

## Aspect matters in sentential temporal interpretation

The goal of this talk is to provide a uniform account of the temporal interpretation of complement clauses such as those in (1) – (2). Whilst in (1) the embedded predicate is located in the past with respect to the main predicate (*past-shifted* reading), cases like (2) are considered ambiguous between two temporal readings: a past-shifted (PSR) reading and a simultaneous reading (SR), where the eventualities of the two clauses are understood as overlapping in time. Based on data from Spanish, I argue that the SR is possible only when imperfect aspect is present in the complement clause and both clauses make an assertion about the same interval. The proposed account is articulated within the framework put forward in Stowell (1993, 2007) and Demirdache and Uribe-Etxebarria (2000, 2007), where Tense and Aspect are conceived as ordering predicates taking intervals as arguments. Tense orders a contextually relevant interval (*Assertion Time*, Klein 1994) before, within, or after a reference interval (Utterance Time in main clauses) yielding past, present or future interpretation respectively. Aspect orders the Assertion Time (AsT) before, within or after the Event Time (EvT), giving perfective, imperfect or prospective correspondingly. Thus, different temporal interpretations derive from the contents of these predicates and the relations that the intervals can establish in the syntax (e.g. by binding).

The proposal is twofold. First, I argue that the predicate contained in Aspect is the head responsible for yielding the SR. This differs from traditional analyses where the SR is explained by the content in the Tense head (Ogihara 1996, Stowell 1993). Example (3) shows that the SR relies on the aspect predicate corresponding to the imperfect (*within*). As Gennari (2003) and Arche (2004, 2006) also note, the SR becomes unavailable without the imperfect. Second, I propose that the SR reading arises when the embedded AsT is coindexed with the main AsT and both are understood *within* the span of time of the embedded EvT. As sentences in (4) and (5) show, when the embedded clause has a different AsT and cannot be coindexed with the main AsT, the embedded AsT becomes the only interval susceptible to be ordered with respect to the embedded EvT and, as a result, the SR disappears and a PSR reading ensues. All this is shown in the syntactic structure of (6), described in (7). Along the lines of Gennari (2003), I argue that the existence of two readings is a case of vagueness, rather than ambiguity, derivable from a unique semantic representation. Due to the semantics of the imperfect, in both PSR and SR, the assertion concerns only the initiation of the event, which is in the past with respect to the main AsT in both cases (see diagram in (8)).

This analysis is superior to previous ones in that it offers a uniform treatment of tense (past tense means past in both cases), and accounts for the role that Aspect plays in the interpretations without any additional stipulation (unlike Gennari's account, which resorts to the Superinterval Property). Furthermore, this approach can be extended to present under past sentences (9). The contrast between (10) and (11) suggests that if the main AsT (of *say*) can be included within the embedded AsT, it results included *within* the EvT of the embedded clause. In this case too the head involved in the intended ordering is Aspect. If, however, the main clause refers to an AsT that cannot be ordered within the embedded AsT, the sentence becomes anomalous. Under this view, reference to the speech time may be considered as an optical effect. The predicate in Tense establishes an overlapping relation between the AsT in the main clause and the AsT in the embedded one (12). An analysis in these terms can also account for the SR in Hindi, Japanese or Russian (13), where a present tense is needed in the embedded clause. If present is taken to be a predicate establishing an overlap relation between the main and the embedded AsTs, the SR and the lack of reference to the Utterance Time is explained.

- (1) Juan dijo que Pablo construyó una casa  
 John said that Pablo build-past-pfve-3ps a house  
 -----[build]-----[say]-----UTT-----  $\sqrt{\text{PSR reading}} \# \text{SR}$
- (2) Juan dijo que Pablo estaba deprimido/construyendo una casa  
 Juan said that Pablo estar-past-impf-3ps depressed/building a house  
 a. -----[say]-----UTT---  $\sqrt{\text{SR}}$   
     [depressed/building a house]  
 b. -----[depressed]-----[say]-----UTT---  $\sqrt{\text{PSR}}$
- (3) Juan dijo que Pablo estuvo deprimido  
 Juan said that Pablo estar-past-pfve-3ps depressed  
 a. -----depressed-----say-----UTT---  $\sqrt{\text{PSR}} \# \text{SR}$
- (4) Juan dijo (en marzo) que Pablo estaba deprimido  $\sqrt{\text{SR}}$   
 Juan said (in March) that Pablo estar-past-impf-3ps depressed
- (5) Juan dijo en marzo que Pablo estaba deprimido/construyendo una casa en enero  $\# \text{SR}$   
 Juan said (in March) that Pablo estar-past-impf-3ps depressed (in January)
- (6)  $[_{\text{TP}} \text{RT}_{(\text{UTT})} \text{T}_{(\text{before})} [_{\text{AspP}} \text{AsT}_i \text{Asp}_{(\text{after})} \text{EvT}_i \text{[e VP V}_{\text{say}}[_{\text{TP}} \text{RT}_i \text{T}_{(\text{before})} [_{\text{AspP}} \text{AsT}_i \text{Asp}_{(\text{within})} \text{EvT [e VP V}_{\text{be depressed/building a house}}]$
- (7) The embedded AsT, coindexed with the main AsT, is placed before the main EvT (it starts before the main event) and is located within the embedded event. That is, “said” is included in the span of being depressed/building a house.
- (8)  $\begin{array}{c} \text{[be depressed/building a house EvT...} \\ \text{-----[ } \bullet \text{-----[AsT}_{\text{said}} \text{]-----UTT-----} \end{array}$
- (9) Juan dijo que Pablo está deprimido  
 Juan said that Pablo estar-present-3ps depressed
- (10) Juan dijo ayer que Pablo está deprimido este mes  
 Juan said yesterday that Pablo estar-present-3ps depressed this month
- (11) # Juan dijo en marzo que Pablo está deprimido este mes  
 Juan said in March that Pablo estar-present-3ps depressed this month
- (12)  $[_{\text{TP}} \text{RT}_{(\text{UTT})} \text{T}_{(\text{before})} [_{\text{AspP}} \text{AsT}_i \text{Asp}_{(\text{after})} \text{EvT [VP [_{\text{TP}} \text{RT}_i \text{T}_{(\text{within})} [_{\text{AspP}} \text{AsT}_i \text{Asp}_{(\text{within})} \text{EvT [VP}$
- (13) John-wa Mary-ga ninsinsi -te i -ru to it -ta. (Japanese)  
 TOP NOM pregnant PROG **PRESENT** COMP say PAST  
 ‘John said that Mary was pregnant’.  $\# \text{PSR} \sqrt{\text{SR}}$