The ingredients of nonselected NP resultatives

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“Yes. If anything happens to me, he gets everything. Oh my God, Kat, he could murder me dead and get all my money.”

Murder me dead? Somewhere a grammar teacher rolled over in her grave.
(K. Kijewski, Stray Kat Waltz, Putnam, New York, 1998, p. 64)

A resultative construction describes a complex event in which the referent of an NP in the construction comes to be in the state denoted by its XP as a result of the action denoted by its verb.

Within this unified characterization, there are a range of subtypes of the resultative construction.

This talk focuses on one prominent distinction: selected NP vs. nonselected NP resultatives.

THE CLASSIFICATORY CRITERION: Can the postverbal NP be understood as the object of the verb when it is used outside the construction?

1. **SELECTED NP RESULTATIVE CONSTRUCTION:**
   a. Last night, the dog poked me awake every hour to go outside. (G. Dunford, “Charity’s for the Birds”, The Toronto Sun, November 27, 1994, p. 6)
   b. The dog poked me.

2. **NONSELECTED NP RESULTATIVE CONSTRUCTION:**
   a. He had set an alarm, which rang at five thirty the following morning, shrilling them both awake. (R. Pilcher, Voices in Summer, St. Martin’s, 1984, p. 116)
   b. *The alarm shrilled them.

Nonselected NP resultatives have received considerable attention from a syntactic perspective, but have not received systematic study from a semantic perspective.

The perennial challenge: Identifying the conditions on a well-formed resultative construction.

**Goal of the talk:** To use corpus data to understand the complex interplay among the verb, the result XP, and the postverbal NP—whether selected or not—in controlling the well-formedness of a resultative construction.

**Data under consideration:** Only resultative constructions whose result XP is an AP. (Resultatives where XP=PP are ignored here; see Gröne (2014) for interesting recent discussion.)

**The well-formedness condition:** A nonselected NP resultative may emerge when the result state that holds of the nonselected NP is brought about not by acting directly on the entity denoted by this NP, but by acting on another entity which is spatially contiguous with or impinges on this entity.
1 Background on the resultative construction: Ingredients and types

INGREDIENTS OF A RESULTATIVE CONSTRUCTION:
— A verb
— A result XP, where X=A (state) or P (state or location)
— The NP that the result XP is predicated of
  – the subject in an intransitive resultative construction
  – the postverbal NP in a transitive resultative construction
— In transitive resultative constructions, the verb’s subject (the causer)

SUBTYPES OF THE RESULTATIVE CONSTRUCTION:

• Transitive vs. intransitive resultative constructions:
  — Transitive resultative construction: ‘NP1 V NP2 XP’, where XP is predicated of NP2, as in (3).
  — Intransitive resultative construction: ‘NP1 V XP’, where XP is predicated of NP1, as in (4).

(3) He dabbed her face dry with a big white towel. (A. Keegan, Cuckoo, St. Martin’s, New York, 1995, p. 218)

• Transitive resultative constructions fall into two classes according to whether or not the postverbal NP is a selected NP—that is, understood to be the object of the verb when used in isolation.
  — Selected NP resultative constructions by their very nature are only found with transitive verbs. In a few instances, the NP might be a reflexive pronoun, as in She scrubbed herself red with the loofah.
  — Nonselected NP resultative constructions may be further subdivided according to whether their verb is intransitive, as in (5a), or transitive, as in (6a):

(5) a. Hours of talking her throat dry, with him staring with those mystical eyes, drinking in her every word. ((F. Kellerman, Day of Atonement, William Morrow, New York, 1991, p. 85)
   b. She talked (*her throat).
(6) a. Maxey stood up to get a glass and pour it full of milk. (C. Cail, Unsafe Keeping, St. Martin’s, New York, 1995, p. 146)
   b. Maxey poured the milk/*the glass.

In such resultatives, there may be an unexpressed, but understood argument, e.g., the milk in (6a).

• Reflexive pronoun postverbal NPs are found more often in nonselected NP resultatives with both transitive and intransitive verbs, as in The politician talked himself *(hoarse). Such resultatives are termed (“FAKE”) reflexive resultative constructions.

• These subtypes are recognized here as they are useful descriptively, even though many formal accounts analyze all resultative constructions as being of the nonselected NP type; see Hoekstra (1988, 1992a, 1992b) for early arguments on syntactic grounds and Grône (2014) for recent arguments on semantic grounds.
2 The source of the data to be examined

- A collection of about 1150 naturally occurring transitive resultative constructions predominantly drawn from newspapers and fiction written since the mid-1980s; some more recent web examples have been added to explore particular verb–result XP combinations further.
- A CAVEAT: Since the examples are not drawn from a “balanced” corpus designed to be representative of current English, they bear on claims about what resultative options are possible, but the precise numbers should at best be taken to be suggestive of patterns that may exist.

3 Resultative constructions describe complex events


  Consist of a causing event, expressed by the verb, and a result event, the achievement of the state/location expressed by the result XP, yielding a causative event structure:

  ‘causing event CAUSE result event’

- One reason: many can be easily given a paraphrase which explicitly references the two events.

  (7) Tracy wiped the table clean is paraphrasable as ‘Tracy cleaned the table by wiping it’.

- There are constraints on the relation between the two subevents:

  (8) a. The subevents need not be temporally dependent.
  b. The result subevent cannot begin before the causing subevent.
  c. Only the result subevent can bound the event as a whole.
  d. There is no intervening event between the causing subevent and the result subevent; that is, causation is direct.

  (RH&L 2001:783, (45))

  (9) Direct causation is present between the causer and the final causee in a causal chain (1) if there are no intermediate entities at the same level of granularity as either the initial causer or final causee, or (2) if any intermediate entities that are present can be construed as an enabling condition rather than an intervening causer. (Wolff 2003: 5)

- Resultatives share these properties with lexical causatives (Goldberg 1995:194–195), especially property (8d), which has been clearly established for lexical causatives (e.g., Fodor 1970, McCawley 1978, Pinker 1989:66, Shibatani 1976, Smith 1970).

- Nevertheless, these constraints tell us little about how the participants in the event denoted by the verb relate to the holder of the result state and the causer of this state—the sentence’s subject.

- Of particular interest are understood but unexpressed arguments in nonselected NP resultatives, especially with respect to how they contribute to meeting the direct causation condition.
4 A starting point: Result APs headed by the adjective dry

- Resultatives with the result AP dry provide a domain for investigating the factors governing the well-formedness of selected NP and nonselected NP resultatives as this result AP, unlike many others, is prevalent in resultatives of both types.

- There are no attested resultatives with individual-level uses of the adjective dry.

(10) a. The waiter wiped the wine bottle dry. (Stage-level)
    b. * The sommelier decanted the wine dry. (Individual-level; cf. dry wine/ginger ale)

This observation reflects a constraint on the adjective heading the result AP: it must be understood as stage-level since a change to that state is effected.

- An examination of corpus data shows that the type of resultative overwhelmingly correlates with the nature of the entity that the result dry is predicated of: is the entity a surface or a container?

<table>
<thead>
<tr>
<th>干 (of a surface, e.g., counter, floor)</th>
<th>Selected NP</th>
<th>Reflexive</th>
<th>Nonselected NP</th>
<th>Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>干 (of a container, e.g., well, tank, lungs)</td>
<td>6</td>
<td>0</td>
<td>19</td>
<td>4</td>
</tr>
</tbody>
</table>

- The nature of the entity matters as it affects the type of action required to bring about the result state.

4.1 Selected NP resultatives: The entity is a surface

- Various actions are conventionally performed with the goal of drying an entity’s surface; many involve using instruments designed to absorb or remove liquid that is on the surface.

- Thus, these actions are directed at the surface and are lexicalized by verbs which take the surface as object, giving rise to selected NP resultatives.

(11) VERBS INCLUDE: blot, brush, dab, lick, rub, spin, wipe, ...

(12) a. The waitress comes back, wiping the silverware dry with a cloth napkin ... (M.G. Jaffé, Dance Real Slow; Farrar Straus Giroux, New York, 1996, p. 24)
    b. ... a skinny little white woman was washing a huge pile of fresh mixed greens and spinning them dry. (M. Maron, High Country Fall, Mysterious Press, New York, 2004, p. 145)

4.2 Nonselected NP resultatives: The entity is a container

- When predicated of a container, dry indicates the container is empty of liquid.

- This state is usually brought about by acting on the liquid in the container—the container’s contents—rather than on the container itself; thus, the container is a nonselected NP.

- The relevant actions are of two types:
— Actions, perhaps involving an instrument, intended to (re)move liquid; they are lexicalized by verbs that take the liquid as their object.

(13) **VERBS INCLUDE**: boil, drink, pump, suck, …

(14) Having … drunk the teapot dry … (E. Dark, *Lantana Lane*, Virago, London, p. 94)

— Actions that involve the emission of a sound or the secretion (usually by a human) of a substance—actions which may result in a body part (e.g., the lungs, vocal tract), which is viewed as a container, becoming dry. The sound or secretion is usually unexpressed, but may sometimes be the object of a verb lexicalizing such an action (*shriek an ear-shattering shriek*).

(15) **VERBS INCLUDE**: shriek, talk, …

(16) Davina and I erupted from the knife-sharp grass, shrieking our lungs dry as we brandished our spears at the enemy soldiers. (M. Meyers, *Swimming in the Congo*, Milkweed Editions, Minneapolis, MN, 1995, p. 29)

● Nonselected NP resultatives with a reflexive postverbal NP fall under those where *dry* is predicated of a container in that the pronoun stands in for a body or body part. The actions denoted by the verbs in these resultatives are of the same types as in other nonselected NP resultatives with *dry*.

(17) **VERBS INCLUDE**: cry, sweat, whistle, …


4.3 **Results APs headed by the adjectives empty and full**

● Like the result AP *dry*, these result APs are typically predicated of containers.

● An examination of the data reveals that similar considerations enter into whether these APs are found in selected or nonselected NP resultatives.

<table>
<thead>
<tr>
<th></th>
<th>Selected NP</th>
<th>Nonselected NP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reflexive</td>
<td>Reflexive</td>
</tr>
<tr>
<td><em>dry</em> (of a surface)</td>
<td>22 2</td>
<td>2 0</td>
</tr>
<tr>
<td><em>dry</em> (of a container)</td>
<td>6 0</td>
<td>19 4</td>
</tr>
<tr>
<td><em>empty</em></td>
<td>4 0</td>
<td>4 1</td>
</tr>
<tr>
<td><em>full</em></td>
<td>10 0</td>
<td>17 1</td>
</tr>
</tbody>
</table>

● There are proportionally more selected NP resultatives with *full* and *empty* perhaps because more actions can be done to containers to achieve such results; also there are 5 instances of ‘fill NP full’.

(19) She knelt before him and taking one of his hands in hers, shook the bag empty. (P. Patterson, *Spirit Path*, iUniverse, Lincoln, NE, 2002, p. 94; https://books.google.com/books?isbn=0595216714)
5 Generalizing from the case study: Expectations about transitive resultatives

Assuming the dry case study is representative, it points to properties that might be expected of other selected NP and nonselected NP resultatives, while raising questions for further investigation.

5.1 The types of events described by the resultatives

The two types of transitive resultatives might be expected to describe the following kinds of events:

- **SELECTED NP RESULTATIVES:**
  Such resultatives will describe events in which the result state in the entity named by the postverbal NP is brought about when a causer, perhaps using an instrument, acts directly on this entity in a way that brings about the result state in it.

- **NONSELECTED NP RESULTATIVES:**
  Such resultatives will describe events in which the result state in the entity named by the postverbal NP is brought about when a causer, perhaps using an instrument, acts on an entity which bears a close relation to the entity denoted by the postverbal NP, and due to this relation the action also impinges on the entity denoted by the postverbal NP, bringing about the result state in it.

In the dry examples the relation is contents (unexpressed)–container (postverbal NP).

**QUESTIONS:**
— What other close relations are available to nonselected NP resultatives?
— How and why do these relations allow such resultatives to satisfy the direct causation constraint?

5.2 The verbs in the resultatives

- Since across attested resultatives the result states are predominantly physically instantiated, their verbs are expected to denote actions of physical manipulation, surface contact, impact, or force exertion; especially likely are actions conventionally performed to bring about a particular result.

- The verbs lexicalizing such actions are typically what are called ‘manner’ verbs, a set which contrasts with ‘result’ verbs (L&RH 1991, 2013, RH&L 1998, 2010).
  — Manner verbs: specify a manner of carrying out an action (e.g., pound, sweep); often the manner is conventionally associated with a particular result state, although the result isn’t entailed.
  — Result verbs: specify the result of an action (e.g., remove, put, cover, empty, clean); lexically specify a scalar change (Hay, Kennedy & Levin 1999, Rappaport Hovav 2008).

(20) I just wiped the counter, but it’s still dirty/sticky/covered in crumbs.

- Result XPs make possible the explicit expression of a result with a manner verb; given the direct causation condition, this result is understood to be directly caused by the manner action.

(21) # I just wiped the counter clean, but it’s still dirty. (Contradiction)
(22)  # I just wiped the counter clean, but the wiping had nothing to do with the cleanliness.  
(Contradiction)

- The verbs found in the dry resultatives are almost exclusively manner verbs.
- In fact, previous studies of the manner–result dichotomy note this distributional fact, tying it to argument realization differences inherent to the two verbs types (RH&L 1998, 2010). Such analyses are recastings of previous syntactic analyses that suggest nonselected NP resultatives could only be found with unergative and optionally transitive verbs (Carrier & Randall 1993, L&RH 1995).

QUESTION: Are there any repercussions for the range of verbs found in nonselected NP resultatives because the postverbal NP is not an argument of the verb?

6 Further case studies of transitive resultative constructions

**Goal:** To better understand how the verb, the result AP, and the postverbal NP—whether selected or not—work together in determining the well-formedness of a transitive resultative.

6.1 When the AP is headed by the adjectives clean/clear/bare/barkless/free

<table>
<thead>
<tr>
<th></th>
<th>Selected NP</th>
<th>Reflexive</th>
<th>Nonselected NP</th>
<th>Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>clean</td>
<td>77</td>
<td>3</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>bare</td>
<td>16</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>bareless</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>clear ‘unobstructed’</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>free ‘unobstructed’</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

- These adjectives are overwhelmingly found in selected NP resultatives.
- These adjectives denote states that involve the absence of impurities from some entity (clean), the absence of any covering on a surface (bare, barkless), or the absence of obstructions on a surface (clear, free). In fact, the relevant impurities, coverings, or obstructions can be explicitly expressed as an argument of these adjectives, as in clean of crumbs or bare of leaves.
- These adjectives name properties that are typically not inherent to an entity, but are externally caused, that is, they come about as a result of some sort of action on it.

6.1.1 Selected NP resultatives

- The actions that are conventionally performed with the goal of achieving one of these properties usually effect the removal of stuff/impurities/obstructions from a surface via contact of some type. Thus, these result APs are attested primarily with verbs of surface contact and sometimes with verbs of exerting force—the manner verbs which lexicalize such actions.
- Since these verbs take the surface or force recipient—the argument the result AP is predicated of—as their object, they are found in selected NP resultatives.
Verbs in resultatives with an AP headed by clean:

a. SURFACE CONTACT VERBS: lick, scrape, scrub, soak, sweep, wipe
b. OTHER VERBS: cream, hose, shake, slap, smack, splash


She had creamed her face clean . . . (E. Taylor, *The Soul of Kindness*, Chatto & Windus, Great Britain, 1964, p. 104)

Verbs in resultatives with an AP headed by bare:

a. SURFACE CONTACT VERBS: peck, scrape, scratch, scrub, . . .
b. OTHER VERBS: salt, sand, shake, spray, . . .

The ice, in moving to the south, scraped the land bare of its overlying mantle of weathered rock. (http://www.britannica.com/EBchecked/topic/91992/Canadian-Shield)

The impurities/stuff/obstructions are often left unexpressed, but they may also be expressed in the of complement to the result AP, as in (26) and (27).

Lancelot, I noticed, had licked his scratched leg clean of blood. (B. Lee, *Death in Still Waters*, St. Martin’s, New York, 1995, p. 75)

The bricks had been swept clean of every leaf. (M. Muller, *Trophies and Dead Things*, Mysterious Press, New York, 1990, p. 30)

6.1.2 Nonselected NP resultatives

The nonselected NP resultatives tend to involve verbs that denote actions directed at the impurities/stuff/obstructions in order to remove them from some entity; as a consequence of the action, the entity is in the desired result state; although not an argument of the verb, it is expressed as the postverbal NP.

Others require you to take an air shower that blows you clean in the vestibule. (S. Boxer, “Moving From Scruffy Quarters to a Limestone Labyrinth”, *The New York Times*, April 15, 2001, p. 18)

. . . the outside land which had been eaten bare by goats and horses . . . (A.W. Upfield, *Sinister Stones*, 1954; Collier Books, New York, 1986, p. 172)

A few of the nonselected NP resultatives found with clean take body part postverbal NPs; their verbs denote the emission of a secretion from this body part (e.g., saliva, sweat); the secretion may draw impurities away with it, resulting in the cleanness of the relevant body part.

Caz had to spit her mouth clean . . . (A. Keegan, *Cuckoo*, Headline Book, Great Britain, 1994; St. Martin’s, New York, 1995, p. 32)

Grône (2014) cites the nonselected NP resultative in (31) with the change of state verb melt, which resembles the other nonselected NP examples: the snow on the tree melts, leaving the trees clean.
... the warm snap had melted the trees clean. (COCA; Grône 2014:427)

SUMMARY: The selected and nonselected NP resultatives with result APs headed by clean and related adjectives differ as to whether the action denoted by the verb is carried out on the postverbal NP or on an entity that is on this NP—if the latter, then this NP is nonselected.

### 6.2 When the AP is headed by the adjective awake

<table>
<thead>
<tr>
<th>Selected NP Reflexive</th>
<th>Nonselected NP Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>awake</td>
<td>41 6</td>
</tr>
</tbody>
</table>

Wakefulness, a state holding only of animate entities, can be brought about using actions impinge on the sleeper as reflected in systematic differences in the type of resultative construction that verbs of particular semantic types occur in.

#### 6.2.1 Selected NP resultatives

- A causer can cause a sleeper to awake through physical contact or manipulation. Such actions are lexicalized by verbs of contact by impact and verbs of force exertion—manner verbs.

- Since these verbs may express the sleeper—the argument that the result AP is predicated of—as their object, they are found in selected NP resultatives.

(32) VERBS INCLUDE: bump, hug, jerk, kiss, poke, slap, tickle, tug, ...

(33) a. Last night, the dog poked me awake every hour to go outside. (G. Dunford, “Charity’s for the Birds”, The Toronto Sun, November 27, 1994, p. 6)

b. ... the moment he was deeply asleep Vinck was tugging him awake ... (J. Clavell, Shogun, Atheneum, New York, 1980, p. 652)

- The result AP awake is also occasionally attested with some experiencer object psych-verbs, which comment on the psychological effect accompanying physical and other actions.

(34) I slept fitfully, and every time Nicki cried out I was startled awake. (M. O’Callaghan, Down for the Count, St. Martin’s, New York, 1997, p. 99)

#### 6.2.2 Nonselected NP resultatives

- A causer can also cause a sleeper to awake by making a sound—usually a loud or shrill sound—or less often by directing a gaze at the speaker. Such actions are lexicalized by verbs of sound emission, verbs of manner of speaking or a verb such as stare.

- Such verbs are often considered intransitive, with the emitter, speaker, or perceiver as subject, and to the extent they do take objects, they denote sounds or words (e.g., shout an answer).

- Some of these verbs denote actions that may be directed at someone or something (e.g., scream/stare at Pat), but that may as in (35a) or may not as in (35b) be the case in a given resultative.

b. Even Charlotte had been unable to stare her awake as she usually did. (J. McGown, Unlucky for Some, Ballantine, New York, 2004, p. 203)

- The sleeper, however, is not understood to be the object of these verbs to the extent they can take an object, so such resultatives have a nonselected NP. The sound/words/gaze is left unexpressed, although it impinges on the sleeper.

(36) VERBS INCLUDE: bark, crow, jangle, scream, shout, shrill, stare, . . .

(37) He had set an alarm, which rang at five thirty the following morning, shrilling them both awake. (R. Pilcher, Voices in Summer, St. Martin’s, 1984, p. 116)

- Less often a sleeper might wake him/herself through an involuntary bodily process whose occurrence disturbs the sleeper or through a deliberate activity intended to return the sleeper to a state of wakefulness. The latter, in particular, may have an unexpressed argument.

- The verbs lexicalizing these actions do not themselves take the sleeper as an argument even if they take an argument, but as the state is predicated of the sleeper, the result AP awake is predicated of a reflexive pronoun, which qualifies as a nonselected NP.

(38) VERBS INCLUDE: blink, cough, puff, read, snort, scream, shout, shower, stretch, . . .

(39) a. Her dreams during brief intervals of sleep continued the theme, replaying in distorted form various incidents of the day, woven in with vivid but imaginary events, so that, when she tossed herself awake, she couldn’t be sure which of them had actually happened. (A. Fraser, Next Door to Murder, Severn House, New York, 2008, p. 33)

b. Yarborough was “a biblio-holic” and history buff who “read himself awake each morning.” (J. Gonzalez, “Hundreds Mourn Yarborough”, Texas Section, The Fort Worth Star-Telegram, January 31, 1996, p. 17; Nexis)

6.3 When the AP is headed by the adjectives open/closed/shut

- These adjectives are overwhelmingly found in selected NP resultatives.

- As Levison (1993) points out in a study of the verb open, there are two prominent subtypes of the notion of opening; they extend to the adjective open, as well as to the adjectives closed and shut:
  — That relevant to containers whose contents is or is not accessible: e.g., an open jar/purse.
  — That relevant to doors/gates which serve as barriers when shut or portals when open; a subtype of a more general notion of conduit, which includes canals, roads, valves: e.g. an open door/window.

- What is common across the two notions is whether there is a state in which access is (dis)allowed.
The nonselected NP resultatives are primarily found when the result AP is predicated of a container, while both types of open are found in selected NP resultatives.

### 6.4 Selected NP resultatives

- The actions performed with the goal of achieving one of these states typically involve directly affecting the portal/barrier or container, often through the application of force.

- With containers, the actions may also involve affecting the material integrity of the container so as to render the contents of the container accessible.

- Thus, these result APs are attested primarily with the verbs lexicalizing such actions, that is, typically manner verbs.

- Since these verbs express the force recipient (i.e. the portal/barrier or container)—the argument the result AP is predicated of—as their object, they are found in selected NP resultatives.

(40) **VERBS WITH THE AP PREDICATED OF A PORTAL/BARRIER INCLUDE:** crank, fling, hit, kick, pull, push, ram, shove, . . .


b. When she rammed open the door and came charging in, he looked up at her, stunned and fearful. (J. Graham, *Sarah’s Window*, Putnam, New York, 2001, p. 119)

(42) **VERBS WITH THE AP PREDICATED OF A CONTAINER INCLUDE:** rip, slice, slit, steam, thwack, zip, . . .

(43) a. ‘... some of my mail looks to have been steamed open and stuck down again. ...’ (B. Crossley, *Candyfloss Coast*, Virago, London, 1991, p. 87)


- There are also a few resultatives with passive verbs that describe the resulting spatial configuration of the container that (dis)allows access to its content, as in (44).

(44) He had a magazine butterflied open across his lap and when I walk in he looks up and nods. (M.G. Jaffe, *Dance Real Slow*, Farrar Straus Giroux, New York, 1996, p. 20)

| open (of a portal/barrier, e.g., door, window) | 34 | 0 | 3 | 0 |
| closed (of a portal/barrier) | 9 | 0 | 0 | 0 |
| shut (of a portal/barrier) | 26 | 0 | 0 | 0 |
| open (of a container, e.g., jar, purse) | 26 | 0 | 9 | 0 |
| closed (of a container) | 7 | 0 | 4 | 0 |
| shut (of a container) | 23 | 3 | 4 | 0 |
6.5 Nonselected NP resultatives

• In the nonselected NP resultatives, the result AP is usually predicated of a container.

• The actions used to gain access to its contents are of two types:

  — Actions directed at a lid or comparable entity—that is, a part of the container that needs to be removed to allow access to the contents of a container.

  — Actions directed at a closure, such as a lock or clasp, that holds parts of a container together.

• As a result of actions of both types, the container ends up in the desired state, but the NP denoting it is not an argument of the verbs lexicalizing these actions.

• Rather, it is the lid or closure that is the force recipient in these actions, so the verbs lexicalizing these actions would typically express it as their argument, although in these resultatives it is left unexpressed. Such adjectives lack the counterpart of an of phrase, which would allow its expression.

(45) VERBS INVOLVING A LID INCLUDE: blow, flip, pop, . . .

(46) He walked back to the fence at the rear of the parking lot before popping the can open and swallowing several large gulps. (J. Dawson, A Credible Threat, Fawcett Columbine, New York, 1996, p. 85)

(47) VERBS INVOLVING A CLOSURE INCLUDE: bleep, click, tie, . . .

(48) He reached down to the black leather attaché case, lifted it on to his lap and clicked it open. (P.D. James, The Children of Men, Knopf, New York, 1993, p. 124)

6.6 When the AP is headed by the adjective raw

<table>
<thead>
<tr>
<th>Selected NP</th>
<th>Reflexive</th>
<th>Nonselected NP</th>
<th>Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>raw</td>
<td>34</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

• This result AP too is overwhelmingly found in selected NP resultatives, even if it is used in parade examples of nonselected NP resultatives, as in (49).

(49) She worked them [=her hands] raw some days. (M. Logue, Poison Heart, Ballantine, New York, 2005, p. 224)

• As expected, the individual-level sense of raw—uncooked (e.g. raw meat) or unprocessed (e.g. raw materials)—is not attested in resultative constructions.

• Attested instances involve raw in the sense ‘abraded, chafed’—a sense predicated of body parts—and, in fact, the postverbal NP is almost invariably a body part.

• This property is externally caused to hold of a body part and comes about as a result of certain actions involving repeated contact with this body part. Such actions are typically lexicalized by verbs of surface contact, manner verbs which take the surface—in these examples, the body part—as their object, giving rise to selected NP resultatives.
6.7 When the AP is headed by the adjective *hoarse*

<table>
<thead>
<tr>
<th>Selected NP</th>
<th>Reflexive</th>
<th>Nonselected NP</th>
<th>Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>hoarse</em></td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

- Unlike the other APs, *hoarse* occurs only in reflexive resultatives in my corpus and in Boas (2003).
- Hoarseness is a state that holds only of humans (and perhaps some other animates).
- Given its nature, it cannot be directly externally caused to hold of someone; thus, there are no actions which are conventionally directed at a human to bring it about; hence, the lack of selected NP resultatives.
- People can bring this state on themselves via activities that affect their throat such as singing, speaking, or coughing, and, indeed, verbs expressing these activities are the ones attested in resultatives.
- Such verbs are typically considered intransitive, with the speaker or emitter as subject, and to the extent they do take objects, they denote sounds, words, or coughs, snorts, or comparable results of bodily processes (e.g., *cough a horrific cough*).
- As these activities affect the emitter’s throat, a part of the self, these constructions are invariably reflexive resultatives.

(52) **VERBS INCLUDE:** cough, roar, shout, sing, talk, yell, . . .


7 Generalizing from the case studies: The wellformedness of transitive resultatives

The further case studies conform to the picture suggested by the *dry* case study, while illuminating the questions it raised.
7.1 Selected NP resultatives

- The result state in the postverbal NP is one that a causer, perhaps using an instrument, can bring about by acting directly on the entity denoted by the postverbal NP usually via an appropriate type of physical manipulation, force exertion, or contact.

- Concomitantly, verbs denoting actions involving contact with a surface or exertion of a force on an entity are prevalent in such resultatives, across a range of result APs.

- The specific class of verbs found with a given result AP depends on the nature of the result state.

<table>
<thead>
<tr>
<th>Result AP</th>
<th>Postverbal NP</th>
<th>Verb type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>clean, etc./dry</td>
<td>Surface</td>
<td>Exerting force/surface contact</td>
<td>wipe the table clean</td>
</tr>
<tr>
<td>raw</td>
<td>Body part</td>
<td>Surface contact</td>
<td>scrub fingers raw</td>
</tr>
<tr>
<td>open/closed/shut</td>
<td>Container</td>
<td>Exerting force/impact/rupturing</td>
<td>tear the bag open</td>
</tr>
<tr>
<td>open/closed/shut</td>
<td>Portal/barrier</td>
<td>Exerting force/caused manner of motion</td>
<td>push the door open</td>
</tr>
<tr>
<td>awake</td>
<td>Animate entity</td>
<td>Exerting force/surface contact</td>
<td>jerk Tracy awake</td>
</tr>
<tr>
<td>flat/smooth</td>
<td>Physical entity</td>
<td>Exerting force/surface contact/ deformation</td>
<td>smash the grape flat</td>
</tr>
</tbody>
</table>

- Such events meet the direct causation condition on well-formed resultatives (8d), repeated in (54).

\(\text{(54) There is no intervening event between the causing subevent and the result subevent; that is, causation is direct. (RH&L 2001:783, (45e))}\)

There is no intervening causer and, thus, no intervening event in selected NP resultatives: the causer directly affects the postverbal NP, bringing about a change of state.

7.2 Nonselected NP resultatives

- The action denoted by the verb impinges on the postverbal NP, i.e. the holder of the result state, as the action is directed at an understood entity which bears a close relation to the postverbal NP in such a way as to cause a change of state.

In (55) the understood entity, tea, is contained in the entity denoted by the postverbal NP the teapot.

\(\text{(55) Having . . . drunk the teapot dry . . . (E. Dark, Lantana Lane, Virago, London, p. 94)}\)

- The relations between the understood entity and the postverbal NP usually involve physical contiguity; they include:

<table>
<thead>
<tr>
<th>Postverbal NP</th>
<th>Unexpressed entity</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container</td>
<td>Contents</td>
<td>drink the teapot dry</td>
</tr>
<tr>
<td>Body part</td>
<td>Secretion</td>
<td>spit your mouth clean</td>
</tr>
<tr>
<td>Container</td>
<td>Lid or closure</td>
<td>pop the can open</td>
</tr>
<tr>
<td>Surface</td>
<td>Debris or stuff on it</td>
<td>blow/eat the field bare</td>
</tr>
<tr>
<td>Force recipient</td>
<td>Body part/instrument</td>
<td>stomp the hat flat/run the pavement thin</td>
</tr>
<tr>
<td>Body part</td>
<td>Force recipient</td>
<td>scrub one’s fingers raw</td>
</tr>
<tr>
<td>Perceiver</td>
<td>Sound or gaze</td>
<td>bark/stare the neighbor awake</td>
</tr>
<tr>
<td>Addressee</td>
<td>Gesture/sign/words</td>
<td>shout/cough someone awake</td>
</tr>
<tr>
<td>Attached entity</td>
<td>Connection to “anchor”</td>
<td>kick oneself free</td>
</tr>
</tbody>
</table>
• Building on discussion in Iwata (2014), a causer can be said to transmit a force to the entity denoted by the postverbal NP through the mediation of the understood entity, with the force transmission bringing the result about.

• The attested contiguity relations take a form that allows the force transmission to be effective.

• The relations are such that the entire event denoted by the resultative construction satisfies the direct causation constraint despite the nonselected NP. Specifically, the understood entity does not in any sense constitute an “intermediate” causer.

• Some of the relations holding between a postverbal NP and an understood entity are also attested in selected NP resultatives.

Compare the nonselected NP resultative in (56a) to the selected NP resultative (56b): in both the stuff on the land is understood and could be expressed in an of complement to the adjective.

(56) a. The goats ate the land bare (of grass).
    b. The ice scraped the land bare (of grass).

— In nonselected NP resultatives, the postverbal NP is not an argument of the verb, while the understood entity can be considered an argument of the verb, usually the argument that would have been realized as its object (e.g., The goats ate the grass).

— In selected NP resultatives, the postverbal NP is always an argument of the verb (e.g., The ice scraped the land), but there may be an understood entity too, which can be expressed as an object outside the resultative construction (e.g., scrape the grass off the land).

• However, not every relation that a postverbal NP bears in the larger event is a potential argument relation (e.g., the addressee relation); thus, there are nonselected NP resultatives lacking selected NP counterparts. As a consequence, the set of verbs found in nonselected NP resultatives is larger than in selected NP resultatives.

7.3 Unattested nonselected NP resultative constructions

• There are constraints on possible relations between the postverbal NP and the understood entity.

• Unattested are resultatives describing a projectile set in motion by a causer, which comes into contact with another entity, changing its state.

• Thus, the nonselected NP interpretation of (57) in (57a) is impossible, although the event is imaginable; this sentence does allow the selected NP interpretation in (57b).

(57) a. Sam kicked the door open.
    b. Sam kicked a ball which hits the door, causing it to open.

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• Thus, the nonselected NP interpretation of (57) in (57a) is impossible, although the event is imaginable; this sentence does allow the selected NP interpretation in (57b).

(57) a. Sam kicked the door open.
    b. Sam's foot makes contact with the door, causing it to open.

— A launched ball is what Kearns (2000:241), drawing on Cruse (1973:19-20), terms a projectile: an entity that moves due to an imparted force.
— Such an entity may itself impart this force to another entity through contact, just like other causers—agents, natural forces, and certain instruments—may.

— Projectiles pattern with other causers with respect to common diagnostics (Cruse 1973:19-20):
(i) They may be subjects of certain transitive verbs:

(58) a. The ball broke the window.  
     b. Cameron/the crane broke the window.

(ii) They pass the ‘what X did’ test:

(59) a. What the ball did was break the window.  
     b. What Cameron/the crane did is break the window.

NOTE: shoot X dead is not a counterexample: it may appear to have an interpretation comparable to (57a), but it does not as the meaning of shoot involves firing a gun and not the bullet.

• (60) presents an example which is comparable to (57): again a nonselected NP interpretation is not possible, and again this interpretation would involve an intervening causer.

(60) Tracy pushed the door open.
    a. Impossible interpretation: Tracy pushed on a red button that sets a mechanism in operation that opens the door.  
    b. Possible interpretation: Tracy pushed on the door, causing it to open.

(61) a. The red button opened the door.  
     b. What the red button did is open the door.

The button can be viewed as a mechanism that has its own energy source, qualifying as a causer.

8 Conclusion

• Fine-grained case studies that focus on the individual contribution of each ingredient of a resultative construction can deepen our understanding of this construction, also clarifying the factors governing each subtype.

• This larger study confirms the importance of the direct causation condition previously argued to hold of well-formed resultative constructions, while pointing to the resultative subtypes that might most profitably help us better understand the nature of this condition.

References


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