CONNECTIVITY AND PREDICATE INVERSION IN HEBREW SPECIFICATIONAL CLEFTOIDS[1]

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1 Introduction

Since Higgins (1973), it has been known that copular sentences come in a variety of types, namely predicational, specificational, identity/equative and identificational copular sentences. The family of specificational sentences, including specificational pseudoclefts, received much attention in the literature. In this paper it is argued that Hebrew exhibits a special type of specificational copular sentence, prima facie very similar to specificational pseudoclefts, exemplified in (1):

(1)   a. ze   Se ohev lir'ot   hisardut hu/ze   Aviv
         the-one that likes to-watch Survivor PronH/PronZ[2] Aviv
         'The one who likes to watch 'Survivor' is Aviv'.

      b. Aviv hu/ze   ze   Se ohev lir'ot   hisardut
         Aviv PronH/PronZ the-one that likes to-watch Survivor
         'Aviv is the one who likes to watch 'Survivor'.

[2] PronH is the pronominal copula *hu/hi/hem/hen*, PronZ is the pronominal copula *ze/zot/ele*. For more on Hebrew pronominal copulas, cf. Doron (1983, 1986), Rapaport (1987), Rothstein (1995, 2001), Greenberg (2002, 2008), Sichel (1997), Shlonsky (2000), Heller (1999, 2002).

These constructions will be referred to as *cleftoids*. Despite the differences between pseudoclefts and cleftoids, both exhibit similar effects with respect to connectivity, information structure, reversibility, A'-extraction and more. Therefore, in this paper, I will offer a unified account for both pseudoclefts and cleftoids, even though the paper will focus mainly on cleftoids. My research question is the following: given all the analyses that specificational sentences have received, it is still unclear how to account for connectivity properties that these sentences exhibit. This paper will focus on arguing that together with predicate inversion (Moro 1990, 1997, Den Dikken 2006), connectivity can be accounted for in specificational cleftoids and pseudoclefts.

The paper is structured as follows. In section 2 I will present the data from Hebrew. In section 3 I will briefly introduce previous analyses of specificational copular sentences in general, and pseudoclefts in particular, and their shortcomings in accounting for connectivity. In section 4 I will present evidence in favor of the syntactic predicate inversion approach along the lines of Moro (1990, 1997) and Den Dikken (2006), modifying the analysis to account for connectivity. More specifically, I propose viewing the Small Clause of inverse cleftoids as realization of FocP to allow for syntactic configuration of c-command for connectivity, with subsequent internal Merge of the original sentence into a subject and a predicate. Section 5 is dedicated to concluding remarks, open questions and prospects for further research.

2 Hebrew Cleftoids

2.1 Data

In this section I will discuss Hebrew specificational cleftoids in (1), repeated here:

> (2)   a. ze   Se ohev lir'ot   hisardut hu/ze   Aviv
>   the-one.masc that likes to-watch Survivor PronH/PronZ Aviv
>   'The one who likes to watch 'Survivor' is Aviv'.
>
>   b. Aviv hu/ze   ze   Se ohev lir'ot   hisardut
>   Aviv PronH/PronZ the-one.masc that likes to-watch Survivor
>   'Aviv is the one who likes to watch 'Survivor'.

Cleftoids are comprised of a relative clause, headed by the demonstrative pronoun *ze* ('the one'), a pronominal copula and a DP counterweight[3]. The order can also be reversed. Cleftoids resemble pseudoclefts but are different in some respects[4]; the relative clause of cleftoids is headed by the pronoun *ze* ('the-one'), while the free relative of pseudoclefts is headed by a *wh*-pronoun *mi/ma* ('who/what'). The RC head of cleftoids, *ze*, matches in number and gender with the counterweight (thus it can inflect for number and gender, *ze* – masc., *zo(t)* – fem., *ele* – pl.),

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[3] A term from Heycock and Kroch (1999), who refer to the non-wh XP of a pseudocleft by the name 'counterweight', which I adopt here.
[4] Hebrew has also *ze*-clefts (Spector 2012):
 (i)   ze aviv Se ohev   lir'ot   hisardut
              it Aviv that likes   to-watch Survivor
              'It's Aviv that likes to watch Survivor'.
Moreover, Hebrew cleftoids are different from Arabic clefts, discussed in Ouhalla (2000), which do not show word order reversal. And also different from Frascarelli's (2010) 'cleft-like' constructions.

and the counterweight can be only NP/DP (*Aviv* in (1)), while pseudoclefts may have various XPs in the counterweight position (Heller 1999). Contrary to pseudoclefts (3a), the counterweight of cleftoids (3b) must be referring and not quantificational:

(3)   a. ma Se raiti Sam ze   kol   seleb   Se huzkar   le-axrona
                what that saw.I there PronZ every celebrity that mentioned.was lately
                ba-iton
                in-the-newspaper
                'What I saw there was every celebrity that was mentioned lately in the newspaper'.

        b. *ze   Se raiti Sam ze   kol   seleb   Se huzkar   le-axrona
                the-one that saw.I there PronZ every celebrity that mentioned.was lately
                ba-iton
                in-the-newspaper
                'The one that I saw there was every celebrity that was mentioned lately in the newspaper'.

Hebrew cleftoids in (1) and throughout this paper are assumed to belong to the family of specificational sentences (Higgins 1973), just as specificational pseudoclefts. Higgins shows that pseudoclefts in general can be predicational or specificational:

(4)   a. What John is is important to him.   *Predicational*
        b. What John is is important to himself.   *Specificational*

In (4a), the postcopular constituent, or the counterweight, is a predicate of the *wh*-clause, i.e. John's role or occupation has the property of being important to him. In (4b), on the other hand, the counterweight *important to himself* is not a property of the free relative but specifies a property of the subject of the *wh*-clause, John, namely that John is important to himself. In this paper, only specificational pseudoclefts and cleftoids will be explored, since only they exhibit connectivity (Higgins 1973, Heycock and Kroch 1999, Heller 1999, Sharvit 1999, int.al.). Moreover, specificational pseudoclefts can show order reversal, where the counterweight precedes the free relative:

(5)   a. Who she met was John
        b. John was who she met

This is important, since only pseudoclefts with the order [*wh*-clause copula counterweight] exhibit connectivity effects (Heycock and Kroch 2002), thus the two orders in (5) do not have equal status. Even though specificational pseudoclefts and cleftoids show connectivity, they pattern in a different manner in terms of different connectivity phenomena, as discussed next.

2.2 Connectivity

First, let us begin by reviewing connectivity phenomena in specificational pseudoclefts in English. As defined in Mikkelsen (2011), connectivity is: "a phenomenon where an element is present or interpreted in a way that is normally associated with a certain syntactic configuration seemingly without that configuration obtaining". In other words, we are dealing with various binding phenomena which require local c-command, but without apparent c-command configuration. These are exemplified below:

Binding:

$\quad$ (6) $\quad$ a. What Harvey$_i$ heard were stories about himself$_i$ $\qquad$ *Principle A of BT*
$\qquad\quad$ b. Harvey$_i$ heard stories about himself$_i$
$\qquad\quad$ c. *What Harvey$_i$ heard stirred up stories about himself$_i$

$\quad$ (7) $\quad$ a. *What Harvey$_i$ loves is him$_i$ $\qquad$ *Principle B of BT*
$\qquad\quad$ b. *Harvey$_i$ loves him$_i$
$\qquad\quad$ c. What Harvey$_i$ loves excites him$_i$

$\quad$ (8) $\quad$ a. *What he$_i$ heard were stories about Harvey$_i$ $\qquad$ *Principle C of BT*
$\qquad\quad$ b. *He$_i$ heard stories about Harvey$_i$
$\qquad\quad$ c. What he$_i$ heard stirred up stories about Harvey$_i$

In these examples, connectivity is observed with respect to Binding Theory. In the (a) examples, the relevant anaphor/pronoun/R-expression is bound by its antecedent across the copula and without c-command, just like in verbal paraphrases of these pseudoclefts in (b) with c-command[5]. The (c) examples show that connectivity does not arise in very similar configurations with initial *wh*-clause, but without the copula.

$\quad$ Connectivity is also observed with respect to opacity. Thus, (9a) is ambiguous between de dicto and de re readings, just like its verbal counterpart in (9b).

Opacity:

$\quad$ (9) $\quad$ a. What John is looking for is a doctor $\qquad$ *de dicto/de re*
$\qquad\quad$ b. John is looking for a doctor

Negative Polarity Items, which also require a local configuration for their licensing, can be found across the copula in pseudoclefts:

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[5] Connectivity is observed also with headed RCs and other specificational sentences (Mikkelsen 2011):
(i) $\quad$ a. The thing he$_i$ did next was wash himself$_i$/*him$_i$/*Harvey$_i$
$\qquad\quad$ b. His$_i$ biggest worry is himself$_i$/*him$_i$/*Harvey$_i$

NPI licensing:

(10)   a. What nobody bought was any wine
           b. Nobody bought any wine

As we can see from the examples above, all connectivity phenomena in pseudoclefts are observed with 'regular' pseudoclefts, i.e. pseudoclefts which begin with the relative clause, the counterweight coming after the copula. This is also argued by Heycock and Kroch (2002) for English and can be seen from Heller's (1999, 2002) Hebrew examples. Moving on to cleftoids, we can see that as with pseudoclefts, only the 'inverse' order cleftoids show connectivity:

(11)   a. ze   Se ha-boxen$_i$ mexapes ze   et   acmo$_i$ *BT-A + 'et'*
             the-one that the-examiner searches PronZ acc. himself
             'The one that the examiner looks for is himself'

             b. *et   acmo   ze   ze   Se ha-boxen   mexapes
             acc. himself PronZ the-one that the-examiner searches
             'Himself is the one that the examiner looks for'.

We see in (11a) connectivity with respect to Principle A of the Binding Theory and the accusative case marker *et*; the anaphor in the counterweight is bound by the antecedent in the relative clause and the accusative marker *et* in the counterweight is licensed by the verb in the relative clause. The other order cleftoid in (11b) does not allow connectivity. In (12) and (13) connectivity with respect to principles B and C of the binding theory is shown, again only in inverse cleftoids:

(12)   *zot   Se rina$_i$ xibka zot   hi$_i$ *BT - B*
             the-one that Rina hugged PronZ she
             'The one that Rina hugged is she'.

(13)   *zot   Se hi$_i$ xibka zot   Rina$_i$ *BT - C*
             the-one that she hugged PronZ Rina
             'The one that she hugged is Rina'

However, contrary to pseudoclefts (14a), cleftoids (14b) do not exhibit connectivity with respect to negative concord items (NCI) licensing:

(14)   a. mi   Se **lo**   haya Sam ze   **af** seleb   Se nexSav   le-maSehu
             who that neg. was there PronZ any celebrity that considered to-something
             'Who wasn't there was any celebrity that counts'.

             b.*ze   Se **lo**   haya Sam ze   **af** seleb   Se nexSav   le-maSehu
             the-one that neg. was there PronZ any celebrity that considered to-something
             'The one that wasn't there was any celebrity that counts'.

The same goes for negative polarity items (NPI) licensing; they are licensed in pseudoclefts (15a) but not in cleftoids (15b):

(15)   a. mi Se hi **lo**   mac'a ba-marpe'a Selanu ze   rofe Se mevin
             who that she neg. found   in-the-clinic our   PronZ doctor that understands
             davar ve-xaci davar[6] be-psixologiya
             thing and half thing   in psychology
             'Who she haven't found in our clinic is a doctor who knows anything about
             psychology'.

           b. *ze   Se hi **lo**   mac'a ba-marpe'a Selanu ze   rofe Se
              the-one that she neg. found in-the-clinic our   PronZ doctor that
              mevin   **davar ve-xaci davar** be-psixologiya
              understands thing and half thing   in psychology
              'The one she haven't found in our clinic is a doctor who knows anything
              about psychology'.

Contrary to pseudoclefts, cleftoids also do not exhibit opacity[7]:

(16)   a. ma   Se aviv mexapes ze   rofe menateax   *de dicto/de re*
             what that Aviv seeks   PronZ surgeon
             'What Aviv seeks is a surgeon'.

           b. ze   Se aviv mexapes ze   rofe menateax   only *de re*
              the-one that Aviv seeks   PronZ surgeon
              'The one that Aviv seeks is a surgeon'.

A possible explanation for the difference of cleftoids from pseudoclefts in disallowing NPI, NCI and opacity connectivity is the fact that [ze Se…] clause of cleftoids carries an existential presupposition, it being a definite DP and unlike the *wh*-clause of pseudoclefts (see Percus 1997 for a similar claim and argumentation). Thus, *de dicto* reading is blocked. This also explains the impossibility of NPIs and NCIs: in order to license the NPI and NCI elements, negation needs to be present in the [ze Se] clause; however, this clashes with the fact that the thing denoted by the RC head *ze* and co-referential with the DP in counterweight is presupposed to exist. So, in (15b), for example, the presupposition is that she found somebody who has the property X, which clashes with the assertion that she hasn't found somebody which has the property X.

What is still in need of explanation is why connectivity with respect to Binding Theory arises in cleftoids, and why only in inverse cleftoids.

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[6] The idiomatic *davar ve-xaci davar* is an NPI item in Hebrew. It requires the presence of a local negation in order to be licensed.

[7] Edit Doron (p.c.) points that opacity in pseudoclefts is not a property of pseudoclefts per se, but presumably of the free relative alone:

(i)   ma Se aviv mexapes lo   kayam
          what that Aviv seeks   neg. exist
          'What Aviv seeks does not exist'.

Here, both de re and de dicto readings are present, even though this is not a pseudocleft. If opacity is irrelevant to cleftoids and pseudoclefts, it should not be relevant to analyses of connectivity in specificational sentences.

2.3 Information Structure

Another similarity between the reverse order pseudoclefts and cleftoids is their information structure, as discussed by Declerck (1988), Heycock and Kroch (2002), Den Dikken (2005), int.al. for pseudoclefts and specificational copular sentences:

(17)　　　A: who was the culprit? (John or Bill?)
　　　　　B: JOHN was the culprit.

(18)　　　A: what was John? (was John the culprit or the victim?)
　　　　　B: John was THE CULPRIT.

(19)　　　A: Who was the culprit? (John or Bill?)
　　　　　B: the culprit was JOHN.

(20)　　　A: what was John? (was John the culprit or the victim?)
　　　　　B: *THE CULPRIT was John.

While some specificational sentences can exhibit focus on either one of the DPs (17-18), other order specificational sentences can only focus the postcopular DP (19-20). The same information structure properties are observed with reverse cleftoids, which can only focus the counterweight and not the relative clause:

(21)　　　a. mi　haya ze　　Se　aSem, aviv o ron?
　　　　　　 who was　the-one that guilty, Aviv or Ron
　　　　　　 'Who was the one that was guilty, Aviv or Ron?'

　　　　　　b. ze　　Se　aSem　haya [AVIV]
　　　　　　 the-one that guilty was　Aviv
　　　　　　 'The one that was guilty was Aviv'.

(22)　　　a. ma　haya aviv, ze　　Se aSem o ze　　Se xaf mi-peSa ?
　　　　　　 what was　Aviv, the-one that guilty or the-one that innocent ?
　　　　　　 'What was Aviv, the one that was guilty or the one that was innocent ?'

　　　　　　b. # [ZE　　SE　ASEM] haya　aviv
　　　　　　 the-one that guilty　was　Aviv
　　　　　　 'The one that was guilty was Aviv'.

Once again, similarly to what is observed by Heycock and Kroch (2002), cleftoids of the order [counterweight – copula – relative clause] can focus either one of the constituents:

(23)   a. mi haya ze   Se aSem, aviv o ron?
               who was the-one that guilty, Aviv or Ron
               'Who was the one that was guilty, Aviv or Ron?'

            b. [AVIV] haya ze   Se aSem
                Aviv   was   the-one that guilty
               'Aviv was the one that was guilty'.

(24)   a. ma   haya aviv, ze   Se aSem o ze   Se xaf mi-peSa ?
               what was Aviv, the-one that guilty or the-one that innocent ?
               'What was Aviv, the one that was guilty or the one that was innocent ?'

            b. Aviv haya [ZE   SE   ASEM]
               Aviv was   the-one that guilty
               'Aviv was the one that was guilty'.

With these data in mind, we now proceed to reviewing the analyses that specificational copular sentences in general, in pseudoclefts in particular, have received in the literature. The analyses and their shortcomings are followed by motivations for the syntactic approach of predicate inversion and its application on Hebrew cleftoids.

3 Theoretical Background

3.1 Approaches to Specificational Copular Sentences

Since specificational cleftoids and pseudoclefts belong to the family of specificational copular sentences in general, it is worthwhile to review these approaches and their shortcomings, setting up the stage for presenting my account. Several types of approaches to specificational sentences can be found in the literature, roughly divided between syntactic, semantic (equative), and pertaining to analysis on the dimension of information structure, notwithstanding differences between them. In this section I will briefly review these approaches and how they deal with connectivity[8].

Syntactic Approaches. Let us begin with predicational approaches to the problem of the ambiguity of copular sentences (Moro 1990, 1997, Williams 1983, 1994, Heggie 1988, Den Dikken 2005, 2006, Adger and Ramchand 2003, Mikkelsen 2005, Geist 2007, int.al.), which posit only one semantic relation between the precopular and the postcopular constituents, namely a predication relation. The copula is semantically vacuous and the order of the elements in its complement SC is always argument-predicate. While this order is straightforward on the surface for predicational sentences, specificational sentences, repeated here, are derived syntactically via 'Predicate Inversion' (Moro 1990, 1997, Den Dikken 2006).

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[8] For a more extensive overview of the literature on copular clauses, see Mikkelsen (2011).

(25) Specificational
What I don't like about John is his tie
The murderer is John
The problem is Brian's arrest

Inversion of the predicate means it is fronted from complement position of Small Clause (RelP) across the subject to SpecTP (Den Dikken 2006)[9]. For example, the derivation of *The problem is Brian's arrest* will proceed as following:

(26) $[_{TP}$ [the problem]$_j$ $[_{T+Rel}$ is$_k$ $[_{RelP}$ Brian's arrest $[_{Rel}$ t$_k$ [t$_j$]]]]]

If specificational sentences are simply inverse predicational sentences, a terminological ambiguity arises; on these accounts, predicational copular sentences are *canonical* and specificational copular sentences are *inverse*. Things get more confusing when we are dealing with specificational pseudoclefts; 'regular' pseudoclefts, beginning with *wh*-clause, are, in fact, inverse and pseudoclefts of the reverse order, where the *wh*-clause comes post-copularly, are canonical:

(27) a. What I don't like about John is his tie   *inverse*
      b. His tie is what I don't like about John   *canonical*

The canonical/ inverse dichotomy is based on how specificational sentences behave with respect to obligatoriness of the copula under SC taking verbs like 'consider and A' – extraction of and out of postcopular DP, as first noted by Moro (1990). First, notice the behavior of the copula when copular clauses are embedded under an ECM verb:

(28) I consider Brian's arrest (to be) the problem   *canonical*
(29) I consider the problem *(to be) Brian's arrest.   *inverse*

In canonical predicational sentences, such as (28), the copula is optional, while in specificational copular sentences, which are claimed to be inverse (29), the copula is obligatory. This is explained under predicate inversion analysis; in specificational sentences the copula is needed in order to extend the domain and prevent a Relativized Minimality violation (Rizzi 1990), when the predicate raises to SpecTP while crossing the subject[10] (Den Dikken 2006). Now let us look into A'-extraction cases:

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[9] Or SpecCP (Heggie 1988). However, Den Dikken shows that specificational sentences allow raising, supporting the analysis whereby the predicate raises to thematic position, namely SpecTP.
[10] The subject being the closest candidate for raising.

(30)   I think Brian's arrest was the problem.   *canonical*

      a. Whose $arrest_k$ do you think $[t]_k$ was the problem?
      b. How big a $problem_k$ do you think Brian's arrest was $[t]_k$?

(31)   I think the problem was Brian's arrest.   *Inverse*

      a. * How big a $problem_k$ do you think $[t]_k$ was Brian's arrest?
      b. * Whose $arrest_k$ do you think the problem was $[t]_k$?

Extraction shows that canonical and inverse sentences are not equal. What is relevant here are the (b) examples; while in canonical (30b) it is grammatical to A'-move the postcopular constituent, which is the predicate, in inverse sentences such as (31b) it is impossible to extract the postcopular constituent, it being a subject. Since it is the subject, it is situated in a left branch specifier position, thus extraction from/of it is banned by Subjacency[11].

    Unfortunately, predicational approaches cannot account for connectivity. An exception is Den Dikken et. al. (2000); there, specificational pseudoclefts are divided into two types. Connectivity of one type is analyzed along the lines of LF reconstruction together with predicate inversion, but without much elaborating on the precise mechanism of such reconstruction, while connectivity among the other type is analyzed in terms of Question in Disguise theory, to be discussed in §3.2.3. Ultimately, predicational approach is what I will adopt here, but with modifications which will allow accounting for connectivity.

Equative approaches. These approaches maintain that specificational copular sentences are semantically equative, while predicational copular sentences are predicational and there is no transformational relation in the syntax between the two. These analyses are referred to as equative approaches (Jacobson 1994, Sharvit 1999, Heycock and Kroch 1998, 1999, Heller 2002). Since specificational sentences, including pseudoclefts, are equative, they can exhibit either one of the word orders with no expected asymmetries and without positing predicate inversion.

    If specificational copular sentences are indeed equative, it is difficult to account for connectivity. Sharvit (1999) and Heller (1999, 2002), for example, follow Jacobson's (1994) 'semantic approach to connectivity', and claim that there is no c-command configuration at any level of syntactic representation in these cases. Connectivity, thus, is a purely semantic phenomenon with no need for c-command or sisterhood for licensing, but rather connectivity stems from equation of high semantic types. Such an account will not be tenable for specificational cleftoids, since there are asymmetries in the two word orders with respect to various phenomena, to be discussed in the next sections. Moreover, it is also problematic to discard the theoretical notion of c-command in the domain of connectivity phenomena, when this hierarchical relation is so prominent in all other domains of the grammar.

Pragmatic approaches. In the domain of pragmatics, two approaches came to be prominent in the literature. The first is Question-in-Disguise / Ellipsis approach (Ross 1972, Schlenker 1998, Den Dikken et.al. 2000, Schlenker 2003), which is another variant of semantic approaches to specificational copular sentences and in particular to pseudoclefts. According to this approach,

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[11] The Subject condition (Ross 1986).

specificational pseudoclefts are equations of a concealed question with an elided answer, i.e. equations of propositions.

(32) a. What John likes is himself
      b. [What John likes _] is [~~John likes~~ himself]

The pseudocleft in (32) is a question-answer pair, where part of the answer in the counterweight is elided.

On this approach, the c-command configuration required to license connectivity effects is present, but obscured by ellipsis. Once again, the relationship that holds between the *wh*-clause and the counterweight is the one of equation, not predication. What is needed to motivate such an approach is to show that the pre-copular *wh*-clause is a question and that the postcopular constituent has propositional semantics and distribution of a full IP, which will be shown to be untenable for cleftoids.

Another variant of pragmatic/semantic approaches is Heycock and Kroch's (2002) more recent account in terms of information structure. Even though Heycock and Kroch maintain that specificational sentences are semantically equative, they do notice asymmetries between the two orders, such as connectivity (which is exhibited only in regular pseudoclefts beginning with *wh*-clause[12]) and information structure. However, the asymmetry does not lie in the argument/subject – predicate relation, but in the partition of information structure onto GROUND – FOCUS, where the movement of the focus phrase from the GROUND to SpecFocP is a kind of inversion on the level of information structure. This inversion is needed since despite the asymmetries, semantically, specificationals are still equatives. If so, two referring DPs cannot combine semantically. However, focus and ground can, by allowing the focus to bind the variable of the ground.

(33) [FocP [FOCUS that John had fallen down]i [FOC' [FOCo [GROUND what he claimed ti]]]]

In this kind of configuration, and taking into account that this level of information structure, LF, is pre-spell out, connectivity issues are easily accounted for. The problem remains in claiming that semantically we have a relation of equation and in positing a pre-syntactic level of information structure, which seems a rather stipulative move.

A note on terminology. I will provide argumentation in favor of the syntactic predicational approach, with modifications which will allow explaining connectivity. I will argue that cleftoids such as (2a) are instances of predicate inversion (i.e. *inverse*), while cleftoids in (2a) are regular predicational sentences (i.e. *canonical*). In order to avoid terminological confusion, I will adopt Moro's (1990, 1997) and Den Dikken's (2006) terminology, which is worth stressing: Sentences that have an ordinary subject-predicate structure are **canonical**. These are ordinary predicative sentences and also reverse pseudoclefts:

(34) a. John's tie is what I don't like about him
      b. John is the murderer
      c. Brian's arrest is the problem

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[12] Inverse on predicational accounts such as Den Dikken (2006).

Sentences that undergone Predicate Inversion are **inverse**. These are specificational sentences, including regular pseudoclefts:

> (35)   a. What I don't like about John is his tie
>   b. The murderer is John
>   c. The problem is Brian's arrest

3.2 Motivating the Predicate Inversion Approach

3.2.1 Syntactic Asymmetries between Canonical and Inverse Cleftoids

A'- extraction. When testing cleftoids for inversion, we see that they replicate the findings of Moro and Den Dikken for English. More specifically, canonical cleftoids allow extraction of the postcopular DP, while inverse cleftoids disallow extraction of the postcopular DP, supporting the inversion analysis:

> (36)   a. aviv haya ze   Se hexin   et ha-kibud.   *canonical*
>   Aviv was the-one that prepared acc. the-refreshments
>   'Aviv was the one that prepared the refreshments'.
>
>   b. ma$_k$ aviv haya t$_k$? (-ze   Se hexin   et   ha-kibud)
>   what Aviv was   the-one that prepared acc. the-refreshments
>   'What Aviv was?'
>
> (37)   a. ze   Se hexin   et ha-kibud   haya aviv   *inverse*
>   the-one that prepared acc. the-refreshments was Aviv
>   'The one that prepared the refreshments was Aviv'.
>
>   b. *mi$_k$ ze   Se hexin   et ha-kibud   haya t$_k$? (-Aviv)
>   who the-one that prepared acc. the-refreshments was
>   'Who the one that prepared the refreshments was?'

This is expected under the syntactic predicate inversion analysis. After predicate inversion took place, extraction from/of the postcopular subject is impossible (Moro 1997, Den Dikken 2006). If the cleftoid had an equative structure, this asymmetry would have been left unexplained.

Obligatoriness of the copula in ECM embeddings. Another asymmetry is found in the possibility of embedding the sentence under a verb like 'consider', which requires a Small Clause. While for English, the copula in such embeddings is optional in canonical sentences and obligatory in inverse[13], in Hebrew the picture is slightly different and requires a small modification of the test. Hebrew is very limited in its ECM verbs inventory (Rapaport 1987). Even when the verb takes a SC, it can never be a bare SC, such as under *consider*, but rather the relation between the subject and the predicate must be realized by the means of a relator (Den Dikken 2006), a functional

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[13] For Den Dikken the presence of the copula is a clear sign of inversion. The copula extends the domain and allows the predicate to invert around its subject without causing a Relativized Minimality violation (Rizzi 1990).

head inside the SC. All the ECM verbs can take a subject-predicate SC only. So, in contrast to English, where the test for canonical vs. inverse is based on optional vs. obligatory copula under 'consider', in Hebrew the test would be the mere possibility or impossibility of embedding under SC taking verbs:

(38)   a. ani ro'a [bo   et   ze   Se axrai   al   ha-faSla]
               I   see   in-him acc. the-one that responsible about the-blunder
               'I see in him the one who is responsible for the blunder'.

            b. *ani ro'a [be-ze   Se axrai   al   ha-faSla   oto]
               I   see   in the-one that responsible about the- blunder acc.-him
               'I see in the one who is responsible for the blunder him'.

And indeed there is an asymmetry between the canonical and the inverse cleftoids; in canonical SC embedding is good, while the inverse ones do not allow such an embedding. Since Hebrew SCs can only be of the subject-predicate order, we can conclude that (38b) is ungrammatical because the order is different and the sentence indeed involves predicate inversion[14].

3.2.2 Semantic Asymmetries between Precopular and Postcopular Constituents

In the previous sections we saw differences between the two cleftoids in terms of connectivity, information structure, A' extraction and SC embedding, which can justify treating one as canonical and the other as inverse. These asymmetries between the two word orders are unexpected under semantic analyses which treat specificational sentences as equatives, since in equations the word order should not play a role. Another argument that often mentioned among the proponents of semantic equative approach to specificational sentences is that the precopular and the postcopular constituents in these sentences are equal in terms of their semantic type[15] and referentiality. In this section I will show that this is not so. Hebrew specificational cleftoids are comprised of a referential expression of type e and of a predicate of type $<e,t>$, which can combine in either order[16], resulting in canonical or inverse cleftoids.

Modification by non-restrictive relative clause. It is argued that both DPs in equatives (including specificationals) are equally referential, since they can be modified by a non-restrictive relative clause (Doron 1983, Rothstein 1995, Heycock and Kroch 1999):

(39)   The duty nurse, who is very efficient, is Rina, who I am very fond of.

Since predicates do not allow such non-restrictive RC modification, both DPs in (39) are claimed to be non-predicative referential NPs. However, consider (40):

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[14] Heycock and Kroch (1998) have a different explanation: they claim that SC complements can be either equative or predicative. *Consider* is a verb which subcategorizes for a predicative SC, thus equatives cannot be embedded under it. Thus, the impossibility of embedding under *consider* is not a sign for inversion.
[15] Usually e or higher types (cf. Sharvit 1999, Heller 1999, Schlenker 2003, Greenberg 2008).
[16] Partee (1986).

(40)   a. aviv, Se oto dina ma'arica kvar   Sanim hu/ze   ze   Se ohev
              Aviv that him Dina admires already years   PronH/PronZ the-one that likes
              lir'ot   hisardut
              to- watch survivor
              'Aviv, whom Dina admires for years, is the one who likes to watch 'Survivor'.
          b. *aviv hu/ze   ze   Se ohev lir'ot   hisardut, Se oto dina
              Aviv PronH/PronZ the-one that likes to-watch survivor   that him Dina
              ma'arica kvar Sanim.
              admires already years
              'Aviv is the one who likes to watch 'Survivor', whom Dina admires for years'.

While the precopular DP here, *Aviv*, is clearly referential, and can be modified by non-restrictive RC, (40a), [ze Se…] clause in (40b) does not allow such a modification, suggesting that it is not referential.

Resumption by a gendered pronoun. Another test, suggested by Mikkelsen (2002) in favor of the syntactic analyses is resumption by a gendered pronoun. The pre-copular DP in specificational copular sentence (41a) cannot be resumed by a gendered pronoun and must use the neutral *it*. The pre-copular DP in (41b), on the other hand, is resumed by a gendered pronoun *he/she*:

(41)   a. The culprit isn't you, *he/*she/it is Fiona.
          b. Fiona isn't the culprit, she/*it is the law

From these examples Mikkelsen concludes that the DP *the culprit* in specificational (41a) is not referential as DP *Fiona* in predicational (41b), since the former cannot be resumed by a gendered pronoun. The referentiality[17] of the pre-copular constituent in specificational copular sentences is of high relevance; if it is not referential, this supports the idea that it is not a subject, but rather a predicate which has undergone inversion to the subject position. Applying the test to Hebrew cleftoids, we get:

(42)   ze   Se hegi'a la-Siur   lo   haya aviv, *hu/ze haya Rasel
          the-one that arrived to-the class neg. was Aviv   he/it was Russell
          'The one who came to class was not Aviv, it was Russell'.

(43)   aviv lo   haya ze   Se hegi'a la-Siur,   hu/*ze haya ze   Se hevriz
          Aviv neg. was the-one that arrived to-the class, he/it   was the-one that skipped
          'Aviv was not the one who came to class, he was the one who skipped'.

In inverse cleftoid (42), the precopular DP is resumed by a non-gendered pronoun *ze* ('it'), while in canonical (43), the precopular DP is resumed by the gendered pronoun *hu* ('he'). It shows that the precopular [ze Se…] clause in (42) is not the referential subject, since it cannot be resumed by a gendered pronoun, like *Aviv* in (43). If so, there is a strong reason to believe that this is the predicate.

---

[17] Defined semantically as type e (Partee 1987).

Ellipsis of predicates. Another argument is also adopted from Mikkelsen (2011). Mikkelsen shows that semantic predicates can be targeted by VP-ellipsis:

(44)   Sylvia is the architect of this project, but I wish she wasn't.

In (44), the postcopular DP *the architect of this project* can be elided, suggesting it is the predicate. As already mentioned, in cleftoids that are under examination, one of the DPs, the proper name, is clearly referential. Thus, our suspect for all the referentiality tests is the [ze Se…] clause, whose status is unclear. Let us see if it can be elided:

(45)   ze   Se ha-itona'i   diveax alav   hu/ze   aviv$_k$, aval
          the-one that the-journalist reported about-him PronH/PronZ Aviv, but
          halevay ve hu$_k$ lo   haya [ze   Se ha-itona'i   diveax alav]
          if-only   and he neg. was
          'The one who the journalist reported about is Aviv, but I wish he (=Aviv)
          wasn't' (the one who the journalist reported about).

And indeed, [ze Se…] clause is elided, suggesting it is a predicate.

Obligatoriness of the copula in matrix clauses. As has been noted by Doron (1983), equative sentences in Hebrew require a pronominal copula, while in predicative sentences the copula is optional:

(46)   a. dani *(hu)   mar kohen
              Dani PronH Mr. Cohen
              'Dani is Mr.Cohen'.

          b. dani (hu)   rofe
              Dani PronH doctor
              'Dani is a doctor'.

If the cleftoids under discussion were equative structures, they would obligatory require the copula, as other equatives in Hebrew. However, in canonical cleftoids, such as (47), (48), the copula is optional and can be omitted:

(47)   aviv (hu)   ze   Se axrai
          Aviv PronH the-one that in-charge
          'Aviv is the one that's in charge'.

(48)   zaxarti   et ma Se ariela amra li al kax Se iSti   roa
          remembered.I acc. what that Ariela told me about that wife.my sees
          [$_{SC}$bi ze   Se axrai   al ha-Salva Sela]
            in.me the one that responsible on the-serenity her.
          'I remembered what Ariela told me about (the fact) that my wife sees me as
           the one who is responsible for her serenity'.

In (47) the pronominal copula is optional and in the embedded (48) the copula is absent. This suggests that what we have here is a predicative structure, where the argument is *Aviv* in (47) or *me* in (48) and the predicate is the [ze Se..] clause. Now, if the [ze Se..] clause is the predicate in canonical cleftoid, we can assume that it is the predicate also in the inverse cleftoid. However, in the inverse cleftoid the copula is obligatory:

(49)　　　ze　Se axrai　　*(hu)　aviv
　　　　　the-one that in-charge　PronH Aviv
　　　　　'The one that's in charge is Aviv'.

The copula is obligatory in the inverse cleftoids for the reasons mentioned by Den Dikken (2006) for the obligatoriness of the copula in any inverse structure; the copula is necessary to 'make room' for inversion.

Relative clause as a predicate. It is not surprising that the [ze Se…] clause is a predicate in cleftoids, since it can function as a predicate in other instances as well, e.g. after the verb *hofex le* ('turn into', 'become') (50). It is impossible to use *hofex le* in equative sentences where the 'turner' and the 'turnee' have the same referent (51), since the event of 'turning into' implies turning into someone/something else[18].

(50)　　　hi sirva　lekabel et　ha-tafkid ki　　hi margiSa Se　hi hofexet
　　　　　she refused　to-accept acc. the-role　because she feels　that she turns
　　　　　le zot　　　Se tamid mesaxeket et　ha-malka
　　　　　into the-one.fem that always plays　　acc. the-queen
　　　　　'She refused to take the part since she feels that she turns into (=becomes) the one that always plays the queen'.

(51)　　　#koxav ha-boker　　hafax le-koxav ha-erev
　　　　　　star　the-morning turned into-star the-evening
　　　　　'The morning star turned into the evening star'.

Pejorative reading. Another interesting fact about [ze Se..] clause is that when it is used referentially, it has a pejorative or ironic flavor to its meaning:

(52)　　　zot　　　　Se yaca'ti　me-ha-beten　　Sela xoSevet Se　hi malka
　　　　　the-one.fem that came-out.I from-the-stomach her　thinks　that she queen
　　　　　'The one from whose belly I came out thinks that she's a queen'.

---

[18] As correctly pointed by Nora Boneh (p.c.), there are some instances in which two referential DPs can be used with *hofex le*, for example in cases of a sex-changing operation:
(i)　　　yaron kohen　hafax le-dana　　interneSenal
　　　　　Yaron Cohen turned into Dana International
　　　　　'Yaron Cohen turned into Dana International'.
In (i), the sentence is about the same referent, a male named Yaron Cohen, who, after a sex changing operation became the famous female singer Dana International. Even though (i) is felicitous in this case, the postcopular DP is understood as something else, if not in reference, then in its sense. Moreover, these sentences are very limited in the language.

In (52), the referent of the [ze Se..][19] clause is my mother. But using the [ze Se..] clause here, instead of simply saying 'my mother' violates the Gricean maxim of manner and implies a degrading reading. This pejorative reading is obtained only when the use of [ze Se…] is referential (and not predicative or quantificational). In cleftoids, the pejorative reading is not found, suggesting a non-referential status of [ze Se..] clause:

(53)   zot   Se yaca'ti   me-ha-beten   Sela hi   malka
        the-one.fem that came-out.I from-the-stomach her   PronH queen
        'The one from whose belly I came out is a queen'.

This sentence can only be understood literally, with no degrading meaning.

To sum up, in this and the previous sections, I have argued that (i) canonical and inverse cleftoids are asymmetrical. This is based on differences with respect to syntactic phenomena, such as A'- extraction and availability of ECM embedding. This is on top of the observed differences in terms of connectivity and information structure. Moreover, I claimed that (ii) cleftoids are not equative, based on semantic differences between the precopular and postcopular DPs, namely that one of them is always referential while the other, the [ze Se..] clause, is predicative. All this comes to show that predicate inversion is an analysis that best explains these facts. However, let us not forget that a major caveat in this theory is the inability to explain connectivity phenomena, exhibited only by the inverse cleftoids and pseudoclefts. A theory that does convincingly explain connectivity is the Question in Disguise theory, a topic of the next section, which I will eventually have to reject.

3.2.3 Cleftoids Are Not Question-answer pairs

Under the Question-in-Disguise theory, also known as the Ellipsis approach (Schlenker 1998, 2003, Den Dikken et.al. 2000), a pseudocleft such as the one in (54) is a question-answer pair, where part of the answer is elided:

(54)   [What John likes _] is [~~John likes~~ himself]

Such a theory proposes a straightforward account of connectivity, since syntactically, the c-command configuration relevant for binding, obtains. Semantically, however, such accounts posit that specificational pseudoclefts are equations (of propositions), an analysis that we have rejected in the previous section. It is also plausible to assume that the syntactic ellipsis account is not tenable for Hebrew cleftoids, and by extension, to pseudoclefts, by other reasons.

First, it is easy to argue for English pseudoclefts that their *wh*-clause is similar to a question and their counterweight is similar to an answer, based on examples like the following, from Den Dikken et.al. (2000):

(55)   a. What John didn't buy was [IP ~~he didn't buy~~ any wine].
            b. What John didn't buy? [(he didn't buy) any wine].

---

[19] In this case it is [zot Se..], *zot* being the feminine form of *ze*.

However, there is no *wh*-phrase in Hebrew cleftoids, which have instead a [ze Se..] clause. As for pseudoclefts, which have a *wh*-clause, their *wh*-clause is different from questions[20]:

(56)   a. [ma Se dan kana] haya ya'in   *pseudocleft*
                what that Dan bought was   wine
              'What Dan bought was wine'.

           b. ma   dan kana? – ya'in   *question*
                what Dan bought wine
              'What Dan bought? - wine'

In the pseudocleft there is a complementizer *Se* after the *wh*-pronoun, while in questions there is no such a complementizer, suggesting these are different structures. Moreover, cleftoids and pseudoclefts do not have the distribution of questions. The [ze Se..]/[mi Se…] clause of cleftoids and pseudoclefts cannot be embedded under verbs which usually take questions as their complements, such as 'know' (cf. also Heller 2002):

(57)   a. *ani yode'a ze/mi   Se axrai   kan
                I   know the-one/who that in-charge here
                Intended: 'I know the one/who is in charge here'.

           b. ani pagaSti et   ze/mi   Se axrai   kan
                I   met   acc. the-one/who that in-charge here
              'I met the one/who is in charge here'.

With the Hebrew data under consideration, it is hard to see how the [ze Se..]/[mi Se…] clause of cleftoids and pseudoclefts resembles a question.

   Another tenet of the Ellipsis approach is to consider the counterweight of pseudoclefts as an (elided) answer. This is based on its propositional semantics and distribution of full IP:

(58)   a. What I did then was [call the grocer]
           b. What I did then was [I called the grocer]
                                                                                                   (Ross 1972)

(59)   What John didn't do was [he didn't buy any wine]
                                                                                        (Den Dikken et.al. 2000)

However, Hebrew cleftoids allow only DP in the counterweight and a full IP in this position is ungrammatical:

(60)   *ze   Se hu asa ze   hu kana   yain
              the-thing that he did PronZ he bought wine
              'The thing he did was he bought wine'.

---

[20] In fact, it has been noted in the literature that *wh*-clauses of pseudoclefts seem to be free relatives rather than interrogatives (cf. e.g. Heycock and Kroch 1999), as seems to be the case in Hebrew.

Den Dikken et.al. (2000) elaborate on the Question in Disguise analysis, claiming that it is relevant only for a sub-group of specificational pseudoclefts. In short, Den Dikken et.al. divide pseudoclefts into two types, type A and type B, according to their properties: Type A can host a full IP in the counterweight, these pseudoclefts cannot appear in the reverse order, and they can license an NPI connectivity. The second type, Type B, cannot host full IP in the counterweight, exhibit the reverse order and cannot license NPI elements:

(61)   What John didn't do was he didn't buy any wine.   Type A

(62)   a. What John is is important to himself.   Type B
            b. Important to himself is what John is.

Den Dikken et.al. observe that NPIs are found in the counterweight only where full IP is licensed; when there is NPI connectivity, this is a reduced full IP. Recall that Hebrew cleftoids do not license NPI connectivity (15b). They also cannot have a full IP in the counterweight, but only a DP and they exhibit the canonical and the inverse order. Thus they exhibit all the characteristics of Type B pseudoclefts. As for Hebrew pseudoclefts that do license NPI connectivity (15a), they cannot exhibit the reverse order and they can have a full IP in the counterweight, i.e. they belong to Den Dikken et.al.'s type A.

For Type A pseudoclefts, connectivity is explained via the ellipsis approach, inspired by Schlenker (1998), analyzing pseudoclefts as self-answering questions, since full IP pseudoclefts are the ones that resemble question answer pairs in that both allow optional ellipsis and NPI connectivity (cf. (55)). Since Type A pseudoclefts are also argued to be topic-comment constructions, they resist inversion due to their configuration[21].

Type B pseudoclefts, on the other hand, have non-IP counterweights, thus no ellipsis is possible and therefore we would not expect NPI connectivity[22] (albeit other connectivity is preserved). This is exactly the state of affairs with Hebrew cleftoids. That being the case, for type B pseudoclefts and cleftoids the ellipsis analysis is not tenable. Den Dikken et al. claim that these constructions are analyzed in terms of predicate inversion. But what about connectivity? Connectivity in type B is, as already mentioned, not due to ellipsis, since there is no ellipsis when there is no full-IP counterweight. Here, Den Dikken et. al. hypothesize that connectivity is established by syntactic reconstruction at LF. It is known that NPIs are not licensed under reconstruction (cf. Den Dikken et. al. 2000 and ref. therein), thus it is a desirable outcome, since Type B pseudoclefts do not license NPIs. Unfortunately, this is as far as Den Dikken et al.'s explanation of connectivity goes and it is this lacuna in the predicate inversion account that I intend to fill in the next section.

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[21] It is impossible to invert the comment part (the counterweight) over the wh-clause in SpecTop due to lack of structure above it:

(i)   [TopP [$_{CP}$ what John is t][Top^o [$_{IP}$ (John is) angry with himself]]].

[22] Since NPI items should be licensed at S-structure.

4 Analysis

The conclusion to be drawn from data discussed in sections 2 and 3 is that Hebrew cleftoids and pseudoclefts, which exhibit canonical (63a) and inverse (63b) order, have also canonical (subject-predicate) and inverse (predicate-subject) structure, the latter obtained via the mechanism of predicate inversion:

(63)   a. aviv ze   ze   Se ohev lir'ot   hisardut
              Aviv PronZ the-one that likes to-watch Survivor
              'Aviv is the one who likes to watch 'Survivor'.

         b. ze   Se ohev lir'ot   hisardut ze   aviv
              the-one that likes to-watch Survivor PronZ Aviv
              'The one who likes to watch 'Survivor' is Aviv'.

As was already mentioned, for cases of inversion I follow Moro (1990, 1997) and Den Dikken (2006), in proposing predicate inversion. However, we have already seen that analyses along these lines do not provide an accurate account for connectivity. In this section I would like to provide such an account, slightly modifying the orthodox approach to the structure of SC and predicate inversion.

  Let us begin by establishing a semantic basis for predicate inversion analysis. One of the main objections to predicate inversion is the fact that not all predicates can occupy the pre-copular position in English (Heycock and Kroch 1999):

(64)   *Honest is John.

However, we saw that the [ze Se…] clause of cleftoids is indeed a predicate and can be found in subject position in the inverse cases (section 3.2.2.). This is also the line of thought defended by Mikkelsen (2002) and Den Dikken (2006), who claim that in specificational sentences, with predicate inversion, subject position is exactly what predicates do occupy.

  That being the case, I will adopt the Williams-Partee approach to predication. Recall that I am claiming that specificational cleftoids are not semantically equative. I will thus follow Williams (1983) and Partee (1986) in that there is only one copula *be*, *be* of predication[23]. According to the Williams-Partee approach, this *be* takes one referential and one predicative element in either order:

(65)   a. $[\![be]\!] = \lambda P\lambda x[P(x)]$
            b. $[\![be]\!] = \lambda x\lambda P[P(x)]$

On this approach, there is no problem that the predicate will occupy the precopular position. This is what happens in case of inverse cleftoids, when the predicate raises to SpecTP[24].

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[23] For equative sentences, Partee posits type shifting operation of the postcopular NP via type shifting operator IDENT (Partee 1987). For the sentence *Cicero is Tully*, the representation would be $\lambda y[y=t]$, where t=Tully.

[24] Predicate inversion is claimed to be an instance of A-movement to SpecTP, since all predicate-inverted sentences allow raising (Den Dikken 2005):
(i)   a. It was claimed that the problem was Brian's arrest

Now I will propose a predicate inversion analysis which captures connectivity. Let us look at the inverse cleftoid in (66):

(66) kol boxen maxSil be-derex klal talmid Sel boxen axer, aval
every examiner fails usually student of examiner other but
[**zot Se ha-boxen ha-xadaS$_k$ hexSil ze ha-talmida**
 the-one.fem that the-examiner the-new failed PronZ the-student.fem
Sel acmo$_k$]
of himself
'Every examiner usually fails the student of another examiner, but **the one that the new examiner failed is the student of himself**'.

For simplicity, my argument is built in steps. As a first step, let us look at the following tree derivation for the sentence in bold in (66):

(67)
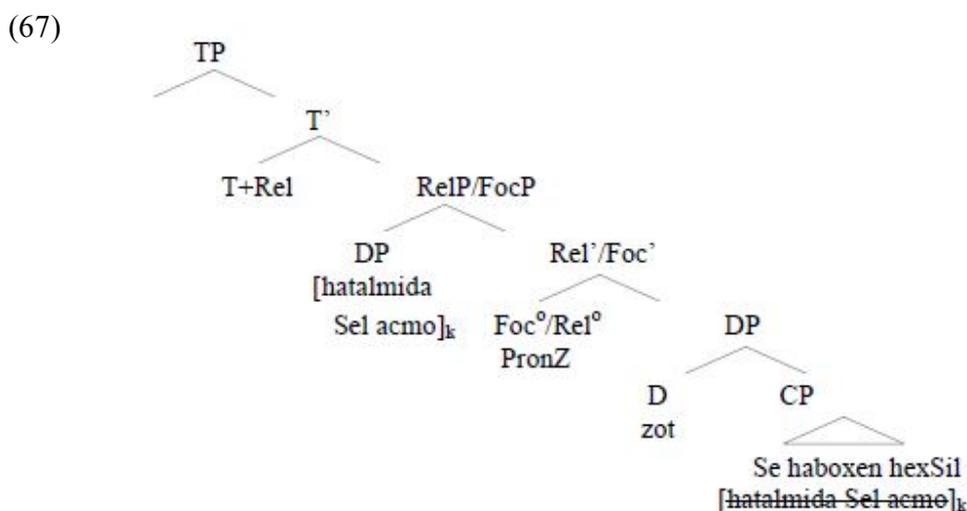
I follow Den Dikken's (2006) view of the SC as a RelP, an asymmetrical phrase containing a functional head, the relator, which mediates the predication relation between the subject and the predicate. However, I propose to view this RelP as a FocP, where the copula instantiates the focus head as the relator. As Den Dikken himself argues, RelP can be realized as various XPs: "the relator does not stand for a particular functional category – anything can be a relator, as long as it is a functional element that finds itself in between the predicate and its subject, in a structure of the type [RP [XP R'[R YP]]]. The choice between candidates for the relator function will often be made on the basis of factors extraneous to the predication relationship to be established" (Den Dikken 2006, pp. 24-25). Together with the understanding that crosslinguistically the copula functions as a focus marker, i.e. lexicalizes the focus in many languages (Frascarelli and Puglielli 2005, Belletti 2012), it is plausible to assume that the copula PronZ is the instantiation

---

b. The problem was claimed to be Brian's arrest
This is a compelling argument against analyses which adopt the idea of inversion, but claim it to be to the left periphery (e.g. Heggie 1988, Heycock and Kroch 2002).

of the focus head in Hebrew cleftoids. For example, Belletti (2012) argues that in clefts, the copula selects a FocP as its complement, with an active Foc^o which needs to be checked, thus a constituent is attracted into its Spec. Since the copula is a lexicalization of focus, it incorporates with Foc^o. My proposed derivation for cleftoids is a similar one.

The derivation proceeds as follows: the initial sentence is   [*ha-boxen hexSil et ha-talmida Sel acmo*] ("the examiner failed the student of himself"). The anaphor is bound in this configuration. The focus head, the relator, attracts the complement of the verb in RC into its specifier, clefting the sentence into a focus and a remnant, forming a RelP configuration (internal Merge). The DP *hatalmida Sel acmo* ('the student of himself') raises into SpecFocP, while the rest of the sentence remains in situ, merged with the definite *zot* ('the one$_{fem}$'), forming the specificational [ze Se] clause[25]. This means that now we have a subject-predicate structure, mediated by the low focus head (cf. Belletti 2002, 2008, 2012), the copula. The subject occupies SpecFocP[26] and the predicate occupies the complement position of the focus head. A potential problem might be a violation of Relativized Minimality (Rizzi 1990); the object of the CP is extracted to SpecFocP across the subject, while both are potential candidates for attraction by Foc^o and the subject is closer, therefore an intervener for object extraction (Belletti, p.c.). This can be easily solved by coindexation: the subject of the CP, *haboxen* ('the examiner') binds the anaphor contained in the object *hatalmida Sel acmo* ('the student of himself'), thus 'the examiner' and 'himself' are coindexed, i.e. the anaphor is identified with its antecedent, therefore the antecedent is no longer an intervener and no RM violation arises[27].

Another potential problem with this configuration is that extraction from a relative clause is an island violation (Ross 1967, Chomsky 1986). However, some RCs do allow extraction from them[28], thus we will put this problem aside for now.

The next step is the raising of the copula to T to extend the domain and allow Predicate Inversion without violating Relativized Minimality (Rizzi 1990)[29].

---

[25] The Foc^o probe searches for closest goal in its domain, and *hatalmida Sel acmo* matches its features (fem.sgl.) with the DP head *zot* by Agree (Frascarelli 2010). Since *zot* is identified with *hatalmida*, *hatalmida* can cross over *zot* to SpecFocP without *zot* being an intervener and inducing an RM violation (Belletti p.c., Belletti 2012).
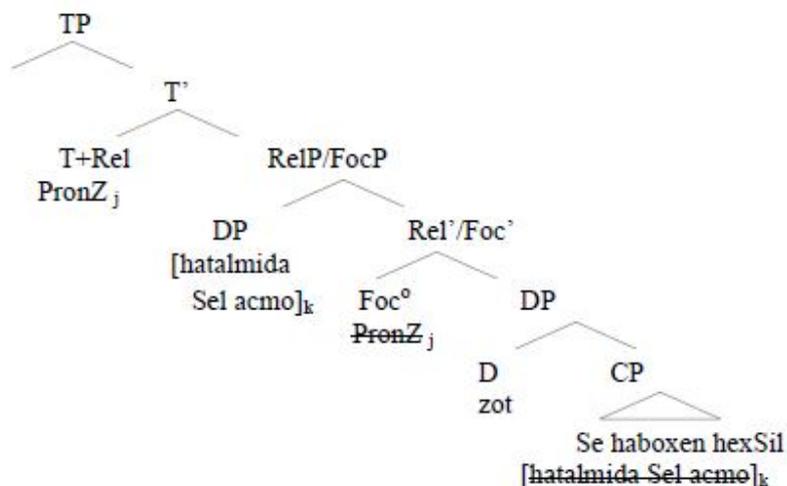
[26] That the subject raises to A' position is not a problem. Cf. Den Dikken (2006), p. 25: "predication relationships can also be established between a predicate and a subject sitting in A'-position". e.g. in instances of topicalization.

[27] What happens when there is no anaphor to be bound, but just a direct object? The proposed derivation is given for cases of connectivity, where there is an anaphor to be bound. For cases with no connectivity, a simple RelP is hypothesized.

[28] Namely Raising relatives (Kayne 1994, Sauerland 2004, int.al.), where the RC head has moved to Spec CP from a position within RC, but is interpreted inside the relative. For English see (Chomsky 1982), Romance (Cinque 2010), Scandinavian (Erteschik Shir 1997), Hebrew (Doron 1982, Rubovitz Mann 2000), and more (Bianchi 2004) (cf. Sichel 2012 and ref. therein). There is reason to assume that the RC in cleftoids is indeed a raising RC. However, this is beyond the scope of this paper.
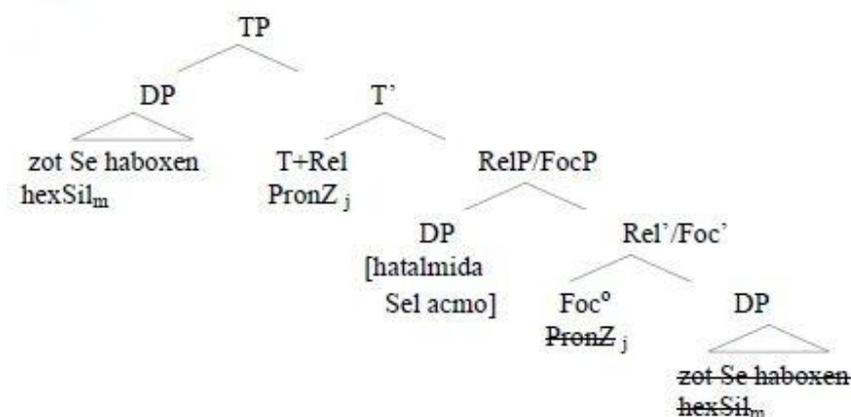
[29] This can be also seen as the incorporation of the Foc^o with the copula, as in Belletti (2012).

(68)

```
                    TP
                   /  \
                       T'
                      /  \
              T+Rel        RelP/FocP
              PronZ_j      /      \
                        DP          Rel'/Foc'
                      [hatalmida    /      \
                      Sel acmo]_k  Foc°       DP
                                   ~~PronZ~~_j  /  \
                                             D      CP
                                            zot      \
                                                  Se haboxen hexSil
                                                  [~~hatalmida Sel acmo~~]_k
```

And finally, predicate inversion:

(69)

```
                      TP
                     /  \
                 DP        T'
                /  \      /  \
        zot Se haboxen  T+Rel    RelP/FocP
        hexSil_m        PronZ_j   /     \
                               DP          Rel'/Foc'
                             [hatalmida    /      \
                             Sel acmo]   Foc°         DP
                                         ~~PronZ~~_j   /  \
                                                  ~~zot Se haboxen~~
                                                  ~~hexSil~~_m
```

This derivation (trees (67), (68), (69) combined) allows us to capture the following: First, treating the RelP as a FocP captures the information structure properties of inverse cleftoids; we saw in (21) that inverse cleftoids cannot focalize the [ze Se..] clause and can only focalize the subject. On this derivation, the subject is attracted by the focus head into its Spec, leaving the predicate unfocused. The predicate cannot be in focus after it raised to SpecTP, since predicate inversion exhaustively focalizes the subject of the inverted predicate (Den Dikken 2006). This structure also captures A'-extraction facts: no extraction from/of the Focus can happen after the predicate has raised across it during predicate inversion, i.e. the focus is 'frozen' in place (Den Dikken 2006), it being in a left branch position.

Secondly, connectivity now naturally follows from this derivation; binding relations are established before the clefting of the original sentence into a subject (focus) and a predicate, where there is c-command between the binder and the bindee. For canonical cleftoids, with no Predicate Inversion, I assume a regular RelP structure. The subject and the predicate originate in SC/RelP, the subject then raises to SpecTP. Since this is a regular SC structure, i.e. the SC is not realized as FocP, no connectivity arises, because this configuration does not allow c-command between the binder and the bindee.

Furthermore, we saw that inverse cleftoids do not license NPI connectivity ((15b), repeated in (70)):

(70)   *ze   Se   hi   **lo**   mac'a ba-marpe'a Selanu ze   rofe   Se   mevin
          the-one that she neg. found in-the-clinic our   PronZ doctor that understands
          davar ve-xaci davar be-psixologiya
          thing and half thing   in psychology
          'The one she haven't found in our clinic is a doctor who knows anything
          about psychology'.

This also follows from the proposed analysis; since for NPI connectivity the licensing of the NPI item is triggered by the presence of negation on the surface, it is not possible after predicate inversion has taken place: negation sits in the [ze Se] clause which has risen to SpecTP and cannot c-command the NPI in SpecFocP[30].

5 Conclusions

In this paper I showed how the puzzle of connectivity surrounding specificational pseudoclefts can be naturally explained by examining Hebrew cleftoids. I have presented evidence in favor of analyzing them along the lines of syntactic approaches, via the mechanism of predicate inversion, based on their behavior with respect to syntactic phenomena of SC embedding, A'-extraction, asymmetries in connectivity and information structure and presented semantic and syntactic evidence against the equative and the ellipsis approaches. The big problem of predicate inversion analyses, namely the inability to capture connectivity phenomena in a sufficient way, was solved by positing a FocP as a realization of the RelP of inverse cleftoids, which comes naturally when the copula is viewed as a realization of a focus head. Connectivity thus follows from this analysis.

A number of open issues still remain, which do not fall in the scope of the present paper but are currently under investigation and are worth mentioning here. Hebrew has two pronominal copulas, PronH and PronZ, thoroughly discussed in the literature (Doron 1983, Rapaport 1987, Rothstein 1995, 2001, Greenberg 2002, 2008, Sichel 1997, Shlonsky 2000, Heller 1999, 2002 and more). Many analyses have been suggested in the literature to account for the differences between them, however none of them can account for the full range of data. For example, Heller (1999) proposes that PronH is found in predicational sentences and lexicalizes a predication relation, while PronZ has the semantics of equation; Sichel (1997) argues that PronH is the realization of AgrS^o, while PronZ occupies a lower AgrO^o position, based on differences in agreement between the two, while Greenberg (2008) proposes to unify the former analyses with the hypothesis that post-copular APs in PronZ sentences modify a null N.

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[30] NPIs are possible in the parallel pseudocleft in (15a) since, presumably, this is a pseudocleft of Type A on Den Dikken et al's (2000) typology: it is marginal on the inverse order and it does allow a full IP in the counterweight:
(i) ma   Se   hi   lo   racta   la'asot ze   limco rofe   Se   mevin   davar ve xaci davar be-psixologiya
    what that she neg. wanted to-do PronZ to-find doctor that understands thing and half thing in psychology
    'What she didn't want to do is to find a doctor who knows anything about psychology'.
Also because there is no semantic clash between the existential presupposition (which is present only in cleftoids and not in pseudoclefts (cf.§2.1) and the negation.

What has been noted by Heller (1999) for Hebrew pseudoclefts and relevant also for Hebrew cleftoids is that only pseudoclefts with PronZ license connectivity. Consider (71), where this is demonstrated by cleftoids:

(71)   a. ze   Se ha-boxen$_i$ mexapes ze   et   acmo$_i$
         the-one that the-examiner searches PronZ acc. himself
         'The one that the examiner looks for is himself'.

      b. *ze   Se ha-boxen$_i$ mexapes hu   et   acmo$_i$
         the-one that the-examiner searches PronH acc. himself
         'The one that the examiner looks for is himself'.

To Heller's observation I add the following: PronZ is not a sufficient condition for the presence of connectivity in these cases. Another obligatory condition is predicate inversion, since only the inverse cleftoids with PronZ license connectivity:

(72)   a. ze   Se ha-boxen$_i$ mexapes ze   et   acmo$_i$
         the-one that the-examiner searches PronZ acc. himself
         'The one that the examiner looks for is himself'.

      b. *et acmo ze   ze   Se ha-boxen   mexapes
         acc. himself PronZ the-one that the-examiner searches
         'Himself is the one that the examiner looks for'.

Unfortunately, Heller's proposal that PronZ is equative and PronH is predicational cannot be maintained; we saw that cleftoids can be canonical and inverse with PronH and with PronZ and that in neither case they are equative[31]. Connectivity is also not a sufficient criterion to render a sentence an equative status, if one does not adopt semantic approaches to connectivity in terms of equation of semantic types (Jacobson 1994, Heller 1999, 2002, Sharvit 1999, Schlenker 1998, 2003). Thus, on the present analysis, we are left with the question of why specificational cleftoids with PronH allow predicate inversion but do not allow connectivity. Since on the present analysis, inversion with PronZ was tied to the realization of PronZ as a low focus head, a possibility that comes to mind is to pursue a line of thought suggested by Sichel (1997); PronZ, on this analysis, is a low copular head, maintaining Doron's (1983) original observation that PronH is located higher, in T. Maybe what allows inversion in PronH sentences, while disallowing connectivity, is a different realization of RelP, not as FocP, since PronH would not be a realization of focus head. However, more research is needed to answer this intricate question. For now I conclude that the proposed analysis in terms of realization of RelP as FocP is a special derivation for cases with connectivity. Since connectivity is a special phenomenon, limited to a subclass of specificational copular sentences, it is not peculiar to assume a special derivation for cases with connectivity.

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[31] Cf. also Greenberg (2008) for additional counterexamples to this generalization.

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