

1. Introduction. This paper offers a new analysis of so-called tense ‘harmony’ in specificational pseudoclefts (Higgins 1979; Sharvit 2003; Romero 2004). Pseudoclefts exhibit a restricted set of tense combinations.

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| (1) What she likes is coffee. | (4) What she will like will be coffee |
| (2) What she liked was coffee. | (5) %What she likes will be coffee. |
| (3) What she liked is coffee. | (6) *What she likes was coffee. |

Unlike in other embedded tense environments, the two tenses in (2) and (4) must corefer, and the PRESENT-under-PAST combination in (6) is unavailable. Moreover, in the specificational pseudocleft environment, tense differences between English and Hebrew, a non-sequence-of-tenses language, are neutralized.

To account for the tense patterns in pseudoclefts, including the leveling of the English and Hebrew patterns, I propose that the fixed information structure of the specificational pseudocleft gives rise to an unusual temporal dependency between the copula and the embedded verb. The account follows the pronominal approach to tense, exploiting Klein’s (1994) notion of Topic Time (TT), the contextually determined interval to which an assertion is confined. In a specificational sentence, the *wh*-clause is interpreted *de dicto* (Romero 2004), so its Reference Time (RT) is bound; however, it must also be interpreted as a topic, so its TT serves a stage-setting function for the sentence, providing a local antecedent for the TT of the copula. Taken together, these two conditions require temporal coreference between the copula and the embedded verb.

2. Temporal dependency puzzle. Standard binding and deletion analyses of embedded tenses are untenable for pseudoclefts. (i) The TTs of the copula and the lexical verb in PAST-under-PAST and FUTURE-under-FUTURE must be simultaneous, whereas in complement clauses, shifted readings occur (binding of embedded RT by matrix ET; obligatory in non-SOT languages and English FUTURE).

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|--|-----------------|
| (7) a. He found out that she loved him | (simultaneous) |
| b. Yesterday , he found out that she loved him years ago . | (past-shifted) |
| (8) a. What she liked was coffee. | (simultaneous) |
| b. * Yesterday , what she liked years ago was coffee. | (*past-shifted) |

Moreover, in Hebrew, for many speakers, the PAST-under-PAST combination requires a past-shifted interpretation, but in a pseudocleft, only the simultaneous reading is available.

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- (9) Dani **amar** Se Miriam **ahava** oto.
 Dani say.M.PAST COMP Miriam love.FEM.PAST him
 ‘Dani said that Miriam had loved him.’ (⊂simultaneous, past-shifted)
- (10) a. *ma Se Miriam kar’a **lifney shavua** haya Hamlet **etmol**.
 what COMP Miriam read.FEM.PAST before week be.PAST Hamlet yesterday
 ‘What Miriam read last week was *Hamlet* yesterday.’ (*past-shifted)
- b. ma Se Miriam **kar’a** **haya** Hamlet.
 what COMP Miriam read.FEM.PAST be.PAST Hamlet
 ‘What Miriam read was *Hamlet*.’ (simultaneous)

(ii) PRESENT-under-PAST is always ungrammatical in specificational pseudoclefts, in both English and Hebrew, (11) and (12).

- (11) *What Mary **was** reading **is** *Hamlet*. (*simultaneous, *double-access)
- (12) *ma Se Miriam **koret** **haya** *Hamlet*.
 what COMP Miriam read.FEM.PRES be.PAST Hamlet
 ‘What Miriam is reading was *Hamlet*.’ (*simultaneous, *double-access)

In complement clauses, however, PRESENT-under-PAST is grammatical. In English, (13), it gives rise to a double-access interpretation, whereas in Hebrew, it is interpreted as a relative, i.e., simultaneous present, (14).

- (13) John **said** that Mary **loves** him. (*simultaneous, double-access)
- (14) Dani **amar** Se Miriam **ohivet** oto.
 Dani say.M.PAST COMP Miriam love.FEM.PRES him
 ‘Dani said that Miriam loved him.’ (simultaneous, double-access)

Although the English and Hebrew interpretations of PRESENT-under-PAST differ in complement clauses, the difference disappears in the pseudocleft environment.

The grammatical pseudocleft facts are also incompatible with the analyses of the complement clause tense patterns above. The simultaneous reading of a PAST-under-PAST tense in English can be analyzed as either deletion of the lower PAST, or binding of a lower zero-TENSE by an interpreted PAST (Kratzer 1998). English also has a true PAST-under-PAST, as (7b) shows. Why should the specificational pseudocleft require a bound tense?

The simultaneous PAST-under-PAST in Hebrew arises when an embedded PAST scopes out of the complement clause and is interpreted *de re* (Ogihara and Sharvit 2012). Similarly, the English double-access PRESENT-under-PAST arises when the embedded PRESENT is interpreted *de re*. Since the latter is not possible in pseudoclefts in English, then *de re* PAST cannot be plausibly extended to explain the simultaneous PAST-under-PAST in Hebrew pseudoclefts. Hebrew lacks tense deletion/zero-PAST, so what is the source of the simultaneous reading in pseudoclefts?

3. Proposal. A double dependency between tenses in pseudoclefts accounts for the strict temporal coreference. Romero (2004) demonstrates that the *wh*-clause of a specificational pseudocleft is both world- and time-dependent. I take its Reference Time (RT) to be bound by the TT of the copula, just as in canonical embedding in intensional contexts. Unlike

in canonical embedding, the double-access PRESENT-under-PAST fails, because one of the “access points” is missing: there is no attitude-holder in an acquaintance relationship with the *res*-PRESENT (e.g., Abusch 1988).

The second component of the dependency results from the fixed information structure of specificational sentences. A hallmark of the specificational copular sentence is that its predicate is interpreted as a topic, whether it remains in-situ or raises to subject position via predicate inversion. This topic expression triggers presuppositions that serve a stage-setting function. The presuppositions indicate what the sentence is about—what entity, world, time, and location. The Topic entity contains a time argument, which participates in the stage-setting. Matrix TT then takes the Topic entity’s time as its antecedent by default.¹ TT-coreference in pseudoclefts parallels anaphora between nominal elements, (15).

(15) As for John_{*i*}, he_{*i*}’s great.

Although the case of PAST-under-PRESENT, (3), is an apparent exception, it is in fact perfectly compatible with this proposal. Deictic elements, like the English PRESENT tense, are not subject to the coreference requirement; consider the parallel with nominal anaphora.

(16) a. In John_{*i*}’s opinion, he_{*i*} is smart.
 b. In John_{*i*}’s opinion, he_{*j*} (pointing) is smart.

Since Hebrew PRESENT is a relative tense, not an indexical tense, Hebrew, unlike English, does not allow the PAST-under-PRESENT in pseudoclefts, (17).

(17) ma Se Miriam **kar’a** *hu/haya Hamlet.
 what COMP Miriam read.FEM.PRES *PRON.3SG.PRES/be.PAST Hamlet
 ‘What Miriam was reading is *Hamlet*.’

This proposal accounts for the similarities between Hebrew and English tense patterns. The proposal makes additional predictions, which are borne out. First, the TENSE patterns should be the same whether or not the specificational sentence is reversed. Secondly, a similar pattern should obtain in other instances of topicalization.

4. Predictions. The reverse specificational pseudocleft, where the topical *wh*-clause is not the structural subject, shows the same tense patterns, (18) and (19).

(18) a. Coffee_{*F*} **was** what she **liked**.
 b. ***Yesterday**, coffee_{*F*} was what she liked **last week**.

(19) *Coffee_{*F*} **was** what she **likes**.

Sharvit (2003) and Romero (2004) propose that the temporal dependencies in pseudoclefts rest from the copula’s binding the lexical verb’s TT. They treat the marked binding configuration as a property of the specificational copula: it binds into its “subject”. This characterization is insufficient, since in (18) and (19), the bound tense is in neither the logical nor the structural subject.

¹In a “predicational” pseudocleft, the free relative is interpreted *de re*, and so its tense can scope out, and receive an independent interpretation.

Now consider how the proposal applies to other topicalization environments. When an attitude complement is topicalized, temporal coreference is preferred. (Such topicalization is marked, so judgments are gradient.) In Hebrew, the preference for the past-shifted interpretation gives way to a simultaneous reading when a complement clause is topicalized.

- (20) a. Aflu Dani **gila** Se Miriam **ahava** oto.
 even Dani find.out.M.PAST COMP Miriam love.FEM.PAST him
 ‘Even Dani found out that Miriam loved him.’ (past-shifted)
- b. et ze Se Miriam (adain) **ahava** oto, aflu Dani
 DOM this COMP Miriam (still) love.FEM.PAST him, even Dani
gila.
 find.out.M.PAST
 ‘That Miriam (still) loved him, even Dani found out.’ (simultaneous)

In addition, a topicalized PRESENT strongly implicates the double-access reading, in contrast to the in-situ version, which has the simultaneous reading.

- (21) a. Lifney mataim shana, aflu Dani **gila** Se Miriam
 before two.hundred years, even Dani find.out.M.PAST COMP Miriam
ohvet oto.
 love.FEM.PRES him
 ‘Two hundred years ago, Dani found out that Miriam loved him.’ (simultaneous)
- b. #Lifney mataim shana, et ze Se Miriam **ohvet** oto, aflu
 before two.hundred years, DOM this COMP Miriam love.FEM.PRES him, even
 Dani **gila**.
 Dani find.out.M.PAST
 ‘Two hundred years ago, Dani found out that Miriam loves him.’ (*simultaneous
 / #double-access)

Combining RT-binding with TT-coreference accounts for obligatory simultaneous tense readings in specificational sentences in both SOT and non-SOT languages. Taking the fixed information structure of specificational sentences seriously sheds light on one of their marked semantic properties.

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