

# Rebinding and simultaneity: Another parallel between embedded tense and pronominal binding

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In finite clauses embedded under attitude verbs, the preterit past tense gives rise to an ambiguity between *simultaneous* and *past-shifted* readings (see, e.g., Enç 1987, Abusch 1997).

(1) Max said that Peter was angry Stowell 2014: 909

On the simultaneous reading, Peter is angry at the time of Max's saying. On the past-shifted reading, Peter is angry at a time prior to Max's saying. Building on Demirdache & Uribe-Etxebarria 2014, Stowell (2014) claims that on the simultaneous reading, the embedded ASSERTION TIME is syntactically bound by the matrix EVENT TIME (EV-T) (2a). On the past-shifted reading, on the other hand, Stowell claims that there is no binding relation but rather, in Stowell's words "...any anaphoric relation that it bears with any possible antecedent must involve coreference with a time mentioned in the preceding discourse." (2014: 909) (2b).

(2) a. Max EV-T  $\lambda t$  said [that Peter was AST-T<sub>t</sub> angry]. *simul.*  
b. Max EV-T  $\lambda t$  said [that Peter was AST-T<sub>u</sub> angry]. *pst-shifted*

In support of this, Stowell shows that the simultaneous reading gives rise to a strict-sloppy ambiguity with VP ellipsis (3), whereas the past-shifted reading does not (4).

(3) Max said  $\langle$ at  $t_1$  $\rangle$  that Peter was  $\langle$ SIM- $t_1$  $\rangle$  angry,  
and Mary will  $\Delta$  too.  $t_1 < t_2$   
a.  $\Delta$  = say at  $t_2$  that Peter is angry at  $t_2$ . *sloppy*  
b.  $\Delta$  = say at  $t_2$  that Peter was angry at  $t_1$ . *strict*

- (4) Max said  $\langle$ at  $t_1$  $\rangle$  that Peter was  $\langle$ at  $t_2$  $\rangle$  angry,  
and Mary will  $\Delta$  too.  $t_2 < t_1 < t_3$
- a.  $\Delta =$  say at  $t_3$  that Peter was angry at  $t_2$ .

Here I show that the parallel between pronominal binding and embedded tense extends to *rebinding*. Sag (1976) and Williams (1977) observe that when the ellipsis antecedent contains the bound element, but not the binder, the sloppy reading is bled (5).

- (5) a. John [<sub>ant.</sub>  $\lambda x$  told me that Mary likes him<sub>x</sub> ], and Bill also did  $\Delta$ .  
 $\Delta =$  tell me that Mary likes him<sub>B</sub>. *sloppy*
- b. John  $\lambda x$  told me that Mary [<sub>ant.</sub> likes him<sub>x</sub> ],  
and Bill also told me that she does  $\Delta$ .  
 $\Delta \neq$  like him<sub>B</sub>. *\*sloppy*

A rebinding configurations can be constructed with embedded tense, giving rise to the same effect. The relevant examples involve sluicing (Ross 1969, Merchant 2001) rather the VPE.

In (6a), where the binder is in the ellipsis antecedent according to Stowell's analysis, there is an ambiguity between a reading on which Bill is reporting who is angry at the time of his reporting (*sloppy*), and a reading on which he is reporting who was angry at the time of John's reporting (*strict*). In (6b), where the binder is outside of the ellipsis antecedent, the sloppy reading is absent. (6b) only has a reading where Bill is reporting who was angry at the time of John's reporting.

- (6) a. John told me  $\langle$ at  $t_1$  $\rangle$  who was  $\langle$ at  $t_1$  $\rangle$  angry,  
and Bill also will  $\Delta$ .  $t_1 < t_2$   
 $\Delta =$  tell me at  $t_2$  who is angry at  $t_2$ . *sloppy*  
 $\Delta =$  tell me at  $t_2$  who was angry at  $t_1$ . *strict*
- b. John told me  $\langle$ at  $t_1$  $\rangle$  who was  $\langle$ at  $t_1$  $\rangle$  angry, and Bill also will  
 $\langle$ at  $t_2$  $\rangle$  tell me who  $\Delta$ .  $t_1 < t_2$   
 $\Delta \neq$  is angry at  $t_2$ . *\*sloppy*  
 $\Delta =$  was angry at  $t_1$ . *strict*

This is expected on an analysis of simultaneous readings according to which they involve a binding relationship between matrix and embedded times. Furthermore, the example in (7) suggests that, just as with pronominal binding, an intervening focus saves the sloppy reading in a rebinding configuration (Fox & Takahashi 2005).

- (7) John only ever told ME  $\langle$ at  $t_1$  $\rangle$  who was  $\langle$ at  $t_1$  $\rangle$  angry, and Bill will only ever tell SUSAN  $\langle$ at  $t_2$  $\rangle$  who  $\Delta$ .  $t_1 < t_2$   
 $\Delta$  = is angry at  $t_2$  *sloppy*  
 $\Delta$  = was angry at  $t_1$  *strict*

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