THE COMPOSITIONAL NATURE OF MANNER AND RESULT

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Introduction

- **Argument-Per-Subevent Condition** (ASC) (Rappaport Hovav and Levin 2001) (RHL): There must be at least one argument XP in the syntax per subevent in the event structure.
- **Manner and result verbs** differ with regard to the subevents they lexicalize.

(1) a. John wiped.
b. [John ACT <*WIPE*>]

(2) a. The vase broke.
b. [The vase BECOME <*BREAK*>]

- **The lexicalization of manner/result** determines argument realization: only verbs from roots encoding manner allow non-selected objects/object deletion (Rappaport Hovav and Levin 2010).

(3) a. John scrubbed his fingers raw.
b. All last night, John scrubbed.

(4) a. *The toddler broke her fingers raw.
b. *All last night, the toddler broke.

Goals

- Show that the **ASC holds as a descriptive generalization** iff severed from RHL's semantic verb classes.
- Argue against RHL's claim that the lexicalization of manner/result in roots determines argument realization and in favor of severing such a lexicalization from the idiosyncratic properties of roots.
- **(A)** The lexicalization of the BECOME subevent in **change-of-state predicates** is granted independently of the verb even if a result verb is involved.

(5) a. With a few slices of her claws, she **tore** him free. (GBooks)
b. She never **empties** the fluff out of the dryer filter. (COCA)
c. They leafed the bare trees black, **broke** the branches off the winterdry limbs. (COCA)

(6) a. Molten nuclear fuel can **melt** through the reactor's safety barriers. (GloWbE)
b. Thieves **smashed** through the window of the popular Blue Genes boutique. (COCA)
c. The bullets **ripped** into the tissue of his back and shoulder. (GloWbE)

- **(B)** Result verbs can also be found in **creation predicates**, where a BECOME subevent is not present at all.

(7) a. I stuck my GoPro under some ice and then **shattered** a hole right above it. (Web)
b. Scientists just **melted** a hole through 3,500 feet of ice. (Web)
c. A [...] team **blew** a hole in the wall near the embassy and charged through. (COCA)

A neo-constructionist approach

- Argument structure is defined on the basis of the relations established in syntax between a head and its arguments (Hale and Keyser 2002).
- Two basic building blocks: **roots** (open class of elements provided with an idiosyncratic encyclopedic content and devoid of any grammatically relevant information) and **functional heads** (units out of which semantic construals are built in syntax) (Mateu 2002, Borer 2005a, Marantz 2013, Acedo-Matellán and Mateu 2014, *i.a.*).
- Two types of syntactic structures to be associated with RHL's ACT (8) and BECOME (9) primitives respectively (Mateu and Acedo-Matellán 2012).

(8) John danced.
[$_{vP}$ v [$\sqrt{}$DANCE]]

(9) The sky cleared.
[$_{vP}$ v [$_{SC}$ [$_{DP}$ the sky] [$\sqrt{}$CLEAR]]]

- **Adjunction of a root** to the *v* head provides a manner interpretation of the verb (Embick 2004, McIntyre 2004, Harley 2005, Mateu and Acedo-Matellán 2012, *i.a.*).

(10) John smiled his thanks.
[$_{vP}$ [$_{v}$ $\sqrt{}$SMILE v] [$_{DP}$ his thanks]]

(11) The wind blew the sky clear.
[$_{vP}$ [$_{v}$ $\sqrt{}$BLOW v] [$_{SC}$ [$_{DP}$ the sky] [$_{AP}$ clear]]]

The Argument-Per-Subevent Condition revisited

NONSELECTED OBJECT CONSTRUCTIONS

- The direct object is not interpreted as the undergoer of the result state named by the verb, but rather as the undergoer of a transition which is lexicalized independently of the verb, by means of an AP (12) or a spatial PP (13).

(12) a. Samson, who **ripped** him free of his bindings and pulled him to safety. (Web)
b. Six times we **broke** her loose from the rocks only to have her catch again. (GBooks)
c. With a few slices of her claws, she **tore** him free. (GBooks)

(13) a. The power of the wind was used to move water [...] to **crush** the oil out of linseed and rapeseed. (COCA)
b. Rigaut **tore** a piece off one of the letters. (COCA)
c. Solar energy can be used [...] for **splitting** hydrogen out of water molecules to create a fuel for vehicles. (COCA)

- Our **division of labor between roots and syntactic structure** allows us to straightforwardly account for this type of examples, by also keeping the ASC valid.

(14) Who ripped him free.
[$_{vP}$ [$_{v}$ $\sqrt{}$RIP v] [$_{SC}$ [$_{DP}$ him] [$_{AP}$ free]]]

- The verb in these examples is intended to arise as the result of externally merging a root with the *v* head, providing the manner co-event of a change-of-state/location predicate whose **final state is lexicalized independently of the verb**.

UNACCUSATIVE CHANGE OF LOCATION PREDICATES

- The subject of the predicate is interpreted as the undergoer of a change-of-location event, while the argument of the result named by the verb serves as a landmark for the change-of-location.

(15) a. The bullets **ripped** into the tissue of his back and shoulder. (GloWbE)
b. Thieves **smashed** through the window of the popular Blue Genes boutique. (COCA)
c. Molten nuclear fuel can **melt** through the reactor's safety barriers. (GloWbE)

- These data are also naturally accounted for: the predicates in (15) involve the same syntactic structure of (12) and (13), consisting of a SC complement to a *v* head introducing a resultative change-of-state/location event.

(16) Thieves smashed through the window.
[$_{vP}$ [$_{v}$ $\sqrt{}$SMASH v] [$_{SC}$ [$_{DP}$ Thieves] [$_{PP}$ through the window]]]

CREATION PREDICATES

- Result verbs are also attested in predicates where no BECOME subevent is involved at all: the direct object is not interpreted as an argument of a BECOME subevent, but as an *effected* object behaving as an incremental theme (Hale and Keyser 2002, Harley 2005).

(17) a. Scientists just **melted** a hole through 3,500 feet of ice. (Web)
b. I stuck my GoPro under some ice and then **shattered** a hole right above it. (Web)
c. A [...] team **blew** a hole in the wall near the embassy and charged through.
d. You really **tore** her a new vagina. (*Cobra Kai*, S. 1, Ep. 10)

- (17) are events of creation involving a configuration where the object DP is merged as the complement of *v*, while the verbal root is adjoined to *v* specifying the manner in which the event unfolds.

(18) Scientists melted a hole.
[$_{vP}$ [$_{v}$ $\sqrt{}$MELT v] [$_{DP}$ a hole]]

Conclusion

- What are conceived of as **result verbs** under RHL's framework can join the derivation of the argument structure as **manner modifiers**, either in the presence or in the absence of an event of change of state/location. They thus can be found lexicalizing an ACT subevent regardless of whether a BECOME subevent is structurally present or not.
- Roots do not have a specification for manner/result which is relevant at argument structure. The **manner/result reading is read off the syntactic structure** and severed from the lexically specified idiosyncratic content of roots.

Selected references. Acedo-Matellán, Víctor & Jaume Mateu. 2014. From syntax to roots: A syntactic approach to root interpretation. In Artemis Alexiadou, Hagit Borer & Florian Schäfer (eds.), *The syntax of roots and the roots of syntax*, 259–281. Oxford: Oxford University Press. • Rappaport Hovav, Malka & Beth Levin. 2001. An event structure account of English resultatives. *Language* 77(4). 766–797. • Rappaport Hovav, Malka & Beth Levin. 2010. Reflections on manner/result complementarity. In Malka Rappaport Hovav, Edit Doron & Ivy Sichel (eds.), *Lexical semantics, syntax, and event structure*, 21–38. Oxford: Oxford University Press.