

ASPECTS OF TOO AND ENOUGH CONSTRUCTIONS

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1. The problem

This paper discusses a peculiar interaction between aspect and actuality entailments in *too* and *enough* constructions (TECs). The novel data is presented in (1) and (2), which differ only in the aspect of the matrix verb:

- (1) Jean était assez rapide pour s'enfuir (mais il ne s'est pas enfui) [non implicative]
Jean was-impf quick enough to escape (but he didn't escape)
- (2) Jean a été assez rapide pour s'enfuir (#mais il ne s'est pas enfui) [implicative]
Jean was-perf quick enough to escape (#but he didn't escape)

In (1) the complement clause need not hold in the actual world (non implicative), while in (2) it must (implicative). Previous analyses (e.g., von Stechow 1984, Heim 2001, Meier 2003) overlooked this aspectual interaction with implicative readings, and, in fact, cannot capture the role of aspect, nor derive the correct implicative readings. In order to account for the facts in (1) and (2), I give a new analysis in which TECs are at-base implicative. Following Bhatt (1999), I take it that aspectual morphology reflects the presence/absence of a genericity operator, which is responsible for the non-implicative reading of the constructions.

2. Previous analyses' shortcomings

According to standard analyses, TECs are comparative constructions and involve covert modality in the complement clause. For example, Mary's age in (3) is compared to a relevant age at which one *can* drive, given certain requirements:

- (3) Mary is old enough to drive

As first pointed out by Karttunen (1971) for English, TECs can have "implicative readings" (i.e., entail the actualization of their complements):

- (4) a. John was clever enough to leave early (implicative)
b. John was clever enough to learn to read (non implicative)

For (4a) Meier (2003) proposes to use a fatalistic conversational background (which only picks the actual world), in order to eradicate the modality in the complement and derive the actuality entailment (i.e., John left early). However, this move is problematic in two respects: (i) it fails to capture aspect's role in actuality entailments, (ii) it cannot derive the full meaning of TECs' implicative readings: sentences constructed with this accessibility relation come out as either true or undefined. The same problem will arise with the other proposals, as they will also need to resort to a fatalistic conversational background.

3. A new proposal:

Basic meaning – I propose that the base meaning of TECs is implicative and emerges with perfective morphology. An *enough* construction asserts that the subject had **the** degree of adjective sufficient and necessary for the realization of the complement clause (5b). One infers that, because the subject had the degree of adjective that guaranteed the realization of the complement, the complement did in fact happen. The definite description generated by *enough* yields the presupposition in (5c), which projects above negation, such that, when the matrix is negated (5a'), one infers that the complement didn't take place (because Jean didn't have the necessary degree of quickness, Jean didn't escape).

- (5) a. Jean a été assez rapide pour s'enfuir
Jean was-perf quick enough to escape
b. ASSERTION: Jean had the degree of quickness that guaranteed that Jean escaped.

- a'. Jean n'a pas été assez rapide pour s'enfuir
Jean was-perf not quick enough to escape
- b'. ASSERTION: J. didn't have the degree of quickness that guaranteed that J. escaped
- c. PRESUPPOSITION: There is a degree of quickness s.t., in all maximally similar worlds, Jean escaped iff Jean was (at least) that quick

While the modal presupposition is encoded in terms of maximal similarity (cf. Lewis 1986), in order to include only worlds that are as similar to ours as far as the relevant properties of escaping are concerned, this proposal doesn't run into the problems of previous analyses, because the modality has universal force and is always realistic (the actual world is the maximally similar to itself).

A *too* construction asserts that the subject had the degree of adjective that guaranteed that the complement *didn't* take place. Because of the duality of antonym adjectives¹, (6a) is truth conditionally equivalent to (5a) ((6c) = (5c)):

- (6) a. Jean n'a pas été trop lent pour s'enfuir
Jean was-perf not slow enough to escape
- b. ASSERTION: Jean had the degree of slowness that guaranteed that Jean didn't escape.
- c. PRESUPPOSITION: There is a degree of slowness s.t., in all acc. worlds, Jean didn't escape iff Jean was that slow

Modal meaning – The non implicative reading is obtained by combining the basic meaning of a TEC with a genericity operator, reflected by imperfective morphology.

- (7) a. Jean était assez rapide pour s'enfuir
Jean was-impf quick enough to escape
- b. ASSERTION: **GEN**(d,s)[Jean escaped in s iff Jean is d-quick][Jean has d in s]

This operator quantifies over situations of ESCAPING (provided by the background); the presupposition associated with TECs gets accommodated into the restriction of the operator (cf. Schubert and Pelletier 1989), such that the relevant situations become those which only depend on Jean's quickness. There might never be such a situation in reality (other factors can intervene once we look at situations which do not only depend on his quickness), hence the complement clause doesn't need to be actualized.

4. Summary

Based on the relationship between matrix aspect and actuality entailments, which parallels that involved with the ability modal (cf. Bhatt 1999) I argue that TECs' base meaning is implicative. Non implicative readings originate from a covert genericity operator (reflected by imperfective morphology), similar to the one involved in dispositional/ability statements.

Selected References:

- Bhatt, R. (1999) *Covert Modality in Non-Finite Contexts*. Ph.D. thesis, UPenn.
 Dahl, Ö. (1975) 'On generics', in E. Keenan (ed.), *Formal semantics of natural language*, Cambridge University Press, Cambridge.
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 Stechow, A. von (1984) Comparing Semantic Theories of Comparison. *J of S 3*.

¹ $[[\text{slow}]] = \lambda d. \lambda x. \neg [[\text{fast}]](d)(x) = \lambda d. \lambda x. \neg \text{TALL}(x) \geq d$ (cf. Stechow 1984)