RECONSIDERING *re-*

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The English repetitive *re-* differs in somewhat puzzling ways from *again*. In this talk we re-evaluate the constraints on *re-*, adopting a modified version of Ramchand's (2008) articulated verbal structure. The core of this proposal is that *re-* can only merge with result projections (the lowest part of the articulated verbal layer (cp. Dowty 1978, Wechsler 1989) and that result projections require "affected" arguments.

***Again*:** As has been noted (von Stechow 1996, Beck 2005,2006, and many others), *again* is ambiguous in sentences like (1) between (at least) a repetitive reading (1-a) and a restitutive reading (1-b); where the first requires that John opened the door before, and the second requires that the door have been opened before.

(1) John opened a door again.
   a. "John opened a door, and then he opened it again."
   b. "The door was in an open state at an early time, and then John caused it to return to that state."

Re- is semantically akin to *again*, but the distributions of the two elements are non-identical (Keyser & Roeper 1992, Lieber 2004), as shown by the contrast between the potential readings of (1) and (2).

(2) John re-opened a door.

While (1) bears two possible readings, (2) can only be true if the door was previously open (while (1) can be true where two different doors have been opened, both for the first time). Thus *re-* must scope under the object indefinite. This is expected, if the restitutive reading results from *again*/*re-* relatively merging low in the verbal layer, below higher associated projections such as Voice/v (von Stechow 1996). Further, as discussed below, *re-* is only felicitous if there is a Result state.

Analysis: Following Ramchand (2008), we decompose the verbal layer. Ramchand posits that "event" projections are decomposable into three distinct projections: *init*P (introducing causation events and licensing external arguments), *proc*P (specifying the nature of the change or process and licensing the undergoing entity), *res*P (specifying the "result state" of an event and licensing the entity coming to hold that result state)—where particular events may involve all or a subset of these projections. We argue that *re-* may only merge with a result projection (cf. Marantz 2007):

(3) $[_{initP}\ [_{procP}\ [\ \text{(re-)}\ [_{resP}\ ]\ ]\ ]\ ]$

Arguments may be merged at different levels: arguments merged within a result projections are "affected" by the verb (cf. Beavers 2011, 2013); only result projections which merge with arguments are licensed. Further, we suggest that a Telic phrase may also be projected as part of the functional layer above vP (cf. Borer 2005's Asp_QP). That is, in contrast to Ramchand (2008), there presence of a result projection does not entail telicity (even in the absence of secondary aspectual modification).

We posit the following basic denotation for *again* and *re-* (other repetives like *anew* seem similar, but impose additional constraints):

(4) Where τ(e) is the runtime of the event *e*, $\prec$ is temporal precedence; LB(i) is the left boundary of an interval *i*:

$$\begin{aligned}[\![\text{again}]\!](\text{P})(\text{e}) &= 1 \text{ iff } \text{P(e)} \,\&\, \exists \text{e}'[\text{P}(\text{e}') \,\&\, \text{LB}(\tau(\text{e}')) \prec \text{LB}(\tau(\text{e}))] \\ &= 0 \text{ iff } \neg\text{P(e)} \,\&\, \exists \text{e}'[\text{P}(\text{e}') \,\&\, \text{LB}(\tau(\text{e}') \prec \text{LB}(\tau(\text{e}))] \quad \text{; undefined otherwise}\end{aligned}$$

Horn's generalisation (Horn 1980, Marantz 2007) notes that *re-* but not *again* requires an underlying object:

(5) a. I re-opened the door / the door re-opened.
   b. ??I resmoked/relaughed/resang. vs. I smoked/laughed/sang again.

However, this constraint appears to be neither necessary nor sufficient. Where the object is unaffected, the result is ungrammatical:

(6) a. John saw a man standing on the corner outside his window last night. *This morning he resaw the same man at the coffee shop.
   b. Bill laughed at John. John, astonished, fell over. *Bill relaughed at him.

This does not reflect a general constraint against *re-* combining with achievements (7) nor a requirement for a telic verb (8):

(7) The ROK 61st Regiment counterattacked, rewon, and then relost the outpost. (Walter G. Hermes, *Truce Tent and Fighting Front* (1966), pg. 467)

(8) Alice reswept the floor for 5 minutes before becoming bored & wandering off to play with her kitten.

Further, *re-* can occur with certain verbs lacking objects, so long as verbs takes an "affected agent" (on "affected agents", see Saksena 1980; Næss 2007), like *read* (9); superficially similar verbs like *sing* (10) do not allow this:

(9) After the funeral, he'd made it his business to read everything he could find about the theory and practice of psychology. After first, it had been like reading a foreign language. He'd had to read and reread till the words blurred and his head ached, but he'd struggled on. (Val McDermid, *The Last Temptation: A Novel* (2003), pg. 139)

(10) After the funeral, John made it his business to sing everything he could by Barbra Streisand. At first, her songs were out of his vocal range. #He'd had to sing and re-sing until the songs blurred and his head ached.

Thus, *re-* must merge with a result projection, and result projections require an affected participant; verbs lacking affected participants cannot be modified by *re-*. *Re-* necessarily scopes over the subject when the verb takes an affected agent (e.g. *read*).

Variable subject identity: Repetitives vary in whether they require subject identity between events:

(11) a. John repainted the wall (even though John had never painted before in his life).
b. *John reread the book (even though he never read it before).

If *re-* is merged lower than the external argument of the verb, then the infelicity of (11-b) is unexpected. Adopting the above proposal that *re-* merges only with result phrases, and that "affected agents" necessarily merge with *res*P and subsequently with *init*P, this outcome is predicted. This behaviour is also observed with *again*:

(12) *Bill read the book and liked it, so John read the book again (though he had never read it before).

Results and telicity: While treating some subjects as part of the Result phrase is consistent with Ramchand (2008), other aspects of the behaviour of *re-* are not. Williams (2011) notes for the following example that the result state of *white* is not presupposed; the previous colour could be different (13-a). He argues that *re-* must directly combine with verbs that are lexically specified as telic (i.e. have a result state).

(13) a. John repainted the wall white
b. *John reran his shoes ragged
c. John recooled the soup (for two hours in the refrigerator)

This proposal accounts for (13-b), but it runs into problems with (13-c). Note that while (13-c) necessarily involves a result—otherwise *re-* would be ungrammatical—it is atelic, and the verb *cool* cannot be lexically specified as telic; telicity is determined by the properties of the (event-homomorphic) object, i.e. telicity is determined by whether the change is maximal along the adjectival scale.

Thus while some kind of result is necessary for *re-*, results do not guarantee telicity, in contrast with Ramchand (2008). Telicity appears to be independent of result states; so derivations involving true telicity will involve movement of an element to TelicP (or otherwise filling TelicP). In (13-c), *the soup* merges directly with *cool* (as well, *re-* also merges with *res*P), and thus entails a result; but no Telicity phrase is necessarily projected and thus the result can be atelic.

Conclusion: Variation in possible readings of sentences involving repetitives like *again*, *re-* with respect to identity of the subject argues for an articulated VP-layer, with "affected agents" of verbs like *eat*, *read* merging as part of the Result. Further, the presence of a Result does not guarantee telicity.

References: BEAVERS, JOHN. 2011. On affectedness. *NLLT* 29:335–370; BEAVERS, JOHN. 2013. Aspectual classes & scales of change. *Linguistics* 51.4: 681–706; BECK, SIGRID. 2005. There & back again: A semantic analysis. *JoS* 22: 3–51; BECK, SIGRID. 2006. Focus on *again*. *L&P* 29: 277–314; BORER, HAGIT. 2005. *Structuring sense, vol. II: The normal course of events.* OUP; DOWTY, DAVID R. 1978. *Word meaning & Montague Grammar*, Reidel; HORN, LARRY. 1980. Affixation & the Unaccusative Hypothesis. *CLS* 16: 134–146; KEYSER, SAMUEL JAY & THOMAS ROEPER. 1992. Re: The abstract clitic hypothesis. *LI* 23.1: 89–125; LIEBER, ROCHELLE. 2004. *Morphology & lexical semantics.* CUP; MARANTZ, ALEC. 2007. Restitutive re & the first phase syntax/semantics of the VP. Ms., NYU; NÆSS, ÅSHILD. 2007. *Prototypical transitivity*. Amsterdam: John Benjamins; RAMCHAND, GILLIAN CATRIONA. 2008. *Verb meaning & the lexicon: A first-phase syntax.* CUP; SAKSENA, ANURADHA. 1980. The affected agent. *Language* 56.4: 812–826; VON STECHOW, ARNIM. 1996. The different readings of *wieder* 'again': A structural account. *Journal of Semantics* 13: 87–138; WECHSLER, STEVEN. 1989. "Accomplishments & the verbal prefix *re-*" *NELS* 19; WILLIAM, EDWIN. 2011. *Regimes of derivation in syntax and morphology*. New York: Routledge.