## The argument structure of abstract verbs with manner/result readings

**Introduction.** The recent literature has established a link between the licensing of causer subjects and the bi-eventivity of the verbal predicate (Folli & Harley 2005, Travis 2005). While agents can be subjects of bi-eventive (1a) or mono-eventive predicates (1b), causers are available only in bi-eventive structures, either as subjects of lexically bi-eventive change-of-state verbs (2a) or as subjects of mono-eventive manner predicates iff they are augmented with a resultative phrase, a particle in (2b) or a PP in (3b).

- (1) a. The boy destroyed the cake
- b. The boy ate the cake
- (2) a. The sea destroyed the beach
- b. The sea ate the beach ??(away)
- (3) a. John rolled the ball (across the goal-line)
  - b. The wind rolled the ball ??(across the goal-line)

Here we show that the same generalization extends to two verbal classes *prima facie* semantically very different from physical verbs as in (1-3), namely speech act verbs and transmission verbs. We use French data for illustration.

**Speech act verbs.** With agents, verbs like *encourager* (encourage, 4a) *prévenir* (warn, 5a) or *suggérer* (suggest, 6a) can be used as speech acts verbs and, then, they do not entail the occurrence of the (psychological) effect the agent intends to trigger through her speech act (no *result implication*, **RI**). Crucially, with non-human causer subjects the same verbs trigger a RI, as shown by the contradictory continuations in (4b, 5b, 6b).

- (4) a. Le pape (les) a encouragés à soutenir le dialogue (mais ça n'a pas eu d'effet sur eux). The pope encouraged (them) to support the dialogue (but it had no effect on them).
  - b. Sa présence \*(les) a encouragés à soutenir le dialogue (#mais ça n'a pas eu d'effet sur eux)

His presence encouraged (them) to support the dialogue (but it had no effect on them).

- (5) a. Il (les) a prévenus du danger, mais ils ne l'ont pas réalisé.
  - He warned (them) of the danger, but they didn't take notice of it.
  - b. La chute de neige \*(les) a prévenus du danger, #mais ils ne l'ont pas réalisé. The snowfall warned them of the danger, but they didn't take notice of it.
- (6) a. Le directeur (leur) a suggéré que Marie était la coupable (#mais personne ne l'a cru). The director suggested (to them) that Marie was the culprit (but nobody believed it).
  - b. Ces traces de pas \*(leur) ont suggéré qu'elle était le coupable (#mais personne ne l'a cru).

These traces suggested (to them) that she was the culprit (but nobody believed it).

The continuations in (4-6) suggest that these sentence pairs differ in terms of event structure: (4a, 5a, 6a) are mono-eventive (they just denote a speech act) while (4b, 5b, 6b) are bieventive (they denote a causative relation between the eventuality described by the causer subject and a result state). This reconfirms the link introduced in (1-3) between causers and bi-eventivity.

**Transmission verbs** like *offrir* (offer) or *enseigner* (teach) behave similar to illocutionary verbs. With agents, they only denote an attempt to transfer the Theme (7a, 8a), whereas with causers, they assert the transfer (7b, 8b). Thus again, the causer triggers a bi-eventive reading.

- (7) a. Pierre (lui) a offert de l'argent (mais il a refusé).
  - Pierre offered (him) money, but he didn't accept it.
  - b. Le Tour de France \*(lui) a offert la troisième marche du podium (#mais il a abandonné avant la dernière étape).

The *Tour de France* offered (him) the third stair of the podium (but he quit before the final stage).

(8) a. Ivan (nous) a enseigné le russe (mais on n'a rien appris). Ivan taught (us) Russian (but we did not learn anything). (Nash 2006) Ce voyage \*(m') a enseigné la sagesse (#mais je n'ai rien appris) This travel taught (me) wisdom (but I did not learn anything).

As observed e.g. by Nash (2006) for English, (8a) is not contradictory. Therefore, even though the 'result inference' is arguably stronger with a double-object construction than with the corresponding to-dative one (cf. Oehrle 1976, Larson 1988), it can still be cancelled with an agent. This, however, is impossible with a causer.

(Non-)Core internal arguments. It has remained unnoticed that the alternation between an agent (4a-8a) and a causer (4b-8b) systematically effects the VP-internal argument structure. Whereas the direct objects in (4, 5) and the indirect objects in (6-8) are optional with agents, they become obligatory with causers. If one assumes, as proposed here, that the sentence pairs in (4-8) differ in their event-complexity (the a-sentences are mono-eventive, the b-sentences are bi-eventive), one can relate this contrast to a more general difference between 'core' and 'non-core' transitive verbs (CTVs vs. NCTVs). Levin (1999) characterizes monoeventive transitive verbs NCTVs because they quite generally allow their objects to be dropped (John wiped (the floor)). Bi-eventive transitive verbs are CTVs because their objects are obligatory (John melted \*(the ice)). This difference is related to the way the object is selected. Objects of NCTVs are selected by the lexical root while objects of CTVs are arguments of the event template, specifically of the resultant state predicate.

Implementing the (non-)result readings. We assume that event structure is built in the syntax and that the above verbal roots can enter mono- or bi-eventive VPs. As a consequence, VP-internal arguments are either arguments of the verbal root or arguments of a syntactically represented result state. This state is provided either by a small clause or by a low applicative.

Verbs with accusative object (e.g. encourager): We take the bi-eventive use of this verb to be more basic/compositional and propose the structure of a denominal locational verb (9a, cf. Hale & Keyser 1998). The prefix 'en' is the head of a PP-small clause; the direct object is the subject and the denominal root the complement of this small clause. The denominal root, which introduces the infinitival clause (consider Il a le courage de le faire), first moves to the prepositional head which then incorporates into the verbalizer. The external argument of such a structure can be either an agent or a causer. We propose that in the mono-eventive use, the complex verb 'en-courager' is reinterpreted as (or coerced into) a manner root which modifies the verbalizing head (9b, cf. Levin 1999, Embick 2005). Crucially, in this manner reading, the result component systematically drops out. This provides further support for the manner/result complementarity (Levin & Rappaport Hovav 2008, to appear).

- (9) a. [VoiceP agent/causer Voice [vP v [PP object en [DP courage [à soutenir le dialogue]]]]]]
  - b.  $[v_{oiceP} agent \ Voice [v_P \ v_{encourage}] \ object [ à soutenir le dialogue ] ] ]$

Verbs with dative object (e.g. offrir): These verbs are basically double object verbs involving a low applicative phrase (10a). The verbal root provides manner information for the eventive verbal head and the result state is provided by a low applicative head with the indirect object as the specifier and the direct object as the complement. While these verbs are basically bi-eventive, they can be coerced into pure manner predicates that lack the result predication (10b). In this case, the internal arguments become arguments of the verbal root.

- (10) a  $[V_{oiceP}]$  agent/causer  $V_{oiceP}$   $V_{offrir}$   $[V_{oiceP}]$  indirect object  $[V_{oiceP}]$  direct object  $[V_{oiceP}]$  agent  $[V_{oiceP}]$  indirect object direct object  $[V_{oiceP}]$

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