Pseudo Relatives in Modern Hebrew

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Abstract

This study addresses the Pseudo Relative (PR) construction in Modern Hebrew, a construction which has been identified and studied in the Romance languages and Modern Greek, as well as in Dutch and Serbo-Croatian, but never before in Hebrew. PRs are structurally similar to relative clauses (RC), but have different characteristics that justify treating them as a separate construction. For example, Hebrew PRs can only appear with the complementizer ha- ‘the’, while RCs allow ha-, le- and a[er]; PRs restrict the tense of the embedded verb while RCs do not.

Conducting a systematic and comprehensive comparison between the Hebrew PR and its counterparts in Italian and Greek, I show that the Hebrew construction shares many features of the Greek and Italian ones, but also differs from them in certain respects. However, closer examination reveals that the differences are superficial: they do not reflect any fundamental difference in the structure or essence of the Hebrew PR, but stem from independent parametric differences between the languages.

The essential similarity between the Hebrew and Italian PR means that, in seeking to analyze the Hebrew construction, it is pertinent to examine analyses proposed for the Italian one, such as the one suggested by Moulton and Grillo (in prep.; 2015a,b). These scholars argue that, unlike RCs, PRs do not denote properties of concrete individuals but rather of events. Syntactically, they form a single constituent of type DP, headed by an empty D position complemented by a CP predicate of situations. This analysis allows Moulton and Grillo to account for various properties of the PR, such as its exceptional agreement and case marking and the existential presuppositions it triggers. In Hebrew it will allow me to also account for the restrictions it places on the choice of complementizer.
In proposing an analysis for the Hebrew PR, I indeed adopt Moulton and Grillo’s analysis, with certain modifications necessary to account for the specific behavior of the Hebrew construction. I argue that although Hebrew PRs, unlike their Italian counterparts, contain an overt determiner-complementizer (ha-) in the C position, the empty D position posited by Moulton and Grillo for Italian should nevertheless be retained in the Hebrew analysis as well, since it helps to account for several prominent features of the Hebrew PR. I show that the suggested Hebrew analysis accounts for all the features of the Hebrew PR, including the behaviour of PRs with conjoined VPs, an issue not addressed in the discussions of PRs in the literature.
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<td>ADJ</td>
<td>adjective</td>
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<td>CP</td>
<td>complementizer phrase</td>
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<td>construct state</td>
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<td>feminine singular\ feminine plural</td>
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<td>sequence of tense</td>
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Introduction

This study discusses the Pseudo Relative (PR) construction in Modern Hebrew. PRs have been studied in several languages, including Italian, Spanish and Modern Greek, but never before in Hebrew.

In terms of their structure, PRs superficially resemble Relative Clauses (RCs). Like RCs, PRs have a DP\NP head, and consist of a complementizer followed by a clause (see ex. 5 for a schematic representation). However, a closer examination reveals many differences between RCs and PRs, both syntactic and semantic. These differences have motivated researchers to treat the PR as a distinct construction, with its own syntactic structure and semantic meaning. According to Moulton and Grillo (2015a, b), PRs differ from RCs in that they denote properties of events, while RCs denote properties of concrete individual. Over the years, researchers have proposed various structural analyses for the PR in several Romance languages (Italian, French and Spanish) and in Modern Greek. This study argues that the PR constitutes a distinct construction in Modern Hebrew as well, and suggests an analysis for it.

Relative clauses are classified into two types: restrictive and non-restrictive. NPs with restrictive RCs (as in examples 1 and 2) denote the intersection of two sets: the set denoted by the head noun, and the one denoted by the relative clause. The restrictive RC thus restricts the denotation of the head noun, making it a subset of the set denoted by the head. In example 1, set A (denoted by the head noun) is 'students', set B (denoted by the RC) is 'individuals who were arriving at school'; the intersection of the two sets is 'students who were arriving at school.' Combining this with the
definite article *the* yields a unique plural individual: the students who were arriving at school in the specific instance evoked by the speaker.

1. הַתּוּנָנָתִּי דֵּרֶךְ הַחֲלֹן בַּתְלָמִידִים יֵכְהִגיֱִסְעַ
   look.1.SG.PST through the-window at.the-students that-arrive.3.PL.PST
   ‘I looked through the window at the students who were arriving at school.’

2. תְּשָׁבַח עֲלֵי הַיְלָדִים המָגוּיִים לְגָן בֵּרֶגֶל.
   think.1.SG.PST about the-children the-arrive.PTCP.PL to.the-kinder.garden by.the-foot
   ‘I thought of the children who come to school on foot.’

Non-restrictive relative clauses add backgrounded information regarding the head noun, but do not restrict its denotation, since it is already uniquely identified.

3. הַנוֹמַרְתְּ נְפֶשֶׁיָּהְמִינַה אֶת הַיְלָדַה וַיָּמָּסֶרֶנְתָּ
   talk.1.SG.PST with Gal the-tell.PTCP.MS stories.CS folk about cultures different
   ‘I talked with Gal, who tells folk tales, about different cultures.’

As for the PR construction, it consists of a nominal head (of type DP or NP), followed by a complementizer and an embedded participle phrase. The following is a schematic representation of a Hebrew sentence with a PR in object position:

4. [Subject + V + [PR DP\NP + [COMP ha + VP participle]]]
When the PR construction complements a verb, it is always a perception verb such as 'to see/watch', 'to hear/listen,' etc.²

6. האונטי לֶרֶךְ המְפֶר על הווֹויִיתִי מַחְשָׁבַת.
   heʔezanti le-ran ha-mesaper ʕal xavayot-av me-ha-tiyul.
   'I listened to Ran telling about his experiences from the trip.'

The following are two attested examples of PRs following perception verbs:

7. לֶלִי הִתְבִּנַה בְּנֵתָּהּ בֶּנֶגֶלֶל כְּבָּרַף לְגָּלַג מֵעֶשֶׂה.
   lili hitbonena be-natan ha-megalgel ʔet ha-ʃeʃif be-kaf-yad-o
   'Lili watched Natan rolling the plum in his hand…'
   (The Imposter Bride, Nancy Richler [Hebrew translation], 2014, p.6)

8. הִיא הִתְבִּנַה בָּהָרָבָּר שָׁבַעְתָּהּ הַמַּמְסָס לְדוֹת בְּנֵאָמִּים בַּר הַשָּׁהֲלוֹ הַלִּפְסוֹפָה דָּוִד לוֹחֲלוֹלָה לַחֲオリジナル יָוִיּוּ.
   hi hitbonena be-xaver-ʃivt-a ha-menase ladug
   'She watched her tribe member trying to fish.'
   (https://he.mypen.net/serialized-stories/6301, 12.11.2017)

The following is an additional attested example, this time of a modifier of an NP with a perceptual content (picture):

² In Italian, a PR (or a structure that closely resembles a PR) can also follow verbs such as ‘catch’, ‘convince’ and ‘meet’, which are not perception verbs since they select only individuals as their complements, whereas perception verbs also select events. I found no convincing examples of this sort in Hebrew. All potential examples of PRs preceded by the equivalent Hebrew verbs are interpreted as RCs rather than PRs, e.g.:

("Descending the stairs, I met three young men... begging for charity... at Abdest-Xana"

(Spies or Heroes, 1930, Ya’akov Ye’ari-Polskin. From the Ben-Yehuda Project)

For this reason, I will not discuss such examples in this thesis.
Although the embedded clauses in the three examples above superficially resemble RCs, they are neither restrictive nor non-restrictive RCs. A restrictive RC necessarily restricts a set of elements, and therefore cannot follow proper names or definite singular nouns, which denote individuals rather than sets. Since the head noun in 7 is a name (**Natan**), and the one in 8 is a definite singular noun, the clauses that follow them cannot be restrictive relative clauses. Nor can these clauses be non-restrictive RCs, since they do not add information about the identity or characteristics of the referent himself; rather, they inform us about the action the referent was performing as he was being perceived by the speaker. The following test is useful for distinguishing Hebrew PRs from RCs. In a PR, the complementizer **ha**- can be omitted without changing the event denotation of the sentence, as shown in 10 (produced from 7 by omitting the complementizer):

10. לili hitbonena be-natan megalgel jezif be-kaf-yad-o Lili watch.3.SG.PST at-Natan rolling plum in-hand-his ‘Lili watched Nathan rolling a plum in the palm of his hand.’

This example preserves the event denotation of 7, showing that what is being perceived in 7 is indeed the action itself rather than the individual, Natan. Altering the structure of an RC in the same way produces a change in the semantics of the sentence, shifting the focus from the individual denoted by the head noun to the action this individual is carrying out. For example, performing the test on the example in 1 yields the example in 11:

11. תקלה תמקש וא הכסת והכישת והמסכל הכסת הלאש תמקש אלו תוחפ הבושח תלאשנש היאם לע תונומת לש ייבוואו יקרוורפאו מיכייחמה מיכקבחתמהו היהת העפשה תיבויח לע בצמה רתיראב

An additional and not less important question which raises is whether the pictures of Abiy and Afwerki smiling and hugging will have a positive effect on the situation in Eritrea itself.’
(Haaretz 11.7.2018, page 8 of main section)
The above examples demonstrate two additional differences between Hebrew PRs and RCs: First, PRs can appear only with the complementizer ha-, whereas RCs allow all of the Hebrew complementizers: ūe-, ṭašer and ha-. Second, the embedded verb in PRs must be in participle form, whereas RCs do not restrict the tense of the embedded verb.

This study argues that the Hebrew PR shares the characteristics of its Italian and the Greek counterparts, and that PRs are subject to the same restrictions in all three languages. However, these restrictions are realized differently in each language due to independent language-specific factors.

The next section of this study will introduce PRs in Italian and Greek. Then I will review the characteristics of the Hebrew PR construction and the features that distinguish it from RCs and small clauses, while also examining the Italian and Greek PRs for the same characteristics and features. The last section of the study will suggest an analysis for the Hebrew PR.
Pseudo Relatives: Italian and Greek versus Modern Hebrew

Unlike the Hebrew construction, PRs in other languages have been discussed in previous literature. I chose to present PRs in Italian (which serves here to represent all Romance languages) and in Greek, because their PRs have been studied most extensively. I will refer to Cinque (1992) and to Moulton and Grillo (in prep., henceforth M&G and 2015b) for Italian, and to Angelopoulos (2015) for Greek.

The PR in Italian and Greek

Like Hebrew PR constructions, Italian and Greek PRs consist of a DP followed by a complementizer and a finite clause, and therefore superficially resemble RCs. However, as will be shown below in greater detail, PR clauses can only be preceded by an invariant complementizer (che in Italian and pu in Greek), not by relative pronouns, whereas RCs can be preceded by relative pronouns. Example 13 presents a PR in Italian, and examples 14-15 present PRs in Greek.

13. Ho visto Gianni che correva. (PR)
   I have seen Gianni that ran.IMPF
   ‘I saw Gianni running.’
   (M&G ex. 1a)

14. Idha ton Yani pu opios etreche. (PR)
   saw-1SG. The Yani that who run-3SG.+PST.+IMP.
   ‘I saw Yani running.’
   (Angelopoulos 2015, ex. 3)

15. I Maria eylepe ton Jani pu etrex. (PR)
   the Mary watch.PST.IMPF the John.ACC that run.PST.IMPF
   ‘Mary was watching John running.’
   (Grillo & Spathas 2014 ex.7a)

3 All Italian examples are taken from M&G in prep., unless stated otherwise.
Cinque 1992 and M&G distinguish between two kinds of PR. The first kind follows perception verbs (such as *see* and *hear*), which can select both events and individuals as their complements; the second kind follows main verbs like *meet* or *catch*, which select only individuals as their complements. M&G deal only with the first kind, hence, all mentions of M&G’s study refer only to PRs of the first kind, which denote events.⁴

Characteristics of Hebrew PRs versus their Italian and Greek Counterparts

Since Hebrew is a Semitic language while Italian and Greek are both Indo-European, we expect to find at least some difference in the realization of the PR and its properties. The following section takes a closer look at the characteristics of Hebrew PRs and compares them to their Italian and Greek counterparts to highlight both differences and similarities.

Syntactic Characteristics

The Complementizer

Hebrew, unlike English, Greek and the Romance languages (e.g., Italian), has no relative pronouns equivalent to *which* or *who*. It does, however, have three overt complementizers: *æler*, *[-]e-⁵* and *ha-*, which introduce both restrictive and non-restrictive relative clauses, and are equivalent to the invariant English complementizer *that*.

⁴ M&G p.4

⁵ Some maintain that *æler* and *[-]e-* are two morphological realizations of the same word, while others believe that they are synonyms, neither of which is morphologically derived from the other. *æler* is the dominant complementizer for RCs in Biblical Hebrew, while *[-]e-* is the dominant one in Mishnaic and Modern Hebrew (Blau 2010, Azar 1995).
In the context of relative clauses, the only difference between them (apart from a difference in register\(^6\)) is that \(a\)∫er and \(∫e-\) can be used in every syntactic and semantic environment, while \(ha-\) requires the verb within the relative clause to be a non-negated participle whose subject is bound by the head noun (Bar-Ziv Levy 2017).

Examples 16-19 present RCs consisting of \(a\)∫er or \(∫e-\) followed by finite clauses (in all three tenses), and example 20 presents an RC featuring \(ha-\) followed by a participial clause.

\(^6\) In Modern Hebrew \(a\)∫er is typical of the written (especially literary) language, while \(∫e-\) is common in both the written and the spoken language.
The boy walking along the path is my brother.

PRs, on the other hand, can only be introduced by *ha-*, as shown by the minimal pairs in 21-22 and 23-24:

21. לילי התבוננה בנתן המציל את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשושים בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקヒ ותראה את התשusaha בקHitbonena be-natan megalgel et ha-jezif be-kaf-yado…

Lili watch.3.SG.PST at-Natan the-roll.PTCP.MS ACC the-plum in-his-hand

‘Lili watched Natan rolling the plum in his hand…’

22. לילי התבוננה בנתן שאסרה להצל שלג thirds que l'espace à hai... (PR)

Lili watch.3.SG.PST at-Natan that-roll.PTCP.MS ACC the-plum in-his-hand

‘Lili watched Natan who was rolling the plum in his hand…’

To understand the difference in meaning and grammaticality between the two variants of each sentence, I apply the test described in the introduction, which distinguishes PRs from RCs. With the complementizer *ha-*, we get the PR event reading: the embedded clause describes the action that is being watched, not a property of the individual who is being watched, as expected in the case of RCs (moreover, this reading is preserved if the complementizer is removed). In example 21, Lili is watching Natan performing the action of rolling the plum. She is not watching Natan as a person who is rolling a plum or who rolls plums as part of his general characteristics or habits,
nor is she distinguishing one specific Natan who is rolling a plum from other Natans who are not, for Natan is already singled out as a specific single individual in this context (in the story from which the example is taken Natan is Lili’s husband). Describing Natan as an individual is the function of RCs, not of PRs.

In example 23, we get both the PR reading and the RC reading, as noted above. The ambiguity exists in 23 but not in 22 due to the difference in the clausal subject: in 21 the clausal subject is a proper noun (Natan) while in 23 it is a definite noun, constructed on the basis of the set of members of the tribe. This set allows the (restrictive) RC reading, which distinguishes this specific tribe member who is fishing from other tribe members who are not.

Replacing *ha-* with *ie-* precludes the PR reading. Examples 21-22 demonstrate this more clearly than examples 23-24, since 21 allows only the PR reading, and switching the complementizer therefore renders the sentence ungrammatical. Example 23, on the other hand, allows the RC reading as well, so the change of complementizer only eliminates the ambiguity: example 24 can only be understood as distinguishing a single tribe member – the one trying to fish – from others.

Turning now to Italian and Greek, they too allow RCs to be introduced by any relativizing element, whereas PRs can only be introduced by one invariant complementizer: *che* in Italian and *pu* in Greek.

25. Il cane il quale abbaia è felice. (RC)
   the dog the which barks is happy
   ‘the dog that is barking is happy.’
   (M&G, ex. 4a)

26. Ciò che ho visto è Gianni che il quale ballava. (PR)
    that which i.have seen is Gianni that the which dance.IMPF
    ‘I saw Gianni dancing.’
    (M&G, ex. 4b)
Example 25, in Italian, is an RC introduced by a relative pronoun, while 26 shows that the PR clause can only be introduced by *che*, not by a relative pronoun.

In Greek, the situation is slightly more complex. Greek has three complementizers, all of which can introduce constructions that display PR-like properties. However, *pu* seems to be the most common complementizer in PRs, and it is the only one that generates the robust existential presupposition typical of this construction, as will be shown below.

27. *Ton idha pu pighenespiti tus*. (PR)
   Him I saw that as going home of-their
   ‘I saw him going to their home.’
   (Angelopoulos 2015, ex. 17)

28. *Evlepa ton Stoltidi na ine kurasmenos* (PR)
   I was seeing the Stolditi na is tired
   ‘I was seeing Stolditis being tired.’
   (Angelopoulos 2015, ex. 74a)

29. *Evlepa ton Stoltidi oti itan kurasmenos*. (PR)
   I was seeing the Stolditi that was tired
   ‘I was seeing Stolditi being tired.’
   (Angelopoulos 2015, ex. 74b)

*The PR Tense*

While Hebrew RCs can feature a verb in any tense, PRs allow only a participle, regardless of the tense of the main verb (the same is not true for Italian and Greek, but is equivalent -- as will be shown below). The participle can be active or passive (as long as the passive participle has the verbal reading; including a reversible resultative reading of an adjectival passive, as in 32). The use of the participle is indicative of the present tense.

Example 30 presents an RC with the embedded verb in each tense (past, present and future); examples 31-33 show PRs with present participles (both active and passive).
The restriction on the tense of the PR verb makes sense if we accept that PRs denote events (or certain temporary results of events). The event denoted by the PR necessarily occurs while it is being perceived, and the sentence must reflect this simultaneity. This is achieved by restricting the tense of the embedded verb. RCs, denoting individuals, do not require this expression of simultaneity, since the denotation of the individual remains constant over time.

The restriction on the tense of the PR verb is also evident in Italian and Greek. In these languages, too, the tense of the PR verb must match the tense of the matrix verb. More precisely, the time interval denoted by the PR must include the time denoted by the matrix verb. This restriction does not apply to RCs.

34. * Vedo Maria che correva. (*PR)
   I.see.PRES Maria that run.IMPF
   ‘I see Maria that was running.’
   (M&G, ex. 3a)

35. Vedo la ragazza che correva. (RC, *PR)
   I.see.PRES the girl that run.IMPF
‘I see the girl that was running.’
(M&G, ex. 3b)

Example 35 is interpreted as an RC but not as a PR. As an RC, it conveys that one of the girl’s characteristics is that she ran at some point in the past. But a PR, which has an event reading, is impossible because the speaker cannot be perceiving in the present an event that occurred in the past. The need to express the co-occurrence of the event and its perception dictates the match between the matrix and embedded verbs. Example 34 is infelicitous since it is neither an RC nor a PR. The restrictive RC reading is excluded because the head is a proper name. The PR reading is impossible as well, since the matrix verb and the embedded verb do not match in tense, meaning that event and perception did not occur simultaneously.

The Greek examples are similar to the Italian ones: example 38 is an RC, which involves no tense restriction, example 36 has a PR reading, and example 37 has neither an RC reading nor a PR reading.

36. I Maria eylepe ton Jani pu etrex. (PR)
   the Mary watch.PST.IMPF the John.ACC that run.PST.IMPF
   ‘Mary was watching John running.’
   (Grillo & Spathas 2014 ex. 8a)

37. *I Maria eylepe ton Jani pu tha trexi. (*RC\*PR)
   the Mary watch.PST.IMP the John that FUT. run.PERF
   ‘Mary was watching John that will run.’
   (Grillo & Spathas 2014 ex. 8b)

38. I Maria eylepe ton athliti pu tha trexi. (RC)
   the Mary watch.PST.IMP the athlete that FUT. run.PERF
   ‘Mary was watching the athlete that will run.’
   (Grillo & Spathas 2014 ex. 8c)

Now, on the face of it, the restriction on the clausal tense of Hebrew PRs may seem somewhat different from the restriction in Italian and Greek, because in Italian and Greek, the tense of the
embedded verb depends on the tense of the matrix verb, whereas Hebrew requires the embedded verb to be a present participle, regardless of the tense of the matrix verb. However, I claim that all three languages exhibit the same restriction (i.e., the simultaneity restriction), but that it is realized differently in each language. The reason for the difference is that Italian and Greek are sequence-of-tense (SOT) languages, while Hebrew is not (Sharvit 2003).7

In non-SOT languages like Hebrew, simultaneity of the matrix and embedded verbs is expressed by means of present-under-past sentences (see footnote 6), so these are the sentences that allow the PR reading in Hebrew (ex. 31). In SOT languages like Italian and Greek, simultaneity is

issentences in which the matrix verb is a propositional attitude verb containing a past morpheme, and the embedded verb likewise contains a past morpheme) have two possible interpretations — the first is that the embedded past is semantically nonpast, which conveys a meaning of simultaneity; the second is that the embedded past is also semantically past, which conveys a meaning of anteriority.

John believed that Mary was pregnant.

*nonpast reading:*
John’s belief: “Mary is pregnant”
the time of the alleged pregnancy overlaps with John’s “now”.

*Anteriority reading:*
John’s belief: “Mary was pregnant”
the time of the alleged pregnancy precedes John’s “now”.

(b) present-under-past sentences (i.e. the matrix verb is a propositional attitude verb which contains the past morpheme but the embedded verb contains the present morpheme) have only the *double access* reading, in which the embedded action coincides both with the time conveyed by the matrix verb and the time of utterance.

John believed that Mary is pregnant.

*Double access reading:*
the time of the alleged pregnancy contains the time at which John held his belief as well as the time of utterance.

Non-SOT languages have also two characteristics: (a) present-under-past sentences generate a nonpast reading similar to the nonpast reading of past-under-past sentences in SOT languages.

*ינד בשתורש בורה* (Sharvit 2003)
expressed using past-under-past sentences, and therefore these are the sentences that allow the PR reading in these languages (ex. 13 and 36).

The Relative Gap

RCs contain a gap which can appear in several positions within the dependent clause, including subject, object or lower subject. In Hebrew, in the complement of a preposition, this gap must be filled with a pronominal suffix coreferential with the head of the RC. Example 39 presents an RC with a gap in the subject position and ex. 40 an RC with a gap in the object position.

39. ונחלשךילאתתאתמישרחםירפסהוכסדוהש. (RC)
send.1.PL.PST to-you ACC list.CS the-books that-print.3.SG.PST.PASS
'We sent you the list of the books that have been printed'

40. נידיןלאקראתתארפסהםלוכשוארק. (RC)
yadayin lo karati ?et ha-sefer; je-kulam karʔu φ.
still NEG read.1.SG.PST ACC the-book that-everyone read.3.PL.PST
'I still haven’t read the book everyone has read.’

The gap within a PR, though, can only be in the highest subject position (ex. 41).

41. יתננובתהנדבייקשנמהתאם nid. (PR)
hitbonanti be-Dani ha-e1-menא[ek ?et Dina.
watch.1.SG.PST at-Dani the-e1-kiss.PTCP.MS ACC Dina
‘I watched Dani kissing Dina.’

This restriction is correlated to the fact that Hebrew PRs can only appear with the complementizer ha-­-, and this complementizer (in PRs and elsewhere) marks a gap in subject position.

Italian exhibits the same feature: PRs and RCs both contain a gap, but in a PR this gap must be in the highest subject position, whereas RCs also allow lower gaps, such as in object or lower subject position.
42. Ho visto Luigi che e1 salutava Maria. (PR)
   I have seen Luigi that greet.IMPF Maria
   ‘I saw Luigi greet Maria.’
   (M&G, ex. 5a)

43. * Ho visto Luigi che Maria salutava e1. (*PR)
   I have seen Luigi that Maria greet.IMPF
   ‘I saw Maria greeting Luigi.’
   (M&G, ex. 5b)

44. * Ho visto Luigi che Paolo sosteneva che e1 salutava Maria. (*PR)
   I have seen Luigi that Paolo assert.IMPF that greet.IMPF Maria
   ‘I saw Luigi assert that Paolo greeted Maria.’
   (M&G, ex. 5c)

**DP Distribution**

M&G claim that PRs have the distribution of DPs, and present several syntactic arguments to prove this, which will be presented here. I will show that Hebrew PRs, like their Italian counterparts, have DP distribution. For every characteristic I will present Hebrew examples, followed by Italian ones.

- First, it should be noted that PRs form constituents, as shown by the tests of topicalization (ex. 45 and 47) and pseudo-clefting (ex. 46 and 48).

45. את דני הבשת כי תמרות ראית רק פעמיים אחת (PR)
   ACC Dani the-cry.PTCP.MS cry.CS-bitter saw.1.SG.PST only time one in-my-life
   ‘Dani crying bitterly I saw only once in my life.’

46. מהו/מי שראיתי את [תרם] הבשת כי תמרות [1] (PR/*PR)
   Ma\[mi\_2] je-ra?i ti ze ?et [dani\_2 ha-boxe bxi-tamrurim].
   what\[who\_2] that-saw.1.SG.PST is ACC [Dani\_2 the-cry.PTCP.MS cry.CS-bitter]\]
   ‘What I saw is Dani crying bitterly.’

47. Mario che piangeva, ho visto! (PR)
   Mario that weep.IMPF, I saw
   ‘Mario weeping, I saw!’
   (M&G, ex. 8a)
48. Ciò che ho visto è [Mario che piangeva] (PR\*PR)
That which I have seen is Mario that cry-IMPF
‘What I saw was Mario crying.’
(M&G, ex. 8b)

• Hebrew DPs can follow the preposition יֵל (‘of’), as shown in 49, whereas CPs such as content clauses cannot, as shown in 51. Example 50 shows that PRs can complement this preposition, like a DP:

49. המראה של Dani על כסא זה recalls how Mario was crying.
ha-mar'e יֵל [DP Dani ſal kise muzhav] hu marhiv.
the-sight of [DP Dani on chair golden] is spectacular
‘The sight of Dani on a golden chair is spectacular.’

50. המראה של Dani על כסא זה recalls how Mario was crying.
ha-maxaze יֵל [PR Dani ha-oxel ?et ha-salat] hu marhiv.
the-sight of [PR Dani the-eat.PTCP.MS ACC the-salad] is spectacular
‘The sight of Dani eating the salad is spectacular.’

51. המшла (شاه) של Dani את רולי הוא מצוין.
the-claim (*of) that-Dani love.3.SG.PST ACC Ruti is not true
‘The claim that Dani loved Ruti is not true.’

Italian exhibits a similar characteristic: PRs can complement prepositions such as ди (‘of’) (ex. 53), just like simple DPs (ex. 52), while other embedded clauses and small clauses cannot (ex. 54-55).

52. La vista di [DP Carlo]…
the sight of Carlo
‘The sight of Carlo…’
(M&G, ex. 12a)

53. La vista di [PR Carlo che balla il tango] è da non perdere. (PR)
the sight of Carlo that dance the tango is to not miss
‘The sight of Carlo dancing the tango is not to be missed.’
(Cinque 1992, ex. 35b)

54. La storia (*di) [CP che Gianni ha sconfitto il drago] non è vera. (CP)
the story of that Gianni defied the dragon not is true
‘The story that Gianni defies the dragon is not true.’
(M&G, ex. 12c)

55. *La vista di [TP Carlo ballare]… (bare infinitive)
the sight of Carlo dance.INF
‘The sight of Carlo dancing…’
(M&G, ex. 12d)

- PRs, like DPs, can be subjects of embedded clauses (ex. 56 and 58), while CPs cannot (ex. 57 and 59).

56. [tahiti im [dani ha-mak][iv le-muzika roš[e][et] mafriša wonder.1.SG.PST if [Dani the-listen.PTCP.MS to-music loud.FS] disturb.PTCP.MS l-ax.
to-you
‘I wondered whether Dani listening to loud music disturbs you.’

57. *[tahiti im [le-dani mak][iv le-muzika roš[e][et] mafriša wonder.1.SG.PST if [that-Dani listen.PTCP.MS to-music loud.FS] disturb.PTCP.MS l-ax.
to-you
‘I wonder if that Dani listens to loud music disturbs you.’

58. Mi chiedo se [Gianni che costruisce una nave spaziale] ti disturbi. (PR)
to.me ask.1.SG if Gianni that builds a ship space you disturbs
‘I wonder whether Giani building a spaceship annoys you.’
(Moulton, HUJI course handout, ex. 20a)

59. *Mi chiedo se [che Gianni costruisce una nave spaziale] ti disturbi. (*CP)
to.me ask.1.SG if that Gianni builds a ship spatial you disturbs
‘I wonder if that Giani builds a spaceship annoys you.’
(Moulton, HUJI course handout, ex. 20b)

- Coordination: a singular noun-based DP and a PR can be coordinated, triggering plural agreement (ex. 60 and 63), whereas CPs cannot be coordinated with DPs in subject position (ex. 61 and 64). Also, PRs cannot be coordinated with bona fide CPs (ex. 62 and 65). This means that, once again, PRs behave more like DPs than CPs.
Exceptional agreement

Unlike RCs, PRs display exceptional agreement between the matrix verb and the PR: the matrix verb can agree with the event denoted by the PR as a whole (ex. 67 and 69); alternatively, it can
agree with the PR head in number, person and gender (ex. 66 and 68). In Hebrew, since there’s no to be verb, I will demonstrate this using copulative PRON (hu 'he' and hem 'they' in this case).

66. בֶּן וּדָנִי הַרְוְקִדִים אֲחֵי הַנַּעֲרִים בְּדַיָּהָרִים
   Ben and Dani the-dance.PTCP.PL ACC the-tango PRON.MP  sight spectacular
   ‘Ben and Dani dancing the tango are a spectacular sight.’

67. בֶּן וּדָנִי הַרְוְקִדִים אֲחֵי הַנַּעֲרִים בְּדַיָּהָרִים
   Ben and Dani the-dance.PTCP.PL ACC the-tango PRON.MS  sight spectacular
   ‘Ben and Dani dancing the tango is a spectacular sight.’

68. גַיָּנוּ נַעֲרִים וּמַרְפֵּאָה
   Gianni and Maria that dance-PRES the tango are a sight
   da non perdere. (PR)
   ‘Gianni and Maria dancing the tango are a sight not to be missed.’
   (Cinque 1992, ex. 33b)

69. כָּרָלוֹ וּפַאוֹלוֹ נַעֲרִים וּמַרְפֵּאָה
   Carlo and Paolo that dance-PRES the tango is a sight
   da non perdere. (PR)
   ‘Carlo and Paolo dancing the tango is a sight not to be missed.’
   (M&G, ex. 19)

This exceptional agreement between the matrix verb and the PR head is also possible in non-copular sentences:

70. בֶּן וּדָנִי הַמַּעֲלָלִים אֲחֵי הַמַּעֲלָלִים מַעֲלָלִים בְּדַיָּהָרִים
   Ben and Dani the-cook.PTCP.PL ACC the-soup very impress.3.PL.PST ACC Rina
   ‘Ben and Dani cooking the soup really impressed Rina.’

71. בֶּן וּדָנִי הַמַּעֲלָלִים אֲחֵי הַמַּעֲלָלִים מַעֲלָלִים בְּדַיָּהָרִים
   Ben and Dani the-cook.PTCP.PL ACC the-soup very impress.3.SG.PST ACC Rina
   ‘Ben and Dani cooking the soup really impressed Rina.’
As opposed to Cinque, who claims that when the matrix verb agrees with the PR head (ex. 68 and 66), the PR denotes an individual, M&G argue that both patterns of agreement characterize event-denoting PRs, i.e., that there is no semantic difference between PRs exhibiting singular vs. plural agreement.

While this criterion is the same in Hebrew and Italian, its realization is slightly different due to different properties of the two languages: verbs in Hebrew agree with their subjects in three parameters: number (singular/plural), person (1, 2, 3) and gender (feminine/masculine), whereas verbs in Italian agree with their subjects in only two of these parameters: number and person, but not in gender. This can be seen by comparing ex. 66 (above) with the following example:

73. (PR)  
rina ve-gila ha-rokdít ʔet ha-tango hen maxaze marhiv.  
Rina and-Gila the-danic.PTCP.FP ACC the-tango PRON.FS sight spectacular  
‘Rina and Gila dancing the tango are a spectacular sight.’

Case assignment

The case of the PR head depends on the position of the entire PR: when the PR is in subject position, the PR head is in nominative case (ex. 74 and 76), and when the PR is in object position, its head is assigned accusative case (ex. 75 and 77-78).  

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M&G exemplify this using PRs with pronominal heads, which (unlike other Italian nouns) exhibit overt case distinctions (e.g., io vs. me). This option is not available in Hebrew, since pronouns – which likewise exhibit case, e.g., ʔani vs. ʔoti – cannot function as PR heads (a restriction to be discussed below). I therefore use examples in which the PR heads are definite or proper nouns, which likewise exhibit overt case distinctions in Hebrew (definite accusatives are marked with ʔet whereas nominatives are unmarked). 78 thus makes an argument that PRs are definite
Possible PR Heads

The head of a PR is a DP or an NP, just like the head of an RC. However, Hebrew (non-restrictive) RCs can be headed by a noun of any sort: a proper name (ex. 79), a definite or indefinite noun (ex. 80 and 81), and, as pointed out by Yael Maschler (2011), even a pronoun (ex. 82):
As for PRs, just like RCs they can be headed by proper and definite nouns (ex. 83 and 84)

It should be noted that example 84 is actually ambiguous: it can be understood as a restrictive RC if the context is such that there are several girls and the speaker was watching only the one who was dancing the tango. But a different context, like the one below – in which the speaker is describing the event he witnessed, namely the dancing of the girl – yields the PR reading:

However, PRs are unlike RCs in that they cannot be headed by pronouns (ex. 85-87) or by non-specific indefinite nouns (ex. 88)
Ex. 88 shows that a non-specific indefinite noun in the head position precludes the PR reading, leaving only the RC reading. An exception is specific indefinites, which can function as heads in both RCs (ex. 89) and PRs (ex. 90):

89. Ruti the-bounced BHUT wuxom ḥisom le-lishmo le-lihav bhel ma-mekihal. (RC)
   ruti hitbonena be-xatul katan ve-xamud le-nisa lelakek
   Ruti watch.3.SG.PST at-cat.INDF small and-cute that-try.3.SG.PST lick.INF
   xalav mi-tox ha-kli.
   milk from-inside the-bowl
   ‘Ruti watched a cute little cat who was trying to lick milk out of the bowl.’

90. Ruti the-bounced BHUT wuxom ḥisom le-lishmo le-lihav bhel ma-mekihal. (PR)
   ruti hitbonena be-xatul katan ve-xamud ha-menase lelakek xalav
   Ruti watch.3.SG.PST at-cat.INDF small and-cute the-try.PTCP.MS lick.INF milk
   mi-tox ha-kli.
   from-inside the-bowl
   ‘Ruti watched a cute little cat trying to lick milk out of the bowl.’

Italian does not display a similar restriction on the PR head: any DP can function as the head of a PR, including pronouns, as shown below:

91. Tu che balli sei un evento da non perdere. (PR)
   you that dance be.2.SG an event to not miss
   ‘You dancing is an event not to be missed.’
   (M&G, ex. 29a)

92. Io che ballo è un evento da non perdere. (PR)
   I that dance be.3.SG an event to not miss
   ‘Me dancing is an event not to be missed.’
   (M&G, ex. 30b)
93. Ha visto me che fumavo par strada. (PR)
   he.has seen me.ACC that smoke.IMPF in street
   ‘He saw me smoking in the street.’
   (M&G, ex. 34a)

This is another contrast between Italian and Hebrew, which again raises the question of whether
the contrast indicates an intrinsic structural difference between Hebrew and Italian PRs, or stems
from an independent difference between the two languages that is unrelated to PRs.

Evidence again points to the second option. The apparent difference may stem from the fact that
the Italian pronouns are clitics and can climb up the sentence, while the Hebrew pronouns cannot
climb even when they are clitics.

"Clitic climbing"9 is a phenomenon where a clitic does not append to the embedded verb of which
it is the object, but rather to the matrix verb. This involves movement from an embedded non-
finite verb position, which is lower in the tree, to the matrix verb position, which is higher – hence
the name “clitic climbing.” This process, possible only with certain main verbs, is found in Italian
and Greek10, but not in Hebrew.

The following examples are from Italian:

94. Gianni vuole darcieli.
    Gianni wants to-give-usDAT-them
    (Kayne 1991, ex. 40)

95. Gianni ce li vuole dare.
    (Kayne 1991, ex. 41)

In ex. 94 the clitics follow the non-finite verb of which they are the objects, and in ex. 95 they
have climbed up, to precede the matrix verb.

9 Rizzi 1982, Kayne 1991
10 Chatzikyriakidis, 2010a, 2010b
PRs are different from the constructions presented in the literature as examples of clitic climbing, such as those in 94-95. The literature refers to clitic climbing out of object position within the embedded clause, not from subject position. Conversely, Italian PRs display clitic climbing from the subject position within the embedded clause, and Greek PRs display clitic climbing from both subject and object position. Another difference is that the literature on clitic climbing refers to constructions where the embedded clause is non-finite, whereas the verb within a PR clause is finite.

Despite these dissimilarities, the Italian and Greek mechanism that allows clitic climbing may be responsible for the ability of pronouns to function as PR heads in these languages. This option is ruled out in Hebrew since this language does not allow clitic climbing.

**Heavy PR Clauses**

It seems that Hebrew clauses are more amenable to a PR reading when the clause is heavier, for example when it contains a complement. Ex. 96 is an RC, which is grammatical whether the clause is light or heavy. But in ex. 97, the PR reading is available only when we include the object in brackets.

96. התבוננתי ביילה שרקדה (ריקוד מהיר).
hitbonanti ba-yalda je-rakda *(rikud mahir).
watches.1.SG.PST at.the-girl that-dance.3.SG.PST (dance rapid)
‘I watched the girl who danced a rapid dance.’

97. התבוננתי ברינה הורקדה (ריקוד מהיר).
hitbonanti be-rina ha-rokedet *(rikud mahir).
watches.1.SG.PST at-Rina the-dance.PTCP.FS *(dance rapid)
‘I watched Rina dancing a rapid dance.’

Italian and Greek seem less sensitive to this parameter. In 98 and 99 (which appear above as 13 and 15), the PR reading is available even without a complement.
98. Ho visto Gianni che correva. (M&G, ex. 1a)
   ‘I saw Gianni running.’

99. I Maria evlepe ton Jani pu etrexe. (Grillo & Spathas 2014)
   ‘Mary was watching John running.’

Adjectival PR predicates

Hebrew allows nominal sentences,\(^{11}\) i.e. sentences where the predicate is non-verbal: an AP (ex. 100), a PP, or an NP (ex. 101), including an adjectival participle.

100. הַיַלְדָּה חָזָאמָה
Ha-yalda xaxama.
the-girl smart.FS
‘The girl is smart.’

101. דָּנִי רְפֵּא
Dani rofe.
Dani doctor.MS
‘Dani is a doctor.’

Therefore, one might expect PRs to allow adjectives, as well as verbal passive participles, to play the role of the predicate. However, this seems to be impossible:

102. רָאִיתֶה את דָּנִי הָעַצְו
 ra?iti et Dani ha-acuv.
see.1.SG.PST ACC Dani the-sad.MS
‘I saw the sad Dani.’

While grammatical, the sentence doesn’t convey the PR meaning, but only the meaning where atzuv is a modifier and describes Dani as an individual in a permanent state of being sad.

Italian, on the other hand, allows adjectives as PR predicates:

\(^{11}\) Doron, 1983.
103. Ho visto Gianni che era triste (PR)
‘I have seen Gianni that was sad.
‘I have seen Gianni being sad.’

This is possible because the PR contains a copular verb which eliminates the individual-level meaning of the adjective (‘sad’ in this case) and allows a situational reading.

**PRs with Conjoined Predicates**

An interesting phenomenon which M&G do not address is that of PRs with conjoined predicates.

The following are some attested Hebrew examples:

104. לומלע unlawful או חיך ודיית המריאת נשמה את מפעמי התורה הלהב את ראות. מילילית (PR)
le-mul סin-ay חalta im-i ha-yafa … ha-sama
to-against eyes.CS-my rose mother.CS-my the-beautiful… the-put.PTCP.FS
?et ha-taxara ha-levana al rof-a, madlika ?et ha-nerot,
ACC. the-lace the-white on head-hers light.PTCP.FS ACC. the-candles,
mevarexet סal-eihem, o'rexet ?et ha-fulan
bless.PTCP.FS on-them, set.PTCP.FS ACC. the-table
ve-koret lanu lavo.
and-call.PTCP.FS us to-come
‘In front of my eyes rose my beautiful mother, placing the white lace on her head, lighting the candles and blessing them, setting the table and calling us to come.’
*(A Lone Wolf in Jerusalem, Ehud Diskin, 2016)*

105. נזכרתי בעב המчкиם על ייר, זכרם על התולה רובע ואוהה. (PR)
nizkarti be-av-i ha-mekadeš al ha-ya’in,
remember.1.SG.PST at-father.CS-my the-sanctify.PTCP.MS on the-wine
mevarex al ha-xala ve-botze’a ?ota.
bless.PTCP.MS on the-xala and-slice.PTCP.MS it
‘I remembered my father blessing the wine, blessing the challah and slicing it.’
*(A Lone Wolf in Jerusalem, Ehud Diskin, 2016)*

106. אני הבנתי בתلمידיהם המleftrightarrowים, המריאים这些人 כל نفس שם המריאה שלם עצמון ואחרים. (PR)
ani hitbonanti ba-talmidim ha-makSidivim,
I watch.1.SG.PST at-the-students the-listen.PTCP.PL
ha-marišim be-ga7ava…, ha-menagnim yaxdav…,
the-cheer.PTCP.PL with-pride… the-play.PTCP.PL together…
ha-mexabkim yaxad…
the-hug.PTCP.PL together…
‘I watched the students listening, cheering with pride…, playing together…, hugging…’
(Dashvu’i – magazine for high school principals, Issue 77, 3.7.2015)

It should be noted that these sentences differ slightly in structure. In the first two examples (104-105) the complementizer ha- appears only once, before the first predicate, although it obviously takes scope over all the actions described by the conjoined predicates. Conversely, in the last sentence (106), the complementizer is repeated before each conjoined predicate.

Interestingly, example 106, with multiple complementizers, also exhibits ambiguity. It has two possible readings: one in which all the actions were committed by the same agent, meaning all of the students, and another (distributive) reading, in which only some of the students participated in each action – some listened, some cheered, and some played (the groups may or may not overlap). Obviously, in examples 104-105, no such ambiguity is possible, since the PR head is a singular noun. However, consider example 107, where the singular head is replaced with a plural one:

107. נזכור ילדי המקדים על וייא, מברכים על התהלת ובצעים אתיה. (PR)
nizkartiti be-yelad-ay ha-mekade∫im al ha-ya’in,
remember.1.SG.PST at-children-my the-sanctify.PTCP.PL on the-wine
mevarexim al ha-xala ve-botze∫im ?ota.
bless.PTCP.PL on the-xala and-slice.PTCP.PL it
‘I remembered my children blessing the wine, blessing the challah and slicing it.’

108. אני התומנים התלמידים המקדימים, המריעים בצעים, שונות. (PR)
ani hitbonanti ba-talmid ha-mak∫iv, ha-meri∫a
I watch.1.SG.PST at.the-student the-listen.PTCP.MS the-cheer.PTCP.PL
be-ga?ava…, ha-menagen …
with-pride… the-play.PTCP.PL…
‘I watched the student listening, cheering with pride…, playing…’

Example 107 seems to lack the distributive reading even though the agent is plural: the sentence conveys that all children performed all the actions. This suggests that it is the repetition of the

12 In Hebrew, it is not obligatory to repeat the complementizer even when there is more than one embedded clause. (Azar 1995, p.221)
complementizer that produces the distributive reading. In 108 the distributive reading is naturally unavailable, because the head noun is singular.

Examples 104-105 also seem to differ from 107106 in another way, namely in terms of the understood order of actions: in 104-105 the actions are understood to occur one after the other, whereas in 106 they may be occurring simultaneously. To test whether this has to do with the repetition of the complementizer, I examined a version of 105 with multiple complementizers:

Ex. 109 indeed seems to be ambiguous between a sequential reading and an unordered one, suggesting that coordination with a single complementizer favors the former reading.

PR
nizkarti be-av-i ha-mekadeʃ al ha-ya’in,
remember.1.SG.PST at-father.CS-my the-sanctify.PTCP.MS on the-wine
ha-mevarex al ha-xala ve-ha-botzeʃa ʔota.
the-bless.PTCP.MS on the-xala and-the-slice.PTCP.MS it
‘I remembered my dad blessing the wine, blessing the xala and slicing it.’
Semantic Characteristics

Complementing Attitude Verbs

Unlike regular embedded clauses, which can function as objects of attitude verbs like 'claim,' 'guess' and 'deduce' (ex. 110), PRs can’t complement such verbs (ex. 111).

110. yndטעוט/קיסמ/שחנמ התדרקור. (CP)
Dani claim/deduce/guess.PTCP.MS that-Rina dance.PTCP.FS
‘Dani claims/deduces/guesses that Rina is dancing.’

111. *yndטעוט/קיסמ/שחנמ התדרקור. (*PR)
Dani claim/deduce/guess.PTCP.MS ACC Rina the-dance.PTCP.FS
‘Dani claims/deduces/guesses Rina dancing.’

The following examples show that Italian is similar: regular CPs can complement the equivalent attitude verbs (examples 112, 114 and 116), while PRs cannot (ex. 113, 115 and 117).

112. Gianni sostiene che Maria corre. (CP)
Gianni claims that Maria runs
‘Gianni claims that Maria runs.’
(M&G, ex. 47a)

113. *Gianni sostiene Maria che corre. (PR)
Gianni claims Maria that runs
‘Gianni claims Maria running.’
(M&G, ex. 47b)

114. Gianni ha intuito che Maria correva. (CP)
Gianni has guessed that Maria run-IMPF
‘Gianni guessed that Maria runs.’
(M&G, ex. 48a)

115. *Gianni ha intuito Maria che correva. (PR)
Gianni has guessed Maria that run-IMPF
‘Gianni guessed Maria running.’
(M&G, ex. 48b)

116. Gianni ha visto la stanza vuota e ha dedotto che Maria correva. (CP)
Gianni has seen the room empty and has deduced that Maria run-IMPF
‘Gianni saw the empty room and deduced that Maria was running.’
(M&G, ex. 49a)
117. * Gianni ha visto la stanza vuota e ha dedotto Maria che correva. (PR)
   Gianni has seen the room empty and has deduced Maria that run-IMPF
   ‘Gianni saw the empty room and deduced that Maria running.’
   (M&G, ex. 49b)

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**Epistemic Perception**

According to Barwise (1981), finite embedded clauses generate an epistemically positive reading. Barwise examines and exemplifies the behaviour of CPs and IPs under perception verbs that describe scenes/events. Ex. 118 is an IP (denoting direct perception) under a perception verb ('to see'), and 119 is a CP (denoting indirect perception) under the same verb.

118. Ralph saw a spy hiding a letter under a rock.

119. Ralph saw that a spy was hiding a letter under a rock.
   (Barwise 1981, ex. 5-6)

Barwise notes that 119 implies 118, but not vice versa. This implication is pragmatic rather than semantic, i.e., involves the hearers' expectations regarding the contexts in which each sentence is appropriate. The presence (or absence) of the implication becomes clearer when we add a clause that contradicts it, as in ex. 120 and 121:

120. Ralph saw a spy hiding a letter under a rock, but thought she was tying her shoe.
   (Barwise 1981, p.374)

121. Ralph saw that a spy was hiding a letter under a rock, #but thought she was tying her shoe.

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13 The distinction between epistemically positive and epistemically neutral perceptual reports was first made by Fred Dretske in his book *Seeing and Knowing*. According to Dretske, there is a simple kind of seeing, in which something is physically perceived by the eyes but is not necessarily interpreted as what it actually is. This type of seeing, which he calls *non-epistemic* seeing, is expressed by direct perception sentences (ex. 118, 120). The other kind of seeing is *epistemic* seeing, in which something is not only physically perceived by the eyes but also interpreted as what it really is. This type of seeing is expressed by indirect perception reports. Barwise refers to the latter type of seeing (seeing and also understanding) as "epistemically positive," and to the former type (seeing but not necessarily understanding) as "epistemically neutral."
In ex. 120 the addition is acceptable because the first part of the sentence is epistemically neutral: it does not convey that Ralph necessarily understood what the spy was doing. In other words, it does not generate an implication that contradicts the addition. Conversely, the first part of the sentence of ex. 121 is epistemically positive: it does convey that Ralph understood what he was seeing, so the addition is infelicious.

M&G tested PRs for this criterion. Comparing Italian PRs to CPs, which generate an epistemically positive reading (ex. 122), and to non-finite SCs (small clauses), which generate an epistemically neutral one (ex. 123), they found that the PRs, like SCs and unlike CPs, are epistemically neutral, as shown in 124.

122. Gianni ha visto dalle lacrime che Maria piangeva, Gianni has seen from the tears that Maria cry.IMPF, #ma pensava ridesse. (CP) but thought laugh.SUBJ ‘Gianni saw from the tears that Maria was crying, #but thought she was laughing.’ (M&G, ex. 50)

123. Gianni ha visto Maria piangere… ma pensava ridesse. (bare infinitive) Gianni has seen Maria cry.INF … but thought laugh.SUBJ ‘Gianni saw Maria crying but thought she was laughing.’ (M&G, ex. 51)

124. Gianni ha visto [PR Maria che piangeva]… ma ha pensato che ridesse. (PR) Gianni has seen Maria that cry.IMPF … but has thought that laugh.SUBJ ‘Gianni saw Maria crying… but he thought she was laughing.’ (M&G, ex. 52)

It should be noted that direct perception verbs describe a relation between a perceiver and an individual situation (Barwise 1981), whereas indirect perception verbs describe a relation between a perceiver and a proposition (Kratzer 1989). This explains why attitude verbs (deduce and claim) don’t select PRs, as they can only combine with propositions, not situations, which is what PRs denote.
In Hebrew, the bare complement is not an infinitive like in Italian, but a participle. Nonetheless, it resembles the Italian bare infinitive in that it generates an epistemically neutral reading (example 126). As for the Hebrew PR, example 127 shows that, just like its Italian counterpart it is epistemically neutral. Also, like Italian, the CP in ex. 125 generates an epistemically positive reading.

125.Dani saw from the tears that Rina was crying, #but thought she was laughing.

126. Dani saw Rina crying, but thought she was laughing.

Existence Presupposition

Unlike bare complements\(^1^4\) of direct perception verbs (ex. 128), which don’t presuppose the existence of the events they denote, PRs give rise to an existential presupposition (ex. 129).

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\(^{14}\) Higginbotham (1983) claims that infinitives, as complements of direct perception verbs, are descriptions of existentially quantified events.

a. John saw Mary depart.
In ex. 128 there is no contradiction between the second part of the sentence, which evokes an event of Danny dancing, and the clause in the beginning of the sentence, which asserts that such an event never took place. In ex. 129, on the other hand, the first part of the sentence is felt to contradict the second part, and is therefore unacceptable. This contradiction arises because the PR in 129 generates a presupposition that an event of Dani dancing actually occurred.

Italian displays a similar contrast:

130. Dato che Maria non ha mai ballato, given that Maria NEG has never danced, Gianni non ha mai visto Maria ballare. (bare infinitive) Gianni NEG has never seen Maria dance ‘Since Maria has never danced, Gianni has never seen Maria dance.’ (M&G, ex. 57)

131. # Dato che Maria non ha mai ballato, Gianni non ha mai visto given that Maria NEG has never danced, Gianni NEG has never seen Maria che ballava. (PR) Maria that dance.IMPF ‘Since Maria has never danced, Gianni never saw Maria dancing.’ (M&G, ex. 58)

b. John saw Mary’s departure. (M&G ex. 56)

The infinitive complement (ex. a) is the indefinite description of the nominal complement in ex. b, which is a definite event.
In ex. 131 there is a contradiction between the first part of the sentence and the presupposition generated by the PR in the second part of the sentence, making the sentence as a whole infelicitous. But in 130, since the bare infinitive in the second part of the sentence doesn’t presuppose existentiality, there is no contradiction between the two parts of the sentence.\textsuperscript{15}

It should be noted that the epistemic implication pertains to the perceiver’s state of mind, whereas the existential presupposition pertains to (what the speaker presents as) the real world. This means that the existential presupposition is weaker than the epistemic implication: an expression can presuppose that the event it describes took place without implying that whoever perceived this event necessarily interpreted it correctly.\textsuperscript{16} A PR is such an expression (it carries an existential presupposition but is epistemically neutral), and this is why it can be felicitously accompanied by an utterance that denies the epistemic implication, but not the existential one.

As for Greek, it has three complementizers: \textit{pu}, \textit{oti} and \textit{na}. \textit{Oti} introduces propositions following attitude verbs, and \textit{na} introduces finite clauses which function as infinitives or subjunctives (Greek lacks infinitive or subjunctive forms). All three complementizers can complement perception verbs, as shown below:

\begin{itemize}
  \item \textit{pu}
  \item \textit{oti}
  \item \textit{na}
\end{itemize}

\textsuperscript{15} This is also true of Spanish PRs:

\begin{itemize}
  \item a. \textit{Juan no vio a Lea bailar, porque Lea no llegó a bailar.}
      \textit{Juan NEG saw OBJ Lea dance.INF, because Lea NEG arrive to dance. INF}
      \textit{‘Juan didn’t see Lea dance, because she didn’t get to dance.’}
  \item b. \textit{#Juan no vio a Lea que bailaba, porque Lea no llegó a bailar.}
      \textit{Juan NEG saw OBJ Lea that dance.IMPF, because Lea NEG arrive to dance. INF}
      \textit{‘Juan didn’t see Lea dance, because she didn’t get to dance.’}
      (M&G ex. 59-60)
\end{itemize}

\textsuperscript{16} The opposite is not true: an expression cannot imply that the event it describes was correctly identified by the perceiver without presupposing that the event actually occurred. In other words, an expression that is epistemically positive necessarily carries an existential presupposition as well.

\textsuperscript{15}\textsuperscript{16}
Syntactically, the subordinate clauses in the three examples above are very similar. However, when it comes to semantic features, the complementizers differ. *Pu*-clauses, like Italian PRs, generate an existential presupposition, whereas *na*-clauses do not, and *oti*-clauses generate only a weak existential presupposition (as will be explained in more detail below).

This is exemplified by the following examples:

135. Dhen ton icha dhi na kurazete.
    not him had seen na is getting tired
    = I did not see any event of him getting tired.
    ¬ there is a specific event of him getting tired but I had not seen this event.
    (Anglopoulos 2015, ex. 76a)

136. Dhen ton icha dhi pu kurazotan. (PR)
    not him had seen that was getting tired
    = there is a specific event of him getting tired but I had not seen this event.
    ¬ I had not seen any event of him getting tired.
    (Anglopoulos 2015, ex. 76b)

137. Dhen ton icha dhi oti kurazotan.
    not him had seen that was getting tired
    = there is a specific event of him getting tired but I had not seen this event.
    ¬ I had not seen any event of him getting tired.
    (Anglopoulos 2015, ex. 78)

    a. Opote, kanis den ton idhe/exi dhi na xorevi sto parti.
       therefore nobody not him saw/has seen SUBJ dance at the party
       ‘Therefore, no one saw/has seen him dance at the party.’
b. Opote, kanis den ton idhe/exi dhi pu xoreve sto parti. (PR)  
therefore nobody not him saw/has seen that dance.PST.IMPF at.the party  
‘Therefore, no one saw/has seen him dance at the party.’  
(M&G, ex. 61)

The contrasts exemplified above stem from the different characteristics of each complementizer. *Pu*-clauses behave like definites, generating an existential presupposition that projects over negation. *Na*-clauses, on the other hand, are claimed to have indefinite properties, which explains why they don’t generate an existential presupposition. They scope lower than negation, just like Italian infinitives (M&G 2015a). *Oti*-clauses are said to have properties of specific indefinites: they generate an existential presupposition, but it is a weak one, which can be denied (Angelopoulos 2015, Roussou 2010). To demonstrate this difference, I bring another example from Roussou 2010:

139. Thimame oti/pu dhiavaze poli.  
remember-1S that read-3S much  
'I remember that he used to read a lot/I remember him reading a lot.’  
(Roussou 2010, ex. 17)

Since *oti* generates weak existential presupposition, the content of the embedded clause may be denied, as follows: ‘I remember that he used to read a lot, but this may be a false recollection.’. When using *pu* instead, which generates a strong presupposition, it is impossible to deny the clause.

More evidence of the existential presupposition generated by PRs is found in other environments: under conditionals and universal quantifiers.

**Conditionals**

PRs seem to carry an existential presupposition under conditionals, as opposed to bare infinitives. In ex. 140 and 142, where the action is described by bare complement in Hebrew and a bare infinitive in Italian, it is possible that Dani/Gianni never danced. In other words, the sentences do
not suppose that an event of Dani/Gianni dancing necessarily took place. Ex. 141 and 143, on the other hand, where the action is described by a PR, do presuppose that Dani danced (although Rina/Maria did not witness it).

140. (bare complement)

Furthermore Rina saw.3.PST ACC. Dani dance.PTCP.MS ACC. the-waltz
she would.be happy. FS but he NEG dance.3.MS.PST
‘If Rina had seen Dani dancing Waltz, she would be happy, but he didn’t.’

141. (PR)

Furthermore Rina saw.3.PST ACC. Dani the-dance.PTCP.MS ACC. the-waltz
she would.be happy. FS but he NEG dance.3.MS.PST
‘If Rina had seen Dani dancing Waltz, she would be happy, but he didn’t.’

142. (bare infinitive)

If Maria had.COND seen Gianni dance.INF SI would.be angry
‘If Maria had seen Gianni dance she would have got angry.’
(M&G, ex. 62a)

143. (PR)

If Maria had.COND seen Gianni that dance.IMPF SI would.be angry
‘If Maria had seen Gianni that dance she would have got angry.’
(M&G, ex. 62b)

Under universal quantifiers

PRs show similar behaviour under universal quantifiers\(^\text{17}\): they allow the non-distributive reading but block the distributive reading; bare complements (or bare infinitives in Italian), on the other hand, do not allow a non-distributive reading.

\[^{17}\text{Due to the phenomenon of "quantifier raising" (QR), the usage of a universal quantifier alongside an existential one creates ambiguity between a distributive and a non-distributive reading:}

\text{Someone loves everybody.}

\text{The non-distributive reading is the one in which the existential quantifier scopes over the universal quantifier, producing the proposition there exists one person who loves everyone. The distributive reading is the one in which the universal quantifier undergoes QR and scopes over the existential one, even though it is syntactically lower. This}

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hand, allow both readings in the same environment. In ex. 144, with a bare complement, each person saw some event of Tali dancing, but they did not necessarily see the same event. Conversely, ex. 145, with a PR, necessarily means that everyone saw the same dancing event.

```
144.kulam ra¿u ?et tali rokedet ?et agam ha-barburim. (bare complement)
everyone see.3.PL.PST ACC Tali dance.3.FS.PTCP ACC lake the-swans
‘Everyone saw Tali dancing ‘swan lake’. ’
```

```
145. kulam ra¿u ?et tali ha-rokedet ?et agam ha-barburim. (PR)
everyone see.3.PL.PST ACC Tali the-dance.PTCP.FS ACC lake the-swans
‘Everyone saw Tali dancing ‘swan lake’. ’
```

The Italian examples in 146 and 147 display the same contrast.

```
146. Tutti hano visto Maria ballare. (bare infinitive)
All have seen Maria dance.INF
‘Everyone saw Maria dance.’
(M&G, ex. 63a)
```

```
147. Tutti hano visto Maria che ballava. (PR)
All have seen Maria that dance.IMPF
‘Everyone saw Maria dancing.’
(M&G, ex. 63b)
```

In other words, the structures in ex. 146 and 144 allow the universal quantifier to scope over the dancing event, generating a multiple event reading as well as a single event reading. Conversely, the PRs in ex. 147 and 145 do not allow the universal quantifier scope over the dancing event, generating a single meaning for the sentence: that there was only one event of dancing, which was witnessed by everyone.

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produces the proposition that for every person there exists another person that loves him. PRs behave unexpectedly in that they block QR, thus precluding the distributive reading.
The distributive reading becomes available, however, when the PR head contains a variable pronoun that is bound by the quantifier:

148. Ogni ragazzo ha visto sua sorella che ballava.
      every boy has seen his sister that dance.IMPf
Hebrew PRs: An Analysis

Having described the PR and its properties, I now turn to the question of its precise structural analysis. First, I will present the analysis suggested by M&G for Italian PRs. I will also mention Cinque’s (1992) analyses but will not elaborate on them. Subsequently, I will propose an analysis for the Hebrew PR, largely inspired by M&G’s analysis for Italian PRs but not identical to it. Finally, I will show how the analysis suggested for the Hebrew PR accounts each of its properties.

M&G suggest a unified analysis for all PRs under perception verbs. They treat them as event-denoting constructions in which the PR head and the PR-clause are part of a single constituent of type DP, headed by a null D:

```
  DP
   \   /
  D   CP
      |   /
null  DP  C'
     |   /
    C   IP
     |   /
    PRO VP
```

Since this analysis is only of the PR element, it can be inserted into any sentence, in any position – subject or object. The following are two examples, with the PR in object position (ex. 13) and in subject position (ex. 68).

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18 M&G’s analysis doesn’t account for PRs under verbs that do not select events as complements, such as *meet* and *catch*. According to them, these PRs should have a different analysis as they indeed denote individuals, not events.
As M&G argue and as is shown above, PRs have the distribution of DPs, which motivates M&G to analyze them as DPs rather than CPs. The empty D explains the fact that the case of the PR head is not assigned by any element within the CP but is determined by the position of the entire PR in the larger sentence. The process that enables this is as follows: the matrix V assigns case to the empty D, which in turn assigns case to the PR head.
The empty D position also facilitates the exceptional agreement between the PR head and matrix verb, which is unique to the PR construction (as shown above in ex. 68-69): the phi-features of the PR head are percolate to the empty D position, but, since this position is empty, these phi-features remain unexpressed unless they further agree with the matrix verb itself, where they can be realized. Of course, as mentioned earlier, this exceptional agreement is optional; the second option is for the empty D to receive the impersonal 3SG phi-features, which are then agrees to the matrix verb.

The analysis of PRs must differ from that of RCs and bare infinitives in order to reflect the semantic differences between the constructions exemplified above, namely that PRs cannot complement propositional attitude verbs, and carry an existential presupposition while generating an epistemically neutral reading. M&G’s assumption that PRs are DPs can indeed account for these differences, since constituents of different kinds have different properties. In this case, DPs differ from CPs in that they do not denote propositions. M&G’s analysis also explains why PRs, unlike bare infinitives, are referential. According to them, the empty D that heads the PR lends the entire construction the properties of a definite expression by causing the empty position to be interpreted as a definite article (which is also similar to the definite article in its semantic type, as will be demonstrated below). This accounts for the differences between PRs and infinitives in existential presupposition and in quantificational force, as the definite article would generate the existential presupposition and mark the event as specific.

\[\text{19 The phi-features from the PR head are projected to the empty D because the PR head combines with a CP, which is a constituent that cannot bear phi-features (Iatridou and Embick 1997).}\]
Moreover, if we consider D to be of type \(<s,t>,<s>^{20}\) and CP to be of type \(<s,t>\), the empty D can operate on a set of events to yield a single event. This is not possible if we analyze PRs as CPs or as infinitives, because these constituents denote a set of events and neither contains a D to single out one event from among the set.

Finally, M&G show that Cinque’s (1992) analysis doesn’t account for all PR properties Cinque (1992) distinguishes three types of Italian PRs, and associates each of them with a different structure. He treats one kind of PR as a constituent of type CP, but M&G show that these PRs actually have the distribution and behavior of DPs. He analyzes another kind of PR as a single constituent of type DP, but in his analysis this PR denotes an individual, rather than an event. M&G show that even the PRs of this type denote events, which means that this analysis is problematic.

A third type of PR, featuring verbs that do not select events, is analyzed by Cinque as two constituents. M&G do not address this analysis, since they deal only with event-denoting PRs. Regardless whether it is applicable to the Italian data, this analysis is irrelevant to Hebrew PRs, since, as stated above, Hebrew does not feature PRs of this sort.

The following section proposes a structural analysis of the Hebrew PR, treating it as a single constituent, and shows that this analysis accounts for each of the PR properties presented in the previous sections.

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\(^{20}\) s stands for “situation”.
As already demonstrated above, constituency tests such as topicalization (ex.149) and pseudo-cLEFTING (ex.150) indicate that the Hebrew PR forms a constituent. (The original sentence is ex. 7: lili hitbonena be-natan ha-megalgel ?et ha-∫e∫if be-kaf-yad-o.)

149. be-natan ha-megalgel ?et ha-∫e∫if be-kaf-yad-o lili hitbonena!
at-Natan the-roll.ptcp.ms acc the-plum in-hand-his Lili watch.3.fs.pst
‘Lili watched Natan as he was rolling the plum in his hand…’

150. ma ñe-lili hitbonena b-o hu natan ha-megalgel ?et ha-∫e∫if what that Lili watch.3.fs.pst at-him is Natan the-roll.ptcp.ms acc the-plum in-hand-his
‘What Lili was watching is Natan rolling a plum in his hand.’

I have also shown that PRs have the distribution of DPs: they can complement prepositions, coordinate with DPs, and be the subject of an embedded clause. The PR, then, seems to be a single constituent of type DP. Such an analysis is indeed suggested by Cinque and by M&G for Italian PRs (or for some of them). But, as mentioned above, their analyses differ: Cinque implies that the che clause modifies the individual denoted by the PR head, while M&G contend that the PR, as a whole, denotes an event.

Hebrew seems to support M&G’s claim that PRs denote events. This follows from the properties that were presented above, namely pseudo-cLEFTING, which is only grammatical when using the relative pronoun what, not which (see ex. 46 and 150), and exceptional agreement: pronouns can agree either with the PR head (in number, gender and person) or with the entire PR as an event-denoting expression (which triggers impersonal singular, 3rd person agreement; see ex. 66-73). Consequently, I tend to adopt M&G’s structural analysis rather than Cinque’s. As I will show below, M&G’s analysis, with a few modifications, is applicable to the Hebrew PR.

Let us recall M&G’s proposal:
Applying this to ex. 7, we get the following tree:

This seems like a reasonable analysis for this sentence. However, it raises the question: is the empty D position necessary in Hebrew, as it is in Italian? The crucial difference between Italian and Hebrew PRs is that the latter feature an overt determiner, *ha-*,
complementizer. *Ha-* is also the definite article in Hebrew. So, is there need for an empty D position, or should the proposed structural analysis be modified in some way?

Two possible modifications suggest themselves:

a. Omitting the empty D position altogether (leaving *ha-* in the complementizer position).

b. Positing a D position, just like M&G, but instead of leaving it empty, having it contain the determiner-complementizer *ha-* , which is realized in the complementizer position.

I will present the consequences of each option, and explain why I chose the latter, namely to leave the tree as it is, only with a silent determiner in the D position, which is realized in the C position.

M&G suggest the D position in order to explain several properties of the Italian PR: its DP distribution, its exceptional case marking and its exceptional agreement. (In Italian, this position is necessarily empty, and has no phonological expression). As stated, M&G assume that the matrix verb assigns case to the PR head via the empty D position. The phi-features of the PR head percolate in the opposite direction, projecting first to the empty D position and then upwards to the matrix verb, allowing the exceptional agreement between the verb and the PR head. (Alternatively, the verb can also acquire the default 3sg phi-features). These features can’t be expressed on a phonologically null position, and are only expressed on an overt element elsewhere in the sentence (the agreement on the matrix verb and the case on the PR head).

The D position lends the whole structure the properties of a definite expression, which explains the referential nature of PRs. The D position takes a set of events (denoted by the PR predicate) and operates on it, yielding a single definite event, just as an "ordinary" D operates on a set of individuals and singles out one of them.
The properties of the Italian PR that motivate the assumption of the empty D position are all shared by the Hebrew PR, and thus should be reflected by the Hebrew analysis as well. Returning to the two options presented above, it is evident that if the empty D position is eliminated, there is no way to account for the fact that the PR, as a whole, behaves like a DP, as demonstrated above.

The second option – that the D position contains a ‘silent determiner,’ which projects to the complementizer position, where it is realized phonologically as ha- – seems to be the better option, as it accounts for all the PR properties presented above, and also accords with the fact that the Hebrew complementizer ha- is first and foremost the Hebrew definite article. In fact, it might also explain why this is the only complementizer that can appear in PRs.

The analysis is as follows:

As stated, this analysis reflects all the properties which are common to Italian and Hebrew PRs. It accounts for the epistemically neutral reading of the PR, because it treats this construction not as a CP (which denotes propositions) but rather as a DP. This aspect of the analysis also accounts for the existential presupposition; in fact, this is clearer in Hebrew than in Italian, because the DP head is the definite article.
The restriction on pronouns as heads of Hebrew PRs is accounted for by the fact that the pronoun, which is a clitic, corresponds to a null pro in the head position, which cannot be licensed by any functional head in the embedded clause (from which it is separated by C, or any functional head in the main clause, from which it is separated by D. Since the clitic cannot climb outside the clause, as Hebrew doesn’t allow clitic climbing, the derivation crashes.

As for Hebrew PRs with conjoined predicates, I believe that this analysis, with several extensions, can account for them as well. I assume that, when the PR predicate consists of only one complementizer ha- followed by conjoined VPs, the complementizer scopes over all of the VPs, which are lower than it in the tree:

For the other case, where ha- is repeated before each conjunct, I suggest the following analysis:
The two analyses account for the differences in interpretation described above. In the first construction, with only one complementizer, the entire set denoted by the PR head is understood to be the agent, be it a set of one element or more. This, I argue, stems from having a single PRO in the embedded clause, followed by several sibling VPs. Since the PRO (coindexed with the PR head) is the subject of all these VPs, the sentence cannot convey that each action was carried out by a different subset of the set denoted by the PR head. The second construction, where the complementizer is repeated before each VP, can generate such a reading, because each VP is associated with a different PRO, all of them referring back to the PR head. If the PR head denotes a set of more than one element, we may assume that, given multiple PROs, each can refer to a different subset of this set. The subsets may or may not overlap; alternatively, they can all be identical to the entire set, producing a reading identical to a single-complementizer sentence.

As an illustration, examples 106 and 108 above are associated with the trees below, respectively:
A question that arises is whether the silent definite article in the D position impedes the procedures that enable the exceptional agreement and the case assignment. I claim that it does not. The case assignment remains the same: the matrix verb assigns case to the D position, which contains a silent determiner. Since, as a null element, this determiner cannot bear case, it passes the case downward to the PR head, where the case can be realized.

The matter of the exceptional agreement, on the other hand, is more complex. The PR head projects its phi-features onto the silent determiner in the D position above it. It might be suggested that the D position can then form an agree relation with the matrix verb (as suggested for the Italian PRs).

Three issues remain to be resolved: Why is the definite article realized in the lower in the C position, rather than in the D position itself; why do PRs appear only with the complementizer ha- and not with the complementizer je; and lastly, but most importantly in my opinion, why does Hebrew allow the realization of an overt determiner while Italian doesn’t?
Regarding the first issue (the realization of the determiner in the C position rather than the D position), the answer may lie in the fact that *ha-* (which is the complementizer, in this case) is a clitic. As such, it is bound to be realized in adjacency to the verb to which it cliticizes, which, in the case of the PR, is the embedded verb. As mentioned above, Hebrew doesn’t allow clitic climbing, which prevents *ha-* from climbing towards the D position, away from its verb.

This claim is reinforced by Shlonsky (1988). Shlonsky argues that the cliticization of the Hebrew complementizer *je*- is syntactic, not only phonological, occurring already at level of logical form. *je*- is free to move according to the empty category principle. Its movement out of C position leaves this position empty, just like the movement of *ha-* from the C position to the D position. In both scenarios, the complementizer is phonologically realized in the C position.

As for the second issue, perhaps the complementizer of a PR is required to be *ha-* rather than *je-* because the PR is a constituent of type DP, with a D head. As described above, Hebrew RCs with present participles can be introduced by either *je-* and *ha-* and in colloquial Hebrew, RCs with *je-* (rather than *ha-*) are in fact the rule. Hence, the exclusion of *je-* in PRs might on the face of it seem odd. But if the PR is actually a DP, the restriction becomes reasonable: we may assume that *ha-* is the only complementizer that can bear all the semantic and syntactic features of the PR as described above, thanks to its dual function as both the definite article and as a complementizer.

This brings us to the third and last issue (why Hebrew allows the realization of the determiner while Italian doesn’t). As claimed throughout this work, it seems that the Hebrew PR and the Italian PR are intrinsically and structurally similar, differing only in superficial features that stem

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21 This principle states that an empty category must stand in proper government relation to another category. α properly governs β if and only if α governs β [and α ≠ AGR]. The bracketed phrase is relevant only for non-pro-drop languages. (Chomsky, 1981).
from parametric differences between the two languages. (For example, the tense restriction on the embedded verb exists in both languages, but is realized differently in each of them because Italian is a SOT language while Hebrew is not; the restriction on pronouns as the heads of PRs exists in Hebrew but not in Italian because Italian allows clitic climbing whereas Hebrew does not). I suggest that the exclusion of an overt definite article from the Italian PR but not from the Hebrew one stems from a difference between the definite articles in the two languages: the Hebrew definite article *ha*- bears no phi-features such as number, person or gender, whereas the Italian definite article is marked for number and gender, but not for person. Had the Italian PR featured a definite article, there would have been no way to account for the exceptional agreement: the phi-features of the PR head would project onto the D position, and some of them, namely number and gender, would be realized in that position, but the person feature would remain unrealized. The matrix verb, unlike the definite article, can overtly express all three features, which is what actually occurs in the Italian PR. This once again validates the claim that the PRs are structurally similar in Hebrew and Italian.

In sum, I have adopted M&G’s structural analysis of the PR, with slight modifications so as to reflect the properties of the Hebrew construction more accurately. Adopting M&G’s analysis was possible due to the structural similarities between the Hebrew and Italian PRs, which were presented and exemplified above. The analysis presented here captures all the properties of the Hebrew PR, while also explaining how it differs from superficially similar structures (RCs and small clauses), both syntactically and semantically.
Conclusions

In this study I examined the Hebrew Pseudo Relative (PR) structure, which has not been addressed in previous literature, perhaps because its close resemblance to relative clauses (RCs) caused it to be conflated with the latter. I argued that, while PRs are somewhat similar to RCs in form and to bare complements in meaning, they nevertheless constitute a unique construction, distinct from both.

In order to fully comprehend the structure of PRs in general and Hebrew PRs in particular, I compared PRs in three languages – Hebrew, Italian and Greek. The comparison revealed differences between the PR construction in each language, but at the same time revealed that these differences are superficial. That is, I determined that the fundamental properties of the construction are identical in all three languages, but that these properties are realized somewhat differently in each of them, due to parametric differences between Hebrew, Italian and Greek. This finding is significant, as it means that the PR is a cross-linguistic phenomenon that exists in all these languages, and perhaps in other languages as well. Since the structure is basically the same, I was able to apply M&G's analysis of Italian PRs to the Hebrew construction with only slight modifications. I showed that the proposed analysis accounts for all the properties of the PR construction.

This study addressed only PRs that are preceded by perception verbs, because Hebrew PRs seem to be restricted to verbs of this class. According to M&G and Cinque, Italian allows PRs with verbs such as meet and catch, but, as mentioned above, Hebrew does not seem to allow this. PR-like Hebrew constructions featuring these verbs appear to be structurally different from PRs. They may simply be RCs, or perhaps they are a construction distinct from both PRs and RCs. The question
of their identity and behavior, in Hebrew and in other languages, is a question that merits further investigation.
References


Publisher: Thesus, Editors: F. Corbin, C. Dobrovie-Sorin, and J.-M. Marandin, pp.191-214


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הפנמה המוצאת, כלל שימור פמודת ה-PR-ות הריאה. זווית ל.addObserver את התכונות המאפויות והן PR, בערב, תוך כר וPRS-ית למקהל של קורייניקציה של PR, נושא של אנכס התייחסות בפיזורמות הדנה ב-PRS-ית.
פסיאודר-זיקו באברית הודישה

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בהנהלת פרופ' עדית דורן

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