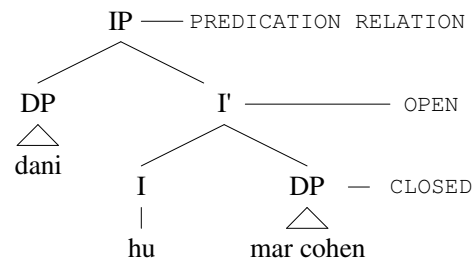
1.2.2.3 Rothstein's (1995, to appear) Analysis

Rothstein (1995, to appear) argues that the distribution of pronH can be explained in terms of predication relation. For her, a predication relation is a primitive saturation relation between a syntactic closed constituent – the subject – and a syntactic open constituent – the predicate. Certain syntactic constituents are syntactic predicates; these include maximal projections of lexical heads, such as APs, and certain projections of functional heads, including I'. In this framework the difference between an argument and a predicate in pronH sentences is in their predication status. A post-copular argument in an identity sentence is a closed constituent, so it cannot combine directly with the subject, since no predication relation can be formed, as in (25a). In order for there to be a predication relation in the sentence, the post-copular argument must combine with pronH which is located in I, so that I' can be predicated of the subject, as in (25b):

(25) a.

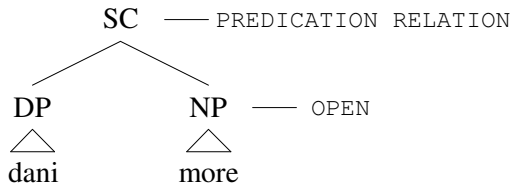


b.

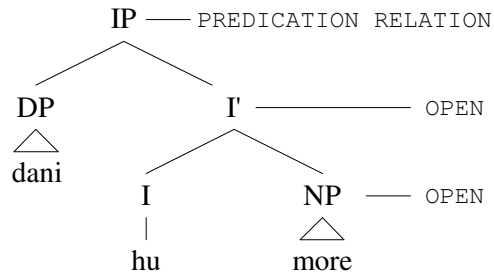


When the post-copular phrase is an open constituent, it can either form a direct predication relation with the subject resulting in a copula-less sentence, as in (26a), or combine with pronH in I to form a syntactic predicate and then form the predication relation with the subject, as in (26b):

(26) a.



b.



Semantically, the meaning of pronH is the identity function $\lambda P.P$ at the type of predicates $\langle e,t \rangle$ (Partee 1987). When the post-copular phrase is a predicate, pronH applies vacuously; but when the post-copular phrase is not a predicate, pronH would trigger type shifting into the type of predicates. Since this analysis assigns pronH the same role in predicational and identity sentences, I adopt it here and assume that the meaning of pronH is indeed $\lambda P.P$ (though my analysis does not really depend on this assumption).

1.2.2.4 A Note on Predicational pronH Sentences

Though my interest here is in the role of pronH and not its alternation with copula-less sentences, I briefly present the observation of Greenberg (1994) on the optionality of pronH in predicational sentences. Greenberg points out that pronH is not always optional in predicational sentences. There are both cases of obligatory present pronH, as in (27a), and obligatory absent pronH, as in (27b):

(27) a. orvim *(hem) Sxorim

ravens H black

“Ravens are black.”

(Greenberg 1994, ch. 1 ex. 57)

b. tir'e! sara (??hi) mitaxat la-ec

look! Sarah H under to-the-tree

“Look! Sarah is under the tree.”

(Greenberg 1994, ch. 1 ex. 55)

Moreover, when pronH is optional, there is a meaning difference between the pronH version and the copula-less version:

(28) ha-Samayim (hem) kxulim

the-sky H blue

“The sky is blue.”

(Greenberg 1994, ch. 2 ex. 56, from Ben David 1971)

When pron_H is present, the sentence means that blue is an inherent property of the sky (it may be uttered in a cloudy day), and when pron_H is absent, the sentence means that the sky is blue right now. Greenberg (1998) argues that in predicational (but not in identity) sentence, pron_H indicates the presence of a generic operator.

1.3 REVIEWING PRON-Z

In reviewing the literature on pron_Z, the main issue addressed is its distribution in comparison to the distribution of pron_H, i.e. what governs the choice of the copula in nominal sentences. Rubinstein (1968) and Doron (1983) (both in a footnote) claim that the choice of pron is stylistic, whereas Berman & Grosu (1976), Berman (1978) and Sichel (1997) suggest a grammatical distinction between the copulas. I review these analyses here, showing that none of them can account for the full range of data.

1.3.1 Rubinstein (1968): Stylistic Choice

Rubinstein (1968) is the first to address the question of the choice of pron. He observes that “the choice for pron_Z is stylistic *par excellence* and there is no significant difference in choosing between pron_H and pron_Z” (p. 136). What he means is that pron_Z is more colloquial than pron_H. His examples are cited from written texts (the pron_H counterparts are mine):

(29) a. ma Se-eyn lanu *hu/ze kesef

what that-no to-us H/Z money

“What we don’t have is money.”

b. ‘elohim hu/ze davar riSon

god H/Z thing first

“God is (the) first thing.”

- c. ma Se-matrid oti *hu/ze Se-[hu] kanir'e hitkaven le-ma'ase axer³
 what that-bothers me(Acc) H/Z that-[he] probably meant to-deed other
 "What bothers me is that he probably meant something else."
- d. bolonia hi/ze lo 'ir
 Bologna H/Z no city
 "Bologna is not a city."
- e. ha-xiyux hu/ze lo tSuva biSvil-xa
 the-smile H/Z no answer for-you
 "The smile is not an answer for you."
- f. Steim esre Snot ha-limudim hen/ze kim'at ve-lo klum
 twelve years the-study H/Z almost and-not something
 "Twelve years of study are almost nothing." (Rubinstein, p. 136)

Comparing Rubinstein's pronZ examples with their pronH counterparts reveals that a pronH version is not available for every pronZ sentence, as predicted if the choice of pronH is indeed stylistic. In Rubinstein's examples, the cases where pronH cannot be substituted are both pseudoclefts, but we will see below (section 1.3.5) that the same contrast is also found in simple copular sentences. In any case, these examples show that the difference between the prons cannot be reduced to style (even though a stylistic difference between pronH and pronZ indeed exists), and a grammatical generalization regarding the distribution of pronH and pronZ is to be sought.

1.3.2 Berman & Grosu (1976): The Category of the Subject

Berman & Grosu (1976) describe the choice between pronH and pronZ as following directly from the properties of the personal and impersonal pronouns to which they are

³ The original sentence lacks the pronoun after the relativizer and it is ungrammatical. Adding the subject pronoun does not affect the availability of pronH and pronZ.

historically related. These pronouns differ with respect to their possible referent: the personal pronouns refer to non-sentential and genderbearing antecedents, as in (30a), and the impersonal pronouns refer to sentential and genderless ones, as in (30b):

(30) a. rivka xaxama, aval ani lo ohev ota/*et zot (Berman & Grosu's 8)

Rivka smart, but I not love her(Acc)/Acc it(f)

“Rivka is smart, but I don't like her.”

b. rivka to'enet Se-hu xaxam, aval ani lo mekabel *oto/et ze⁴ (Berman & Grosu's 9)

Rivka claims that-he smart but I not accept him(Acc)/Acc it(m)

“Rivka claims that he is smart, but I don't accept that.”

Their next step is to draw a correlation between the possible referent of the pronouns and the possible subjects in pron sentences: a non-sentential subject chooses for pronH, whereas a sentential subject chooses for pronZ. This is illustrated in (31) with nominal subjects and in (32) with four kinds of sentential subjects – a CP in (a), a *wh* question in (b), a free relative in (c) and an infinitival in (d):

(31) a. moSe hu/*ze yafe (from B&G's 6-7)

Moshe H/Z pretty

“Moshe is pretty.”

b. bankai hu/*ze aSir meod

banker H/Z rich very

“A banker is very rich.”

(32) a. Se-nitnaged lo ze [_{AP} meguxax] / [_{NP} ra'ayon mesukan] (from B&G's 10-11)

that we-will-oppose to-him Z absurd / idea dangerous

“That we oppose him is absurd / a dangerous idea.”

⁴ In this context the feminine impersonal pronoun is also possible. In this position the masculine and feminine impersonal pronouns differ with respect to Accusative marking in object position, which obligatorily marks all definite objects: the masculine pronoun must be marked by *et*, but the feminine pronoun must not:

(i) a. rivka to'enet Se-hu xaxam, aval ani lo mekabel *(et) ze
Rivka claims that-he smart but I not accept (Acc) Z(m)

b. rivka to'enet Se-hu xaxam, aval ani lo mekabel (*et) zot
Rivka claims that-he smart but I not accept (Acc) Z(f)

both: “Rivka claims that he is smart, but I don't accept that.”

Beyond this observation, I have nothing to say about this phenomenon.

- b. eix livnot et ha-bayit ze [_{AP} barur lanu] / [_{NP} Se'ela me'anyenet]⁵
 how to-build Acc the-house Z clear to-us / question interesting
 “How to build the house is clear to us / an interesting question.”
- c. ma Se-ra'ita ba-xeder ze [_{AP} xaSud] / [_{NP} maSehu xaSud]⁶
 what that you-saw in-the-room Z suspicious / something suspicious
 “What you saw in the room is suspicious / something suspicious.”
- d. le-hitnaged lo ze [_{AP} meguxax] / [_{NP} ma'ase yalduti]
 to oppose to-him Z absurd / deed childish
 “To oppose him is absurd / a childish act.”

Berman & Grosu do not give the pronH versions of (32), implicitly assuming that these are all ungrammatical. But while genuine sentential subjects may indeed only choose for pronZ, the free relative subject in (32c) may choose for either pron:

- (33) ma Se-ra'ita ba-xeder hu/ze [_{NP} maSehu xaSud]
 what that you-saw in-the-room H/Z something suspicious
 “What you saw in the room is something suspicious.”

Since a free relative is usually considered to be an NP (e.g. Jacobson 1995), (33) serves as a counter example to the part of Berman & Grosu's generalization that non-sententials choose for pronH; so we cannot adopt the sentential/non-sentential subject distinction as the single principle governing the choice of pron.

1.3.3 Berman (1978): The Human / Non-Human Distinction

Berman (1978) maintains the sentential/non-sentential distinction of Berman & Grosu (1976) as the generalization governing the choice of pron, and adds a sub-generalization for

⁵ In this example we already see that pronZ does not simply agree to the right: while the post-copular NP is feminine, pronZ is in its masculine form:

(32) b. eix livnot et ha-bayit ze Se'ela me'anyenet
 how to-build Acc the-house Z(m) question(f) interesting
 “How to build the house is an interesting question.”

⁶ The AP version is not so good – See chapter 2 and especially footnote 1 there.

non-sentential subjects. Her observation is that a human-denoting NP cannot occur with pronZ, as illustrated in (34):

(34) a. dan hu/ze Sem yafe

Dan H/Z name pretty

“Dan is a pretty name.”

b. dan hu/*ze baxur yafe

Dan H/Z guy pretty

“Dan is a pretty guy.”

(Berman, p. 196)

However, we will see in the next section that there are cases where pronZ occurs with human-denoting NPs as subjects, so we cannot adopt this sub-generalization to govern the choice for pron.

1.3.4 Sichel (1997): Two Kinds of Infl Realization

Sichel (1997) restricts her discussion to (what she calls) agreeing pronZ, i.e. to cases where pronZ agrees with the post-copular phrase. So her first observation is that the difference between pronH and pronZ is their agreement behavior. Sichel points out that while pronH agrees with the subject to the left, pronZ agrees with the predicate to the right:

(35) a. ha-be'aya Se-hizkarta hi/zot sugiya mefursetmet

the-problem(f) that-you-mentioned H(f)/Z(f) issue(f) famous

“The problem you mentioned is a famous issue.”

b. ha-be'aya Se-hizkarta hi/ze inyan mesubax

the-problem(f) that-you-mentioned H(f)/Z(m) matter(m) complicated

“The problem you mentioned is a complicated matter.”

(Sichel's 12)

Note, however, that (35a) has another pronZ version with a masculine pronZ, as in (36):

(36) ha-be'aya Se-hizkarta ze sugiya mefursetmet

the-problem(f) that-you-mentioned Z(m) issue(f) famous

“The problem you mentioned is a famous issue.”

This is a case where pronZ agrees with neither the subject nor with the predicate, which is not

in the scope of Sichel's analysis. I come back to such examples in the end of this section.

Her second observation is that pronH and pronZ differ in the range of predicates: while the former allows for a wide range of predicates, APs, PPs, NPs and DPs, the predicate position of the latter is restricted to DPs and specific NPs:

(37) a. rina hi talmida/xaxama/ba-bayit/xavera Seli/gveret kohen (Sichel's 2)

Rina H student/smart/in-the-house/friend mine/Ms. Cohen

b. rina zot *talmida/*xaxama/*ba-bayit/xavera Seli/gveret kohen

Rina Z student/smart/in-the-house/friend mine/Ms. Cohen

both: "Rina is a student / smart / at home / a friend of mine / Ms. Cohen."

Note here that we have already seen in (32) above cases where pronZ occurs with APs. Again, I come back to that in the end of this section.

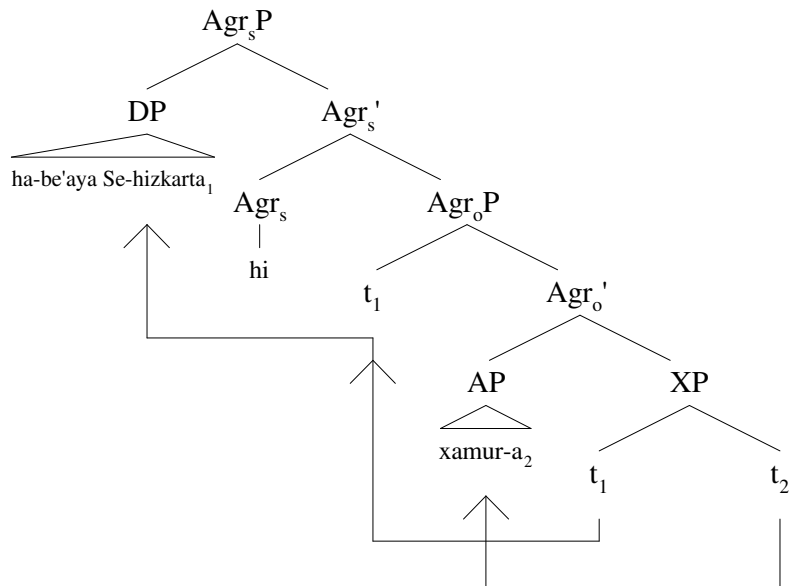
Sichel's (1997) account for the two prons extends Doron's (1983) original insight that pronH is a realization of agreement features located in Infl. Instead of a single Infl node, she adopts the structure of two agreement nodes, the higher associated with the subject Agr_s and the lower associated with the object Agr_o. Her claim is that pronH is a realization of agreement features in Agr_s, whereas pronZ is a realization of agreement features in Agr_o⁷. This seems to explain the agreement behavior of both prons; however, the actual derivation is more complex. (38) is a derivation of a pronH sentence, where the AP predicate must agree with the subject. Both phrases start out in a small clause and raise to a spec-head configuration in Agr_o where the predicate checks the agreement features against the subject. Sichel assumes that all DPs are licensed in a specifier position, so in the next step the subject raises to specAgr_sP and checks the features of pronH:

(38) ha-be'aya Se-hizkarta hi xamura

the-problem(f) that you-mentioned H(f) serious(f)

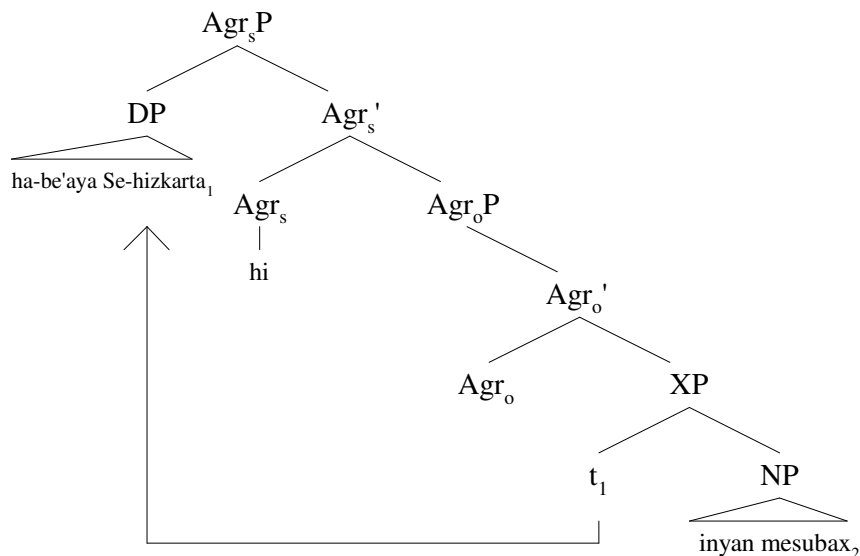
"The problem you mentioned is serious."

⁷ A part of Sichel's analysis concerns the structure of copula-less sentences, which, she claim, involves the functional head Agr_o. However, the right account of copula-less sentences is beyond the scope of the present study.



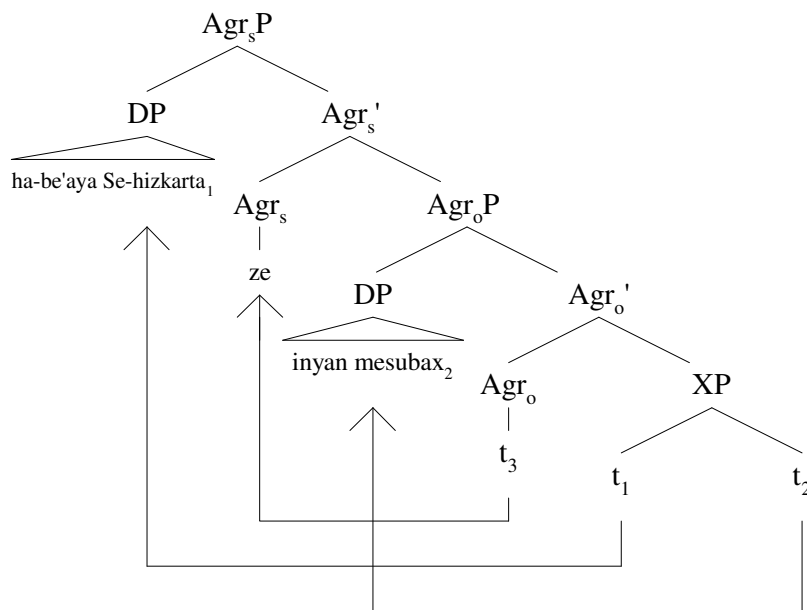
In (39), the predicate is an NP with fixed gender features, so it need not check its features against the subject; it does not raise to Agr_o , so $\text{specAgr}_o\text{P}$ is not created. In order for the subject to be licensed it raises to $\text{specAgr}_s\text{P}$ and checks the features of pronH (but since Sichel assumes that all DPs are licensed in a specifier position, she must add an LF movement of the post-copular DP to $\text{specAgr}_o\text{P}$):

- (39) ha-be'aya Se-hizkarta hi inyan mesubax
 the-problem(f) that you-mentioned H(f) matter(m) complicated
 "The problem you mentioned is a complicated matter."



In (40) we see a derivation of a pronZ sentence. PronZ is generated in Agr_o and the predicate (that has fixed gender features) raises to specAgr_oP in order to be licensed and checks there the features of pronZ. The next step is head movement of pronZ to Agr_s followed by raising of the subject to specAgr_sP:

- (40) ha-be'aya Se-hizkarta ze inyan mesubax
 the-problem(f) that you-mentioned Z(m) matter(m) complicated
 "The problem you mentioned is a complicated matter."



This explains both of Sichel's observations. First, "shortest move" determines that the predicate in the small clause would raise to check the features of pronZ in Agr_oP, and this gives the agreement with the predicate. Second, this derivation explains why predicates that agree with the subject are impossible with pronZ: Agr_o to which the predicate should raise to check its agreement features against the subject is already occupied by pronZ, so there is no spec-head configuration available for agreement to be checked.

The problem in adopting Sichel's analysis is that it is restricted to agreeing pronZ, and there does not seem to be a natural way to extend it to non-agreeing pronZ. Although Sichel is aware of cases where pronZ does not agree, she discards them as "metalinguistic expressions"

which include “mathematical formulae, dictionary definition, and metaphorical extensions of these.” (fn. 1). But we saw in (36) and also in (32b) above, and we will further see in the next chapter that non-agreeing pronZ occurs in sentences that cannot be discarded as “metalinguistic expressions”, so all pronZ sentences should be given a unified account. In chapter 4 I give such an account. In Sichel’s derivation, the generation of pronZ in Agr_o yields both the agreement with the predicate and the limited range of predicates, so we cannot use this to account for non-agreeing pronZ which does not exhibit either of these patterns.

1.3.5 Is There a Syntactic Generalization?

The possible subjects we saw for pronZ are sententials (32), non-human nominals (34), but also human nominals in (37). This means we are left with none of the suggested generalizations for relating the distribution of pronZ to its subject: neither the sentential/non-sentential (section 1.3.2) nor the human/non-human (section 1.3.3). (41) shows that all these facts reflect a partial picture and, in fact, all syntactic categories – CPs, DPs, NPs, but also APs and PPs – are possible subjects in pronZ sentences:

- (41) a. [CP Se-nitnaged lo] ze [AP meguxax]
 that we-will-oppose to-him Z absurd
 “That we oppose him is absurd.” (Repeated from ex. 32)
- b. [DP ha-be'aya Se-hizkarta] ze [NP inyan mesubax]
 the-problem that you-mentioned Z matter complicated
 “The problem you mentioned is a complicated matter.” (Repeated from ex. 35)
- c. [NP rimon] ze [NP pri ekzoti]
 Pomegranate Z fruit exotic
 “Pomegranate is an exotic fruit.” (Repeated from ex. 13a)
- d. [AP gavoha] ze [AP yafe]
 tall Z beautiful
 “Tall is beautiful.”

- e. [PP leyad ha-Sulxan] ze [NP makom tov la-Sevet]
 near the-table Z place good to-seat
 "Next to the table is a good place to sit."

Note, however, that the subject position of pronH is not unrestricted, and only DPs and NPs are possible in this position⁸. Consider (42), the pronH version of (41):

- (42) a. *[CP Se-nitnaged lo] hu [AP meguxax]
 that we-will-oppose to-him H absurd
 "That we oppose him is absurd."
- b. [DP ha-be'aya Se-hizkarta] hi [NP inyan mesubax]
 the-problem that you-mentioned H matter complicated
 "The problem you mentioned is a complicated matter."
- c. [NP rimon] hu [NP pri ekzoti]
 Pomegranate H fruit exotic
 "Pomegranate is an exotic fruit."
- d. *[AP gavoha] hu [AP yafe]
 tall H beautiful
 "Tall is beautiful."
- e. *[PP leyad ha-Sulxan] hu [NP makom tov la-Sevet]
 near the-table H place good to-seat
 "Next to the table is a good place to sit."

As for predicates, though Sichel (1997) claims that only DPs and specific NPs are possible (37), we have also seen sentences with APs in (32), and in the next chapter we will also see CPs and infinitivals (see ex. 47). To summarize, there is no syntactic-categorial generalization

⁸ Although colors, which seems to be APs, can occur with pronH:

- (i) kaxol hu yafe
 blue H nice
 "Blue is nice."

I think that there is some reason to think that colors are really ambiguous between APs and NPs, since they may occur as complements of prepositions, as in (ii)

- (ii) cavati et ha-kise be-kaxol
 I-painted Acc the-chair in-blue
 "I painted the chair blue."

I leave this question open.

that could capture the difference between the distribution of pronH and pronZ. In the next chapter I turn to look at a more restricted class of copular sentences – pseudoclefts – in order to point out the difference between pronH and pronZ.

1.4 SUMMARY

The main differences between pronH and pronZ that were introduced in this chapter are summarized in the following table:

	PronH	pronZ
Possible subjects	Nominal (NPs & DPs)	All categories
Agreement	With the subject	With the predicate (or no agreement)
Sentence type	Predicational & Identity	?

We see that pronH and pronZ do not have the same range of subjects. We see further that pronH agrees with the subject and pronZ with the predicate, but in the next chapter we will see that the situation is more complex, and I will argue for the existence of two kinds of pronZ – agreeing and non-agreeing – as assumed in Sichel (1997). As for the relation encoded in these sentences, we see that pronH sentences can be predicational or identity sentences; the relation encoded in pronZ will be the main issue of the next two chapters.

Chapter 2

Two Pronominal Copulas and Three Pseudoclefts

In this chapter I study the personal pronH and the impersonal/demonstrative pronZ as they occur in pseudoclefts – copular sentences that host a Free Relative (FR) as their subject – and I show that pronH and pronZ result in predicational and specificational pseudoclefts respectively. To support this claim, I present various tests that were introduced in Higgins' (1973) comprehensive work on English pseudoclefts. I then focus on the special properties of Hebrew specificational pseudoclefts and show that connectivity is not to be assimilated with specificational pseudoclefts.

This chapter is constructed as follows. Section 2.1 presents the basic ambiguity of pseudoclefts and shows its relevance to pronH and pronZ; section 2.2 is a detour exploring the properties of FRs in Hebrew; and section 2.3 introduces two types of specificational pseudoclefts: one which displays connectivity effects and one which does not.

2.1 TWO PRONOMINAL COPULAS IN PSEUDOCLEFTS

The following pseudocleft sentence is ambiguous between what Higgins (1973), following Akmajian (1970), calls a predicational and a specificational reading:

- (1) What John is is important. (adapted from Higgins p. 7)

On the predicational reading, *what John is* refers to John's job or position, and the sentence says that this job is important. The specificational reading talks about John himself, assigning the property *important* to him personally, which is very similar to simply saying *John is important*. So in this case the two readings are truth-conditionally different: the predicational reading may be true if, for instance, John is the president which is an important job, although John himself may stop being important once he loses this job; but for the specificational reading to be true, John himself must be important.

A second example of an ambiguous pseudocleft is given in (2):

- (2) What I'm pointing at is a cat. (Higgins, p. 212)

On the predicational reading, the FR subject picks out “the nearest object intersected by the line formed by producing the longitudinal axis of my forefinger and the sentence says of that object that it is a cat.” (Higgins, p.212). This is similar to saying *That object is a cat*. For the specificational reading, Higgins suggests an analogy to a list where the FR serves as the heading of the list and the predicate complement (Higgins’ term for the post-copular phrase which I use throughout this section) is the single item on the list, as in *what I'm pointing at: a cat*. Intuitively, the predicational reading teaches you that the object at which I’m pointing is a cat, whereas the specificational reading tells you to which direction I’m pointing. Note that here, unlike in the previous example, both versions are true in the same situation in the world: when I’m pointing at a cat.

Against the background of the ambiguity of (some) English pseudoclefts, let us turn to their Hebrew counterparts. As we saw in the previous chapter, Hebrew does not have a present-tense verbal copula, but two pronominal copulas: the personal pronH and the impersonal/demonstrative pronZ. Therefore, the ambiguous English pseudocleft in (2) has two different equivalents in Hebrew:

- (3) a. ma Se-ani macbi'a alav hu xatul
 what that-I point on-it H cat
 b. ma Se-ani macbi'a alav ze xatul
 what that-I point on-it Z cat

Interestingly, the meaning contrast in the minimal pair in (3) corresponds with the two aforementioned readings. The pronH version (3a) has the predicational reading and the pronZ version has the specificational reading. On the basis of the intuitions concerning the above examples, I suggest the following generalization for Hebrew pseudoclefts:

- (4) a. A pronH pseudocleft is (unambiguously) predicational.
 b. A pronZ pseudocleft is (unambiguously) specificational¹.

The rest of this section is devoted to presenting Higgins' (1973) structural tests that are used to argue that predicational and specificational pseudoclefts not only mean something different, but they are actually separate constructions. Higgins gives the following taxonomy to refer to them:

(5)	<u>Relation</u>	<u>Subject</u>	<u>Predicate Complement</u>	
	a. Predicational	Referential	Predicational	
	b. Specificational	Superscriptional	Specificational	(Higgins, p. 264)

While “referential” and “predicational” are relatively well-defined terms, Higgins does not explain the newly introduced “superscriptional” and “specificational” beyond giving their intuitive meaning of describing a one-item list. The nature of the specificational relation will be the central issue of chapter 3.

Together with using the tests to argue for the existence of two separate pseudocleft constructions, I will be using the same tests to check the validity of the generalization in (4) that Hebrew lexicalizes these constructions in the choice of pron. If Higgins' tests turn out to support this generalization, the existence of two distinct pronominal copulas in Hebrew will then reinforce Higgins' distinction between the two sentence types, which was based in his work purely on English data.

2.1.1 The Nature of the Predicate Complement

While the predicate complement in a predicational pseudocleft is predicational, i.e. a semantic predicate, Higgins (1973) uses three structural tests – coordination, deletion and

¹ It seems to be the case that if a pronZ pseudocleft is ungrammatical under the specificational reading, a predicational reading can be forced in colloquial speech - if one is available. However, even under these circumstances the pseudocleft does not behave like a predicational pseudocleft on the syntactic tests. See chapter 5 (section 5.3) for some discussion of pronZ predicational (non-pseudocleft) sentences.

extraction – to justify the term “specificational” for the predicate complement in a specificational pseudocleft by showing that it is not predicative.

2.1.1.1 Coordinating Predicates

Since predicates cannot be coordinated with non-predicates, one way to ensure that the predicate complement position hosts an (unambiguous) predicative phrase, i.e. that the pseudocleft must be predicational, is by coordinating an ambiguous phrase with an unambiguous predicate. This is exemplified in (6), where the ambiguous NP from (2) is conjoined with a verbal predicate and the sentence has the predicational reading, where I’m teaching you what the object at which I’m pointing is, but lacks the specificational reading, where I’m telling to which direction I’m pointing:

- (6) What I’m pointing at is a cat and is called Jemima. pr *sp (Higgins, p. 213)

Applying this test to Hebrew, we find that pronH, but not pronZ, may occur with the coordinate predicates:

- (7) ma Se-ani macbi'a alav hu/*ze xatul ve-mexune garfield
 what that-I point on-it H/*Z cat and-called Garfield
 “What I’m pointing at is a cat and is called Garfield.”

This gives the first supporting evidence to our generalization that pronH yields the predicational reading, and also that pronZ yields the specificational reading.

2.1.1.2 Deleting the Predicate Complement

The second distinction between a predicational and a specificational predicate complement shows up if we try to delete them in an appropriate context. (8a) is a coordination of two ambiguous pseudoclefts: on the predicational reading, John and Mary’s jobs are important and interesting, and on the specificational reading, John and Mary themselves are important and interesting. Higgins shows that deleting the predicate complement from the second pseudocleft causes the specificational reading to disappear, i.e. deletion is possible for a predicational predicate complement but not for a

specificational one:

- (8) a. What John is is important and what Mary is is interesting. pr sp
 b. What John is is important and what Mary is is too. pr *sp
 c. What John is is important, but what Mary is isn't. pr *sp (Higgins, p. 302)

Turning to Hebrew, we find that independently of the particular properties of pseudoclefts, deleting the predicate complement in a pron sentence necessitates the deletion of the copula as well, so the test does not transfer simply:

- (9) a. dan hu more le-hit'amlut ve-ron (*hu) gam
 Dan H teacher to-gym and-Ron (*H) also
 “Dan is a gym teacher and Ron is too.”
 b. dan hu more le-hit'amlut, aval ron (*hu) lo
 Dan H teacher to-gym but Ron (*H) not
 “Dan is a gym teacher, but Ron isn't.”

The Hebrew equivalent of (8a) is in (10), and it allows for both pronH, which yields the predicational reading that Dan and Ron's previous positions are important and interesting, and pronZ, which yields the specificational reading that Dan and Ron themselves were important and interesting:

- (10) ma Se-dan haya hu/ze xaSuv ve-ma Se-ron haya hu/ze me'anyen²
 what that-Dan was H/Z important and-what that-Ron was H/Z interesting
 “What Dan was is/was important and what Ron was is/was interesting.”

² The FR in the pseudocleft in (10) is put in the past tense due to an independent feature of Hebrew. Berman & Grosu (1976) noticed that unlike the past/future copular verb, the personal pronH cannot be stranded in the end of a clause, as exemplified in the following relative clauses (Rapoport (1987) attributes this behavior to pronH being a clitic on the element following it.):

- (i) a. *[ma Se-dan hu _]
 what that-Dan H “What Dan is”
 b. [ma Se-dan haya _]
 what that-Dan was “What Dan was”

Putting the FR in the past tense would be ungrammatical in English due to the lack of tense harmony required in specificational pseudoclefts (the pronominal copulas are present tense). But Hebrew all in all lacks tense harmony, so that in specificational pseudoclefts when the FR contains past/future tense, the copula may be a pronominal copula.

Adding an elided clause to the pseudoclefts in (10) yields a pattern parallel to the English facts: ellipsis is possible when the copula of the antecedent is pronH, as in (11), but not when it is pronZ, as in (12):

- (11) a. [ma Se-dan haya _] hu xaSuv, ve-[ma Se-ron haya _] gam
 what that-Dan was H important and-what that-Ron was also
 “What Dan was is important and what Ron was is too.”
- b. [ma Se-dan haya _] hu xaSuv, aval [ma Se-ron haya _] lo
 what that-Dan was H important but what that-Ron was not
 “What Dan was is important and what Ron was is not.”
- (12) a. *[ma Se-dan haya _] ze xaSuv, ve-[ma Se-ron haya _] gam
 what that-Dan was Z important and-what that-Ron was also
 “*What Dan was was important and what Ron was was too.”
- b. *[ma Se-dan haya _] ze xaSuv, aval [ma Se-ron haya _] lo
 what that-Dan was Z important but what that-Ron was not
 “*What Dan was was important and what Ron was was not.”

Assuming the elided clause “copies” its copula from the antecedent, deletion of the predicate complement is possible in pronH pseudoclefts only, supporting our generalization of the pronH-predicational and pronZ-specificational correlation.

2.1.1.3 Extraction out of the Predicate Complement

The last distinction between the two types of predicate complements is the grammaticality of extraction out of them. Higgins shows this to be possible, though not perfect, for the predicational pseudoclefts in (13), but ungrammatical for the specificational ones in (14):

- (13) a. What John is seems to be [important to that woman]. (Higgins, p. 308)
- a'. ?That's the woman who what John is seems to be [important to _].
- b. They said that what Mary was looking at appeared to be [a picture of a kangaroo].
- b'. ?What did they say that what Mary was looking at appeared to be [a picture of _]?

- (14) a. What John is is [proud of that book]. (Higgins, p. 307)

- a'. *This is the book that what John is is [proud of _].
 b. They said that what Mary was going to do was [give the dog to John].
 b'. *Who did they say that what Mary was going to do was [give the dog to _] ?

Accordingly, we expect extraction out of the predicate complement to be possible in pronH but not in pronZ pseudoclefts. When both prons are available, as in (15), the contrast is not as strong as in English (see again footnote 1), but when the pseudocleft allows only for one pron, as in (16) for pronH and in (17) for pronZ, we see that the former but not the latter allows for extraction:

- (15) a. hem xoSvim Se-ma Se-dan haya hu/ze [mo'il la-xevra]
 they think that-what that-Dan was H/Z helpful to-the-society
 "They think that what Dan was is/was helpful to society."
 b. lemi hem xoSvim Se-ma Se-dan haya hu/??ze [mo'il _] ?
 to-who they think that-what that-Dan was H/Z helpful
 "To whom do they think that what Dan was is helpful?"
- (16) a. hem xoSvim Se-ma Se-dan bana hu/*ze [mo'il la-xevra]
 they think that-what that-Dan built H/*Z helpful to-the-society
 "They think that what Dan built is helpful to society."
 b. lemi hem xoSvim Se-ma Se-dan bana hu [mo'il _] ?
 to-who they think that-what that-Dan built H helpful
 "To whom do they think that what Dan built is helpful?"
- (17) a. hem xoSvim Se-ma Se-dan haya *hu/ze [nexmad la-orxim]
 they think that-what that-Dan was *H/Z nice to-the-guests
 "They think that what Dan was was nice to the guests."
 b. *le-mi hem xoSvim Se-ma Se-dan haya ze [nexmad _] ?
 to-who they think that-what that-Dan was Z nice
 "**To whom do they think that what Dan was was nice?"

Using the syntactic tools of coordination, deletion and extraction, Higgins convincingly shows that the predicate complements in the predicational and specificational readings of

pseudoclefts have distinct structural behavior. Thus, if the predicate complement in a predicational pseudocleft is predicative, the specificational predicate complement could not be predicative. Implementing these tests for Hebrew reveals that the same distinctions exist with pronH and pronZ pseudoclefts respectively, providing preliminary support for the correlation between the choice of pron and the type of pseudocleft, as suggested in the generalization in (4).

2.1.2 The Referentiality of the Subject

Recall Higgins' (1973) taxonomy for the FR subject in pseudoclefts: “referential” for the predicational subject and “superscriptional” for the specificational subject. To justify the latter, Higgins aims to show that it is not referential. In (18a) the negated FR does not pick out an object in the world of which we can say that it is a tie, so this sentence only has the specificational reading where I don't like John's tie:

- (18) a. What I don't like about John is his tie. (Higgins, p. 214)
 b. What I don't like about John is dotted.

Note that it is possible to force a reference for the negative FR and get the predicational reading of (18a) as well as the unambiguously predicational pseudocleft (18b), e.g. in the context of a guessing game where one is describing John's tie. But we can choose a negative FR for which a concrete object denotation is very unnatural and can only be found in a very specific context, as is the case for (19), so the pseudocleft has the specificational reading (that John doesn't like milk) but lacks the predicational reading (that there is an object that John doesn't like and it is called milk):

- (19) What John doesn't like is milk.

In the Hebrew version of (19), only pronZ is possible:

- (20) ma Se-dan lo ohev *hu/ze xalav
 what that-Dan not love *H/Z milk
 “What Dan doesn't like is milk.”

The fact that pronH is blocked when the predicational reading is absent and pronZ occur

when the specificational reading is available serves as further evidence for the generalization that the two copulas – pronH and pronZ – yield the two types of pseudoclefts – predicational and specificational.

2.1.3 Omitting the Copula

In the previous sections we considered the properties of the subject and predicate complement of pseudoclefts. The third element in a copular sentence is the copula, which can be omitted from a predicational pseudocleft but not from a specificational one. This is shown in (21), where (21a) is a coordination of ambiguous pseudoclefts and (21b), from which the copula was omitted, has the predicational reading but lacks the specificational reading, i.e. the copula may be omitted only when the sentence is predicational:

- (21) a. What John is is interesting and what Bill is is important. pr sp (Higgins, p. 305)
 b. What John is is interesting and what Bill is ... important. pr *sp

An analogous situation is found in Hebrew with respect to (22), where both prons are possible. In accordance with our generalization, pronH can be omitted, as in (23a), but the omission of pronZ causes ungrammaticality, as in (23b):

- (22) [ma Se-dan haya _] hu/ze xaSuv, ve-[ma Se-ron haya _] hu/ze me'anyen.
 what that-Dan was H/Z important and-what that-Ron was H/Z interesting
 pronH: "What Dan was is important and what Ron was is interesting."
 pronZ: "What Dan was was important and what Ron was was interesting."
- (23) a. [ma Se-dan haya _] hu xaSuv, ve-[ma Se-ron haya _] ... me'anyen.
 what that-Dan was H important and-what that-Ron was ... interesting
 "What Dan was is important and what Ron was ... interesting."
 b. *[ma Se-dan haya _] ze xaSuv, ve-[ma Se-ron haya _] ... me'anyen.
 what that-Dan was Z important and-what that-Ron was ... interesting
 "*What Dan was was important and what Ron was ... interesting."

2.1.4 Sentential Adverbs

Up to this point we looked at the behavior of the different parts of pseudoclefts. Now we go on to examine pseudoclefts as a whole with respect to sentential adverbs. Higgins (1973) points out that modifying an ambiguous pseudocleft using a sentential adverb causes the specificational reading to disappear. In (24) we find modal adverbs: the modified pseudocleft (24a) only has the predicational reading, where John's position is (probably) important, but lacks the specificational reading that John himself is (probably) important; (24b) only means that the object you saw is (perhaps) a kangaroo, but not that you perhaps saw a kangaroo. In (25), the ambiguous pseudocleft modified by *also* has the predicational reading that the object at which I'm pointing is another kangaroo, and not the specificational reading that I'm pointing at two things:

- (24) a. What John is is probably important.pr *sp (Higgins, p. 318)
 b. What you saw was perhaps a kangaroo. pr *sp
- (25) What I'm pointing at is also a kangaroo. pr *sp (Higgins, p. 10)

A third adverbial that cannot modify a specificational pseudocleft is negation. The following unambiguous specificational pseudoclefts show that it is impossible to negate a specificational pseudocleft, unless negation is contrastive:

- (26) a. ?What John is isn't proud of himself. (Higgins, p. 321)
 a'. What John is isn't proud of himself, but proud of his work.
 b. ?What Mary did wasn't to wash herself.
 b'. What Mary did wasn't to wash herself, but to wash her daughter.

Thus sentential adverbs that pertain to pseudoclefts as a whole are an additional tool to distinguish predicational and specificational pseudoclefts.

An analogous pattern is found in Hebrew. (27) shows that a modal adverb can only modify a pronH pseudocleft; (28) shows that *gam* "also" is possible as a sentence modifier only with pronH; and (29) shows negation to be possible for pronH pseudoclefts, but only as contrastive in pronZ pseudoclefts (the translations are of the grammatical reading):

- (27) [ma Se-dan haya _] hu/*ze **be-hexrax** mo'il la-xevra
 what that-Dan was H/*Z in-must helpful to-the-society
 “What Dan was is definitely helpful to society.”
- (28) [ma Se-dan haya _] hu/??ze **gam** xaSuv
 what that-Dan was H/??Z also important
 “What Dan was is also important.”
- (29) a. [ma Se-rut osa _] hu **lo** musari
 what that-Ruth does H not moral
 “What Ruth is doing is not moral.”
- b. [ma Se-rut osa _] ze **lo** le-hitraxec ??(ela li-Stof yadayim)
 what that-Ruth does Z not to-wash-herself ??(but to-wash hands)
 “What Ruth is doing isn't to take a shower (but to wash her hands).”

Sentential adverbs that yield the same pattern with pronZ pseudoclefts in Hebrew as with specificational pseudoclefts in English serve as additional supporting evidence for the pronZ-specificational correlation.

2.1.5 Syntactic Connectivity: Binding

The most well-known characteristic of specificational pseudoclefts is the fact that the two parts of the pseudocleft behave like a simple sentence with respect to various syntactic (and semantic) phenomena, i.e. the post-copular phrase in a specificational pseudocleft behaves in some ways as if it is sitting inside the gap of the FR. These phenomena, which are labeled (syntactic) connectivity, typically include: binding effects, the licensing of polarity sensitivity items, preservation of opacity and Case marking. This behavior of specificational pseudoclefts stands in contrast to predicational pseudoclefts where the same effects are not found. In this section I concentrate on binding effects, the kind of connectivity discussed in Higgins (1973).

Predicational and specificational pseudoclefts exhibit different behavior with respect to licensing of anaphors in their post-copular position. The reflexive in (30a), the pronoun in (31a) and the full NP in (32a) are not c-commanded by the relevant NP in the FR:

- (30) a. [What John_i is] is [important to himself_i] *pr sp
 b. John_i is important to himself_i
- (31) a. [What John_i is] is [important to him_i] pr *sp
 b. *John_i is important to him_i
- (32) a. [What he_i is] is [important to John_i] pr *sp
 b. *He_i is important to John_i

(30a) only means that John is important to himself and not that his job is important, which is the same reading as in (30b); (31a) only means that John's job is important to him; and (32a) again only means that his job is important to John. That is, the predicational readings are available in accordance with the binding conditions A, B and C: the free reflexive in (30a) causes ungrammaticality, but both the free pronoun in (31a) and the free full NP in (32a) yield a grammatical predicational reading. The specificational reading is available for exactly the opposite cases, counter to the Binding conditions: the reflexive in (30a) yields a grammatical specificational reading, while the pronoun and the full NP do not. This is the same as in the simple (b) paraphrases, in which the anaphors are bound.

We find the same contrast in Hebrew with respect to conditions A and B. The free reflexive in (33a) is not possible with pronH, but the free pronoun in (34a) is. The converse is true for pronZ, which is parallel to the (b) paraphrases:

- (33) a. [ma Se-dan_i haya _] *hu/ze mesukan le-acmo_i
 what that-Dan was *H/Z dangerous to-himself
 "What Dan_i was was dangerous to himself_i."
 b. dan_i haya mesukan le-acmo_i
 Dan was dangerous to-himself
 "Dan_i was dangerous to himself_i."
- (34) a. [ma Se-dan_i haya _] hu/*ze mesukan lo_i
 what that-Dan was H/*Z dangerous to-him
 "What Dan_i was is dangerous to him_i."

b. *dan_i haya mesukan lo_i

Dan was dangerous to-him

“*Dan_i was dangerous to him_i.”

Condition C effects do not create a mirror image of pronH and pronZ. The pronZ version is out, as expected from the paraphrase, but the pronH version is also quite bad, even though it is not expected to be ‘connected’:

(35) a. [ma Se-hu_i haya _] ??hu/*ze mesukan le-dan_i

what that-he was ??H/*Z dangerous to-Dan

“What he_i was is dangerous to Dan_i.”

b. *hu_i haya mesukan le-dan_i

he was dangerous to-Dan

“*He_i was dangerous to Dan_i.”

This seems to show that the distribution of full NPs in Hebrew is not simply governed by condition C and not that connectivity effects of condition C are available with pronH. Thus, I will ignore condition C effects throughout. However, the other binding conditions do show that pronH and pronZ pseudoclefts pattern with predicational and specificational pseudoclefts in English and serve as the final evidence for the correlation suggested in our generalization.

To summarize section 2.1: we saw that the predicational and specificational readings of pseudoclefts behave differently with respect to various syntactic and semantic phenomena, as presented in Higgins (1973), i.e. they are two separate copular constructions. In what follows, I use the following terminology to refer to their parts: *subject* and *predicate* for the predicational pseudocleft and *subject* and *focus phrase*, a common term in the literature, for the specificational one.

Using Higgins’ tests as diagnostics, I have established the correlation between pronH and predicational pseudoclefts on the one hand, and pronZ and specificational pseudoclefts on the other hand. That is, Hebrew lexicalizes the distinction between the two

types of pseudoclefts in the choice of the pronominal copula. In the rest of this chapter I look at the special characteristics of pronZ-specificational pseudoclefts in Hebrew, but first I explore in detail some facts about Hebrew FRs.

2.2 FREE RELATIVES IN HEBREW

This section presents two features of FRs in Hebrew that are relevant to their occurrence in pseudoclefts. Specifically, I focus on the possible *wh* words in FRs and on quantifiers that take FRs as complements.

2.2.1 The *wh* Words

There are five *wh* words in Hebrew that may be used to introduce FRs: *mi* “who”, *ma* “what”, *eix* “how”, *eifo* “where” and *matay* “when”. This section explores their agreement behavior as well as their possible occurrence in predicational and specificational pseudoclefts.

2.2.1.1 *mi* “who”

The human referring *mi* “who” may bind a human-referring gap, which can only appear in argument position (subject or object), so that a *mi* FR always denotes a human referent. Like other NPs in Hebrew, these FRs have agreement features. When the gap is in object position, the FR is either masculine or feminine. This is shown in (36), where the FR is the subject of the sentence, and the present-tense main verb, which generally agrees in number and gender with the subject, may be either masculine (a) or feminine (b):

(36) a. [mi Se-ha-mora ohevet _] mekabel ciyunim tovim

who that-the-teacher loves gets(m) grades good

“Whoever the teacher loves gets good grades.”

b. [mi Se-ha-mora ohevet _] mekabelet ciyunim tovim

who that-the-teacher loves gets(f) grades good

“Whoever (of the girls) the teacher loves gets good grades.”

When the gap of the FR is in subject position the “gender” of the FR is determined by the agreement features on the verb inside the FR. Again, we can learn this from the agreement features of the main verb in (37) – it must be masculine in (a) and feminine in (b):

- (37) a. [mi Se-kibel ciyun tov] ohev/*ohevet et ha-mora
 who that-got(m) grade good loves(m)/*loves(f) Acc the-teacher
 “Whoever got a good grade likes the teacher.”
- b. [mi Se-kibla ciyun tov] *ohev/ohevet et ha-mora
 who that-got(f) grade good *loves(m)/loves(f) Acc the-teacher
 “Whoever (of the girls) got a good grade likes the teacher.”

FRs introduced by *mi* “who” are NPs, so – as we saw in the previous chapter (section 1.3.5) – they may occur as a subject of both pronH and pronZ, i.e. a *mi* FR is possible in both predicational and specificational pseudoclefts.

2.2.1.2 *ma* “what”

The *wh* word *ma* “what” is less restricted and can bind either a (non-human) argument gap or a predicate gap; in both cases the FR has masculine-singular agreement features. This is exemplified in (38) for a FR with a predicate gap and in (39) for a FR with an object gap. Although the gap in the FR in (38) is feminine, the main verb must be masculine-singular; (39), where the masculine-singular main verb again indicates that the FR has masculine-singular agreement features, is an appropriate continuation of the first clause which creates a feminine antecedent for the FR (‘banana’ is feminine in Hebrew):

- (38) [ma Se-rut hayta _] ya’azor/*ta’azor la ba-xayim
 what that-Ruth was(f) will-help(m)/*will-help her in-the-life
 “What Ruth was will help her in life.” (e.g. she was a lifeguard)
- (39) (axalti banana, ve-kanir’e Se) [ma Se-axalti _] kilkel/*kilkela li et ha-te’avon.
 (I-ate banana(f) and-it-seems that) what that-ate-I ruined(m)/*ruined(f) to-me Acc the-appetite
 “(I ate a banana, and it seems that) what I ate ruined my appetite.”

Further, when the gap of the FR is in subject position, the inside verb is always masculine-singular, as exemplified in (40). Again, this FR can also be used when the actual referent

is feminine:

- (40) [ma Se-kikkel/*kikkela li et ha-te'avon] kikkel/*kikkela li gam et macav ha-ruax
 what that ruined(m)/*ruined(f) to-me Acc the-appetite ruined(m)/*ruined(f) to-me also state the-mind
 “What ruined my appetite also ruined my mood.”

Like *mi* FRs, *ma* FRs are NPs and as such they can occur in both predicational and specificational pseudoclefts.

2.2.1.3 Non-NP Free Relatives

The FRs introduced by *eix* “how”, *eifo* “where” and *matay* “when” occur as adverbials in simple sentences:

- (41) a. ani etnaheg [eix Se-ata mitnaheg]
 I will-behave how that-you behave
 “I will behave the way you behave.”
- b. ani axake lexa [eifo Se-ani tamid yoSevet]
 I will-wait to-you where that-I always sit
 “I will wait for you where I always sit.”
- c. ani avo [matay Se-kavanu le-hipageS]
 I will-come when that-we-set to-meet
 “I will come at the time we set.”

Interestingly, these are impossible as subjects of pseudoclefts. For predicational pseudocleft, this is expected from the fact that only NPs are possible in subject position of pronH (see again chapter 1, section 1.3.5), but they are also impossible in specificational pseudocleft, even though no such restriction applies to the subject position of pronZ:

- (42) a. *[eix Se-dan hitnaheg] ze be-gasut / yafe
 how that-Dan behaved pronZ in-rudeness / nice
 “How Dan behaved was rude/nice.”

- b. *[eifo Se-ani tamid yoSevet] ze ba-kafiteria
 where that-I always sit Z in-the-cafeteria
 “Where I always sit is in the cafeteria.”
- c. ??matay Se-amarti lexa lavo ze be-Seva
 when that-I-told to-you to-come Z in-seven
 “The time I asked you to be here was seven.”

I come back to these facts when I discuss the denotation of FRs in Hebrew in the next chapter (section 3.2.3.2).

2.2.2 Quantifying Over the Free Relative

A second characteristic of (the NP) FRs in Hebrew is that they can be complements of quantifiers – *kol* “every/all” in (43a) and *rov* “most” in (43b):

- (43) a. karati et kol ma Se-dekart katav
 read-I Acc every what that-Descartes wrote
 “I read everything Descartes wrote.”
- b. karati et rov ma Se-dekart katav
 read-I Acc most what that-Descartes wrote
 “I read most of what Descartes wrote.”

Now, consider the predicational and specificational pseudoclefts in (44), which are based on an example from Doron (1983) (she attributes it to Emmon Bach):

- (44) a. ma Se-dekart katav hu hoxaxa le-kiyum-o³ (Doron, p.89)
 what that-Descartes wrote H proof to-existence-his
 “What Descartes wrote is a proof of his existence.”
- b. ma Se-dekart katav ze hoxaxa le-kiyum-o
 what that-Descartes wrote Z proof to-existence-his
 “What Descartes wrote was a proof of his existence.”

³ Doron gives only the pronH version (she does not discuss pronZ) and she is somewhat inconsistent about its meaning. On the one hand, she says it is specificational in the sense of Higgins (1973), but, on the other hand, she paraphrases it as *What Descartes wrote proves his existence* which is predicational.

The predicational pseudocleft (44a) asserts that the thing Descartes wrote proves his existence; this may be anything, whether a philosophical essay, a note to his lover or a list of things he has to do. The specificational pseudocleft (44b) may be paraphrased by the simple sentence *Descartes wrote a proof of his existence*. Now compare these readings with their quantified counterparts in (45-46):

- (45) a. kol ma Se-dekart katav hu hoxaxa le-kiyum-o
 every what that-Descartes wrote H proof to-existence-his
 b. rov ma Se-dekart katav hu hoxaxa le-kiyum-o
 most what that-Descartes wrote H proof to-existence-his
- (46) a. kol ma Se-dekart katav ze hoxaxa le-kiyum-o
 every what that-Descartes wrote Z proof to-existence-his
 b. rov ma Se-dekart katav ze hoxaxa le-kiyum-o
 most what that-Descartes wrote Z proof to-existence-his

The predicational pseudoclefts in (45) assert that every piece of written material, or most pieces of written material, constitute a proof of Descartes' existence. This may be said by my philosophy professor, if I ask her how we could know that Descartes really existed. The specificational pseudoclefts in (46), on the other hand, assert that a proof of his existence is all the thing (i.e. the only thing), or most of the things, Descartes wrote. This would be an appropriate answer if I inquire about the content of Descartes' work. This aspect of pseudoclefts will provide an additional perspective for the investigation of the specificational relation in the next chapter.

2.3 TWO TYPES OF PRON-Z PSEUDOCLEFTS

In this section we come back to pseudoclefts and explore the special characteristics of Hebrew specificational pseudoclefts which – as established in section 2.1 – are induced by pronZ. We look at the agreement behavior of pronH and pronZ and find that there are actually two kinds of pronZ pseudoclefts – agreeing and non-agreeing – that differ with respect to connectivity effects, but yet seem to be specificational.

2.3.1 The Basic Agreement Facts

We saw in chapter 1 that pronH always agrees with its subject and pronZ – when it exhibits agreement – agrees with the predicate. Therefore, we expect that in a predicational pseudocleft pronH will agree with the FR and in a specificational pseudocleft pronZ will agree with the focus phrase. For simplicity, I concentrate on the singular forms only.

In a predicational pseudocleft pronH and the predicate (when applicable) agree with the FR subject in number and gender. This is exemplified for different kinds of FRs and predicates in (47). A *ma* FR in (a) has masculine pronH and AP predicate; an object gap *mi* FR in (b) is possible with either masculine pronH and NP predicate or with feminine ones; and the subject gap *mi* FRs in (c-d) are possible with either masculine or feminine pronH, depending on the agreement of the verb inside the FR (the predicate does not change):

- (47) a. [ma Se-noxal _ ha-yom] hu ta'im/*hi te'ima
 what that-eat-we today H(m) tasty(m)/* H(f) tasty(f)
 “What we will eat today is tasty.”
- b. [mi Se-ha-mora ohevet _] hu talmid tov / hi talmida tova
 who that-the-teacher loves H(m) student(m) good(m) / H(f) student(f) good(f)
 “The person(s) the teacher loves is a good student.”
- c. [mi Se-nixnas axSav] hu/*hi roS ha-memSala
 who that-entered(m) now H(m)/*H(f) head(m) the-government
 “The man that just entered is the prime minister.”
- d. [mi Se-nixnesa axSav] *hu/hi roS ha-memSala
 who that-entered(f) now *H(m)/H(f) head(m) the-government
 “The woman that just entered is the prime minister.”

Turning to pronZ-specificational pseudoclefts, we find that the agreement behavior is more complex. When the FR gap is in predicate position, the predicate across the copula is

“connected” to the gap in the FR, as we saw in section 2.1.5 for binding effects. This is exemplified in (48a) for a masculine subject and in (48b) for a feminine subject. In (49) we see that even when both elements surrounding the copula are feminine, pronZ can only occur in its masculine-singular form *ze*⁴:

- (48) a. [ma Se-dan haya _] ze nexmad/*nexmada
 what that-Dan was(m) Z(m) nice(m)/*nice(f)
 “What Dan was was nice.”
- b. [ma Se-rut hayta _] ze *nexmad/nexmada
 what that-Ruth was(f) Z(m) *nice(m)/nice(f)
 “What Ruth was was nice.”
- (49) [ma Se-rut hayta _] ze/*zot nexmada
 what that-Ruth was(f) Z(m)/*Z(f) nice(f)
 “What Ruth was was nice.”

When the FR gap is in argument position, the agreement behavior of pronZ depends on the focus phrase, as we saw in chapter 1. If the focus phrase does not have agreement features, as is the case for the infinitive in (50a) and for the CP in (50b), pronZ occurs in its masculine-singular form *ze*:

- (50) a. ma Se-meri ohevet ze li-Son
 what that-Mary loves Z(m) to-sleep
 “What Mary likes is to sleep.”
- b. ma Se-dan hici'a ze Se-nelex ha-bayta
 what that-dan suggested Z(m) that-we-will-go the-house
 “What Dan suggested was that we went home.”

If the focus phrase has explicit agreement features, as in the case of NPs, pronZ may either

⁴ Related examples are specificational pseudoclefts where the focus phrase is a VP. Here we also find agreement across the copula but only the masculine-singular form of pronZ, as in (i):

- (i) ma Se-rut asta ze/*zot halxa ha-bayta
 what that-Ruth did(f) Z(m)/*Z(f) went(f) home
 “What Ruth did was go home.”

The analysis of these depends on the analysis for VP ellipsis, which is beyond the scope of this thesis.

agree with the NP or bear the masculine- singular form *ze*. This is overt when the NP is feminine, as in (51), but not when the NP is masculine, as in (52):

- (51) a. mi Se-pagaSnu etmol ba-Suk ze/zot rut
 who that-we-met yesterday in-the-market Z(m)/Z(f) Ruth
 “The person we met yesterday in the market is Ruth.”
- b. ma Se-dekart katav ze/zot hoxaxa le-kiyum ha-el
 what that-Descartes wrote Z(m)/Z(f) proof(f) to-existence the-god
 “What Descartes wrote is a proof of God's existence.”
- (52) a. mi Se-pagaSnu etmol ba-Suk ze/*zot dan
 who that-we-met yesterday in-the-market Z(m)/*Z(f) Dan
 “The person we met yesterday in the market is Dan.”
- b. ma Se-dekart katav ze/*zot ma'amar al ha-kiyum
 what that-Descartes wrote Z(m)/*Z(f) article(m) about the-existence
 “What Descartes wrote is an article about existence.”

But if the FR has explicit agreement features (see again section 2.2.1.1 above), there is no optional agreement: pronZ and the FR must show the same features. Again, this is overt only when the focus phrase is feminine. In (53), where the focus phrase is masculine, only masculine pronZ is possible and thus the FR is also masculine. In (54), however, both masculine and feminine pronZ are possible, and the FR must have the same features (which are determined by the inside verb):

- (53) a. mi Se-loke'ax/*lokaxat et rut me-ha-gan ze ha- Saxon
 who that-takes(m)/*takes(f) Acc Ruth from-the-kindergarten Z(m) the-neighbor(m)
- b. *mi Se-loke'ax/lokaxat et rut me-ha-gan zot ha-Saxon
 who that-takes(m)/takes(f) Acc Ruth from-the-kindergarten Z(f) the-neighbor(m)
- both: “The person that takes Ruth from the kindergarten is the neighbor.”

- (54) a. mi Se-loke'ax/*lokaxat et rut me-ha-gan ze ha-metapelet
 who that-takes(m)/*takes(f) Acc Ruth from-the-kindergarten Z(m) the-nanny(f)
- b. mi Se-*loke'ax/lokaxat et rut me-ha-gan zot ha-metapelet
 who that-*takes(m)/takes(f) Acc Ruth from-the-kindergarten Z(f) the-nanny(f)

both: “The person that takes Ruth from the kindergarten is the nanny.”

The existence of optional agreement of pronZ (in some cases) is surprising, since optional agreement does not generally characterize Hebrew. The fact that the masculine-singular form of pronZ *ze* alternates with the agreeing forms suggests that in these cases it is a neutral form rather than a masculine form. Thus, I propose that there is a neutral (non-agreeing) pronZ alongside the agreeing pronZ – as assumed by Sichel (1997) – and turn to investigate what may be encoded in this ambiguity.

2.3.2 Opacity and Other Connectivity Effects

An apparently unrelated issue is the preservation of opacity across the copula. Consider the English simple sentence (55a) and its pseudoclefted counterpart (55b), which are based on Hebrew examples from Sharvit (1997):

- (55) a. Dan seeks the book that helped Ron finish the thesis.
 b. What Dan seeks _ is the book that helped Ron finish the thesis.

Both sentences are ambiguous between a *de dicto* and a *de re* reading. The *de dicto* reading “may come about if, for example, Dan heard of such a book, and being in the midst of writing his own thesis, wants to get hold of this book, with the hope that it would help him too, but he doesn't know which book it actually is”. On the *de re* reading “Dan is looking for *Barriers* and *Barriers* happens to be the book that helped Ron finish his thesis (although Dan himself may not know it.)” (Sharvit (1997), p.9).

Sharvit points out that this ambiguity does not show up in specificational pseudoclefts in Hebrew. Consider first the simple sentence, where the definite object is obligatorily marked by the Accusative marker *et*, which obligatorily marks all definite direct objects:

- (56) dan mexapes *(et) ha-sefer Se-azar le-ron le-sayem et ha-teza
 Dan seeks Acc the-book that-helped to-Ron to-finish Acc the-thesis
 “Dan seeks the book that helped Ron finish the thesis.” (Sharvit's 24)

Like (55a), (56) is ambiguous between the same *de dicto* and *de re* readings. But the pseudoclefted counterpart of (56) has two versions: with and without the Accusative marker *et*. When *et* is present, as in (57a), both the *de dicto* and the *de re* readings are available, but when it is absent, as in (57b), only the *de re* reading is available:

- (57) a. ma Se-dan mexapes ze **et** ha-sefer Se-azar le-ron le-sayem et ha-teza
 what that-Dan seeks Z(m) **Acc** the-book(m) that-helped to-Ron to-finish Acc the-thesis
 “What Dan seeks is the book that helped Ron finish the thesis.” (Sharvit's 25)
- b. ma Se-dan mexapes ze ha-sefer Se-azar le-ron le-sayem et ha-teza
 what that-Dan seeks Z(m) the-book(m) that-helped to-Ron to-finish Acc the-thesis
 De re of “What Dan seeks is the book that helped Ron finish the thesis.” (Sharvit's 26)

Given these examples, Sharvit concludes that the meaning difference is to be attributed to the semantic role of the Accusative marker *et*.

We can use Sharvit's distinction in our investigation of the agreement facts of *pronZ*. Changing the masculine focus phrase *sefer* “book” into a feminine NP, such as *avoda seminaryonit* “seminar paper”, does not result in the optional agreement we saw in the previous section (for FRs with an argument gap):

- (58) a. ma Se-dan mexapes ze/*zot **et** ha-avoda ha-seminaryonit Se-azra le-ron le-sayem et ha-teza
 what that-Dan seeks Z(n)/*Z(f) Acc the-work the-seminar that-helped to-Ron to-finish Acc the-thesis
 “What Dan seeks is the seminar paper that helped Ron finish the thesis.”
- b. ma Se-dan mexapes ??ze/zot ha- avoda ha-seminaryonit Se-azra le-ron le-sayem et ha-teza
 what that-Dan seeks ??Z(n)/Z(f) the-work the-seminar that-helped to-Ron to-finish Acc the-thesis
 De re of “What Dan seeks is the seminar paper that helped Ron finish the thesis.”

When *et* is present and the sentence has both the *de dicto* and the *de re* readings, *pronZ* must not agree with the focus phrase, but when *et* is absent and only the *de re* reading is available, *pronZ* must agree with the focus phrase. I assume that the same distinction is

present in (57), though not overtly. In order to check which factor affects the agreement of pronZ, I will look at opacity and Accusative marking separately.

Changing the definite direct object into an indefinite, which does not require (in fact, does not allow for) *et*, reveals that the opacity distinction is found without the presence of *et*. So when pronZ does not agree, as in (59a), the sentence has both the de dicto and the de re readings (the existence of pink giraffes is not entailed), but when pronZ agrees, as in (59b), only the de re reading is available (the existence of pink giraffes is entailed):

- (59) a. ma Se-dan mexapes ze jirafa vruda
 what that-Dan seeks Z(n) giraffe(f) pink(f)
 “What Dan seeks is a pink giraffe.”
- b. ma Se-dan mexapes zot jirafa vruda
 what that-Dan seeks Z(f) giraffe(f) pink(f)
 De re of “What Dan seeks is a pink giraffe.”

Thus, we conclude that the availability of preserving opacity across the copula interacts with the agreement behavior of pronZ.

Second, consider (60), where the verb inside the FR is not opaque, but the focus phrase is definite and corresponds to an object gap in the FR. When *et* is present, as in (60a), pronZ must not agree with the focus phrase, and when *et* is absent, pronZ must agree with the focus phrase:

- (60) a. ma Se-kaninu ba-Suk ze/*zot et ha-xulca ha-kxula
 what that-we-bought in-the-market Z(n)/*Z(f) Acc the-shirt(f) the-blue(f)
- b. ma Se-kaninu ba-Suk ??ze/zot ha-xulca ha-kxula
 what that-we-bought in-the-market ??Z(n)/Z(f) the-shirt(f) the-blue(f)
- both: “What we bought in the market is the blue shirt.”

So the agreement behavior of pronZ interacts with the presence and absence of the Accusative marker *et* as well.

The preservation of opacity and Case marking across the copula are two forms of connectivity effects (see again section 2.1.5 above), and they pattern together with respect to the form of pronZ. When pronZ does not agree, i.e. with neutral pronZ, the pseudocleft preserves opacity across the copula and allows (in fact, necessitates) Accusative marking of the focus phrase in accordance with the position of the gap in the FR. When pronZ agrees with the focus phrase, i.e. with agreeing pronZ, both of these effects are blocked.

A third connectivity effect was already mentioned in the previous section. This is the agreement of predicates across the copula, and the relevant example is repeated as (61):

(61) [ma Se-rut hayta _] ze/*zot nexmada
 what that-Ruth was(f) Z(m)/*Z(f) nice(f)

“What Ruth was was nice.”

(Repeated from 49)

When the gap of the FR is in predicate position, and the predicate in the focus phrase agrees with the corresponding gap in the FR, pronZ must not agree, i.e. only neutral pronZ is possible. Thus, I suggest that there are two kinds of pronZ – neutral and agreeing, and the difference between the pseudoclefts they induce is in the availability of connectivity effects. To check this claim further, I turn to examine two additional connectivity effects: binding and the licensing of negative polarity items.

Licensing of negative polarity items across the copula means that the negation is inside the FR licenses the polarity item in the focus phrase, i.e. without c-command, the polarity item is licensed. This is exemplified in (62):

(62) John bought pens, pencils and papers. What he didn't buy was any books. (Sharvit's 8)

Regardless of the forms of pronZ, this is impossible in Hebrew:

(63) (dan maca kol miney katavot, aval) *ma Se-hu lo maca ze/zot af katava relevantit
 Dan found all kinds articles but what that-he not found Z(n)/Z(f) any article(f) relevant(f)

“Dan found all kinds of articles, but what he didn't find was any relevant article.”

I assume that the unavailability of licensing the polarity item *af* “any” is due to its nature, i.e. independent of pronZ, and therefore beyond the scope of the present study.

The other form of connectivity is licensing anaphors across the copula, which was discussed in section 2.1.5 above for (what we now know to be) neutral pronZ. Since we found condition C effects even when they are not expected (in pronH-predicational pseudoclefts) I concentrate here on conditions A and B that are available only for pronZ-specificational pseudoclefts and can therefore be considered connectivity effects. Note that in order to check the interaction of the agreement of pronZ with Binding effects, the focus phrase must be an NP with an embedded anaphor, but since *picture*-NPs allow for both reflexives and pronouns, we cannot consider them here. So we look at bare anaphors in object position. Consider the simple sentences in (64):

- (64) a. *rut_i haxi ohevet et acma_i*
 Ruth most loves Acc herself
 “Ruth_i loves herself_i most.”
- b. **rut_i haxi ohevet ota_i*
 Ruth most loves Acc-her
 “*Ruth_i loves her_i most.”

In accordance with conditions A and B, the bound reflexive in (64a) is grammatical whereas the bound pronoun in (64b) results in ungrammaticality. Note that both anaphors require the Accusative marker *et*, which marks all definite objects, so we are actually dealing with two effects of connectivity together.

Now consider the pseudoclefted counterparts of (64a). (65a) is the neutral pronZ version and (65b) is the agreeing pronZ version:

- (65) a. [*ma Se-rut_i haxi ohevet _*] *ze *(et) acma_i*
 what that-Ruth most loves Z(n) Acc herself
- b. **[ma Se-rut_i haxi ohevet _]* *zot (et) acma_i*
 what that-Ruth most loves Z(f) (Acc) herself
 “What Ruth_i loves most is herself_i.”

We find here the same pattern as with other connectivity effects: with neutral pronZ we find reflexivization as well as obligatory Accusative marking, and with agreeing pronZ

reflexivization is blocked regardless of Accusative marking (though we wouldn't expect to find *et* with agreeing pronZ anyway).

With condition B, our predictions are only partially realized:

- (66) a. *[ma Se-rut_i haxi ohevet _] ze ota_i
 what that-Ruth most loves Z(n) Acc-her
- b. *[ma Se-rut_i haxi ohevet _] zot hi_i (acma)
 what that-Ruth most loves Z(f) she (herself)
 “*What Ruth_i loves most is her_i.”

The neutral pronZ pseudocleft again exhibits connectivity effects: its status is the same as the simple (64b), i.e. ungrammatical. As for the agreeing version, I changed the Accusative pronoun *ota* into the Nominative *hi*, since we saw that agreeing pronZ does not allow for Accusative marking. Nonetheless, the pseudocleft remains ungrammatical, even when the reflexive is added to emphasize the bound reading – counter to condition B of the Binding Theory. In chapter 4 (section 4.2.2) I come back to these data.

What we saw in this section is that there are indeed two types of pronZ pseudoclefts that exhibit different behavior with respect to connectivity, and may be traced back to two kinds of pronZ: neutral and agreeing. Neutral pronZ pseudoclefts behave like English specificational pseudoclefts in that they exhibit connectivity with respect to Binding and preservation of opacity, as well as other effects that are not available in English, such as Accusative marking and the agreement of predicates. Agreeing pronZ pseudoclefts, on the other hand, lack all kinds of connectivity effects. Since connectivity is considered to be a central – maybe even defining – characteristic of specificational pseudoclefts, one may wonder whether agreeing pronZ pseudoclefts are indeed specificational. I address this question in the next section.

2.3.3 Are Both PronZ Pseudoclefts Specificational?

To check the status of the two types of pronZ pseudoclefts I come back to Higgins'

(1973) tests that were used in section 2.1 to distinguish predicational pseudoclefts, induced by pronH, and specificational pseudoclefts, induced by (what we now know to be) neutral pronZ.

First, I compare the status of the focus phrase in the three kinds of pseudoclefts. The three structural tests, repeated from section 2.1.1 above, are coordination in (67), extraction in (68), and deletion in (69):

- (67) ma Se-dekart maca hu/*ze/*zot hoxaxa le-kiyum ha-el ve-mofi'a
 what that-Descartes found H(m)/Z(n)/Z(f) proof(f) to-existence the-god and-occurs
 be-kol sifrey ha-filosofya
 in-all books the-philosophy
 "What Descartes found is a proof of God's existence and occurs in all philosophy books."
- (68) ma Se-dekart maca hu/*ze/*zot [hoxaxa le-kiyum ha-el] ve-ma
 what that-Descartes found H(m)/Z(n)/Z(f) proof(f) to-existence the-god and-what
 Se-Spinoza maca gam
 that-Spinoza found also
 "What Descartes found is a proof of God's existence and what Spinoza found was too."
- (69) a. ma Se-dekart maca hu/*ze/*zot hoxaxa le-kiyum ha-el
 what that-Descartes found H(m)/Z(n)/Z(f) proof(f) to-existence the-god
 "What Descartes found is a proof of God's existence."
 b. le-kiyumo Sel mi ma Se-dekart maca hu/*ze/*zot [hoxaxa _] ?
 to-existence of who what that-Descartes found H(m)/??Z(n)/*Z(f) proof
 "To whose existence what Descartes found is a proof?"

We find that the status of the focus phrase in agreeing pronZ pseudoclefts patterns with the one in neutral pronZ pseudoclefts, and not with the predicational pronH focus phrase on all three tests.

A fourth test concerns the status of the copular element itself. We saw in section 2.1.3 that pronH can be omitted whereas (neutral) pronZ cannot. The minimal tripple in (70) shows that agreeing pronZ patterns with neutral pronZ:

- (70) ma Se-dekart maca hu/*ze/*zot [hoxaxa le-kiyum ha-el] ve-ma Se-Spinoza
 what that-Descartes found H(m)/Z(n)/Z(f) proof(f) to-existence the-god and-what that-Spinoza
 maca ... hoxaxa le-he'ader ha-el
 found proof(f) to-absence the-god
 "What Descartes found is a proof of God's existence and what Spinoza found a proof
 of the absence of God."

The fifth test concerns the possibility of using sentential adverbs. Here again agreeing pronZ patterns with neutral pronZ in blocking the occurrence of *gam* "also":

- (71) ma Se-dekart maca hu/*ze/*zot gam hoxaxa le-kiyum ha-el
 what that-Descartes found H(m)/Z(n)/Z(f) also proof(f) to-existence the-god
 "What Descartes found is also a proof of God's existence."

The last test checks the referentiality of the FR subject. Unlike the tests we saw so far, in (72), where the FR is negated, agreeing pronZ patterns with pronH rather than with neutral pronZ:

- (72) ma Se-dekart lo maca *hu/ze/*zot hoxaxa le-kiyum ha-el
 what that-Descartes not found H(m)/Z(n)/Z(f) proof(f) to-existence the-god
 "What Descartes didn't find is a proof of God's existence."

The fact that agreeing pronZ pseudoclefts behave like neutral pronZ pseudoclefts (except for the referentiality test) suggests that they are specificational rather than predicational, as could have been suggested from the fact that they do not exhibit connectivity.

2.4 CONCLUSIONS

This chapter introduced three types of pseudoclefts in Hebrew. In the first part of the chapter I have established the correlation between the personal pronH and the impersonal/demonstrative pronZ pronominal copulas and the predicational and specificational types of pseudoclefts respectively. In the next chapter I will use this overt distinction to investigate the relation encoded in specificational pseudoclefts. In the second part of the chapter I have argued for the existence of two kinds of pronZ – neutral

and agreeing – that differ with respect to syntactic connectivity: while neutral pronZ pseudoclefts exhibit all the different effects, agreeing pronZ pseudoclefts do not allow for any of them. Reviewing Higgins' (1973) tests for distinguishing predicational and specificational pseudoclefts reveals that agreeing pronZ pseudoclefts pattern on most tests with neutral pronZ and not with pronH, suggesting that they are indeed specificational. Thus, we may either argue for the existence of three types of pseudoclefts in Hebrew or give a unified account of both kinds of pronZ as specificational in a way that will explain their different behavior with respect to connectivity, concluding that connectivity effects are not a defining feature of specificational pseudoclefts. In chapter 4 I follow the second option.

Chapter 3

The pronH - pronZ Distinction:**The Nature of the Specificational Relation**

In the previous chapter we followed Higgins (1973) in arguing for two types of pseudoclefts – predicational and specificational – based on their different meaning and structural properties, and showed that this distinction is lexicalized in Hebrew in the choice of the (pronominal) copula. In discussing these pseudoclefts, Higgins does not define the semantic relations they encode, so in this chapter we go on to investigate the nature of these relations. Predicational pseudoclefts encode the predication relation which is relatively well understood, but specificational pseudoclefts encode the debatable specification relation which was claimed to be inverse predication or equation. The inverse predication analysis was first suggested in Williams (1983), who was followed by Partee (1986) and Moro (1997) among others; the equation analysis was assumed by many writers and was argued for in Heycock & Kroch (1996, 1997). I use the overt distinction Hebrew makes between predicational and specificational pseudoclefts to argue that specificational pseudoclefts (at least in Hebrew) are equatives and not inverse predication, and that the impersonal pronominal copula (pronZ) that induces these pseudoclefts is a ‘BE of identity’.

This chapter is constructed as follows. Section 3.1 shows that adopting Jacobson’s (1995) semantics for FRs yields equivalent truth-conditions for inverse predication and equation, so that the choice between these analyses depends on the composition of the elements. In sections 3.2 and 3.3 I argue against both a transformational and a non-transformational approach to inverse predication; and in section 3.4 I argue for analyzing specificational pseudoclefts in Hebrew as equatives and for a ‘BE of identity’ meaning for pronZ.

3.1 INVERSE OR EQUATION? A SYNTACTIC DECISION

As we saw in the previous chapter, Higgins (1973) shows that the post-copular phrase in a specificational pseudocleft is not predicative, as opposed to its counterpart in a predicational pseudocleft. Accordingly, it is analyzed as a (semantic) argument under both inverse predication and equation, and the different analyses arise from the different status they assign to the FR subject. Analyzing the FR as a predicate which is predicated over the focus phrase yields an instance of inverse predication, whereas analyzing it as an argument yields equation with the focus phrase. In this section I show that if we use Jacobson's (1995) analysis of FRs for the semantics of specificational pseudoclefts, we get equivalent truth-conditions under inverse predication and equation, so that the decision between the two depends on the composition of the elements.

In her analysis of FRs (which deals only with NP FRs with a gap of type e), Jacobson (1995) follows Cooper (1983) in assuming that FRs start out as sets of individuals - predicates of type $\langle e, t \rangle$ - where the *wh* phrase introduces the abstraction over the variable denoted by the gap in the FR. Her major innovation is that the *wh* constituent does not denote just any set of individuals that have some property, but the set containing the maximal individual with that property, which is (at most) a singleton. The singleton set may be shifted by the IOTA type-shifting operation (of Partee 1987) to denote a definite NP of type e - the maximal individual with the same property. This is illustrated in (1), where the FR in (1a) starts out with the set meaning in (1b) which may be shifted to denote the individual (of the type of the gap) in (1c) (\leq is the plural "part-of" relation):

- (1) a. [What John ordered _]
 b. $\lambda X. \text{ORDERED}(j, X) \wedge \forall Y(\text{ORDERED}(j, Y) \rightarrow Y \leq X)$ type $\langle e, t \rangle$
 c. $\iota X. \text{ORDERED}(j, X) \wedge \forall Y(\text{ORDERED}(j, Y) \rightarrow Y \leq X)$ type e

My next step is to use these FR denotations to represent the semantics of pseudoclefts. The semantics of the (unambiguously) predicational pseudocleft in (2a) is represented in

(2b):

(2) a. What John ordered is tasty.

b. (TASTY (ιX . ORDERED(j,X) \wedge $\forall Y$ (ORDERED(j,Y) $\rightarrow Y \leq X$)))

For the (unambiguously) specificational pseudocleft in (3a), we have two possible representations. Under the inverse predication analysis in (3b) the FR has its set denotation at type $\langle e,t \rangle$, and it is predicated of the focus phrase, and under the equation analysis in (3c) the FR has its argumental denotation of type e which is equated with the denotation of the focus phrase:

(3) a. What John ordered was tart tatin.

b. inverse: $((\lambda X$. ORDERED(j,X) \wedge $\forall Y$ (ORDERED(j,Y) $\rightarrow Y \leq X$)) (t))

= ORDERED(j,t) \wedge $\forall Y$ (ORDERED(j,Y) $\rightarrow Y \leq t$)

c. equation: ιX . ORDERED(j,X) \wedge $\forall Y$ (ORDERED(j,Y) $\rightarrow Y \leq X$) = t

The predication semantics in (3b) means that *tart tatin* has the property of being the maximal thing, i.e. the only thing, that John ordered. The equation semantics in (3c) means that *tart tatin* is identical to the (maximal) individual that John ordered. These representations are truth-conditionally equivalent due to the maximalization of the FR. Therefore, the decision between the analyses depends on the syntactic and semantic composition of the elements and not on the sentence level semantics.

Note, however, that (3c) presupposes that there is something that John ordered, whereas (3b) does not carry any presupposition. Although I will not go into this issue here, it seems *prima facie* that a FR does carry such a presupposition, which argues against the idea that a FR starts out with a set denotation (as in 1b). In the next section I show that there are other reasons to argue that FRs start out as arguments and not as sets. But rejecting the non-presuppositional representation in (3b) does not mean necessarily rejecting the analysis of inverse predication, since we will see in section 3.3 below that an inverse predication analysis need not assume a predicative meaning for the FR subject.

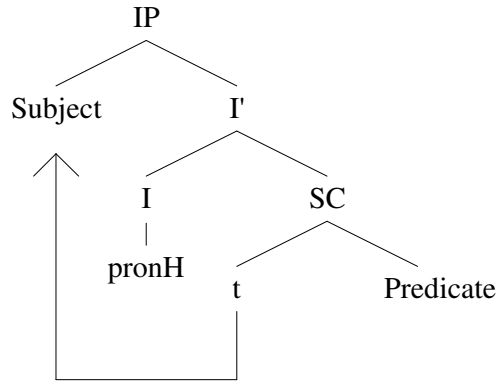
3.2 MORO (1997): “STRONG INVERSE”

The analysis of inverse predication takes all copular sentences to encode one relation – predication – from two perspectives: canonical predication sentences, to which predicational pseudoclefts belong, exhibits the order subject-predicate, and inverse predication sentences, to which specificational pseudoclefts belong, exhibits the order predicate-subject. In this section I present Moro’s (1997) analysis of Italian copular sentences in which both elements around the copula are NPs, and I argue that his analysis of inverse copular sentences cannot be adopted for specificational pseudoclefts in Hebrew.

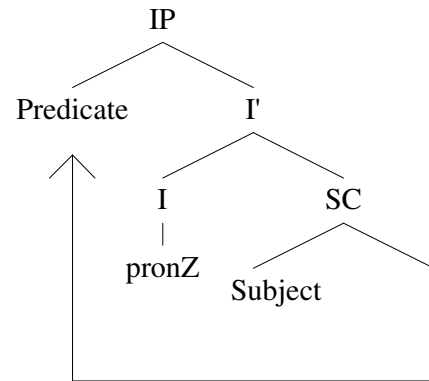
Moro analyzes all copular sentences as a copula taking a predicative Small Clause (SC) complement, in which the theta-role assignment is already determined. The Extended Projection Principle necessitates that one of the elements in the SC will raise to specIP – the subject position of the full clause. Raising of the subject of the SC yields a canonical copular sentence and raising of the predicate yields an inverse copular sentence.

Unlike in Italian or English where predicational and specificational pseudoclefts are induced by one copular verb, in Hebrew these are induced by two pronominal copulas. So adopting Moro’s analysis to Hebrew would mean that the (pronominal) copula determines which element in the SC will raise to specIP: pron_H would trigger raising of the subject of the SC to yield predication, as in (4a), and pron_Z would trigger raising of the predicate of the SC to yield inverse predication, as in (4b):

(4) a.



b.



In what follows I refer to this account of specificational pseudoclefts as “strong inverse”, because both the syntax and the semantics are of inverse predication (the semantics will be discussed in section 3.2.3 below). I present two kinds of syntactic evidence from Moro (1997) in favor of inverse predication, and then I argue against “strong inverse” by showing that in Hebrew FRs are not predicates, following tests from Heycock & Kroch (1997) and Jacobson (1995).

3.2.1 The Syntactic Status of the Post-Copular Phrase

The first kind of supporting evidence for inverse predication discussed in Moro (1997) involves three cases of extraction out of the post-copular phrase. To illustrate that, consider (what Moro refers to as) a canonical sentence in (5a) and an inverse sentence in (5b):

- (5) a. una foto del muro fu la causa della rivolta
 a picture of-the wall was the cause of-the riot
 “A picture of the wall was the cause of the riot.”
- b. la causa della rivolta fu una foto del muro
 the cause of-the riot was a picture of-the wall
 “The cause of the riot was a picture of the wall.”

The first kind of extraction environment is *lo* pronominalization. In Italian, an object or a predicate pronoun cliticizes onto the verb from left. This is possible in the canonical sentence (6a), but not in the inverse case (6b):

- (6) a. una foto del muro lo fu _
 a picture of-the wall it-was
 “A picture of the wall was it.” (e.g. the cause of the riot)
- b. *la causa della rivolta lo fu
 the cause of-the riot it-was
 “The cause of the riot was it.” (e.g. a picture of the wall) (adapted from Moro’s 35a)

The second case is extracting a part out of the post-copular phrase. Again, this is possible in the canonical sentence (7a), but ungrammatical in the inverse sentence (7b):

- (7) a. di quale rivolta pensi che una foto del muro fu [la causa _]?
 of which riot think-you that a picture of-the wall was the cause _
 “Which riot do you think that a picture of the wall was the cause of?”
- b. *di quale muro pensi che la causa della rivolta fu [una foto _]?
 of which wall think-you that the cause of-the riot was a picture _
 “Which wall do you think that the cause of the riot was a picture of?” (Moro's 24)

The third kind of extraction that shows the same pattern is the Italian partitive clitic *ne*: it may be extracted out of the post-copular phrase in the canonical (8a), but not in the inverse (8b):

- (8) a. una foto del muro ne fu [la causa _]
 a picture of-the wall of-it was the riot
- b. *la causa della rivolta ne fu [una foto _]
 the cause of-the riot of-it was a picture _ (Moro's 32)

Moro relates this pattern to extraction out of subject and object positions, explicitly in the case of *ne*. While *ne* may be extracted out of object position (9b), such extraction is impossible out of a subject (9b):

- (9) a. il figlio di Gianni vide una foto di Maria
 the son of Gianni saw a picture of Mary
 “Gianni’s son saw a picture of Mary.”

b. il figlio di Gianni ne vide [una foto _]
 the son of Gianni of-her saw a picture _
 “Gianni’s son saw a picture of her.”

c. *[il figlio _] ne vide una foto di Maria
 the son of-him saw a picture of Mary
 “His son saw a picture of Mary.”

(Moro's 31)

Moro explains these extraction facts in structural terms; he claims that extraction is possible out of a right-branching position, but blocked for a left-branching position. In (9) it is clear that the subject is left-branching in specIP, whereas the object, which is a complement of the verb, is right-branching. But in copular sentences the situation is more complex: while in a canonical copular sentence it is possible to extract out of the post-copular phrase which is the right-branching element in the SC, in an inverse copular sentence it is impossible to extract out of the post-copular phrase which is the left-branching element in the SC (see again figure (4) above).

For Hebrew, we saw in the previous chapter that the same extraction pattern is found with pronH-predicational and pronZ-specificational pseudoclefts (section 2.1.1.3). The relevant examples are repeated here: the unambiguously predicational pseudocleft in (10) allows for extraction out of the post-copular phrase, but the unambiguously specificational pseudocleft in (11) does not allow for this kind of extraction:

(10) a. hem xoSvim Se-ma Se-dan bana hu/*ze [mo'il la-xevra]
 they think that-what that-Dan built H/*Z helpful to-the-society
 “They think that what Dan built is helpful to society.”

b. le-mi hem xoSvim Se-ma Se-dan bana hu [mo'il _] ?
 to-who they think that-what that-Dan built H helpful
 “To whom do they think that what Dan built is helpful?”

(Repeated from ch. 2 ex. 16)

(11) a. hem xoSvim Se-ma Se-dan haya *hu/ze [nexmad la-orxim]
 they think that-what that-Dan was *H/Z nice to-the-guests
 “They think that what Dan was was nice to the guests.”

b. *le-mi hem xoSvim Se-ma Se-dan haya ze [nexmad _] ?

to-who they think that-what that-Dan was Z nice

“*To whom do they think that what Dan was was nice?”

(Repeated from ch. 2 ex. 17)

Since the Hebrew data behaves like the Italian data with respect to extraction, we may conclude that it supports Moro’s analysis. Note, however, that Moro’s explanation for the extraction facts only applies in a structure where the copula takes as SC complement, but not when canonical and inverse predication have the same structure, as in section 3.3 below.

3.2.2 The Agreement Behavior of the Copula

A second kind of argument given in Moro (1997) in favor of the inverse analysis concerns the agreement of the copula in Italian, in which verbs usually agree (in person and number) with their subjects. In copular sentences, however, there are also cases of obligatory agreement with the post-copular phrase. In this context Moro adds pseudoclefts to the scope of his discussion: the canonical sentence (12a) and the predicational pseudocleft (13a) show agreement to the left, whereas the inverse sentence (12b) and the specificational pseudocleft (13b) shows agreement to the right:

(12) a. le foto del muro furono/*fu la causa della rivolta

the pictures of-the wall were/was the cause of-the riot

“The pictures of the wall were the cause of-the riot.”

b. la causa della rivolta furono/*fu le foto del muro

the cause of-the riot were/was the pictures of-the wall

“The cause of the riot was the pictures of the wall.”

(Moro's 33)

(13) a. cio che non mi piace della matematica e/*sono ovvio

what that non to-me please of-the mathematics is/are obvious

“What I don't like about mathematics is obvious.”

b. *cio che non mi piace della matematica *e/sono i numeri*

what that non to-me please of-the mathematics is/are the numbers

“What I don't like about mathematics is the numbers.”

(Moro's 162)

Given the agreement behavior of other Italian verbs, the fact that in the (b) sentences the copula must agree with the post-copular phrase suggests that it is the subject of the clause and serves as strong motivation for the inverse analysis. But note that in Moro's structure this agreement pattern is not straightforward, since the subject of the full clause (in specIP) is always left of the copula. To account for this fact, Moro complicates the structure further, but I will not go into the details here.

Turning to Hebrew, the situation is not so unified. In a predicational pseudocleft, pronH always agrees to the left, but in specificational pseudoclefts, pronZ may either agree to the right or have a fixed neutral form (see again chapter 2, section 2.3.1). So agreeing pronZ pseudoclefts behave like inverse copular sentences in Italian and, following Moro's argument, should be analyzed as inverse predication, but neutral pronZ pseudoclefts that do not behave like copular sentences in Italian should not be considered as inverse predication. Given this agreement pattern, we can either conclude that Hebrew has three types of pseudoclefts instead of the two types we saw in English (or Italian), or that agreement to the right is not necessarily an indication of inverse predication. The first assumption is problematic, since we have already seen in the previous chapter that both pronZ pseudoclefts are specificational (section 2.3.3). I come back to the agreement issue in the next chapter (section 4.3.6).

3.2.3 Free Relatives as Predicates

Although Moro (1997) does not discuss the semantics of his analysis, the fact that for him the theta-role assignment is determined in the SC implies that the subject and the predicate of the SC form a predication relation, so the former must be of some semantic type X and the latter of the matching predicative type $\langle X, t \rangle$. A problem raised by

Rothstein (to appear) is the case of identity sentences, e.g. pronH identity sentences, where the elements in the SC cannot form a predication relation. There are three ways to approach this problem: (i) assume that there are no true equatives (I will discuss the problems with this approach in section 3.4.1); (ii) assume that true equatives are analyzed in a separate construction, as in Heggie (1988); or (iii) assume that the predication relation is licensed semantically using type-shifting. The third options is equivalent to the “weak inverse” analysis presented (and rejected) in the next section, so I will ignore it here. If we adopt one of the other options, then in order to derive a specificational pseudoclefts as inverse predication, the FR must be the predicate in the predicative SC, i.e. it must have a set denotation of the right $\langle X, t \rangle$ type to match the focus phrase. In the rest of this section I follow tests from Heycock & Kroch (1997) and Jacobson (1995) to check the status of FRs in Hebrew. These tests reveal that, unlike what Jacobson argues for English, FRs in Hebrew start out as arguments, and since “strong inverse” requires that the FR would denote a predicative element to be predicated of the focus phrase, I reject this analysis for specificational pseudoclefts in Hebrew.

3.2.3.1 Heycock & Kroch (1997): Free Relatives in Small Clauses

One way to test whether FRs start out as predicates is found in Heycock & Kroch (1997). Heycock & Kroch discuss inverted specificational pseudoclefts that are expected to be predicational on the inverse predication analysis. They find that (some of) these FRs do not behave like other predicates with respect to two diagnostics: predicates preposing and predicative SCs.

First, these FRs cannot undergo predicate preposing:

- (14) a. She said that she would run the marathon; and run the marathon, she did.
 b. She said that she was honest, and honest she was. (H&K's 5)
 c. *She said that run the marathon was what she would do; and what she did, run the marathon was.

Second, only some of the reversed specificational pseudoclefts are possible in the predicative SC complements of *consider* and *with*:

- (15) a. Honest is what John is.
 b. *I consider honest what John is.
 c. *With honest what John is, we have nothing to fear. (H&K's 8)
- (16) a. Read poetry is what he does best.
 b. *I consider read poetry what he does best.
 c. *With read poetry what he does best, he'll be a great success. (H&K's 9)
- (17) a. this book is what you should read next.
 b. I consider this book what you should read next.
 c. With this book what everyone is reading, we'll have to discuss it. (H&K's 10)
- (18) a. That it was raining was what he should have said.
 b. ?I consider that it was raining what he should have said.
 c. ?With that it was raining what he believes, I expect him to take an umbrella. (H&K's 11)

Thus, Heycock & Kroch conclude that FRs start out as arguments rather than as predicates.

We can apply Heycock & Kroch's SCs test to Hebrew, where the complement of *maca* "find" is a predicative SC. (19) shows that both a predicative NP and a superlative DP are possible in this position:

- (19) a. macati [_{SC} ota [_{NP} baxura xaxama]]
 I-found her woman smart
 "I found her a smart woman."
- b. ani mocet [_{SC} otxa [_{DP} ha-mo'amad ha-mat'im beyoer la-tafkid]]
 I find you(Acc) the-candidate the-appropriate most to-the-position
 "I find you the best candidate for the job."

But (20) shows that a FR introduced by *mi* "who" or *ma* "what" cannot occur in the same position, i.e. there is not predicate meaning available for these FRs:

- (20) a. *macati [_{SC} oto [_{FR} mi Se-yaxol la-azor li]]
 I-found him who that-can to-help me
 "I found him to be the person that could help me."

- b. *macati [_{SC} oto [_{FR} ma Se-hayiti crixa]]

I-found him what that-I-was need

“I found it to be what that I needed.”

A second predicative SC environment in Hebrew is matrix SCs, i.e. copula-less sentences (see again chapter 1, section 1.2.2). In (21a) the gap of the FR is in predicate position, so the FR may either be a set of predicates (type $\langle\langle e,t\rangle,t\rangle$), or a predicate (of type $\langle e,t\rangle$) when its denotation is of the type of the gap. In (21b) the gap of the FR is in argument position, so the FR may either be a predicate (of individuals, type $\langle e,t\rangle$), or an individual (of type e). Both FRs are ungrammatical without pronH:

- (21) a. mira *(hi) ma Se-julya hayta ba-Sana Se-avra

Mira H(f) what that-Julia was in-the-year that-passed

“Mira is what Julia was last year.” (e.g. the department’s chair)

- b. daniel *(hu) mi Se-xipasti

Daniel H(m) who that-I-look

“Daniel is the person I was looking for.”

But this does not necessarily mean that the SCs are not predicational, since we saw in chapter 1 (section 1.2.2.4) that individual-level predicates are impossible in matrix SCs as well. To avoid this complication, we can change the proper-name subjects of the sentences in (21) to pronouns which yield a different pattern with pronH: pronH is obligatorily absent from predicational sentences and it is optional in identity sentences. So if these are predicative SCs, we expect pronH to cause ungrammaticality. Consider (22):

- (22) a. ani (??hi) ma Se-julya hayta ba-Sana Se-avra

I H(f) what that-Julia was in-the-year that-passed

“I am what Julia was last year.”

- b. ata (hu) mi Se-xipasti

you H(m) who that-I-look

“You are the person I was looking for.”

The pattern we get in (22) is clearer. PronH is obligatorily absent when the gap of the FR is

in predicate position (i.e. the FR is of type $\langle\langle e,t\rangle,t\rangle$ or $\langle e,t\rangle$), so the SC is predicative, which means that the FR is a predicate of type $\langle e,t\rangle$ which is the type of the gap. PronH is optional when the gap is in argument position (i.e. the FR is of type $\langle e,t\rangle$ or e), so the SC is not predicative, which means that the FR is of type e which is again the type of the gap.

3.2.3.2 Jacobson (1995): Non-NP Free Relatives

As we saw in section 3.1, Jacobson (1995) analyzes FRs as starting out as predicates and only then they are shifted to individuals. Applying this analysis for all FRs would mean that they start out with a set meaning of type $\langle X,t\rangle$ and then they are shifted into their argumental meaning at type X . To show the availability of the predicative meaning, Jacobson presents non-NP FRs introduced by *why* and *how*. These are impossible as adverbials, as in (23), but OK in specificational pseudoclefts, as in (24):

(23) a. *I'll do it [why you do it].

b. *I'll do it [how you do it]. (Jacobson's 50)

(24) a. [Why John left] was to get to the party on time.

b. [How John gets his way] is by grunting a lot. (Jacobson's 51)

In these FRs the gap is of the type of adverbs, so the predicative meaning would be a set of adverbs and the argumental meaning would be just adverbs. Jacobson assumes an inverse predication analysis of specificational pseudoclefts, so in (24) the FRs should denote sets of adverbs and in (23) they should denote adverbs. Since only the predicative meaning is available, she argues that this is the “original” meaning and, for a reason not well understood, it cannot be shifted to the argumental meaning required in (23)¹.

Applying this test to Hebrew, we find exactly the opposite situation (see again chapter 2, section 2.2.1.3). The non-NP FRs introduced by *eix* “how”, *eifo* “where” and *matay*

¹ As pointed out to me by Fred Landman, this argument is not very solid. One could equally assume that FRs start out as arguments and claim that the type-shifting operation IDENT that is needed to get the set interpretation only applies to type e , and thus cannot be used with adverbs.

“when” may occur as adverbials in simple sentences, as in (25), but not in specificational pseudoclefts, as in (26):

(25) a. ani etnaheg [eix Se-ata mitnaheg]

I will-behave how that-you behave

“I will behave the way you behave.”

b. ani axake lexa [eifo Se-ani tamid yoSevet]

I will-wait to-you where that-I always sit

“I will wait for you where I always sit.”

c. ani avo [matay Se-kavanu le-hipageS]

I will-come when that-we-set to-meet

“I will come at the time we set..”

(Repeated from ch. 2 ex. 41)

(26) a. *[eix Se-dan hitnaheg] ze be-gasut / yafe

how that-Dan behaved pronZ in-rudeness / nice

“How Dan behaved was rude/nice.”

b. *[eifo Se-ani tamid yoSevet] ze ba-kafiteria

where that-I always sit Z in-the-cafeteria

“Where I always sit is in the cafeteria.”

c. ??matay Se-amarti lexa lavo ze be-Seva

when that-I-told to-you to-come Z in-seven

“The time I asked you to be here was seven.”

(Repeated from ch. 2 ex. 42)

Following Jacobson’s argument, these data show that in Hebrew the argumental and not the set denotation of non-NP FRs is available. But note that they can serve – in very colloquial speech – as relative clauses, as in (27):

(27) a. ha-derech [eix Se-ata mitnaheg] hi me’acbenet

the-way how that-you behave H annoying

“The way you behave is annoying.”

b. ha-makom [eifo Se-ani yoSevet tamid] hu cafuf miday

the-place where that-I sit always H crowded too

“The place where I always sit is too crowded.”

- c. ha-Sa'a [matay Se-kavanu le-hipageS] lo noxa li
 the-time when that-we-set to-meet not comfortable to-me
 "The time we set is not comfortable to me."

Since here they are restrictive relatives, these FRs must have a set denotation. But the fact that they are impossible in specificational pseudoclefts means that the set denotation is not the denotation of FRs in specificational pseudoclefts. Moreover, FRs introduced by *mi* "who" and *ma* "what" that do occur in specificational pseudoclefts cannot possibly serve as relative clause, as in (28):

- (28) a. *ra'iti ha-yom et ha-iS mi Se-pagaSnu etmol
 I-saw the-day Acc the-man who that-we-met yesterday
 "Today I saw the man we met yesterday."
 b. *macati et ha-davar ma Se-xipasti
 I-found Acc the-thing what that-I-sought
 "I found what I was looking for."

To conclude, counter to what argued in Jacobson (1995) for non-NP FRs in English, in Hebrew these FRs have a set denotation, but they cannot occur as subjects of specificational pseudoclefts. The NP FRs that do not have a set denotation are possible in specificational pseudoclefts, so FRs in specificational pseudoclefts do not have a set denotation.

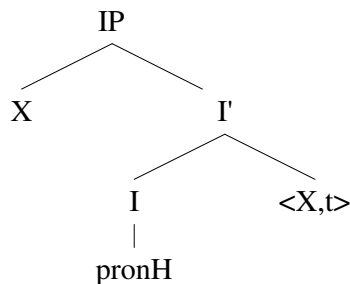
Taking all these facts together, it seems clear that FRs in Hebrew start out as arguments (of the type of the gap), and not as sets (of the matching predicative type) as suggested by Jacobson (1995) for English. Therefore, specificational pseudoclefts in Hebrew cannot be analyzed as "strong inverse". If we assume that specificational pseudoclefts in Hebrew involve inverse predication, the only possible analysis is one which does not require that the FR would be a predicate. Such an analysis is the subject of discussion in the next section.

3.3 PARTEE (1986): “WEAK INVERSE”

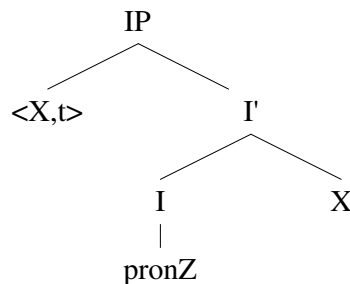
A non-transformational approach to inverse predication is found in Partee (1986). Partee analyzes BE as taking an argument of some (semantic) type X and a predicative element of the matching type $\langle X,t \rangle$, allowing for either order. Canonical predication is obtained when the copula takes the predicative element first, and inverse predication when the copula takes the argumental element first.

While in English the copula allows for either order, the order in Hebrew would have to be fixed for each of the pronominal copulas: pronH would take the predicative element as its complement and an argument as its subject – $\lambda P\lambda x.P(x)$, and pronZ would take an argument as its complement and a predicate as its subject – $\lambda x\lambda P.P(x)$. This is illustrated in (29):

(29) a.



b.



In this system, accounting for identity sentences is done by using type-shifting. In a pronH identity sentence, the post-copular element denotes an individual which will be shifted by IDENT (of Partee 1987) into the singleton set containing that individual, and this will be predicated of the subject (see again chapter 1, section 1.2.2.3).

Further, type-shifting allows deriving specificational pseudoclefts as inverse predication even if the FR does not denote a predicate. If a FR were to denote a predicate, deriving specificational pseudoclefts would be done by simply predicating it of the focus phrase. But we saw in the previous section that the FRs that occur in specificational pseudoclefts in Hebrew do not have a set denotation, in order to derive a specificational pseudocleft we

need to use type-shifting. In a pronZ sentence, the phrase in specIP is the element to be type-shifted, so the FR will be shifted by IDENT to a singleton set, and this in turn will be predicated of the focus phrase, resulting in equation semantics.

I refer to this account of specificational pseudoclefts as “weak inverse”, because the syntax is of inverse predication but the sentence-level semantics is equation. In the rest of this section I present supporting evidence for analyzing specificational pseudoclefts in English as inverse predication from Williams (1983), and some evidence against such an analysis from Heycock & Kroch (1996). I show that implementing Williams’ main idea in Hebrew argues against an inverse predication analysis for specificational pseudoclefts.

3.3.1 Williams (1983): Inverting the Elements

The original idea of analyzing specificational pseudoclefts as inverse predication is found in Williams (1983). Williams discusses four constructions that are assumed to allow only the canonical order of predication (subject-predicate), thereby revealing the “real” subject and predicate. For all the tests, he uses the unambiguously predicational pseudocleft in (30a) and the unambiguously specificational pseudocleft in (30b):

(30) a. [What John is] is [important to him].

b. [What John is] is [important to himself]. (Williams' 11)

His tests are based on the idea that inverting the elements around the copula results in the opposite order of predication, i.e. inverting (30a) would result in the inverse predication (31a) and inverting the inverted (30b) would result in canonical predication (31b):

(31) a. [Important to him] is [what John is].

b. [Important to himself] is [what John is].

The first construction Williams considers is yes-no questions. These are formed by inverting the auxiliary with the subject: (32) shows that in the predicational pseudocleft the copula can invert with the FR but not with the XP, while (33) shows the opposite for the specificational pseudocleft:

(32) a. Is [what John is] [important to him] ?

b. *Is [important to him] [what John is] ?

(33) a. *Is [what John is] [important to himself] ?

b. Is [important to himself] [what John is] ? (Williams' 15)

This suggests that the subject of the predicational pseudocleft is the FR, whereas the subject of the specificational pseudocleft is the focus phrase.

Second, Williams assumes that a raising verb allows only for the “real” subject to raise.

(34) shows that in the predicational pseudocleft only the FR may raise, but in the specificational pseudocleft in (35) only the focus phrase may raise:

(34) a. [What John is] seems to be [important to him].

b. *[Important to him] seems to be [what John is].

(35) a. *[What John is] seems to be [important to himself].

b. [Important to himself] seems to be [what John is]. (Williams' 16)

Again, the predicational and the specificational pseudoclefts create a mirror image, this time with respect to a raising verb. This behavior supports the idea that the two types of pseudoclefts encode the same relation – predication – from the opposite perspective.

The next environment Williams presents is the complement of the verb *consider* which takes a predicative SC, i.e. it only allows for the canonical order of predication:

(36) a. I consider [_{SC} [what John is] [important to him]].

b. I consider [_{SC} [important to him] [what John is]]. (Williams' 18)

(37) a. *I consider [_{SC} [what John is] [important to himself]].

b. I consider [_{SC} [important to himself] [what John is]]. (Williams' 17)

Unlike in the previous cases, the predicational and specificational pseudoclefts do not create a mirror image with respect to this construction. While the data of the specificational pseudocleft in (37) motivates Williams' analysis, the availability of both orders for the predicational pseudocleft in (36) calls into question the idea that the SC reveals the canonical order of predication. Williams is aware of this weakness and explains

that the grammaticality of (36b) is a result of “heavy NP shift” on (36a)². Even if this is indeed the reason, we cannot use this test to motivate inverse predication.

The last diagnostic presented by Williams is gapping. Williams points out that omitting the copula in the second of two coordinated pseudoclefts is possible for a predicational pseudocleft (38a) but not for a specificational one (38b) (This was already pointed out by Higgins 1973; see again chapter 2, section 2.1.3). For the inverted specificational pseudocleft (39), gapping is possible:

(38) a. [What John is] is [important to him] and [what Mary is] _ [important to her].

b. *[What John is] is [important to himself] and [what Mary is] _ [important to herself].

(39) [Important to himself] is [what John is] and [important to herself] _ [what Mary is].

Note, however, that gapping is also possible for the inverted predicational in (40):

(40) [Important to him] is [what John is] and [important to her] _ [what Mary is].

Like the predicative SC environment, gapping does not create a mirror picture of predicational and specificational pseudoclefts, since the inverted predicational in (40), which should be equivalent to the specificational pseudocleft in (38b), is grammatical. So we cannot use it to motivate the inverse predication analysis.

In section 3.3.3 below I try implementing Williams’ idea in Hebrew, where identifying the subject and the predicate can be done in a simple copular sentence due to the overt copular distinction between predicational and specificational pseudoclefts.

3.3.2 Heycock & Kroch (1996): Predicates in Subject Position

In this section I present data from Heycock & Kroch (1996) showing that real predicates do not occur in the subject position of the copula. If specificational pseudoclefts were an instance of “weak inverse“, we would expect to find a range of predicates in subject

² Note that Heycock & Kroch (1997) consider similar cases where the subject of the SC is an AP to be ungrammatical (see again section 3.2.3.1 above).

position. But Heycock & Kroch point out that the subject position of the copula is restricted, and real predicative elements cannot occur in this position. (41-42) show that it is not only APs and predicative NPs that are impossible, but also definite NPs (=DPs) that are to be predicated over the post-copular phrase:

- (41) a. John is proud of his daughters. (H&K's 58)
 b. John is a doctor.
 c. John is the best candidate for the job.
 d. John is the one thing I have always wanted a man to be. (H&K's 62)
- (42) a. *Proud of his daughters is John. (H&K's 59)
 b. *A doctor is John.
 c. The best candidate for the job is John.
 d. *The one thing I have always wanted a man to be is John. (H&K's 64)

Thus, adopting the inverse predication analysis for specificational pseudoclefts would mean that FRs are special in their being raised to predicates in subject position, which is an unattractive complexity in the theory.

Turning to Hebrew, we predict that inverting the elements around the (pronominal) copula would result in the other copula, i.e. inverting the elements in a pronH sentence should yield a pronZ sentence. (43-44) are the Hebrew equivalents of Heycock & Kroch's examples, where we find that a pronH sentence can be inverted into a pronZ sentence in the same cases where inversion is possible in English:

- (43) a. dan hu nexmad meod
 Dan H nice very
 "Dan is very nice."
 b. dan hu rofe
 Dan H doctor
 "Dan is a doctor."

c. dan hu ha-mo'amad ha-mat'im beyoter la-tafkid
 Dan H the-candidate the-appropriate most to-the-position
 "Dan is the best candidate for the position."

d. dan hu ha-siba Se-lo bati la-mesiba
 Dan H the-reason that-not I-came to-the-party
 "Dan is the reason I didn't come to the party."

- (44) a. *nexmad meod ze dan
 nice very Z Dan
- b. *rofe ze dan
 doctor Z Dan
- c. ha-mo'amad ha-mat'im beyoter la-tafkid ze dan
 the-candidate the-appropriate most to-the-position Z Dan
- d. *ha-siba Se-lo bati la-mesiba ze dan
 the-reason that-not I-came to-the-party Z Dan

The fact that the only predicate that can occur in subject position of pronZ is one that also has an individual denotation means that this position does not host predicates, so these data argue against a "weak inverse" analysis for specificational pseudoclefts in Hebrew.

3.3.3 Inverting the Elements in Hebrew

In this section I come back to pseudoclefts and use the copular distinction in Hebrew between a predicational and a specificational pseudocleft to argue against an inverse predication analysis of specificational pseudoclefts. If specificational pseudoclefts are indeed inverse predication, then inverting the elements around pronZ should yield a pronH sentence with a FR predicate and vice versa. Consider the two specificational pseudoclefts in (45a) and (45b), repeated from chapter 2 (ex. 51a), and the inverted pronH sentence in (45c), which support *prima facie* the inverse predication analysis:

- (45) a. mi Se-pagaSnu etmol ba-Suk ze rut
 who that-we-met yesterday in-the-market Z(n) Ruth
 "The person we met yesterday in the market is Ruth."

- (48) a. Read poetry is what he does best.
 b. *I consider read poetry what he does best.
 c. *With read poetry what he does best, he'll be a great success.
- (49) a. This book is what you should read next.
 b. I consider this book what you should read next.
 c. With this book what everyone is reading, we'll have to discuss it.
- (50) a. That it was raining was what he should have said.
 b. ?I consider that it was raining what he should have said.
 c. ?With that it was raining what he believes, I expect him to take an umbrella.

Although these data suggest that inverted specificational pseudoclefts are not predicational, they do not constitute conclusive evidence against an inverse predication analysis for neutral pronZ pseudoclefts, since this pattern could be attributed to some independent restriction on the subject position of pronH (which is restricted to NPs) rather than to the different relation encoded in pronH and pronZ sentences.

So let us turn to look at a neutral pronZ pseudocleft with a focus phrase that can in principle occur in subject position of pronH. Specifically, consider (51), where the focus phrase is a quantified expression (agreeing pronZ is impossible here):

- (51) [ma Se-dan menase li-mco ba-iton] ze [le-faxot Stey ta'uyot]
 what that-Dan tries to-find in-the-paper Z(n) at-least two mistakes
 "What Dan is trying to find in the newspaper is at-least two mistakes."

When this pseudocleft is inverted, we do not get a grammatical pronH sentence (but neutral pronZ is OK here³):

- (52) [le-faxot Stey ta'uyot] *hen/ze [ma Se-dan menase li-mco ba-iton]
 at-least two mistakes *H(f,pl)/Z(n) what that-Dan tries to-find in-the-paper
 "At least two mistakes are what Dan is trying to find in the newspaper."

³ Note that the existence of a grammatical (neutral) pronZ version does not argue against "weak inverse": if both the FR and the quantified expression are arguments, it may be possible to compose them as inverse predication in either order to yield equation semantics.

To show that the ungrammaticality of the pronH version is not due to independent reasons, consider (53):

- (53) a. [le-faxot Stey ta'uyot] hen xamurot
 at-least two mistakes H(f,pl) serious
 “At least two mistakes are serious.”
- b. ha-ta'ut Se-Say asa hi [ma Se-dan menase li-mco ba-iton]
 the-mistake that-Shai made H what that-Dan tries to-find in-the-paper
 “Shai’s mistakes are what Dan is trying to find in the newspaper.”

The fact that both the quantified expression in the focus phrase and the FR are possible in the relevant positions in a pronH sentence shows that the ungrammaticality of the pronH version of (52) is due to the relation between the phrases. If pronH sentences encode predication, pronZ pseudoclefts do not encode inverse predication. Note, moreover, that the quantified expression has a different meaning in the focus phrase of pronZ and as the subject of pronH: it is non-specific in the former and specific in the latter.

Another piece of evidence against “weak inverse” comes from a FR with a predicate gap. Such a FR is possible in the predicate position of pronH, but this pronH sentence can invert into neither an agreeing nor a neutral pronZ pseudocleft:

- (54) a. rut hi [ma Se-hayiti _ ba-Sana Se-avra]
 Ruth is what that-was-I in-the-year that-passed
 “Ruth is what I was last year.” (e.g. the president of the club)
- b. [ma Se-hayiti _ ba-Sana Se-avra] #ze/*zot rut
 what that-was-I in-the-year that-passed Z(n)/Z(f) Ruth
 “#What I was last year was Ruth.”

The ungrammaticality of the neutral pronZ pseudocleft argues against a “weak inverse” analysis for neutral pronZ pseudoclefts, since both relevant expressions are possible in the right positions of neutral pronZ. For the NP *Ruth* we saw this in (45a) above, and for the FR we see it in (55):

- (55) ma Se-hayiti ba-Sana Se-avra #ze/*zot nexmada
 what that-was-I in-the-year that-passed Z(n)/Z(f) nice(f)
 “What I was last year was nice.”

The ungrammaticality of the agreeing pronZ pseudocleft in (54b) is not surprising, since we saw in the previous chapter (section 2.3.1) that it can only occur with argument gap FRs. But this still argues against a “weak inverse” analysis for agreeing pronZ pseudoclefts, since no such restriction applies to the predicate position of pronH, i.e. agreeing pronZ is not the opposite of pronH.

This conclusion gets further support from other FRs that are possible in predicate position of pronH, but not with agreeing pronZ pseudoclefts. These include: a negated FR in (56), a quantified FR in (57), and a non-agreeing FR in (58):

- (56) a. ha-moda’a Sel ha-xug le-balSanut hi ma Se-dan lo maca
 the-announcement(f) of the-department to-linguistics H(f) what that-Dan didn’t found
 “The announcement of the department of Linguistics is what Dan didn’t find.”
 b. *ma Se-dan lo maca zot ha-moda’a Sel ha-xug le-balSanut
 what that-Dan didn’t found Z(f) the-announcement(f) of the-department to-linguistics
 “What Dan didn’t find was the announcement of the department of Linguistics.”
- (57) a. ha-Sxena mimul hi kol mi Se-dan mexapes
 the-neighbor(f) from-across H(f) all who that-Dan seeks
 “The next-door neighbor is the only person Dan is looking for.”
 b. *kol mi Se-dan mexapes zot ha-Sxena mimul
 all who that-Dan seeks Z(f) the-neighbor(f) from-across
 “The only person Dan is looking for is the next-door neighbor.”
- (58) a. ha-metapelet hi mi Se-loke’ax/lokaxat et rut me-ha-gan
 the-nanny(f) H(f) who that-takes(m)/takes(f) Ruth from-the-kindergarten
 “The nanny is the one that takes Ruth from the kindergarten.”
 b. *mi Se-loke’ax et rut me-ha-gan zot ha-metapelet
 who that-takes(m) Ruth from-the-kindergarten Z(f) the-nanny(f)
 “The person that takes Ruth from the kindergarten is the nanny.”

Again, these data rule out “weak inverse” for agreeing pronZ pseudoclefts, because they show that the pre-copular position of agreeing pronZ is not the same as the predicate position of pronH as expected from this analysis.

Abstracting from these FRs, agreeing pronZ pseudoclefts are predicted to invert into pronH sentences, since the focus phrase in an agreeing pronZ pseudocleft is always an NP. However, when this NP is a specific indefinite singular, as in (59a), the pronH counterpart is ungrammatical, as in (59b) (neutral pronZ is impossible here):

- (59) a. mi Se-lokaxat et rut me-ha-gan zot Sxena me-ha-binyan
 who that-takes(f) Acc Ruth from-the-kindergarten Z(f) neighbor from-the-building
 “The person that takes Ruth from the kindergarten is a neighbor from the building.”
- b. *Sxena me-ha-binyan hi mi Se-lokaxat et rut me-ha-gan
 neighbor from-the-building H(f) who that-takes(f) Acc Ruth from-the-kindergarten
 “A neighbor from the building is the person that takes Ruth from the kindergarten.”

As we saw for neutral pronZ, this is not a conclusive argument against an inverse predication analysis for agreeing pronZ pseudoclefts, since specific indefinite singular NPs are generally impossible in subject position of pronH. But taking all the facts together shows that agreeing pronZ pseudoclefts are not “weak inverse”.

We conclude that the lexical distinction Hebrew makes between predicational and specificational pseudoclefts enables us determine that both agreeing and neutral pronZ pseudoclefts are not an instance of “weak inverse”. Since we saw in section 3.2 that pronZ pseudoclefts are not “strong inverse” either, specificational pseudoclefts in Hebrew cannot be analyzed as inverse predication.

3.4 EQUATION

The analysis of equation takes us back to the long standing dichotomy between the two roles of the copula: predication and identity. It is more complex than inverse predication in the sense that it adds a second relation – equation – to the predication relation we already

know to be encoded in copular sentences. For pseudoclefts, this means that predicational pseudoclefts encode the predication relation, while specificational pseudoclefts are an instance of equation. Note that Higgins (1973) who first introduced specificational sentences, was not willing to assimilate specificational sentences to identity sentences, because the subject of the latter is referential but that of the former is non-referential (see again chapter 2, section 2.1.2). I come back to this issue in the next chapter.

I first present Heycock & Kroch's argument that there is a need to assume equatives independent of pseudoclefts, and then consider two possible analyses: "weak equation" that takes it to be a special case of predication and "strong equation" that postulated two separate elements for predication and equation.

3.4.1 Heycock & Kroch (1996): True Equatives

Heycock & Kroch (1996) argue that there exist true equative copular sentences, i.e. a construction in which the two phrases are equated, and claim that specificational pseudoclefts are an instance of this construction. They argue that in some copular sentences none of the phrases can be regarded as "less referential" or "more predicative" than the other, i.e. there is no preferred candidate to be the predicate. Consider (60):

(60) a. Your attitude toward Jones is my attitude toward Davies.

b. Your opinion of Edinburgh is my opinion of Philadelphia. (H&K's 35)

Intuitively, these sentences differ from predicational sentences in that none of the phrases is assigned as a property to the other, but rather they are asserted to be identical (more precisely, their denotation is asserted to be identical). This is even more obvious in the case of tautologies: the idea is that in (61) neither phrase is a property applied to the other phrase, but the two (identical) properties are asserted to have the same denotation:

(61) a. When it comes down to it, honest is honest.

b. In the end, long is long.

c. You can dress it up if you like, but in the end being dishonest is just being dishonest. (H&K's 40)

This intuition about the meaning of the sentences is syntactically supported by two structural diagnostics for predicates, on which neither phrase comes out as a predicate.

The first diagnostic concerns the predicative SC complement of *consider*. When we take the phrases from (62) and place them in a SC, as in (62-63), we find that neither order is possible:

- (62) a. *I consider your attitude towards Jones my attitude toward Davies.
 b. *I consider my attitude towards Davies your attitude toward Jones. (H&K's 36)
- (63) a. *I consider your opinion of Edinburgh my opinion of Philadelphia.
 b. *I consider my opinion of Philadelphia your opinion of Edinburgh. (H&K's 37)

A second kind of structural diagnostic is adopted from Rothstein (1995), who herself follows Doron (1983). Doron points out that only non-predicative NPs can have non-restrictive modification. But in (60), both elements can be modified by non-restrictive relative clauses, which means that neither is a predicate:

- (64) Your opinion of Edinburgh, which you learned from your parents, is my opinion of Philadelphia,
 which I learned from mine. (H&K's 38)

Since neither phrase turns out to be a predicate on these diagnostics, Heycock & Kroch conclude that both phrase are arguments which are equated to each other.

They relate these true equatives to specificational pseudoclefts by showing that they exhibit the same behavior with respect to extraction. Both types of copular sentences do not allow for extraction out of the post-copular phrase (see again chapter 2, section 2.1.1.3). This is exemplified in (65-65):

- (65) a. *[whose attitude towards Davis] would you say that your attitude to Jones is _ ?
 b. *[Whose opinion of Philadelphia] de you think that your opinion of Edinburgh is _ ?
- (65) a. *Who is your attitude towards Jones my attitude towards _ ?
 b. *[What city] is your opinion of Edinburgh my opinion of _ ?

Since we need to include equatives in our theory of copular sentences and we saw that specificational pseudoclefts are not inverse predication, we conclude that they are

equatives.

3.4.2 Two BEs or Not Two BEs?

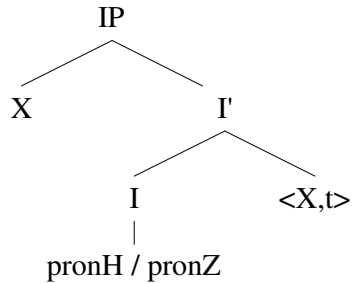
Like Moro, Heycock & Kroch (1996, 1997) analyze all copular sentences as a copula taking a SC complement. Therefore, the difference between equative and predicational copular sentences is not due to an ambiguous copula, but due to the existence of two types of SCs (keeping the copula semantically vacuous). These SCs have a different structure: a predicative SC is constructed only from the subject and the predicate, while an equative SC involves an empty functional head present. Since such a head is unidentifiable in the structure, I will not consider the details of this analysis.

Instead, I consider two alternatives for equatives: (i) deriving equation as a special case of predication, in the sense of Partee (1987), and (ii) postulating two separate copulas: ‘BE of identity’ and ‘BE of predication’.

3.4.2.1 Partee (1987): Not Two BEs

Partee (1987) suggests deriving both predicationals and equatives using one copula with the meaning of the identity function $\lambda P.P$ at type $\langle\langle e,t \rangle, \langle e,t \rangle\rangle$. If the post-copular phrase is a predicate, the copula will apply vacuously, but if the post-copular phrase is not a predicate, the copula will trigger its raising to denote a predicate. So identity is just a special case of predication. This means that pronZ is a ‘BE of predication’ just like we assumed in section 3.3 for pronH (so the existence of two pronominal copulas needs to be attributed to a different factor):

(67)

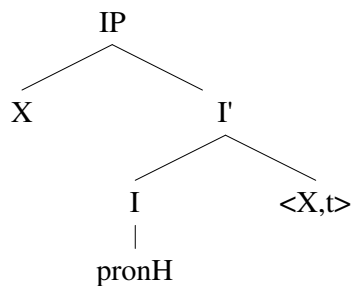


To derive a specificational pseudocleft, the FR and the focus phrase must denote arguments of the same type; pronZ would trigger lifting the focus phrase into a singleton predicate using IDENT and then this predicate would be predicated of the FR subject. I refer to this account as “weak equation”, since it derives equation semantics through predication syntax, and thus predicts the existence of simple predicative pronZ sentences (see section 5.3 for some discussion of predicational pronZ sentences).

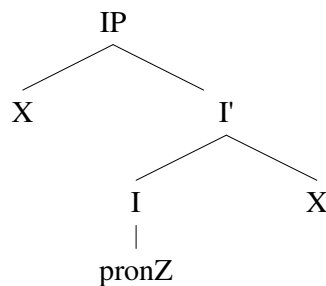
3.4.2.1 Two BEs

The second option is to assign the equation meaning to pronZ itself, i.e. to analyze it as a real verb that encodes the identity relation, whereas pronH is semantically vacuous and is used only to mediate the predication relation (it may yield equation as a special case of predication). I refer to this option as “strong equation”, since it derives equation semantics at the sentence level using a ‘BE of identity’. This is illustrated in (68):

(68) a.



b.



In a specificational pseudocleft, pronZ takes the FR and the focus phrase and equates them directly. As for other pronZ sentences, this account predicts that all pronZ sentences would be equatives, as opposed to “weak equation” which predicts the existence of predicative

pronZ sentences.

3.4.2.3 Choosing Between Them

To choose between these two accounts we look at how pronH-identity pseudoclefts that are derived as a special case of predication, i.e. an instance of “weak equation”, behave on Higgins’ (1973) tests that distinguish between predicational and specificational pseudoclefts. If they behave differently from pronZ, then there is evidence that pronH and pronZ are different constructions, and since pronH sentences are clearly “weak equation”, we deduce that pronZ sentences are “strong equation”. The pronH pseudocleft in (69) hosts a proper name *Yossi* in the post-copular position and it is triggered by pronH to shift (by IDENT) to a singleton set denotation:

- (69) mi Se-ani macbi’a alav hu yosi
 who that-I point on-it H Yossi
 “The person I’m pointing at is Yossi.”

Now consider (70) which presents Higgins’ tests for this pseudocleft: coordinating predicates in (70a), deleting the post-copular phrase in (70b), deleting the copula in (70c) and a sentential adverb in (70d):

- (70) a. *mi Se-ani macbi’a alav hu yosi ve-lomed iti ba-universita
 who that-I point on-it H Yossi and-studies with-me in-the-university
 “The person I’m pointing at is Yossi and studies with me in the university.”
- b. mi Se-ani macbi’a alav hu yosi aval mi Se-ata macbi’a alav lo
 who that-I point on-it H Yossi but who that-you point on-it no
 “The person I’m pointing at is Yossi, but the person you are pointing at isn’t.”
- c. mi Se-ani macbi’a alav hu yosi ve-mi Se-ata macbi’a alav ... gabi
 who that-I point on-it H Yossi and-who that-you point on-it ... gabi
 “The person I’m pointing at is Yossi, and the person you are pointing at - Gabi.”
- d. mi Se-ani macbi’a alav hu ka-nir’e / lo yosi
 who that-I point on-it H probably / no Yossi
 “The person I’m pointing at is probably/not Yossi.”

What we find is that the pronH-identity pseudocleft in (70) patterns on most tests with pronH-predicational pseudoclefts and not with pronZ-specificational pseudoclefts (see again chapter 2, section 2.1). Therefore, these tests are sensitive to the type of pronH construction, and are evidence that two separate kinds of constructions are involved, i.e. since pronH since “weak equation”, pronZ is “strong inverse”. The fact that (70a), unlike pronH-predicational pseudoclefts, does not allow for coordination with a verbal predicate indicates that this test is sensitive to the actual status of the post-copular phrase. Thus, I conclude that pronZ-specificational pseudoclefts are not a special case of predication, i.e. pronZ is ‘BE of identity’.

3.4.3 Extraction Revisited

In the beginning of this chapter we saw two kinds of evidence that favor the inverse predication analysis: the syntactic status of the post-copular phrase (section 3.2.1) and the agreement behavior of the copula (section 3.2.2). I will explain the agreement behavior of pronZ in specificational pseudoclefts under the equation analysis in the next chapter. In this section I return to the extraction facts; in particular, why it is possible to extract out of the complement of pronH but not out of the complement of pronZ.

It is a well known fact that it is always possible to extract out of predicates, but extraction out of arguments is restricted to properly governed ones (in the sense of Chomsky 1986a), so what Moro’s (1997) examples show is that the post-copular phrase in what he calls an inverse sentence and what I argue to be an identity sentence is a non-properly governed argument. Since Rothstein (to appear) shows that the copula is not a theta-assigner, we would not expect it to properly govern its complement anyway, so there is no need to assume that the post-copular position is a subject position. For the pronominal copulas in Hebrew, I assume that pronZ, like pronH, is a realization of features in Infl, i.e. a functional element, so they do not theta-mark their complement and thus do

not properly govern it. The complement of pronZ under the ‘BE of identity’ meaning is always a non-properly governed argument, and as such it is never possible to extract out of this position. In pronH sentences, extraction is possible when the post-copular phrase is a predicate, but when the post-copular phrase is an argument, we predict extraction to be impossible. As (71) shows, this prediction is borne out:

- (71) a. mi Se-ani macbi’a alav hu [ha-xaver Sel yosi]
 who that-I point on-it H the-friend of Yossi
 “The person I’m pointing at is Yossi’s friend.”
- b. *Sel mi ata xoSev Se-mi Se-ani macbi’a alav hu [ha-xaver _] ?
 of who you think that-who that-I point on-it H the-friend
 “*Whose friend do you think that the person I’m pointing at is?”

Since the “strong equation” analysis can equally explain the extraction facts presented by Moro (1997), these facts cannot be used to prefer the inverse predication analysis. Thus, we are left with none of the original motivation that seem to better explained under the inverse predication.

3.5 CONCLUSIONS

This chapter studied the relation encoded in pronZ-specificational pseudoclefts in the light of the Hebrew data. We have argued against a (transformational and non-transformational) inverse predication analysis for specificational pseudoclefts in Hebrew and showed that pronZ is a ‘BE of identity’. I discuss some crosslinguistic implications of this analysis as well as some of its implication for Hebrew in chapter 5.

Chapter 4

**The Neutral - Agreeing pronZ Distinction:
Explaining Connectivity Effects**

In the previous chapter we argued that specificational pseudoclefts are equatives, choosing a ‘BE of Identity’ meaning for (both kinds of) pronZ. In this chapter we go on to explain the different behavior of the two types of pronZ pseudoclefts with respect to connectivity: why neutral pronZ pseudoclefts exhibit all different effects of connectivity, but agreeing pronZ pseudoclefts do not. I propose that the distinction between agreeing and neutral pronZ is in the semantic type of the arguments they equate, and account for connectivity effects in neutral pronZ pseudoclefts mainly following Sharvit’s (1997) semantic theory. The typal analysis shows that connectivity is a by-product of equation at high semantic types, and not an effect of syntactic reconstruction or copying. This analysis gets further support since it can also account for other differences between the two types of pronZ pseudoclefts. I conclude the chapter by suggesting a different perspective of the typal analysis: instead of postulating two kinds of pronZ, we can sort the domain in a way that will keep the typal difference.

4.1 TWO PRON-Z: A TYPAL ANALYSIS

Recall from chapter 2 the contrast in intensionality Sharvit (1997) presents between the pseudoclefts in (1) that are minimally different in the presence and absence of the Accusative marker *et*:

- (1) a. ma Se-dan mexapes ze **et** ha-sefer Se-azar le-ron le-sayem et ha-teza
 what that-Dan seeks Z(n) **Acc** the-book(m) that-helped to-Ron to-finish Acc the-thesis
- b. ma Se-dan mexapes ze ha-sefer Se-azar le-ron le-sayem et ha-teza
 what that-Dan seeks Z(m) the-book(m) that-helped to-Ron to-finish Acc the-thesis
- “What Dan seeks is the book that helped Ron finish the thesis.” (Repeated from ch. 2 ex. 57)

Sharvit's observation is that (1a) has both a de dicto and a de re reading, whereas (1b) has only the de re reading. Assuming equation semantics, she analyzes this distinction in terms of the type of the equated arguments: (1a) is an equation of intensional Generalized Quantifiers and (1b) is an equation of individuals. Sharvit attributes the typical distinction to the semantic role of the Accusative marker *et*, but we have already seen that the difference between the pseudoclefts is in the kind of the copula: (1a) is a neutral pronZ pseudocleft and (1b) is an agreeing pronZ pseudocleft (neutral and masculine pronZ are identical in form). Adopting Sharvit's analysis would mean that the neutral pronZ pseudoclefts is an equation of intensional Generalized Quantifiers and the agreeing pronZ pseudoclefts is an equation of individuals.

More generally, I propose that the distinction between the two kinds of pronZ is in the semantic type of their arguments: agreeing pronZ equates individual arguments of type *e*, and neutral pronZ equates elements with a denotation of any higher type. Their meaning is given in (2):

- (2) a. Agreeing pronZ $\lambda y \lambda x. x=y$ $x, y \in \text{VAR}_e$
 b. Neutral pronZ $\lambda Y \lambda X. X=Y$ $X, Y \notin \text{VAR}_e$

Before we turn to the analysis itself, it should be noted that in this chapter I adopt (for convenience) the maximality operator from Sharvit (1997) instead of the one we saw in the previous chapter from Jacobson (1995). The definition is given in (3):

- (3) For any world *w* and assignment *g*, $[\text{Max}(\lambda u. \varphi)]^{g,w}$ is the greatest element in
 $\{\delta \in C_{\text{type}(u),w} : [\varphi]^{w,g[u/\delta]} = 1\}$ if there is one; otherwise it is undefined. (Sharvit's 13)

The FR will denote the maximal element (of the type of the gap) with the relevant property. For individuals the maximality operator is defined on a structured domain of individuals and for properties the maximality is defined in terms of entailment. As Sharvit points out, ordering properties is not so simple, but I will ignore this problem here (for details, see Sharvit 1997 pp. 18-20).

4.2 EXPLAINING CONNECTIVITY EFFECTS

In this section I show how the typal analysis explains the fact that neutral pronZ pseudoclefts exhibit connectivity and agreeing pronZ pseudoclefts do not. I account for the connectivity effects of preservation of opacity and binding effects following the semantic theory of Sharvit (1997), and sketch a possible explanation for Accusative Case marking by *et* and for the agreement of predicates, concluding that connectivity is a by-product of equation at high semantic types. These data constitute explicit evidence against deriving connectivity by reconstruction, since the reconstruction account wrongly predicts that all specificational pseudoclefts would exhibit connectivity, and it seems impossible to modify it in a plausible way that would explain why neutral pronZ, but not agreeing pronZ, allows for reconstruction, i.e. how the copula can affect reconstruction inside the FR.

4.2.1 Opacity

As mentioned above, the contrast in opacity between agreeing and neutral pronZ pseudoclefts is immediately explained by the typal distinction. Consider (4), repeated from chapter 2 (ex. 59):

- (4) a. [ma Se-dan mexapes _] ze jirafa vruda
 what that-Dan seeks Z(n) giraffe(f) pink(f)
 “hat Dan seeks is a pink giraffe.”
- b. [ma Se-dan mexapes _] zot jirafa vruda
 what that-Dan seeks Z(f) giraffe(f) pink(f)
 De re of: “What Dan seeks is a pink giraffe.”

For the analysis of intensional predicates I follow Zimmermann (1993) in that the object of *seek*, or Hebrew *xipes*, is a property of type $\langle s, \langle e, t \rangle \rangle$. To derive the de dicto reading for (4a), a variable π of this type is inserted as the object of *xipes*; it is abstracted over yielding the set of properties that Dan seeks, and the maximality operator picks out the maximal property in that set, which is equated to the property denoted by *jirafa vruda* “pink

giraffe”:

$$(4a') \quad \text{Neutral pronZ (de dicto)} \quad \text{type } \langle s, \langle e, t \rangle \rangle \quad \text{Max}[\lambda\pi.\text{SEEK}(d, \pi)] = \text{^PG}$$

As for agreeing pronZ, it forces the interpretation of *jirafa vruda* “pink giraffe” as an individual at type *e*, so I assume that indefinites like *pink giraffe* can have a denotation at this type. Partee (1987) assumes that indefinites can have an interpretation at type *e* as new variables, in the sense of Heim (1982), whereas Reinhart (1997) and Winter (1997) assume that indefinites get an interpretation at type *e* through the application of a choice function to their interpretation at type $\langle e, t \rangle$. For my purposes here, either alternative will do. Turning to the FR, its individual interpretation is obtained by using a variable of type $\langle s, \langle e, t \rangle \rangle$, where the free variable to be abstracted over is of type *e*, so the FR denotes the maximal individual that Dan seeks, and this is equated to the individual denoted by *jirafa vruda* “pink giraffe”:

$$(4b') \quad \text{Agreeing pronZ (de re)} \quad \text{type } e \quad \text{Max}[\lambda y.\text{SEEK}(d, \lambda z.z=y)] = \text{pg}$$

But neutral pronZ also has a de re reading, which should be derived at some type higher than *e*. I suggest that equation will be at type $\langle e, t \rangle$. The individual denoting FR we had for agreeing pronZ is raised by IDENT to denote a singleton predicate of type $\langle e, t \rangle$, and this is equated to the contextually restricted predicate *pink giraffe*:

$$(4a') \quad \text{Neutral pronZ (de re)} \quad \text{type } \langle e, t \rangle \quad \lambda u.u=\text{Max}[\lambda y.\text{SEEK}(d, \lambda z.z=y)] = \text{PG}$$

This equation can only be true if the contextually restricted predicate *pink giraffe* is a singleton, so equating predicates really means equating individuals. Such a predicate can be either the set containing a unique pink giraffe, as in $\{\sigma(\text{PG})\}$, or the set containing some pink giraffe chosen by a choice function, as in $\{M(\text{PG})\}$.

This analysis predicts that if there is no type *e* denotation available, agreeing pronZ will be blocked. Such a case is found with idioms:

- (5) ma Se-dan mexapes ze/*zot maxat be-aremat Saxat
 what that-Dan seeks Z(n)/Z(f) needle in-stack hay
 “What Dan seeks is a needle in a haystack.”

As an idiom, the focus phrase only has a property interpretation which cannot be an argument of agreeing pronZ. If we try to understand *maxat be-aremat Saxat* “a needle in a haystack” as an individual, we get a funny (grammatical) reading which is non-idiomatic.

However, neutral pronZ is possible independently of the intensionality of the verb inside the FR, as exemplified in (6) with the verb *kana* “buy”:

- (6) a. ma Se-dan kana ze jirafa vruda
 what that-Dan bought Z(n) giraffe(f) pink(f)
 b. ma Se-dan kana zot jirafa vruda
 what that-Dan bought Z(f) giraffe(f) pink(f)
 “What Dan bought was a pink giraffe.”

In these cases, both kinds of pronZ yield a de re reading, so we derive it at type e for agreeing pronZ and at a higher type for neutral pronZ. This interpretation will be the same as what we had for the de re readings of the intensional example. The (extensional) verb takes an individual as its complement, so the abstraction will yield the set of individuals that Dan bought. In the agreeing case, this individual denoting FR will be equated with the individual denoted by the indefinite focus phrase, as in (6b’), and in the neutral pronZ case, the FR will be raised by IDENT to denote a singleton predicate that will be equated with the contextually restricted predicate, as in (6a’):

- (6a’) **Neutral pronZ** type $\langle e, t \rangle$ $\lambda u. u = \text{Max}[\lambda y. \text{BUY}(d, y)] = \text{PG}$
 (6b’) **Agreeing pronZ** type e $\text{Max}[\lambda y. \text{BUY}(d, y)] = \text{pg}$

4.2.2 Binding: Principles A and B

To account for the different behavior of neutral and agreeing pronZ pseudoclefts with respect to binding effects, I follow Sharvit’s (1997) analysis of binding in specificational pseudoclefts. Since the standard GB Binding Theory is stated in structural terms of c-

command and governing category which are not available in specificational pseudoclefts (see again chapter 2, section 2.1.5), Sharvit adopts the binding theory of Reinhart & Reuland (1993) and Grodzinsky & Reinhart (1993) which is stated as principles on the reflexive interpretation of predicates.

In this theory a reflexive semantic predicate is a predicate for which two of the arguments are the same, as indicated by indexing. For a predicate to be reflexively interpreted, it must be reflexive marked. Reflexive marking is either lexical, as in *hitraxec* “wash himself”, or syntactic, as in the case where a SELF-anaphor marks a (lexically) non-reflexive as reflexive, as in *raxac et acmo* “washed (Acc) himself”. The three main principles on reflexive interpretation are stated in (7):

- (7) **Principle A** a reflexive-marked syntactic predicate is (semantically) reflexive.
 Principle B a reflexive semantic predicate is reflexive-marked.
 Rule-I NP A cannot corefer with NP B, if replacing A with C,
 C a variable A-bound by B, yields an indistinguishable
 interpretation.

Principle A requires that a syntactic predicate will be interpreted reflexively. The term syntactic predicate, which consists of a lexical head, its arguments and an overt head, is introduced in order to capture the behavior of *picture*-NPs that allow for both reflexives and pronouns, and we will see its importance to pseudoclefts below. Principle B requires the opposite of principle A: a predicate can only be interpreted reflexively if it is marked for reflexivization. Rule-I rules out accidental coreference when an alternative bound reading is available (I use here the term ‘bound’ to mean reflexively marked and reflexively interpreted). Let us see how these principles account for the relations in the simple sentences in (8):

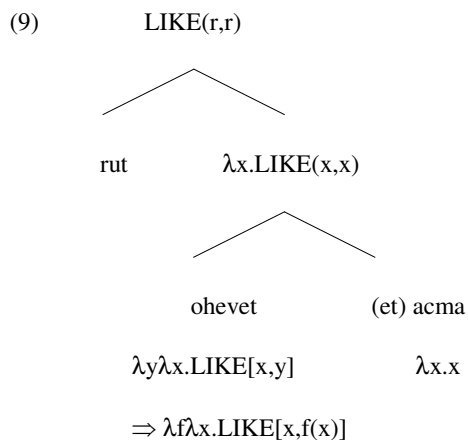
- (8) a. *rut_i ohevet et acma_i*
 Ruth loves Acc her
 “Ruth likes herself.”

- b. *rut_i ohevet ota_i
 Ruth loves Acc her
- c. rut_i ohevet ota_j
 Ruth loves Acc her

both: “Ruth loves her.”

(8a) is grammatical because *ohevet* “loves” is reflexive-marked by *acma* “herself”, and as a syntactic predicate it is interpreted reflexively (as indicated by the indices) in accordance with principle A. In (8b) *ohevet* “loves” is interpreted reflexively (as indicated by the indices), but it isn’t reflexive-marked, violating principle B; and (8c) is grammatical since the predicate is neither reflexive-marked nor reflexively interpreted. Note that the accidental coreference reading in (8c) – where *ota_j* refers to Ruth – is blocked by Rule-I since a bound reading using the reflexive is available, i.e. (8a).

The semantic derivation of (8a) is illustrated in (9):



Sharvit (1997) analyzes the reflexive anaphors as the identity function $\lambda x.x$ of type $\langle e,e \rangle$, and raises the verb to take a functional object of type $\langle e,e \rangle$ instead of a simple individual object. Combining this verb with the identity function at (roughly) the VP level reflexivizes the predicate to give the right meaning at the sentence level.

With these tools, we can turn to see how Sharvit explains the licensing of the anaphors in the focus phrase of specificational pseudoclefts. In (10), repeated from chapter 2 (ex. 33-34), the anaphors are embedded in a property (I explain this here for the Hebrew

examples with neutral pronZ):

- (10) a. [ma Se-dan_i haya _] ze mesukan le-acmo_i
 what that-Dan was Z(n) dangerous to-himself
 “What Dan_i was was dangerous to himself_i.”
- b. *[ma Se-dan_i haya _] ze mesukan lo_i
 what that-Dan was Z(n) dangerous to-him
 “*What Dan_i was was dangerous to him_i.”

Due to the type of the reflexive anaphor, the predicate in the focus phrase in (10a) is type raised to $\lambda f \lambda x. \text{Dangerous-To}(x, f(x))$, and it is reflexivized resulting in $\lambda x. \text{Dangerous-To}(x, x)$. The focus phrase in (10b) just denotes the non-reflexive predicate $\lambda x. \text{Dangerous-To}(x, y)$. Principle A does not apply to neither of these predicates, since they are not syntactic predicates due to the lack of an overt subject. The interpretation of these specificational pseudoclefts is given in (10'), where the focus phrase is equated to the FR denoting the maximal property that Dan was (I ignore tense in the representation):

- (10') a. **Neutral pronZ** type $\langle e, t \rangle$ $\text{Max}[\lambda P. P(d)] = \lambda x. \text{Dangerous-To}(x, x)$
 b. **Neutral pronZ** type $\langle e, t \rangle$ $\text{Max}[\lambda P. P(d)] = \lambda x. \text{Dangerous-To}(x, y)$

In (10a) the property that Dan had is identical to the property of being dangerous to oneself, which means that Dan was dangerous to himself. The reflexive reading of (10b) is predicted by Rule-I to be ungrammatical due to the existence of a bound reading, i.e. (10a).

Now we can go on to explain the cases that show that binding effects are impossible with agreeing pronZ. Consider first (11), repeated from chapter 2 (ex. 65), where the focus phrase hosts a reflexive:

- (11) a. [ma Se-rut_i (haxi) ohevet _] ze et acma_i
 what that-Ruth most loves Z(n) Acc herself
 b. *[ma Se-rut_i (haxi) ohevet _] zot acma_i
 what that-Ruth most loves Z(f) herself
 “What Ruth_i loves most is herself_i.”

Following Sharvit, the focus phrase in (11a) is the identity function of type $\langle e, e \rangle$, so it

needs to be equated to the FR of the same type. For the FR to be interpreted at this type, the variable in the gap has to be of type $\langle e, e \rangle$, thereby causing the verb to raise, so that the FR denotes the maximal function that maps Ruth to the people she loves most. The pseudocleft equates this function with the identity function denoted by the focus phrase¹:

(11a'). **Neutral pronZ** type $\langle e, e \rangle$ $\text{Max}(\lambda f[\text{LOVE}(r, f(r))]) = \lambda x.x$

The ungrammaticality of the agreeing pronZ version is straightforward under the typical analysis: since agreeing pronZ equates individuals, it cannot take the identity function denoted by the reflexive as its argument.

Second, we look at the corresponding pseudocleft where the anaphor is a pronoun.

Consider (12), repeated from chapter 2 (ex. 66):

- (12) a. *[ma Se-rut_i (haxi) ohevet _] ze ota_i
 what that-Ruth most loves Z(n) Acc-her
 b. *[ma Se-rut_i (haxi) ohevet _] zot hi_i (acma)
 what that-Ruth most loves Z(f) she (herself)
 “*What Ruth_i loves most is her_i.”

The ungrammaticality of (12a) is predicted by Rule-I due to the existence of a bound reading – (11a). But Rule-I is not enough to account for the ungrammaticality of (12b), since in order to get the alternative bound reading we have to change the copula in addition to the anaphor, as stated in Rule-I. It seems that the ungrammaticality of (12b) should also be explained by the existence of a bound reading, so it may be that Rule-I should be modified. In section 4.2.5 below we see more cases that cause the same problem.

4.2.3 Agreement of Predicates

The third connectivity effect we saw in chapter 2 is the agreement of predicates across the copula. This is illustrated in (13), repeated from chapter 2 (ex. 48):

¹ As Sharvit points out, the reflexive in the focus phrase could reflexivize the copular predicate, but Sharvit assumes that this is blocked due to the uninformative result of $\lambda x.x=x$.

- (13) a. [ma Se-dan haya _] ze nexmad/*nexmada
 what that-Dan was(m) Z(n) nice(m)/*nice(f)
 “What Dan was was nice.”
- b. [ma Se-rut hayta _] ze *nexmad/nexmada
 what that-Ruth was(f) Z(n) *nice(m)/nice(f)
 “What Ruth was was nice.”

Under our analysis of neutral pronZ (see section 4.3.2 for why predicates are only possible with neutral pronZ), it requires two arguments of the same semantic type higher than e, but these examples show that the arguments of pronZ should also bear the same gender. There are two ways to go: semantic and syntactic.

If we wish to keep the restriction on the arguments purely semantic, we can adopt Dowty & Jacobson’s (1989) semantic theory of agreement, where the domain of individuals is sorted, e.g. for (natural and non-natural) gender. This means that the set of nice female entities will be different from the set of nice male entities. Under such an analysis these different predicates will be equated with the predicates denoted by the FRs: the variables in the gaps of the FRs will be of different gender, so the FR in (13a) will denote the maximal masculine property that Dan had and the FR in (13b) – the maximal feminine property that Ruth had.

An alternative analysis is to add the syntactic features of the arguments to the restriction pronZ poses on the semantic type of its arguments. The most straightforward way to add the syntactic feature to the representation is using a feature percolation system as, for instance, in theories like HPSG (Pollard & Sag 1994). Specifically, the gap of the FR will be syntactically marked for gender, and this feature will percolate up to mark the FR: in (13a) it will be a masculine feature and in (13b) – a feminine feature. These alternatives are indistinguishable, but in section 4.3.6 below, I suggest sorting of the domain for gender for a different reason. Importantly, whatever analysis we adopt, the connectivity effect of

agreement of predicates would only be associated with some high semantic type and not a direct consequence of equation at this type, since the agreement features of predicates do not change the type of the predicates.

4.2.4 Accusative Case Marking

The last form of connectivity we saw in chapter 2 is Accusative marking by *et* of the (definite) focus phrase according to the corresponding gap in the FR. This is required in neutral pronZ pseudoclefts, but blocked in agreeing pronZ pseudoclefts, as exemplified in (14), repeated from chapter 2 (ex. 60):

- (14) a. ma Se-kaninu ba-Suk ze *(et) ha-xulca ha-kxula
 what that-we-bought in-the-market Z(n) Acc the-shirt(f) the-blue(f)
- b. ma Se-kaninu ba-Suk zot (*et) ha-xulca ha-kxula
 what that-we-bought in-the-market Z(f) Acc the-shirt(f) the-blue(f)

both: “What we bought in the market is the blue shirt.”

To adopt a syntactic account, in which pronZ requires its argument to bear the same syntactic features, we need to assume that only neutral pronZ poses this restriction, which seems ad-hoc. But under the typal analysis, we can draw the descriptive generalization that *et* only marks high type objects, so a semantic account would mean that *et* precedes high type object (or that *et* raises its complement to high types). Preliminary support to the idea that *et* only marks objects of certain types comes from the fact that in simple sentences it only marks definite direct objects. This has to be further checked, independently of pseudoclefts. In any case, it seems to support a purely semantic account also for the more ‘syntactic’ effects of connectivity: Case marking and agreement of predicates.

4.2.5 Connectivity in *mi* Free Relatives

Up to this point we have seen how the typal distinction accounts for connectivity effects with *ma* “what” FRs. Now we go on to look at similar effect with *mi* “who” FRs. Consider

the contrast in (15):

- (15) a. *mi* Se-dan mexapes *ze/zot baxura xaxama
 who that-Dan seeks *Z(n)/Z(f) woman smart
 “The person that Dan seeks is a smart woman.”
- b. *ma* Se-dan mexapes ze/*zot baxura xaxama
 what that-Dan seeks Z(n)/*Z(f) woman smart
 “What Dan seeks is a smart woman.”

The typical analysis means that (15a) is an equation of individuals, whereas (15b) is an equation of some higher type. Since the focus phrase can be interpreted as an individual or as a property and the same holds for the gap of the FR, the fact that only one pronZ is possible in each case can only be attributed to the restriction the *wh* words impose on the interpretation of the FR. Specifically, *mi* “who” assigns a [+human] feature to the gap and *ma* “what” assigns it a [-human] feature. So the ungrammaticality of (15a) is because the [-human] individual FR cannot be equated with the [+human] individual *baxura xaxama* “smart woman”, and the ungrammaticality of (15b) seems to be because a *mi* FR cannot denote a property. To see the possible denotations of a *mi* FR consider (16):

- (16) a. *mi* Se-dan mexapes ze ha-Sxena mimul
 who that-Dan seeks Z(n) the-neighbor(f) from-across
 “The person Dan seeks is the next-door-neighbor.”
- b. *mi* Se-dan mexapes zot ha-Sxena mimul
 who that-Dan seeks Z(f) the-neighbor(f) from-across
 de re of: “The person Dan seeks is the next-door-neighbor.”

(16a) is ambiguous between a *de dicto* reading, which may come about if the house is on fire and Dan wants to inform the neighbor but he doesn’t know who this person is; and a *de re* reading, which may come about if Dan is looking for Ruth who happens to be the next-door-neighbor. (16b), on the other hand, only has the *de re* reading. This contrast in intensionality is the same as what we found with *ma* FRs (see again section 4.2.1). That is, a *mi* FR does have an intensional interpretation, but it is restricted to roles which are

[+human], i.e. to type $\langle s,e \rangle$ of individual concepts. Now we can explain the ungrammaticality of the neutral pronoun version of (15a): while *baxura xaxama* “smart woman” is interpreted as a (general) property at type $\langle s,\langle e,t \rangle \rangle$, the *mi* FR may be interpreted as [+human] at type e or $\langle s,e \rangle$, neither of which will match the focus phrase.

The second connectivity effect is binding. Consider (17-18) which host a reflexive and a pronoun in the focus phrase, all of which are ungrammatical:

(17) a. **mi Se-ruti haxi ohevet ze (et) acma_i*
 who that-Ruth most loves Z(n) (Acc) herself

b. **mi Se-ruti haxi ohevet zot acma_i*
 who that-Ruth most loves Z(f) herself
 “The person Ruth loves most is herself.”

(18) a. **mi Se-ruti haxi ohevet ze ota_i*
 who that-Ruth most loves Z(n) (Acc) her

b. **mi Se-ruti haxi ohevet zot hi_i*
 who that-Ruth most loves Z(f) she
 “The person Ruth_i loves most is her_i.”

In (17), the focus phrase denotes the identity function of type $\langle e,e \rangle$ which needs to be equated to a FR of the same type. But a *mi* FR can only be of type e or $\langle s,e \rangle$, resulting in an unresolved mismatch. Note that this is irrelevant for (17b), since agreeing pronoun can only equate individuals anyway. In (18) there is no type mismatch, since the pronoun is (presumably) of type e . These should be blocked by Rule-I due to the existence of a bound reading. But here again the formalization of Rule-I is not enough to account for the ungrammaticality, since it only allows to change the anaphor, but here we need to change the *wh* word and the copula (in 18b). It seems again that we need to modify Rule-I so it could account for all these cases, but this requires further study and is beyond the scope of this thesis.

The third connectivity effect we saw is the agreement of predicates. This is

straightforwardly blocked for *mi* FRs due to type mismatch: while predicates are of type $\langle e,t \rangle$ (and maybe $\langle s,\langle e,t \rangle \rangle$), a *mi* FR can only be of type e or $\langle s,e \rangle$. The last connectivity effect is Accusative marking by *et*. If we reexamine example (16a) above, we find that the focus phrase is not Accusative marked by *et*, counter to what is expected from the position of the gap of the FR. This could be explained under a semantic account of Accusative Case marking by *et*, where it would only mark objects of certain types, if, for some reason, *et* would not mark objects of type $\langle s,e \rangle$ (in the same way that it wouldn't mark NPs of type e). Although this line of account seems promising, a thorough investigation of the Accusative marker is needed in order to adopt such an analysis. Note that these data show that the syntactic analysis suggested above (that pronZ requires that its arguments would bear the same syntactic feature) is impossible, since it would wrongly predict marking by *et* for all (definite) NP that correspond to an object gap.

The availability of only one connectivity effect with *mi* FRs – the preservation of opacity – strongly favors a semantic account of connectivity over any kind of reconstruction or copying. Because even if we could find an explanation to the different connectivity behavior of agreeing and neutral pronZ that will only allow for reconstruction in neutral pronZ pseudoclefts, it could not predict the different connectivity behavior of *ma* “what” and *mi* “who” FRs in neutral pronZ pseudoclefts. In other words, since the typical analysis of connectivity associates each connectivity effect with equation at a specific type, it predicts that only some of the effects would be available if the range of types of equation is restricted for some reason.

4.3 SOME ADDITIONAL DIFFERENCES

In this section I present some additional differences between agreeing and neutral pronZ pseudoclefts that are explained under the typical distinction between the two types of pronZs, and I suggest reanalyzing the two kinds of pronZ as one agreeing pronZ which

reflects the agreement features of its arguments.

4.3.1 The Focus Phrase

We saw in chapter 2 (section 2.3.1) that agreeing pronZ occurs only with an NP focus phrase, as opposed to neutral pronZ that allows for a wide range of elements in the focus phrase. The typical analysis straightforwardly explains this restriction on the focus phrase, since only NPs have a denotation at type e .

4.3.2 The Free Relative Subject

We saw in chapter 2 (section 2.3.1) that when the gap in the FR is in predicate position, only neutral pronZ is possible. If the focus phrase is an AP, this can be explained by the type of the focus phrase, but this is also the case when the focus phrase is an NP, as in (19a), which is in principle possible with agreeing pronZ, as in (19b):

- (19) a. [ma Se-rut hayta _] ze/*zot menahelet beyt sefer
 what that-Ruth was Z(m)/*Z(f) director(f) school
 “What Ruth was was a principal.”
- b. [mi Se-dan roce lifgoS _] *ze/zot menahelet beyt sefer
 who that-Dan wants to-meet *Z(m)/Z(f) director(f) school
 “The person Dan wants to meet is a principal.”

The gap in (19a) is in predicate position, i.e. it hosts a variable P of type $\langle e, t \rangle$, it is abstracted over to yield the set of properties that Ruth had, so the FR denotes the maximal property that Ruth had, and this is equated to *menahelet beyt sefer* “a principal”, which denotes a predicate²:

(19a'). **Neutral pronZ** type $\langle e, t \rangle$ $\text{Max}[\lambda P.P(r)] = M$

In (19b), the *mi* FR denotes an individual of type e and it is equated to the individual denotation (of type e) of the indefinite focus phrase.

² Note that one could not use here a complex variable of type $\langle e, t \rangle$, e.g. $\lambda x.x=y$, and abstract over the individual variable since predicate position is a scope island.

4.3.3 Referentiality (Higgins 1973)

We saw in chapter 2 (section 2.3.3) that agreeing pronZ pseudoclefts pattern with pronH pseudoclefts and not with neutral pronZ pseudoclefts on Higgins' (1973) "referentiality" test. In (20), repeated from chapter 2 (ex.72), we see that only neutral pronZ is possible with a negated FR:

- (20) ma Se-dekart lo maca *hu/ze/*zot hoxaxa le-kiyum ha-el
 what that-Descartes not found H(m)/Z(n)/Z(f) proof(f) to-existence the-god
 "What Descartes didn't find is a proof of God's existence."

According to Higgins, the FR in a predicational pseudocleft is referential but the FR in a specificational pseudoclefts is not. But (20) shows that the FR in agreeing pronZ is also referential. The typal analysis shows that what Higgins calls "referential" means having a denotation at type *e*. Note, however, that in a structured domain there is a further complication, since a negated FR may denote – out of the blue – some plural individual of type *e*. So we need to assume that agreeing pronZ does not just take any individual of type *e* as its argument, but only a singular individual which is not defined for a negated FR without context. Since we are only looking at the singular forms of pronZ, this is not a surprising result.

4.3.4 Quantifying over the Free Relative

We saw in chapter 2 (section 2.2.2) that certain quantifiers take an NP FR as their complement and these occur as subjects of pseudoclefts. (21) shows that such a quantified FR is only possible with neutral pronZ:

- (21) kol ma Se-dekart katav ze/*zot hoxaxa le-kiyum-o
 every what that-Descartes wrote Z(m)/*Z(f) proof(f) to-existence-his
 "Everything Descartes wrote is a proof of his existence."

Whatever semantics we give for *kol* "all", the quantified FR will denote a plural individual. But, as we saw in the previous section, agreeing pronZ only takes singular individuals as its arguments, so this accounts for (21) straightforwardly.

4.3.5 Creation (Sharvit 1997)

The last difference between neutral and agreeing pronZ pseudoclefts is adapted from Sharvit (1997). If the verb inside the FR is a creation verb, only neutral pronZ is possible (Note that Accusative marking connectivity is also involved):

- (22) a. ma Se-rut tixtov ze/*zot et ha-teza Sela
 what that-Ruth will-write Z(n)/*Z(f) Acc the-thesis(f) hers (Sharvit's 78)
- b. *ma Se-rut tixtov ze/zot ha-teza Sela
 what that-Ruth will-write Z(n)/Z(f) the-thesis(f) hers
 "What Ruth will write is her thesis."

Since there is no individual denotation for the FR (the thesis was not yet created), it cannot be an argument of agreeing pronZ, which only takes individual arguments, but the neutral pronZ version in (20a) is grammatical, since it can be an equation of some intensional object, e.g. intensional Generalized Quantifiers.

4.3.6 Agreement: Sorting The Domain

I have argued all along for the existence of two kinds of pronZ: one which agrees with the element to its right and one which has a fixed neutral form. In this section I suggest a different perspective and change the analysis to having one agreeing pronZ, where the domain is sorted for gender.

Consider (23), repeated from chapter 2 (ex.54), where the focus phrase is a feminine NP and (24) where the focus phrase is a masculine NP:

- (23) a. mi Se-loke'ax/*lokaxat et rut me-ha-gan ze ha-metapelet
 who that-takes(m)/*takes(f) Acc Ruth from-the-kindergarten Z(n) the-nanny(f)
- b. mi Se-*loke'ax/lokaxat et rut me-ha-gan zot ha-metapelet
 who that-*takes(m)/takes(f) Acc Ruth from-the-kindergarten Z(f) the-nanny(f)
- both: "The person that takes Ruth from the kindergarten is the nanny."

- (24) a. mi Se-axrai/*axra'it al tahalix ha-Salom ze roS ha-memSala
 who that-is in charge(m)/*(f) on process the-peace Z(n) head(m) the-government
- b. mi Se-*axrai/axra'it al tahalix ha-Salom zot roS ha-memSala
 who that-is in charge*(m)/(f) on process the-peace Z(n) head(m) the-government
- both: "The person in charge of the peace process is the prime minister."

These data show that agreement of agreeing pronZ is semantic, since pronZ bears the feminine form when the actual referent is feminine: both in (23b) where the grammatical gender of the focus phrase is feminine, and in (24b) where the grammatical gender of the focus phrase is masculine³.

In this context I raise the question of whether we need to postulate two separate pronZ – neutral and agreeing. I suggest that we have only an agreeing pronZ which reflects the gender features of its arguments. In the case of individuals we have both masculine and feminine, but in all other types the arguments of pronZ do not have gender features and the default form is the masculine one. This is formalized by sorting the domain to feminine and masculine entities:

- (25) For any type τ : $F_\tau, M_\tau \subseteq D_\tau$ such that:
- (i) $F_\tau \cap M_\tau = \emptyset$
 - (ii) $F_\tau \cup M_\tau = D_\tau$
 - (iii) $M_\tau \neq \emptyset$
 - (iv) $F_e \neq \emptyset$; if $\tau \neq e$: $F_\tau = \emptyset$

Informally, the domain is divided into feminine and masculine entities at type e , and at all other types all the domain is masculine (this means that masculine is the default gender).

We have feminine and masculine variables:

- (26) a. $\text{VAR}_M = \{m_1, m_2, m_3, \dots, m_n\}$
- b. $\text{VAR}_F = \{f_1, f_2, f_3, \dots, f_n\}$

So the meaning of the two forms of pronZ is as follows:

³ Note that the data in (23) can be also used to argue against a reconstruction account for connectivity, since such an account would give the opposite results for the agreement of the verb inside the FR.

$$(27) \quad \begin{array}{ll} ze & \lambda m_2 \lambda m_1 . m_1 = m_2 \\ zot & \lambda f_2 \lambda f_1 . f_1 = f_2 \end{array}$$

When the arguments of pronZ are individuals of type e, they will be either feminine or masculine and will ‘fit in’ into the pronZ of the right gender only, i.e. we get what we call agreeing pronZ; and when the arguments are of any higher type, they are sorted as masculine by default and we get what we call neutral pronZ.

4.4 CONCLUSIONS

This chapter gives a unified account for neutral and agreeing pronZ pseudoclefts as specificational by analyzing them as equation at different semantic types, but we saw that instead of assuming two kinds of pronZ, we can sort the domain for gender and have only one pronZ which reflects the gender of its arguments.

First, the typal analysis shows that a ‘BE of identity’ is not restricted to identity of individuals as assumed in the philosophical tradition for cases like *The morning star is the evening star*, but it may equate any two phrases that are of the same type. Thus, what is known as ‘identity statements’ are just equatives at type e. This explains why Higgins was not willing to analyze specificational pseudoclefts as identity statements: for him identity statements involve two referential expressions, but he noticed that specificational pseudoclefts are cross-typal and the elements in the equation need not be referential.

Second, the typal analysis enables us explain the different connectivity behavior of both the (apparent or real) two kinds of pronZ and of *ma* and *mi* FRs using a semantic account of connectivity. I conclude that what allows for connectivity is equation at high semantic types. But this does not mean that equation at high types is enough to create all the connectivity effects, e.g. agreement of predicates and Accusative Case marking. The fact that connectivity effects yield a complex pattern in Hebrew rejects any kind of reconstruction analysis for these phenomena.

Chapter 5

Open Problems

Having presented my analysis of specificational pseudoclefts in Hebrew, I present some of its implications for other copular sentences in Hebrew – both past/future pseudoclefts with the copular verb *h.y.y.* and non-pseudocleft pron sentences – as well as for pseudoclefts crosslinguistically, and the problems they raise for future research.

5.1 PSEUDOCLEFTS CROSSLINGUISTICALLY

I have analyzed specificational pseudoclefts in Hebrew as equatives induced by ‘BE of identity’, deriving connectivity as a by-product of high semantic types. First, this suggests that specificational pseudoclefts crosslinguistically are to be analyzed as equatives. However, most languages have one copula for both predicational and specificational pseudoclefts, and not two distinct copulas like in Hebrew. So transferring the analysis given for Hebrew to other languages would mean that the (English or Italian) copula is ambiguous between a ‘BE of predication’ and a ‘BE of identity’, which is not a desirable result. For languages where there is only one copula, I suggest, following Partee (1987), that the copula is a ‘BE of predication’ (with the meaning of the identity function $\lambda P.P$) that can derive equation as a special case of predication using the type-shifting operation IDENT (see again chapter 3, section 3.4.2.1). Second, the analysis of connectivity as a by-product at high semantic types means that in English, where all connectivity effects are available, equation is possible for all the types, whereas in languages that do not exhibit connectivity, e.g. Italian and Greek, equation at the right type is not available (see Iatridou & Varlokosta 1998 for relevant data). Note that this could be caused by one of two factors: the range of types the copula can equate and the range of denotations that FR have. The typical analysis predicts that there could be a language where specificational pseudoclefts exhibit only some connectivity effects, since each effect is derived at a different type and

the language may allow for equation at a restricted range of types, so it raises the question of whether such a language indeed exists.

5.2 TENSE IN HEBREW PSEUDOCLEFTS

My analysis of two BEs in present-tense pseudoclefts – pronH as a ‘BE of predication’ and pronZ as ‘BE of identity’ – raises questions about the role of the verbal copula h.y.y. in past and future pseudoclefts. Recall that the so-called ‘present-tense’ is not a tense in Hebrew (see again chapter 1, section 1.2.1) and that Hebrew lacks tense harmony, so that even when the FR is in the past tense, we can use the pronominal copula. However, it is possible to use the past verbal copula in pseudoclefts, as in (1):

- (1) a. ma Se-kaniti ba-Suk haya tapuxim
 what that-I-bought in-the-market was apples
 “What I bought in the market was apples.”
- b. mi Se-lakax et rut me-ha-gan haya saba Sela
 who that-took Acc Ruth from-the-kindergarten was grandfather her
 “The person that took Ruth from the kindergarten was her grandfather.”

These pseudoclefts have a specificational reading. The prominent reading of (1a) is that I bought apples in the market and not that the things I bought in the market had the property of being apples (which they may not have anymore); and the prominent reading of (1b) is that it is her grandfather who took Ruth from the kindergarten and not that this person was her grandfather, but now he isn’t. That is, both cases are equation of individuals. However, these could be derived as a special case of predication using IDENT, so they do not constitute evidence to the general existence of equatives in the past-tense. Now, consider the pseudoclefts in (2), where the specificational reading is also available (although the pronZ version is clearly preferred):

- (2) a. ma Se-dan amar haya Se-anaxnu crixim la-lexet

what that-Dan said was that-we need to-go

“What Dan said was that we should go.”

- b. ma Se-rut asta haya le-exol glida

what that-Ruth did was to-eat ice-cream

“What Ruth did was eat ice cream.”

If specificational pseudoclefts are equatives, then in (2a) we have an equation of propositions and in (2b), which is an example of VP ellipsis that I did not consider earlier, we also have equation of some type higher than individuals. These data suggest that the copular verb *h.y.y* in Hebrew is like the copular verb in other languages (e.g. English), i.e. a cross-categorial ‘BE of predication’ that may induce equation as a special case. If this is indeed the case, we should find all connectivity effects with the past copula *haya*. Indeed, we find opacity and binding effects, as illustrated in (3):

- (3) a. ma Se-dan xipes haya ha-sefer Se-azar le-ron le-sayem et ha-teza

what that-Dan sought was the-book that-helped Ron to-finish Acc the-thesis

“What Dan sought was the book that helped Ron finish the thesis.”

- b. ma Se-rut asta haya le-Saker le-acma

what that-Ruth did was to-lie to-herself

“What Ruth did was lie to herself.”

(3a) has both a *de dicto* reading, where Dan seeks the book that helped Ron finish his thesis without knowing which book it is, and a *de re* reading, where Dan seeks some book which accidentally also helped Ron finish his thesis; in (3b) a reflexive is licensed in the post-copular phrase without being *c-commanded* by the relevant NP which is inside the FR. However, the other two connectivity effects – agreement of predicates and Accusative marking by *et* – are impossible with the copular verb *haya*, as exemplified in (4):

- (4) a. *ma Se-rut hayta etmol haya nexmada

what that-Ruth was(f) yesterday was(m) nice(f)

“What Ruth was yesterday was nice.”

- b. ma Se-dan kana etmol haya (*et) ha-xulca ha-kxula Se-hu loveS axSav
 what that-Dan bought yesterday was Acc the-shirt the-blue that-he wears now
 “What Dan bought yesterday was the blue shirt that he is wearing now.”

The fact that these connectivity effects are impossible with the copular verb *haya* suggests that there is an additional factor involved. This is not surprising, since the agreement of predicate and Accusative marking are the more ‘syntactic’ effects, so they are not dependent on the type of equation alone. As mentioned in the previous chapter (section 4.2), a detailed analysis of these effects are beyond the scope of this thesis.

5.3 PREDICATIONAL PRON-Z SENTENCES

My analysis of pronZ as a ‘BE of identity’ implies that all pronZ sentences are equatives. However, the pronZ sentence in (5) seems predicational:

- (5) video ze yakar
 VCR Z expensive
 “A VCR is expensive.”

The existence of predicational pronZ non-pseudoclefted sentences would force to postulate a second pronZ, which is an unwanted result. However, looking more closely at these cases reveals that they are not really predicational. Consider (6):

- (6) a. *kadursal ze katom
 basketball Z orange
 b. bibi ze acuv
 Bibi Z sad

Assigning the property *orange* to a basketball in (6a) is impossible, and assigning the property *sad* to Bibi in (6b) does not mean that Israel's former prime minister is a sad person (e.g. after he lost the elections), but that the fact that Bibi was the prime minister is a sad situation, i.e. it is some aspect of Bibi of which we predicate the property *sad*. Note that this is also true for the sentence in (5), which could mean that buying a VCR is expensive, but also that repairing one or having a wedding taped on a VCR is expensive.

Although I do not have an analysis for these sentences, I suggest that they may involve equation of the AP with an aspect of the subject NP. This idea gets preliminary support from the fact that although these sentences seem predicational, they behave like identity sentences with respect to extraction (see again ch. 2, section 2.1.1.3):

- (7) a. bibi hu/ze mezik la-medina
 Bibi H/Z damaging to-the-state
 “Bibi is damaging to the country.”
- b. le-mi ata xoSev Se-bibi hu mezik ?
 to-who you think that-Bibi H damaging
- c. *le-mi ata xoSev Se-bibi ze mezik ?
 to-who you think that-Bibi Z damaging
- both: “To whom do you think that Bibi is damaging ?”

5.4 IDENTITY IN DISCOURSE

The last issue I touch on is a less semantic aspect of interpretation. My analysis gives both sentences in (8) the same interpretation:

- (8) a. dan hu ha-Saxen mimul
 Dan H the-neighbor from-across
 “Dan is the next-door-neighbor.”
- b. dan ze ha-Saxen mimul
 Dan Z the-neighbor from-across
 “Dan is the next-door-neighbor.”

However, there seem to be some meaning difference between the sentences. Intuitively, to utter the pronH version the participants have to know who Dan is, and the new information is that he is the next-door-neighbor; but in the pronZ version the topic of the conversation is the next-door-neighbor, and the new information is the relevance of Dan. As suggested by the fact that this is not a truth-conditional difference, this distinction is not very strong. Now, the discourse status of the pronH sentence may be expected from the fact that it is

really a predicational sentence, so it predicates the property of being the next-door-neighbor of Dan. But the status of the pronZ sentence raises the question as to what the assertion of a true identity sentence is. In short, I have not touched the problem of what could be called “the pragmatics of identity”. I hope take this up in other work.

REFERENCES

- Akmajian A. (1970). "On Deriving Cleft Sentences from Pseudocleft sentences",
Linguistic Inquiry 1:140-168.
- Ariel, Mira. (1990). *Accessing NP Antecedents*. London: Routledge.
- Ben David A. (1971). *leSon ha-mikra ve-leson xaxamim* (in Hebrew). Dvir, Israel.
- Berman, Ruth (1978). *Modern Hebrew Syntax*. University Publishing Projects, Tel Aviv.
- Berman, Ruth & Alexander Grosu (1976). "Aspects of the Copula in Modern Hebrew". In
P.Cole (ed.), *Studies in Modern Hebrew Syntax and Semantics*. North Holland,
Amsterdam.
- Chomsky, Noam (1986a). *Barriers*. MIT Press, Cambridge, Massachusetts.
- Chomsky, Noam (1986b). *Knowledge of Language: Its Nature, Origin and Use*. Praeger,
New York.
- Cooper, Robin (1983). *Quantification and Syntactic Theory*. Reidel, Dordrecht.
- Doron, Edit (1983). *Verbless Predicates in Hebrew*. Ph.D. dissertation, University of
Texas at Austin.
- Dowty, David & Pauline Jacobson (1989). "Agreement as a Semantic Phenomenon." In
Joyce Powers and Kenneth de Jong (eds.) *Proceedings of the Fifth Eastern States
Conference on Linguistics* (ESCOL '88). Columbus: Ohio State University.
- Greenberg, Yael (1994). *Hebrew Nominal Sentences and the Nature of the Stage-
Individual Level Distinction*. MA Thesis, Bar-Ilan University.
- Greenberg, Yael (1998). "An Overt Syntactic Marker for Genericity in Hebrew", in S.
Rothstein (ed.) *Events and Grammar*, pp. 125-143. Kluwer Academic Press.

- Grodzinsky Yosef and Tanya Reinhart (1993). "The Innateness of Binding and Coreference". *Linguistic Inquiry* 24: 69-101.
- Hazout, Ilan (1994). "The Hebrew pronoun *ze* and the syntax of sentential subjects". *Lingua* 93, pp.265-282.
- Heggie, Laurie (1988). *The Syntax of Copular Sentences*. Ph.D. dissertation, University of Southern California.
- Heim, Irene (1982). *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. dissertation, GLSA, University of Massachusetts at Amherst.
- Heycock, Caroline & Anthony Kroch (1996). "Pseudoclefts Connectivity: implications for the LF Interface Level", ms. University of Pennsylvania and University of Edinburgh. (version of 15.12.97)
- Heycock, Caroline & Anthony Kroch. (1997). "Inversion and Equation in Copular Sentences". paper presented at the workshop on (Pseudo)clefts, ZAS, Berlin.
- Higgins, Roger (1973). *The Pseudocleft Construction in English*. Ph.D. Dissertation, MIT. Published by Garland, New York, 1979.
- Iatridou, Sabine & Spyridoula Varlokosta (1998). "Pseudoclefts Crosslinguistically". *Natural Language Semantics* 6:3-28.
- Jacobson, Pauline (1994). "Binding Connectivity in Copular Sentences". In *Proceedings of SALT* 4: 481-614.
- Jacobson, Pauline (1995). "On the Quantificational Force of English Free Relatives", in E. Bach, E. Jelinek, A. Kratzer and B. Partee (eds.), *Quantification in Natural Language*, Kluwer Academic Publishers, Dordrecht, 451-486.
- Moro, Andrea (1997). *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge: Cambridge University Press.

- Partee, Barbara (1986). "Ambiguous Pseudoclefts with Unambiguous BE", in S. Berman, J.-W. Choe and J. McDonough (eds.), *Proceedings of NELS 16, 1985*. GLSA, University of Massachusetts, Amherst, 354-366.
- Partee, Barbara (1987). "Noun Phrase Interpretation and Type Shifting Principles". In J. Groenendijk, D. de Jongh and M. Stokhof (eds.) *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*. Foris, Dordrecht, pp. 115-43.
- Pollard, Carl & Ivan A. Sag (1994). *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago Press and Stanford: CSLI Publications.
- Rapoport, Tova Rebecca (1987). *Copular, Nominal and Small Clauses: a Study of Israeli Hebrew*. Ph.D. dissertation, MIT.
- Reinhart, Tanya (1997). "Quantifier Scope - How Labor is Divided between QR and Choice Functions", *Linguistics & Philosophy* 20: 335-397.
- Reinhart, Tanya & Eric Reuland (1993). "Reflexivity", *Linguistic Inquiry* 24:657-720.
- Rizzi, Luigi (1986). "On the Status of Subject Clitics in Romance", in O. Jaeggli and C. Silva-Crvalan (eds.) *Studies in Romance Linguistics*. Foris, Dordrecht.
- Rothstein, Susan (1995). "Small Clauses and Copular Constructions". In A. Cardinaletti & T. Guasti (eds.) *Syntax and Semantics* 28.
- Rothstein, Susan (to appear). *Predicates and Their Subjects*. Kluwer Academic Press.
- Rubinstein, Eliezer (1968). *ha-miSpat ha-Semani* (in Hebrew). HaKibutz HaMeuxad Publication.
- Sharvit, Yael (1997). "A Semantic Approach to Connectedness in Specificational Pseudoclefts". unpublished ms.
- Sharvit, Yael (to appear). "Connectivity in Specificational and Predicational Sentences." *Natural Language Semantics*.

Sichel, Ivy (1997). "Two Pronominal Copulas and the Syntax of Hebrew Nonverbal Sentences." *Proceedings of the TLS Conference on Predication*.

Williams, Edwin (1983). "Semantic vs. Syntactic Categories", *Linguistics & Philosophy* 6: 423-446.

Winter, Yoad (1997). "Choice Functions and the Scopal Semantics of Indefinites", *Linguistics & Philosophy* 20.

Zimmermann, Thomas Ede (1993). "On the Proper Treatment of Opacity in Certain Verbs", *Natural Language Semantics*, 1:149-179.