

The semantics of *at DET time* and their role in discourse coherence

I propose a semantic analysis of temporal adverbials of the form *at DET time*, where *DET* is a demonstrative or definite article (i.e. *at this/that/the time*). In general, temporal adverbials (e.g. *on Tuesday, last night*) serve two functions. At the sentential level, they help locate the event time (e.g. *at 9 AM, Alex left*) or the topic time (e.g. *at 9 AM, Alex had already left*). At the discourse level, they affect how coherence relations are established between sentences, notably by disrupting more general principles of event ordering like narrative progression (Partee 1984). In this talk, I identify unexpected properties of *at DET time* at both levels. I offer an analysis of these properties that throws light on the limits of compositionality in the interpretation of complex temporal adverbials, and on the role of temporal adverbials in the establishment of discourse coherence.

The **temporal property** is that while *at this time* can refer to past, present, or future intervals, *at that time* can only refer to non-present intervals and *at the time* is constrained to past intervals (see (1)). The **coherence property** is that *at the time* appears to block narrative progression, but is compatible with other coherence relations. However, similar constraints are not observed with *at this/that time* (see (2)).

- (1) a. Sue was playing video games. At this/that/the time, Mary was watching TV.
b. Sue is playing video games. At this/#that/#the time, Mary is watching TV.
c. Sue will be playing video games. At this/that/#the time, Mary will be watching TV.
- (2) a. **Narration:** Alice collided into Tom. At this/that/#the time, he fell on the buffet table.
b. **Background:** Alice collided into Tom. At this/that/the time, he was cutting the cake.

I discuss a fully compositional analysis of *at DET time* adverbials at the sentence level, based on established analyses of demonstratives (e.g. Elbourne, 2008) and of the definite article (e.g. Heim & Kratzer, 1998) together with the assumption that nouns like *time* denote sets of temporal intervals. I show that such an analysis accounts for the temporal property of *at this/that time*, but fails to account for the temporal property of *at the time* and for the coherence property of these adverbials. I argue that this analysis must be extended to incorporate discourse level semantics and must recognize non-compositional elements in the interpretation of these adverbials.

I propose such an analysis, building on Partee's (1984) account of narrative progression: eventive predicates introduce a temporal discourse referent that follows the described event and that is picked up as the antecedent of the topic time of the subsequent clause. Partee argues that this chain can be disrupted by temporal adverbials that introduce their own temporal discourse referent. I argue that *at this/that time* are bridging expressions (Clark, 1977) that relate an antecedent event to either the runtime or the post-state of the event. Bridging to different times allows discourse participants to infer a variety of coherence relations. By contrast, *at the time* is idiomatically constrained to background relations. Consequently, I argue that *at the time* can only bridge to the runtime of a familiar event. Thus, the ability to refer to past intervals aligns with the nature of background relations, but due to the uncertainty associated with discussions of future events and their surrounding circumstances, reference to future intervals by *at the time* is more marked. Finally, I argue that the inability of *at the time* to refer to the present is due to the existence of indexical adverbials (e.g. *at the moment*) whose sole purpose appears to be to refer to the present.

In conclusion, these expressions have received little attention in the literature on temporal adverbials. A unified analysis of these adverbials that takes into account both the contributions of the determiner and theories of temporal and discursive structure promises to extend our knowledge in these areas.

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References

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