(Re)sultatives

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There is an intuitive difference between the two kinds of resultatives below (Carrier & Randall 1992; Randall 2010).

(1) Transitive resultatives:
   a. The winemakers stomped the grapes flat.
   b. The chef sliced the cheese thin.
   c. The barber cut the customer’s hair short.
   d. The grocer ground the coffee beans into a fine powder.
   e. They painted their house a hideous shade of green.
   f. John hammered the metal flat.

(2) Intransitive resultatives (odd for some):
   a. The kids laughed themselves into a frenzy.
   b. The old man snored himself awake.
   c. He drank himself sick.
   d. The joggers ran their Nikes threadbare.
   e. He sneezed his handkerchief soggy.
   f. John drank the teapot empty.
The difference is related to the transitivity of the verbs in sentences without resultative secondary predicates.

(3) Transitive verbs:
   a. The winemakers stomped (the grapes).
   b. The chef sliced (the cheese).
   c. The barber cut (the customer’s hair).
   d. The grocer ground (the coffee beans).
   e. They painted (their house).
   f. John hammered (the metal).

(4) Intransitive verbs:
   a. The kids laughed (*themselves).
   b. The old man snored (*himself).
   c. He drank (*himself).
   d. The joggers ran (*their Nikes).
   e. He sneezed (*his handkerchief).
   f. John drank (the teapot).
Descriptively, resultatives with transitives seem to indicate the result state of the existing internal argument of the verb; resultatives with intransitives seem to introduce both a result state and an (internal) argument.

(5) Transitive resultatives:
   a. They painted their house a hideous shade of green.
   b. John hammered the metal flat.

(6) Intransitive resultatives:
   a. He sneezed his handkerchief soggy.
   b. John drank the teapot empty.
Some analyses propose a unified structure for both kinds of resultatives. Such analyses treat all resultatives as structurally either intransitive (e.g., Kratzer 2005) or transitive (e.g., Embick 2004; Williams 2015).

Other approaches (e.g., Randall 2010) propose transitive and intransitive resultatives have different underlying structures.

We show that the verbal prefix re- supports non-unified analyses, and implement a novel non-uniform analysis that involves multidominance (e.g., Johnson 2018; a.m.o.).
Regarding *re-*

(7) The detective reexamined the scene. (repetitive)
    ≈ “The detective examined the scene, and someone had examined the scene before.”

(8) The traveler reread the magazine. (repetitive)
    ≈ “The traveler read the magazine, and someone had read the magazine before.”

(9) John relit the lamp. (restitutive)
    ≈ “John lit the lamp, and the lamp was lit before.”

(10) The satellite reentered the atmosphere. (restitutive)
    ≈ “The satellite entered the atmosphere, and it had been in the atmosphere before.”
Regarding *re-*

*re-* carries an internal argument requirement: *re*-V must take an internal argument, even if V alone typically does not (Keyser & Roeper 1992).

(11) a. John ran for five miles.
    b. * John reran for five miles.
    c. John ran the length of the race course.
    d. John reran the length of the race course.

(12) John *(re)thought the solution.
Regarding *re-*

*Re-*’s internal argument requirement is not satisfied by small clause subjects, clauses, adverbs, or datives. Only direct internal arguments suffice.

(13)  

a. John (re)watched the movie.  
b. John (*re)watched the movie play.  
c. John watched the movie play again.

(14)  

a. John (*re)thought that Bill was tired.  
b. John (*re)behaved badly.  
c. John (*re)gave me a dollar.  
d. John thought that Bill was tired again.  
e. John behaved badly again.  
f. John gave me a dollar again.
Re- with resultatives

In light of re-’s internal argument requirement, consider the following contrasts.

(15) Transitive resultatives:

a. The chef resliced the cheese thin.
b. The grocer reground the coffee beans into a fine powder.
c. They repainted their house a hideous shade of green.
d. John rehammered the metal flat.

(16) Intransitive resultatives:

a. * The joggers reran their Nikes threadbare.
b. * The kids relaughed themselves into a frenzy.
c. * He resneezed his handkerchief soggy.
d. ?* John redrank the teapot empty.
We conclude that transitive resultatives may be truly transitive. In contrast, such parses for intransitive resultatives are impossible or highly disfavored due to their odd meanings (cf. transitive *reran the length of the race course, reran their Nikes).
Re-‘s presupposition includes only the verb and the internal argument. It need not include the resultative.

(17) a. John rehammered the nail flat after he hammered it crooked the first time.

b. John rehammered the metal flatter than Bill had hammered it before.

c. They repainted their house green after having painted it a grotesque shade of yellow.

d. The grocer reground the coffee beans into a fine powder, after first grinding them into small chunks.

e. I redirected him to the airport, since he was going the wrong way.
**Re- in transitive resultatives**

*Re-* can be combined with restitutive *again*.

(18) **Context:** The machine made a flat sheet of metal. Bill hammered it until it was all lumpy. To fix this, ...
   
a. John rehammered the metal sheet flat again.
   
b. # John again rehammered the metal sheet flat.


(19) $\langle \text{again} \rangle = \lambda P_{\langle st \rangle}. \lambda e : \exists e'[\tau(e') \prec \tau(e) \land P(e')]. P(e)$

*Re-* is like *again*, but can only attach to a verb with an internal argument. We build this into its semantics.

(20) $\langle \text{re-} \rangle = \lambda P_{\langle e, st \rangle}. \lambda x. \lambda e : \exists e'[\tau(e') \prec \tau(e) \land P(e', x)]. P(e, x)$
Re- in transitive resultatives

Re- can be combined with restitutive again.

18  **Context**: The machine made a flat sheet of metal. Bill hammered it until it was all lumpy. To fix this, ...

a.  John rehammered the metal sheet flat again.

b.  # John again rehammered the metal sheet flat.

The context satisfies a repetitive presupposition ("someone hammered the metal sheet") and a restitutive presupposition ("the metal sheet was flat before"). But crucially, there was no event of hammering the metal sheet that caused it to become flat before.

It is possible to modify [hammer the metal sheet] to the exclusion of [flat], while also modifying [the metal sheet flat] to the exclusion of [hammer]. We need a single structure that permits both.
(21) run their Nikes threadbare

\[ [\text{VP}] = \lambda e. \text{run}(e) \land \exists e' [\text{threadbare}(e', \text{their Nikes}) \land \text{CAUSE}(e, e')] \]

\[ \text{run} \quad [\text{CAUSEP}] = \lambda Q. \lambda e. Q(e) \land \exists e' [\text{threadbare}(e', \text{their Nikes}) \land \text{CAUSE}(e, e')] \]

\[ \text{CAUSE} \quad [\text{SC}] = \lambda e'. \text{threadbare}(e', \text{their Nikes}) \]

\[ \text{DP} \quad \text{A} \]

\[ \text{their Nikes} \quad \text{threadbare} \]
(22) hammer the metal flat

\[ \lambda e.\text{hammer}(e, \text{the metal}) \land \exists e'[\text{flat}(e', \text{the metal}) \land \text{CAUSE}(e, e')] \]

\[
\begin{aligned}
[\text{VP}] &= \\
\lambda e.\text{hammer}(e, \text{the metal})
\end{aligned}
\]

\[
\begin{aligned}
[\text{CAUSE}] &= \\
\lambda Q.\lambda e.Q(e) \\
\land \exists e'[\text{flat}(e', \text{the metal}) \\
\land \text{CAUSE}(e, e')] \\
\end{aligned}
\]

\[
\begin{aligned}
[\text{SC}] &= \\
\lambda e'.\text{flat}(e', \text{the metal})
\end{aligned}
\]

V

hammer

DP

the metal

CAUSE

A

flat
Multidominance allows us to express efficiently and simply the intuition underlying transitive resultatives: the argument is the verb’s object and the resultative’s subject!
(23) rehammer the metal flat again

\[ [\text{VP}] = \lambda e.\text{hammer}(e, \text{the metal}) \land \exists e''[\text{flat}(e''), \text{the metal}) \land \text{CAUSE}(e, e'')] \]

presupp. 1: \( \exists e'[\tau(e') < \tau(e) \land \text{hammer}(e', \text{the metal})] \)

presupp. 2: \( \exists e''[\tau(e'') < \tau(e) \land \text{flat}(e''', \text{the metal})] \)

\[ [\text{SC}] = \lambda e''.\text{flat}(e'', \text{the metal}) \]

presupp. 2: \( \exists e''[\tau(e') < \tau(e) \land \text{hammer}(e', x)] \).

\[ \text{hammer}(e, x) \]

\[ [\text{CAUSEP}] = \lambda Q.\lambda e.Q(e) \land \exists e''[\text{flat}(e'', \text{the metal}) \land \text{CAUSE}(e, e'')] \]

presupp. 2: \( \exists e''[\tau(e'') < \tau(e) \land \text{flat}(e''', \text{the metal})] \)

\[ [\text{VP}] = \lambda e.\text{hammer}(e, \text{the metal}) \]

presupp. 1: \( \exists e'[\tau(e') < \tau(e) \land \text{hammer}(e', \text{the metal})] \)

presupp. 2: \( \exists e''[\tau(e'') < \tau(e) \land \text{hammer}(e', \text{the metal})] \)

\[ [\text{V}] = \lambda x.\lambda e: \exists e'[\tau(e') < \tau(e) \land \text{hammer}(e, x)] \].

hammer(e, x)

\[ [\text{CAUSE}] \]

\[ [\text{SC}] = \lambda e''.\text{flat}(e'', \text{the metal}) \]

presupp. 2: \( \exists e''[\tau(e'') < \tau(e) \land \text{flat}(e''', \text{the metal})] \)

\[ \text{hammer}(e, \text{the metal}) \]

\[ \text{the metal} \]

\[ \text{flat} \]
Syntax and semantics

The acceptability of re- with optionally transitive verbs depends on the interpretation of the object.

(24)  a. John (re)drank the bottle dry.  
      (metonymic reading easy)
    b. John (?*re)drank the teapot empty.  
      (metonymic reading marginal)
    c. John (?re)drank himself into a stupor.  
      (no metonymic reading)

(25)  a. The dog (re)poked his owner awake, after poking him before to no effect.
    b. The dog (*re)poked his nose sore, after poking things with his nose before.
    c. John (re)kicked the door open, after kicking it before.
    d. John (*re)kicked himself free, after kicking before to no avail.
References


