

Pronominal tense and anaphora: evidence from sequence of tense

Bronwyn Bjorkman (Queen's University)

A recurring puzzle in temporal semantics is **sequence of tense** (SOT), a phenomenon characteristic of many (though not all) Indo-European languages. In languages that exhibit SOT effects, past inflection in embedded clauses can lack its usual anterior interpretation, as in (1a), so long as the embedding verb is also past tense, as in (1b).

- (1) a. It **was** raining. *(Rain must be prior to now.)*
b. Someone claimed it **was** raining. *(Rain can be prior to **or** simultaneous with the claim)*

The standard view of SOT is that embedded past inflection in these languages is morphosyntactically dependent on matrix tense, and is consequently not semantically interpreted (Abusch 1994, 1997; Heim 1994; Schlenker 2003; Stowell 2007; Grønn and von Stechow 2010; Zeijlstra 2012). I argue instead for a quite different position, that SOT effects arise *despite* the presence of semantically interpretable tense in embedded clauses, due to the **pronominal** nature of tense in these languages, and specifically to the presence of logophoric tense in embedded clauses. On this account SOT emerges as a potential diagnostic relevant to a long-standing debate on the semantics of tense, whether it is pronominal (as originally proposed by Partee 1973), or instead quantificational (as in, e.g. Kusumoto 1999).

Crucial to this argument is a comparison between SOT effects and other contexts in which past tense morphology occurs without a temporally anterior interpretation, in particular the use of past tense in counterfactual clauses. While the embedded past inflection in (1b) does require that the embedded proposition be evaluated prior to NOW (but not that it be evaluated prior to the time of the original *claim* event), the same is not true for the counterfactual past inflection in examples like those in (2), which are compatible only with present-oriented adverbials.

- (2) a. If it **was** raining (now / *then), we would cancel the concert.
b. I wish my friend laughed often (these days / *in those days)

Counterfactual past, like SOT past, is standardly viewed as morphosyntactically dependent on a past tense feature outside of the counterfactual clause itself. From this perspective, it is appropriate to ask whether dependent tense is a single phenomenon. While there is fairly unanimous agreement that SOT and counterfactual past are semantically very different, there has also been general consensus that both can be given a common morphosyntactic analysis in terms of Feature Transmission (Arregui, 2009; Romero, 2014; Grønn and von Stechow, 2011) or Upwards Agree (Zeijlstra, 2012).

I argue that the empirical profile of SOT cannot be accounted for in terms of a morphosyntactic mechanism of feature valuation or Feature Transmission, because it involves a **non-local** dependency, established across a finite clause boundary. I suggest instead that SOT arises due to the pronominal nature of tense in the relevant languages, and specifically due to the status of embedded tense as a logophoric long-distance reflexive, obligatorily bound by an antecedent in a higher clause.

An advantage of the proposal advanced here is that it offers a better explanation than previous analyses of the striking typological observation that SOT appears to be limited to a subset of the Indo-European language family. In previous work this has been attributed to some form of SOT parameter, or the presence or absence of a SOT rule. Here it can be attributed to the confluence of a pronominal semantics for tense with the existence of logophoric tense pronouns.

References

- Abusch, Dorit. 1994. Sequence of tense revisited: Two semantic accounts of tense in intensional contexts. In *Ellipsis, tense and questions*, 87–139. Dyana 2 Deliverable.
- Abusch, Dorit. 1997. Sequence of tense and temporal de re. *Linguistics and philosophy* 20:1–50.
- Arregui, Ana. 2009. On similarity in counterfactuals. *Linguistics and Philosophy* 32:245–278.
- Grønn, Atle, and Arnim von Stechow. 2010. Complement tense in contrast: the SOT parameter in Russian and English. *Oslo Studies in Language* 2.
- Grønn, Atle, and Arnim von Stechow. 2011. Tense in subjunctive conditionals across languages. Ms., University of Oslo and University of Tuebingen.
- Heim, Irene. 1994. Comments on Abusch's theory of tense. In *Ellipsis, tense and questions*, 143–170. Dyana 2 Deliverable.
- Kusumoto, K. 1999. Tense in embedded contexts. Doctoral Dissertation, University of Massachusetts.
- Partee, Barbara Hall. 1973. Some structural analogies between tenses and pronouns in English. *The Journal of Philosophy* 601–609.
- Romero, Maribel. 2014. Fake tense in counterfactuals: a temporal remoteness approach. In *The art and craft of semantics: A festschrift for Irene Heim (vol. 2)*, ed. Luka Crnic and Uli Sauerland, number 71 in MIT Working Papers in Linguistics, 47–63. Cambridge, MA: MIT Press.
- Schlenker, Philippe. 2003. Sequence phenomena and double access readings generalized. In *Syntax of time*, ed. Jacqueline Guéron and Jacqueline Lecarme, 555–596. MIT Press.
- Stowell, Tim. 2007. The syntactic expression of tense. *Lingua* 117:437–463.
- Zeijlstra, Hedde. 2012. There is only one way to Agree. *The Linguistic Review* 29:491–539.