The door punched open: An unusual English resultative construction

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... the door punched open and two more men leaped into the room. (G. Stockbridge, The Devil's Paymaster, *The Spider* 23:4, 1941, p. 16)

Features of this construction:

- The subject is understood as the object of the corresponding transitive use of the verb
 Two men punched the door.
- The verb is not used intransitively (as an anticausative) in isolation *The door punched.
- The result phrase is predicated directly of the surface subject

- On certain analyses, English resultatives are taken to respect a verb's basic argument structure (e.g., Carrier & Randall 1992; L&RH 1995; Simpson 1983)
- Predict: A transitive verb that lacks an anticausative intransitive counterpart should not be found in an 'intransitive' resultative – one that omits its 'agent' argument
- Note: This prediction would not arise on a (neo-)constructional approach, as any verb should appear in all resultative patterns
- **Goal:** To investigate a class of unnoticed English exceptions to this prediction that still meet the Direct Object Restriction on resultatives

The expected patterns:

 Causative alternation verbs are found in both transitive and intransitive resultatives:

The cold snap froze the lake/The lake froze The cold snap froze the lake solid/The lake froze solid

 Transitive only verbs are not found in intransitive resultatives: Pam wiped the table/*The table wiped
 Pam wiped the table clean/*The table wiped clean

The unexpected pattern: The intr(ansitive)-push open pattern

Transitive only verbs in intransitive resultatives

- As I was closing the refrigerator, the back door pushed open. (L. Berenson, *The dog whisperer*, Kensington, 2014, p. 123) (cf. The dogs pushed the door/*The door pushed.)
- The front door yanked open wider. 'Hello,' said a round-faced boy ... (J. Waterhouse, Shadow Walk, Putnam, New York, 1997, p. 33) (cf. The boy yanked the door/*The door yanked.)

- Goal: To identify its semantic and pragmatic licensing factors
- This goal is independent of whether resultatives receive a lexicalist or (neo-)constructional account
- Delineate the properties of the components of the 'transitive' verb-NP-result phrase combinations found in such resultatives
- Show how these properties allow the satisfaction of the discourse conditions that license these resultatives as 'anticausatives'
- Note: This approach builds on the assumption that a verb's lexical properties constrain its distribution

Roadmap

- Background on English resultatives in the context of intr-push open resultatives
- Properties of intr-*push open* resultatives
- Intr-push open resultatives as anticausatives
- Discourse conditions on intr-*push open* resultatives
- Revisiting the properties of intr-*push open* resultatives
- Concluding remarks

Background: The Direct Object Restriction

- The Direct Object Restriction (DOR): In all resultative constructions the result phrase is predicated of an (underlying) object (Simpson 1983, L&RH 1995: 34)
- The DOR is insensitive to whether a result phrase is predicated of a 'selected' or 'non-selected' object

Pat scrubbed the bathtub clean.

Pat scrubbed her fingers raw.

Background: DOR

Evidence for the DOR:

- The result phrase can be predicated of a direct object but not the object of a preposition
 Sam wiped the table clean.
 *Sam wiped at the table clean.
- The result phrase can't be predicated of subject of a transitive verb *The soprano sang the aria hoarse.
- The result phrase can be predicated of the subject of a passive Sam tore the bag open.
 - The bag was torn open.

Background: DOR

Evidence for the DOR:

- The result phrase can be predicated directly of the subject of an unaccusative but not an unergative intransitive verb
 - Sam tore the bag open. (transitive, causative)
 - The bag tore open. (unaccusative, anticausative)
 - *The soprano sang hoarse. (unergative)
- A 'fake reflexive' object is required to predicate a result phrase of the subject of an unergative verb
 - The soprano sang herself hoarse. (unergative)

Background: DOR

Important takeaway for the analysis of the intr-push open resultatives:

- As the DOR requires an unaccusative analysis of intransitive resultatives, intr-push open resultatives too should receive such an analysis
- Such an analysis is consistent with the observation that their subject is understood as the object of their verb
- This analysis will play a critical part in delineating the discourse conditions that license the intr-*push open* resultatives

- Assumption: Argument structure preservation
- Resultatives preserve the lexical, i.e. argument-taking, properties of their verb (Carrier & Randall 1992; LRH 1995; Simpson 1983)
- Not a universal assumption (e.g., Hoekstra 1988), but leads to the identification of the unexpected resultatives
- Selected NP resultatives trivially meet this assumption: their (underlying) object is understood as the (underlying) object of the verb in isolation

- The bigger issue: Implications for non-selected NP resultatives
- Manner verbs verbs that independently do not require their object to be expressed (RH&L 1998) – should be – and are – ok in such resultatives

Audrey flipped a mug into the air, caught it by its handle, and poured it full. (L. Greenlaw, Fisherman's bend, Hyperion, 2008, p. 219)

 Change of state verbs, which require their theme to be expressed, should not occur as non-selected NPs do not preserve argument structure

*The toddler broke his parents to distraction.

Two classes of counterexamples to this assumption:

- Non-selected NPs with change of state verbs (Ausensi 2021)
 - With a few slices of her claws, she tore him free. (GBooks; Ausensi 2021: 99, (11a))
 - *She tore him. [what is torn is unexpressed]
- The unexpected resultatives, which involve the apparent 'anticausativization' of verbs that lack anticausative uses in isolation

Interaction with the causative alternation:

- Verbs allowing the alternation should be and are found in both transitive and intransitive resultatives with the result phrase predicated of the object of the transitive and subject of the intransitive
 - The chef froze the ice cream./The ice cream froze.
 - The chef froze the ice cream solid./The ice cream froze solid.
- Transitive only verbs should only be found in transitive resultatives
 - The hunter shot the bear./*The bear shot.
 - The hunter shot the bear dead./*The bear shot dead.

Back to the intr-push open resultatives

The unexpected resultatives are the exception!

The verbs in these resultatives do not show the causative alternation except in the context of the resultative construction

- The customer pushed the door./*The door pushed.
- The customer pushed the door open./The door pushed open.

Refer to this as the 'push open pattern'

- The components of these resultatives are generally drawn from semantically coherent sets of lexical items.
 - The verb
 - The adjective heading the result phrase
 - The subject NP
- Will review each in turn

- Verbs are drawn from two manner verb subclasses:
 - Verbs of exerting force (broadly construed) *fling, jerk, pull, push, shove, tug, wrench, yank*
 - Verbs of contact (primarily hitting subtype but also wiping subtype) *kick, punch, scrape, slam, sweep*

He stopped next to the front stoop and waited. The door flung open immediately. (M. Coel, *The man who fell from the sky*, Berkley, 2015, p. 210) The screen door scraped open and Slim ducked under the doorway as he stepped outside. (M. K. Preston, *Perhaps she'll die*, Worldwide, 2002, p. 66)

Even if a manner verb occurs in transitive resultatives with result phrases headed by adjectives found in the intr-*push open* pattern, it might still disallow this pattern:

• I struggled with the window but it was painted shut. (S. Paretsky, *Burn marks*, Delacorte, 1990, p. 185)

*The window painted shut.

I painted the window./*The window painted

• The owner ... taped the parcel neatly closed. (D. Leon, *The golden egg*, Atlantic Monthly Press, 2013, p. 65.)

*The parcel taped neatly closed.

The owner taped the parcel./*The parcel taped.

- Most of the attested NPs are headed by *door* and nouns denoting related entities, e.g., *window, gate*
- Such nouns have three senses:
 - <u>The barrier sense</u>: an entity that fills (or blocks) an aperture (e.g., The door was taken off its hinges in order to be painted)
 - <u>The aperture sense</u>: an aperture (e.g., Sam climbed in the window)
 - The combined sense (e.g., This room has two doors).
- The barrier sense is exhibited in the intr-*push open* pattern
- One exception is *roots* (see below)

- The adjectives heading the result phrase are a small subset of those found in the resultative construction
 - open, closed, shut
 - *free* (in the sense of 'unattached to'; e.g., *The boat drifted free of the rocks*.)

• Yet the verbs found in the intr-*push open* pattern occur with result phrases headed by other adjectives in the transitive pattern:

My scalp bled from John nearly yanking me bald ... (R. MacPherson, *Family skeletons*, St. Martin's, 1997, p. 175)

*I yanked bald.

She wore a towel turban that pulled firm the skin of her temples and cheeks ... (N. Gordimer, *A sport of nature*, Knopf, 1987, p. 310) *The skin of her temples and cheeks pulled firm.

Semantics of the attested adjectives:

- They describe a state whose instantiation with respect to certain entities requires them to be in a specific spatial configuration with respect to a reference entity
- Thus, attaining the result states characteristic of the intr-*push open* pattern requires bringing about a change in the location of an entity

With respect to *open/closed/shut*:

- When predicated of *door* in the intr-*push open* pattern, the noun is used in its barrier sense:
 - an open door bears a particular spatial configuration with respect to the door frame so it no longer blocks the aperture,
 - a closed or shut door bears a different configuration, one where it blocks the aperture
 - compare these adjectives when predicated of containers, as in an open bottle/jar, where the adjective pertains to the accessibility of the contents

(L&RH 2013; see Levison (1993) on opening containers vs. conduits)

With respect to *free*:

• Roots: Roots that are free from soil are no longer in the soil.

A musty scent rose from the plants as their roots pulled free. (Y. Montgomery, *Scavengers*, Avon, 1990, p. 129)

• Door: Used in the barrier sense, with its frame defining the aperture; a door that is free of its frame is no longer spatially contiguous to it on three sides.

This time, with a protesting squeal, the door scraped free of its frame. (L. Cribb, *The fo'c'sle door*, iUniverse, 2013, p. 24)

- Despite the restrictions, intr-push open resultatives are not 'constructional idioms'
- In the right circumstances, such resultatives can be found more widely
- Occasional examples attested with other manner verb-NP-result phrase:

The poster board smacked flat against my windshield [it had been flapping] ... (S.W. Boneham, *Catwalk*, Midnight Ink, Woodbury, MN, 2014, p. 256)

 Observed restrictions may reflect how common events of opening and closing doors, etc. are

Summary

- The verb is a verb of exerting force or a verb of contact
- The NP is often *door* or a comparable entity understood as a 'barrier'
- The adjective describes a spatially instantiated state, e.g., open, closed, shut, free

Towards an explanation of the restrictions

- The restrictions on components suggest that certain semantic and pragmatic factors license the intr-*push open* pattern
- Will argue that the discourse considerations that license the anticausative variant of the causative alternation are at play
- This requires first showing that the transitive and intransitive *push open* resultatives instantiate the causative alternation, qualifying as the causative and anticausative variant, respectively

- Verbs of contact and verbs of exerting force, as manner verbs, are taken not to be causative in their simple transitive uses (RH&L 1998)
- Verbs of change of state are taken to be causative in their transitive uses, but in their intransitive anticausative uses, they lack an overt causer

- The transitive resultative pattern, whether with a manner or result verbs, is consistently given a causative analysis in the literature (Levin 2020):
 - The action denoted by the verb causes a change into the state denoted by the result phrase
- Support for this claim: The transitive resultative pattern can receive a causative paraphrase like the causative variant of verbs of change of state
- Change of state verb:
 - Sam opened the door. 'Sam's acting caused the door to open'
- Tr(ansitive)-*push open* resultative:
 - Sam pushed the door open. 'Sam's pushing caused the door to open'

- The notion of causation in transitive resultatives is the same as in the causative variant in general: direct causation
- It contrasts with the indirect causation that can be expressed in periphrastic causatives
- Direct causation involves a tight relation between the causing and caused subevents of the larger causative event
 - there are no intervening causes (Bittner 1999; Wolff 2003:4-5)
 - manipulation of the affected entity is often involved (Shibatani 1976: 31)

Sam pushed the door open.

- Sam must come into contact with the door
- Cannot describe an indirect causation scenario:
 - e.g. where Sam pushed a heavy cart, setting it in motion, and the cart then hits a door, causing it to open.

- When a manner verb is in a resultative construction, it represents the causing event of a complex, causative event structure
- The subject of a transitive resultative is expressing the cause of this complex event event though it is also the effector of the causing event
- When the manner verb occurs in isolation its effector argument must be expressed given the conditions that govern its appearance with such verbs
- But in a resultative, as part of the complex event, its appearance should be governed by the conditions that govern the expression of the cause of such complex events

- Discourse considerations affect whether the causative and/or the anticausative variant provides an appropriate description of a caused change of state situation
- That is, whether the cause must be expressed, giving rise to the causative variant
- Choosing a causative alternation variant:

'In the description of a change of state, the cause of the change of state is relevant; therefore, since an utterance which specifies the cause of the change of state is more informative than one which expresses just the change of state, it is to be preferred, all things being equal.' (Rappaport Hovav 2014: 23, (65))

• If the tr-/intr-*push open* pattern exemplifies the causative alternation, expect the same discourse considerations to be at play

- The anticausative variant is the preferred description in two types of situations where 'things are not equal'
 - When the cause is recoverable in context
 - When the speaker does not know the identity of the cause
- As predicted, the intr-push open pattern is used in precisely these situations

- When the cause is recoverable in context
 - Due to the natural course of events
 - The days lengthened as summer approached
 - Due to being established earlier in discourse
 - I leaned against the door and it opened (RH 2014: 75, (72b))
 <u>Note</u>: this example involves a verb that shares its root with the adjective *open*, prevalent
 - in intr-push open resultatives

 Intr-push open resultatives are felicitous when the cause is contextually recoverable:

Their yellowed stalks were sharp against her skin as she tugged them from the dry, cold soil. A musty scent rose from the plants as their roots pulled free. (Y. Montgomery, *Scavengers*, Avon, 1990, p. 129)

... for his third try, he struck the top of the door with the heel of his left hand as he pushed with his right. This time, with a protesting squeal, the door scraped free of its frame. (L. Cribb, *The fo'c'sle door*, iUniverse, 2013, p. 24)

• In the first sentence, an agent is mentioned and described as engaging in an activity that should lead to the change of state described in the intrpush open resultative in the second sentence.

- When the speaker doesn't know the exact cause, yet a cause is inferable
- Instance: an agent hidden from view, yet the situation's unfolding requires an agent's involvement to be inferred
 - The door of Henry's lunchroom opened and two men came in. (McCawley 1978: 246, (1a))
 - <u>Note</u>: The verb in this example also shares its root with the adjective open

The door of Henry's lunchroom opened and two men came in.

- This sentence must be uttered in a context where the speaker cannot see who opened the door
 - i.e. the speaker is in the lunchroom and the men are outside the lunchroom
 - likely the men opened the door, but the speaker cannot know for sure
- This sentence is inappropriate if the lunchroom has glass walls so that a speaker inside could see out and sees two men opening the door
- RH argues that the anticausative variant is used here because the speaker does not know the cause of the change of state

RH's discussion carries over to certain examples of the intr-push open pattern, which involve the same state 'open'

- The door pushed open farther and a man I'd never seen before came walking into my room uninvited. (L. Berenson, *The bark before Christmas*, Kensington, 2015, p. 218)
- As I was closing the refrigerator, the back door pushed open. The Poodles came spilling through first. (L. Berenson, *The dog whisperer*, Kensington, 2014, p. 123)

- These examples are used in contexts comparable to McCawley's: the narrator is inside a room and can't see who is opening the door
- As resultatives, they include a verb specifying how the opening comes about
- The choice of the manner verb *push* makes explicit that the door is opening inward
- It reinforces that the narrator knows that someone must be manipulating the door, i.e. that there is an inferable cause
- Interestingly, there are no *pull* examples, where the deixis is reversed

- The intr-*push open* pattern is chosen under the same discourse conditions as anticausative variants in general
- This pattern includes verbs of exerting force and verbs of contact, verbs that are not typically found in anticausatives
- They are licensed because the situation is being described as a complex, causative event
- The (non-)expression of a cause is governed by the same conditions that govern the appearance of a cause in the causative alternation more generally

- The verb-NP-result phrase combinations observed in the intr-*push open* pattern facilitate the satisfaction of the discourse conditions
- Their verbs are verbs of exerting force or verbs of contact
 - Verbs of exerting force require an argument that is the bearer of the force lexicalized by the verb
 - Verbs of contact require an argument that moves into contact with an entity, and it too must bear some force that sets it in motion in order to make contact

- The force bearer is the subject in intr-*push open* resultatives
- It qualifies as a 'projectile', a moving entity imbued with a force
- Projectiles are considered self-energetic and thus as moving autonomously (Kearns 2000: 241; Levin 2020: 210-211)
- Verbs of contact can be used intransitively in directed motion event descriptions, but only if their themes are capable of autonomous motion, so they too are 'projectiles' (Levin to appear; LRH 2022)

A large wave swept over the deck.

The tennis ball slammed into the net.

- The attested adjectives name result states instantiated via a particular spatial configuration
- The confluence of these properties means:
 - The force bearer can be seen as moving autonomously along a trajectory defined by the result state
 - Although the cause imparts a force to the force bearer, setting it in motion, the cause is not continuously involved throughout the course of the event

- Autonomous motion of the force bearer is necessary for a felicitous use of the intr-push open pattern
- When the cause of the causing event must be continuously involved, so motion is not autonomous, the tr-*push open* pattern is required
 - The owner came back, folded the suit and the jacket, wrapped them in light blue paper, and taped the parcel neatly closed. (D. Leon, *The golden egg*, Atlantic Monthly Press, 2013, p. 65.)

*The parcel taped neatly closed.

 ... I asked my father to nail it [=the root cellar] shut. (E. Hart, A whisper of bones, Minotaur, New York, 2018, p. 106)
 *The root cellar pailed shut

*The root cellar nailed shut.

Concluding remarks

This study should contribute to our understanding of:

- The resultative construction, by presenting an unexplored set of resultatives
- The causative alternation, by showing that certain verbs that generally lack intransitive uses allow them in the context of certain result phrases

Further, it emphasizes how the meanings of lexical items – a lexical property – constrains their distributional properties

Concluding remarks: Implications

- Should revisit proposals that verbs of exerting force and verbs of contact – and possibly other manner verbs – 'lexicalize' an effector argument
- LRH (2022) argue independently that the verb of contact *sweep* does not lexicalize an effector, and the intr-*push open* resultatives suggest that their conclusion may hold more broadly

Thank you!

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