

WollP: Where syntax and semantics meet
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Context A common syntactic view since Stowell (1982) holds that future irrealis infinitives such as (1) are (non-finite) tensed clauses where the future interpretation is contributed by (the features of) a syntactic T head (cf. (2)a.) In contrast, many semantic approaches assume that infinitives are tenseless and that the future orientation of an infinitive is provided by the meaning of the selecting predicate (see, e.g., Ogihara 1996, Katz 2001, 2004). Under this view, T is unnecessary for interpretation and hence it is either absent (cf. (2)b) or projected as a syntactic diacritic. This paper argues that neither approach is fully adequate. In line with the semantic approach, I argue that infinitival future cannot be treated as a tense. However, in contrast to the semantic approach, I provide evidence for the syntactic presence of a future element—namely an abstract modal *woll*—in future infinitives (cf. (2)c).

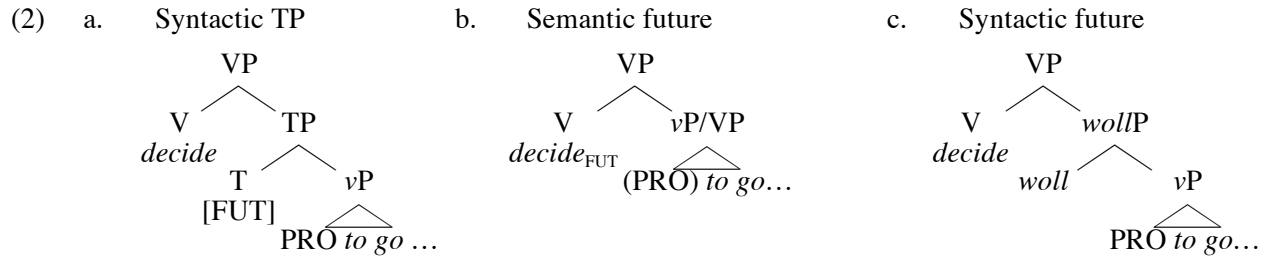
Infinitives are tenseless Future infinitives differ from finite future contexts in two crucial ways. First, while finite future must be evaluated relative to the utterance time (UT) in English ((3)a), infinitival future can refer to a time before the UT ((3)b). A standard account of (3)a (see, e.g., Dowty 1982, Abusch 1988, 1997, 1998, Ogihara 1996) is based on the assumption that (finite) future is not a simple tense but composed of PRES tense plus a modal *woll* and that English PRES is *absolute*—i.e., evaluated with respect to the UT. The PRES tense part of the future is thus responsible for the absolute nature of future contexts such as (3)a. If infinitival future, on the other hand, lacks PRES tense and only involves the modal *woll* (see Ogihara 1996, Wurmbrand To appear), it follows that infinitival future does not require an absolute interpretation (i.e., the time of the infinitival event can be before the UT). Second, while a past tense complement in the scope of a finite future cannot be interpreted as occurring simultaneously with the future event ((4)a), a simultaneous interpretation is possible for past tense complements embedded under a future infinitive ((4)b). I assume that English is subject to the *Sequence of tense* rule in (5), which states that a tense is (optionally) deleted if it is in the scope of another tense with the same value (PRES, PAST) and no other tense is intervening between the two tenses. The difference between (4)a and (4)b then follows again from the presence vs. absence of tense (see (6)). Since in (6)a the highest PAST is not local enough for the lowest PAST, deletion of the latter cannot apply and hence a simultaneous interpretation is not possible. In (6)b, on the other hand, the highest PAST will be the local tense for the lowest PAST, allowing deletion and as result a simultaneous interpretation. If, on the other hand, infinitives were to involve (any type of) PRES tense, the difference between (4)a and (4)b would be left unexplained.

Evidence for *wollP* The argument for the structural presence of *woll* is based on restructuring in languages like German. As shown in (7)a, certain infinitives allow a process of *long passive*—i.e., a construction where the embedded object of an (active) infinitive appears with nominative Case rather than accusative. According to Wurmbrand (2001), long passive indicates the lack of Case projections in the infinitive. Since the embedded object in (7)a cannot receive Case within the infinitive, it becomes Case-dependent on the matrix predicate. In (7)a the matrix verb is passive, and hence the object ends up with nominative. The crucial property of this construction is thus, the lack of an embedded vP and TP.

As shown in (7)b, long passive is not possible in all infinitives; in particular, infinitives with a future interpretation block this process. The relation between future and Case receives a straightforward account under the assumption that future is represented structurally as in (2)c. Following Wurmbrand (2001), I assume that the clause structure of infinitives is ‘flexible’ in that the complement of a verb like *try* can come in different sizes (see (8)), resulting in different degrees of restructuring. Crucially, however, projections are not left out arbitrarily. Rather, structure is built uniformly, with restructuring being special only in that the functional domain is not built up to the top. Thus, the presence of higher functional projections entails the presence of lower ones, and hence a structure such as (8)d would be impossible. The difference between (7)a and (7)b then follows. An infinitive combining with a verb like *plan* receives a future interpretation, and assuming that future is represented syntactically, a *wollP* will be projected as in (9)a. The presence of a *wollP*, however, entails the presence of a vP ((9)b would be impossible), and hence the embedded object will be assigned Case by the ACC assigning vP in the infinitive. In contrast, *try* infinitives do not involve a future interpretation, and hence no *wollP* is projected. Assuming the highest degree of restructuring, only a VP is projected ((9)c), and hence the object will not receive Case in the infinitive but will become Case-dependent on the matrix predicate. Under the semantic view, on the other hand, this future-Case correlation would be unexpected. If the future interpretation of an infinitive is built into the semantics of the selecting predicate as in (2)b, it would not be clear why future infinitives could not be bare VPs (i.e., why they could not lack vPs as in (9)d).

Examples

(1) *Leo decided to go to the party tomorrow.*



(3) a. *Leo decided a week ago that he will go to the party (*yesterday)* party: *before UT
 b. *Leo decided a week ago to go to the party (yesterday)* party: ^{OK}before UT

(4) a. *John promised me yesterday that he will tell his mother tomorrow that they were having their last meal together (when...).*
 *Interpretation: *John promised me to say to her "We are (now) having our last meal together".*
 b. *John promised me yesterday to tell his mother tomorrow that they were having their last meal together.*
 ✓ Interpretation: *John promised me to say to her "We are (now) having our last meal together".*

(5) The SOT rule [Ogihara 1996:134]

If a tense feature B is the local tense feature of a tense feature A at LF, and A and B are occurrences of the same feature (i.e., either [+past] or [+pres]), A and the tense associated with A (if any) are optionally deleted. N.B.: (i) The tense features include [+past] and [+pres] and nothing else. (ii) A tense feature A is "in the scope" of a tense feature B iff B is associated with a common noun and asymmetrically c-commands A, or B is associated with a tense or a perfect and asymmetrically commands A. (iii) A tense feature B is the local tense feature of a tense feature A iff A is "in the scope" of B and there is no tense feature C "in the scope" of B such that A is "in the scope" of C.

(6) (4)a: [_{Matrix} PAST *promise* [_{CP} PRES *woll tell* [_{CP} PAST *meal*]]]
 (4)b: [_{Matrix} PAST *promise* [_{Infinitive} ∅ *woll tell* [_{CP} PAST *meal*]]] SOT

(7) a. *dass der Traktor zu reparieren versucht wurde*
 that the tractor-NOM to repair tried was
 'that they tried to repair the tractor'
 b. **dass der Traktor zu reparieren geplant wurde*
 that the tractor-NOM to repair planned was
 'that they planned to repair the tractor'

(8) a. matrix V [_{CP} [_{TP} [_{wollIP} [_{vP} [_{VP}]]]]]] no restructuring
 b. matrix V [_{wollIP} [_{vP} [_{VP}]]] 'a little' restructuring
 c. matrix V [_{vP} [_{VP}]]] 'more' restructuring
 d. matrix V [_{VP}] 'most' restructuring
 e. *matrix V [_{wollIP} [_{vP}]]] *truncation from the middle

(9) a. *plan* [_{wollIP} [_{vP} [_{VP}]]] c. *try* [_{VP} ...]
 b. **plan* [_{wollIP} [_{vP}]]] d. **plan* [_{VP} ...]

Selected References

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