

An Unusual English Resultative Construction¹

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Introduction

One of Simpson's earliest publications, 'Resultatives' (1983), remains a landmark contribution to our understanding of the English resultative construction in which a result state is predicated of a participant in an event, as in (1). For instance, in (1c) the metal ends up flat as a result of being hammered.

- (1) a. I shot John dead. (Simpson, 1983, p. 143, (5a))
- b. I froze icecream solid. (Simpson, 1983, p. 143, (6a))
- c. I hammered the metal flat. (Simpson, 1983, p. 149)

In her paper, Simpson proposes a generalisation regarding the nature of the resultative construction now known as the Direct Object Restriction (DOR), following Levin & Rappaport Hovav (1995, p. 34).² In a nutshell, in all resultative constructions the result phrase is predicated of an object, whether that object is selected by the verb or not. Further, the only examples in which a result phrase is apparently directly predicated of a subject involve passives of transitive verbs and intransitive unaccusative verbs; in both the subject qualifies as an 'underlying' object, a proposal whose instantiation differs across syntactic frameworks. Thus, as Simpson notes, result phrases are set apart from depictive phrases, which can be predicated of subjects of transitive and unergative verbs (e.g., *Kim read (the book) tired*).

The DOR, whose ultimate explanation continues to be a topic of inquiry, has shaped the way researchers have approached and analysed the resultative construction not only in English, but also in other languages. Continuing along this path, in this paper I focus on a class of underexplored English resultative constructions. Perhaps unsurprisingly, such resultative constructions conform to the DOR, thus providing further support for Simpson's generalisation; however, they show some unusual properties when considered in the larger context of the argument realisation of English verbs, and these call for an explanation. This paper simply aims to lay the groundwork for further research that will lead to such an explanation. My specific goals are twofold: first, to set out the basic empirical properties of this class of resultative constructions and second, to show why such resultative constructions pose an argument realisation puzzle, situating them with respect to other argument realisation phenomena that might offer insight into their analysis.

¹ It is a pleasure to dedicate this paper to Jane Simpson, whose work on the resultative construction has served as an inspiration and foundation for the explorations of that construction I have carried out over the years. I am also grateful to Malka Rappaport Hovav, Shiao Wei Tham, and two reviewers for comments on an earlier version of this paper. I thank Bonnie Krejci for help with the formatting.

² Potential counterexamples to the DOR have been raised over the years, with researchers disagreeing as to whether they are actual or apparent counterexamples; see, among others, Mateu (2005), Matushansky et al. (2012), Rappaport Hovav & Levin (2001), and Wechsler (1997). Nevertheless, the vast majority of resultative constructions uncontroversially conform to the DOR.

The next section introduces this class of resultative constructions in the context of one of Simpson's original observations about English resultative constructions. In the section entitled 'Properties of the intransitive *push open* pattern' I introduce the basic properties that characterise these resultative constructions. In the section entitled 'The intransitive *push open* pattern as an anticausative construction' I situate these constructions within the larger context of English argument realisation phenomena by drawing parallels between this resultative pattern and the anticausative variant of the causative alternation. The last section offers a brief conclusion.

The intransitive *push open* resultative pattern introduced

At the outset of her paper, Simpson (1983, p. 143) observes that members of two paradigmatic semantic classes of verbs are found in resultative constructions: verbs of contact such as *beat*, *kick*³, and *punch*, as in (2), and verbs of change of state such as *break*, *freeze*, and *melt*, as in (3).⁴

- (2) a. I shot John dead. (Simpson, 1983, p. 143, (5a))
b. I shot/kicked/punched/beat John to death. (Simpson, 1983, p. 143, (5b))
- (3) a. I froze the icecream solid. (Simpson, 1983, p. 143, (6a))
b. I melted the butter to a liquid. (Simpson, 1983, p. 143, (7a))

Indeed, verbs from these two classes are well represented in my collection of naturally occurring English resultative constructions.

The resultative constructions in (2) and (3) exemplify what I refer to as the transitive pattern since they include a postverbal noun phrase; further, the result phrase is predicated of this noun phrase. In these instances (but not all instances),⁵ this noun phrase is also understood as the object of the verb in isolation (e.g., *I froze the icecream*). Although both verbs of change of state and verbs of contact are found in the transitive resultative pattern, Simpson notes that only those constructions with verbs of change of state have intransitive counterparts, as in (4).

- (4) a. I froze the icecream solid. (Simpson, 1983, p. 143, (6a))
b. The icecream froze solid. (Simpson, 1983, p. 143, (6b))

In the intransitive resultative pattern exemplified in (4), there is no postverbal noun phrase and the result phrase is predicated directly of the subject. The hallmark of this pattern with

³ Although *kick* often figures on lists of verbs of contact, its most basic meaning simply involves the movement of an animate entity's leg in a particular manner. The leg need not come into contact with a second entity, though it often does; hence, its characterisation as a verb of contact. See also Rappaport Hovav & Levin (2008, p. 135, note 6).

⁴ Simpson's (2b) and (3b) have result phrases that are prepositional phrases; in what follows, I focus on result phrases that are adjective phrases.

⁵ Considerable prior research on the resultative construction has investigated instances of the transitive pattern where the postverbal noun phrase is not selected by the verb, as in *The guests drank the teapot dry*, where *teapot* is not a possible object of the verb *dry* (e.g., **The guests drank the teapot*); however, the result phrases in the constructions of interest in this paper are predicated of selected noun phrases. I leave aside the suggestion made in some prior work that all resultative constructions should be analysed as involving nonselected noun phrases (Hoekstra, 1988).

a verb of change of state is that its subject bears the same semantic role as the object of the corresponding transitive pattern: both are understood as the entity that changes state. Thus, the result phrase is consistently predicated of the argument that changes state. This commonality in semantic role can be captured if the intransitive pattern receives an unaccusative analysis and its subject is taken to be an underlying object; thus, such data are used by Simpson to argue for the DOR. This analysis receives support since subjects of intransitive verbs from other semantic classes cannot have result phrases predicated directly of their subjects, as in **The aspiring diva sang hoarse*; rather, the result phrase must be mediated by a reflexive pronoun object, as Simpson (1983, p. 145) notes, consonant with the DOR, as in *The aspiring diva sang herself hoarse*.

Verbs of change of state are independently known to show intransitive uses whose subject has the same semantic role as the object of the corresponding transitive use even in the absence of a result phrase, as illustrated in (5).

- (5) a. I froze the icecream.
b. The icecream froze.

In these pairs, the transitive use means roughly ‘cause to VERB-intransitive’ and relatedly the subject of the transitive use is understood as the causer of the event; the intransitive use lacks an overt argument corresponding to this causer argument. This observation is the basis for proposing that these verbs show the so-called causative alternation (Levin & Rappaport Hovav, 1995; Schäfer, 2009). I refer to the transitive use as the causative variant and the intransitive as the anticausative variant. In fact, the members of the transitive/intransitive resultative pair in (4) also show this causative relation: the transitive means roughly ‘cause the ice cream to freeze solid’ and again the transitive includes a causer argument which its intransitive counterpart lacks.

In contrast, verbs of contact do not participate in the causative alternation (Fillmore, 1970; Levin, 2015), as shown in (6); that is, the intransitive sentence (6b) cannot be understood with the ogre as the recipient of the blow.

- (6) a. The monster hit/punched the ogre.
b. *The ogre hit/punched.

In fact, in his much cited study of verbs of contact and verbs of change of state, Fillmore (1970) takes this difference as a key reason to give verbs of these two types distinct semantic representations. He analyses verbs of contact as requiring an agent or instrument argument (e.g., *The vandals/The rock hit the window*), while verbs of change of state only optionally take such arguments.

This observation brings me to the unexpected resultative constructions that are the topic of this paper. Despite Simpson’s observation, in reviewing the many resultative examples I have collected over the years, I have found a small number of intransitive resultative constructions with verbs of contact that are comparable to those with verbs of change of state, as in (7)–(9).

- (7) As he seized her, the door **punched open** and two more men leaped into the room. (Stockbridge, G. (1941). The devil's paymaster. *The Spider*, 23(4), p. 16. Wildside Press. books.google.com/books?isbn=0809550849)
- (8) The door of Taylor's cabin **slammed open** and she hurtled through it. (Rust, M. M. (2000). *Coffin corner*, p. 126. Berkley.)
- (9) Thinking of this, I grabbed a hammer and gave the valve-stem a solid smack. The valve **slammed shut**, stripping its threads. (Kittredge, M. (1970). *Murder in Mendocino*, p. 14. Worldwide.)

That is, as in resultative constructions such as *The icecream froze solid*, these examples lack a postverbal noun phrase and the result phrase is predicated directly of the subject of the verb; further, the subject bears the same semantic relation to the verb as the object of the corresponding transitive resultative does. For instance, in (7) the door receives the punch, just as it does in the comparable transitive resultative *Two more men punched the door open*. Comparable examples are attested with verbs of exerting force such as *pull*, *push*, and *yank*, as in (10)–(12). For instance, in (12), a force is exerted on a door, just as it is in the comparable transitive resultative *The boy yanked the front door open wider*.

- (10) A musty scent rose from the plants as their roots **pulled free**. (Montgomery, Y. (1990). *Scavengers*, p. 129. Avon.)
- (11) The door **pushed open farther** and a man I'd never seen before came walking into my room uninvited. (Berenson, L. (2015). *The bark before Christmas*, p. 218. Kensington.)
- (12) The front door **yanked open wider**. 'Hello,' said a round-faced boy with Lara's same blue eyes and grave half-smile. (Waterhouse, J. (1997). *Shadow walk*, p. 33. G. P. Putnam's.)

Yet verbs of exerting force, like verbs of contact, do not participate in the causative alternation in the absence of a result phrase, as shown (13).

- (13) a. The boy pulled/tugged/yanked the door.
- b. *The door pulled/tugged/yanked.

Given the semantic relation of the subject to the verb in what I will now refer to as the intransitive *push open* pattern, it seems reasonable that this pattern too should receive an unaccusative analysis just as intransitive resultative constructions with verbs of change of state do. The subject, then, is an underlying object; thus, these resultatives too conform to Simpson's generalisation.

The puzzle posed by the intransitive *push open* pattern, rather, is why can verbs that typically cannot be used intransitively with their subject understood as the object of the corresponding transitive be used in this way in the presence of certain result phrases? Or drawing on Fillmore's analysis of these verbs we can reframe the question: why is it that verbs that apparently require an agent, instrument, or other 'effector' argument to use Van

Valin & Wilkins' (1996) term⁶ be found without this argument in the intransitive *push open* pattern? This puzzle cannot be ignored. Although I only have a limited number of examples in my collection, some web-searching suggests that further instances of this pattern are quite robustly attested with the same or semantically similar verb-noun phrase-result phrase combinations. Yet as far as I know the intransitive *push open* pattern has not been remarked on in the literature on the English resultative construction.

Although I do not try to solve this puzzle in this paper, I take some initial steps towards a solution. First, I survey the properties of the components of the intransitive *push open* pattern in the next section. Then, in the section after that I suggest that it could be fruitful to consider this pattern in the context of the causative alternation by showing further parallels between this pattern and the anticausative variant. In the conclusion I underscore the importance of studying this pattern: its properties suggest it can contribute to our understanding of argument realisation, agentivity, and causation more generally.

Properties of the intransitive *push open* pattern

As a step towards better understanding the intransitive *push open* pattern, I introduce several critical properties of the examples instantiating this pattern. As the examples provided so far hint and as I now show, the components of this pattern—the verbs, result phrases, and noun phrases attested in it—each seem to be drawn from semantically coherent sets.

First, as noted in the previous section, such resultatives are found with verbs drawn from specific semantic classes, which figure among the classes of verbs not typically said to participate in the causative alternation. Surveying my collection of naturally occurring resultatives, most common are verbs of exerting force, as in (14), including the verb *fling*, a verb of throwing, which could be subsumed in this class if it is broadly construed.⁷

(14) fling, jerk, pull, push, shove, tug, wrench, yank

(15) He stopped next to the front stoop and waited. The door **flung open** immediately. Ruth stood in the opening ... (Coel, M. (2015). *The man who fell from the sky*, p. 210. Berkley.)

As also noted, some verbs of contact are attested, as in (16); these are primarily verbs of hitting, but also the verbs *scrape* and *sweep*, which belong to the wiping subtype of verbs of contact rather than the hitting subtype illustrated in earlier examples; see Levin (1993, 2017) on this distinction.⁸

⁶ Van Valin & Wilkins (1996) propose this term to encompass not only animate arguments that are involved in bringing about events, but the broader set of arguments that participate in an event in this way including certain instruments, autonomously operating machines, natural forces, and other causers. The term is similar in scope to Ramchand's (2008) 'initiator' and Wolff et al.'s (2010) 'force creator'.

⁷ A reviewer suggested adding *blow* to the list of verbs of exerting force, but in its basic meaning this verb simply lexicalises motion of an air current (e.g., *The wind blew*); that is, it describes a one-participant event.

⁸ A reviewer suggests that the verbs found in the intransitive *push open* pattern might receive a narrower characterisation as verbs of shutting and opening, although perhaps manner of opening and shutting would be more accurate as these are not verbs of change of state. I believe such a characterisation is not appropriate since many of the verbs in (14) and (16) do not prototypically describe actions whose purpose is opening or closing something; consider *scrape* and *sweep*. See also note 9.

- (16) kick, punch, scrape, slam, sweep
- (17) The screen door **scraped open** and Slim ducked under the doorway as he stepped outside. (Preston, M. K. (2002). *Perhaps she'll die*, p. 66. Worldwide.)

There is further reason to believe that the semantic class of the verb—and thus something about the semantics of the verbs themselves—matters. There are many transitive verbs that like verbs of contact and verbs of exerting force do not participate in the causative alternation, but that appear not to be found in the intransitive *push open* pattern. Even if such verbs can appear in the transitive pattern with the same result phrases as attested in instances of the *push open* pattern, that in itself does not guarantee that they can be found in the intransitive *push open* pattern. Consider the verbs *paint* and *tape*, as in (18) and (19).

- (18) a. I struggled with the window but it was **painted shut**. (Paretsky, S. (1990). *Burn marks*, p. 185. Delacorte Press.)
 b. *The window painted shut.
 c. I painted the window./*The window painted.
- (19) a. The owner came back, folded the suit and the jacket, wrapped them in light blue paper, and **taped** the parcel **neatly closed**. (Leon, D. (2013). *The golden egg*, p. 65. Atlantic Monthly Press.)
 b. *The parcel taped neatly closed.
 c. The owner taped the parcel./*The parcel taped.

Second, the noun phrases attested in this pattern are most often headed by *door*, with some exceptions, as in (10), with the noun phrase *roots*. The noun *door* and related nouns such as *window* and *gate* deserve some comment: they can refer to an entity that fills (or blocks) an aperture (e.g., *The door was taken off its hinges in order to be painted*), to the aperture (e.g., *Sam climbed in the window*), or to the two together (e.g., *This room has two doors*). As I discuss further below, in the intransitive *push open* pattern the noun *door* is used to refer to the entity filling the aperture; I refer to this as the noun's 'barrier' sense.

Further, the adjectives heading the result phrase also constitute a limited set. The most frequently attested are *open*, *closed*, and *shut*, but so is *free* (in the sense of 'unattached to', e.g., *The duck swam free of the rocks*). Thus, they constitute a small subset of the adjectives found in the resultative construction; see Kramer (2022) and Wechsler (2005), among others, for discussion. This limitation is particularly striking given that the verbs found in the intransitive *push open* pattern are attested with result phrases headed by a wider range of adjectives when found in the transitive resultative pattern.

- (20) a. My scalp bled from John nearly **yanking** me **bald** ... (MacPherson, R. (1997). *Family skeletons*, p. 175. St. Martin's.)
 b. *I yanked bald.
- (21) a. She wore a towel turban that **pulled firm** the skin of her temples and cheeks ... (Gordimer, N. (1987) *A sport of nature*, p. 310. Knopf.)
 b. *The skin of her temples and cheeks pulled firm.
- (22) a. For dessert we ate the peanut butter, **scraping** the sides of the jar **clean**. (Nović, S. (2015). *Girl at war*, p. 315. Random House.)
 b. *The sides of the jar scraped clean.

The attested adjectives, like all adjectives found in result phrases, describe a state of an entity. However, the states in the intransitive *push open* pattern stand out. They are states whose instantiation with respect to certain entities requires the entity to be in a particular spatial configuration with respect to what might be termed a reference entity. When roots are free from soil as in (10), they are no longer in the soil. In (23), the larger context makes clear that *the door* is being used in the barrier sense, with its frame defining the aperture. Here when the door (i.e. barrier) is free of its frame, it is no longer spatially contiguous to it on all four sides.

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

Let me turn next to the adjectives *free*, *open*, *closed*, and *shut*. When predicated of the noun *door* in the intransitive *push open* pattern, the noun is being used in its barrier sense: an open door bears a particular spatial configuration with respect to the door frame, while a closed or shut door bears a different configuration. As noted in Levin & Rappaport Hovav (2013) opening a door, window, or gate means moving it so that it is no longer blocking the aperture (see Levison (1993) on opening containers vs. conduits). Thus, attaining the result states characteristic of the intransitive *push open* pattern requires bringing about a change in the location of an entity.

These observations about the semantics of the verbs, result phrases, and noun phrases found in the intransitive *push open* pattern will have to be factored into any account of this pattern.⁹ They suggest that a particular constellation of semantic factors play a part in licensing it.

The intransitive *push open* pattern as an anticausative construction

Fillmore (1970) observes that verbs of contact must appear with an agent or instrument argument, and he posits a semantic role analysis that reifies this requirement by making an agent or instrument an obligatory argument; this requirement prevents these verbs from showing the causative alternation. Rappaport Hovav & Levin (1998) propose predicate decompositions for these verbs in terms of a primitive predicate ACT, which instantiates the same requirement, and their analysis is refined in Levin (2017). The same expectation holds of verbs of exerting force, as they fall into the larger class of manner verbs, which Rappaport Hovav & Levin (1998, 2010) and Levin (2015, 2017) tie this property to. Manner verbs lexically specify a manner of carrying out an action, contrasting with result verbs, among

⁹ The restricted sets of verbs, noun phrases, and result phrases described in this section might suggest that the intransitive *push open* pattern is a constructional idiom. However, the constraints on this pattern may not be as rigid as the discussion in this section suggests. I have found a very few examples of the intransitive resultative pattern with other manner verbs—the larger semantic class that subsumes verbs of contact and verbs of exerting force (Rappaport Hovav & Levin, 2010)—and these involve other noun phrases and adjectives, as in *The glazed wood wiped clear, but a print from the heel of her palm left a faint oval on the paint near the door, even after a scrubbing.* (Kelly, N. (2002). *Hot pursuit*, p. 162. Poisoned Pen Press.). This suggests that given the right confluence of circumstances, the intransitive *push open* pattern might be found more broadly. The properties that I have taken to characterise the pattern may in part reflect how common events of opening and closing doors are compared to other events that may allow for a comparable event description. I leave this issue for further investigation.

them verbs of change of state, which specify a change of state or location (Rappaport Hovav & Levin, 2010). Many manner verbs describe actions that might be used to bring about particular results, but they do not lexicalise the results; however, when a manner verb such as a verb of contact occurs in the resultative construction, then the result phrase overtly specifies the result.

As noted in the previous section, from this perspective the existence of the intransitive *push open* pattern poses a puzzle since certain verbs that apparently require an effector argument can occur without this argument in this resultative pattern. As a step towards a full account of why this resultative pattern allows the absence of this argument, in this section I reinforce the parallel drawn in the previous section between the intransitive *push open* resultative pattern and the transitive pattern with the same verb-result phrase combinations—henceforth, the transitive *push open* pattern—and the causative alternation with verbs of change of state.

The semantic analysis of verbs of contact and verbs of exerting force posited by Fillmore and Rappaport Hovav & Levin take the simple transitive uses of these verbs not to be causative, unlike the simple transitive uses of verbs of change of state. As discussed in the previous section, transitive uses of verbs of change of state are taken to be causative, contrasting with their intransitive uses—the anticausative variant of the causative alternation—which lacks an overt causer argument and are taken not to be causative.¹⁰ As also discussed there, the transitive resultative pattern can also be given a causative paraphrase, and in fact, this pattern is consistently given a causative analysis in the literature: the verb denotes an action that causes a change into the state denoted by the result phrase. However, the intransitive *push open* resultative pattern lacks a causer and as suggested in the previous section, it can be seen as the anticausative variant of the transitive resultative construction with the same verb-result state combination. In fact, the situations described in the intransitive *push open* resultative pattern can be described using a pure change of state description involving the verb related to the adjective. That is, a situation that can be described as *The door yanked open* can also be described as *The door opened*. The same holds with their transitive counterparts: a situation that can be described as *The thug yanked the door open* can also be described as *The thug opened the door*.

Not only does the availability of a causative paraphrase differentiate between the members of a transitive and intransitive *push open* resultative pair just as it differentiates between the causative alternation variants with verbs of change of state, but the notion of causation involved is the same as in the causative alternation. As much discussed, the type of causation instantiated in the causative variant is what is called direct causation, contrasting with the indirect causation that can be expressed in periphrastic causatives. Direct causation involves a tight relation between the causing and caused event characterised by a lack of intervening causes (Bittner, 1999; Wolff, 2003, pp. 4–5), often involving the causer manipulating the affected entity (cf. Shibatani's (1976, p. 31) 'manipulative' causation). Interestingly, not only is the transitive resultative pattern given a causative analysis, but it

¹⁰ There is an ongoing controversy as to whether the anticausative variant should receive some form of causative analysis; see Schäfer (2009, Section 3) for an overview of proposed analyses and their motivation. What matters here is the existence of parallels between the *push open* pattern and the causative alternation.

too has been shown to involve direct causation (Bittner, 1999; Kratzer, 2005, pp. 196–197; Levin, 2020).

Thus, when verbs of contact or exerting force are found in the transitive *push open* pattern, the meaning conveyed is precisely the type of meaning that would be expected to have an anticausative counterpart—the meaning conveyed in the intransitive *push open* pattern. However, not all change of state situations can be described by both the causative and anticausative variant with the relevant verb of change of state; certain discourse conditions must be met to ensure the felicity of a variant. If the relation between the transitive and intransitive *push open* patterns is a form of causative alternation, then we might expect the same discourse conditions to be at play in choosing between them. As I now show, this is indeed so.

One of the most detailed discussions of the pragmatic conditions that license a felicitous use of the anticausative variant is provided in Rappaport Hovav (2014), and I draw on it here. Rappaport Hovav notes that for a given verb of change of state both the causative and anticausative variants are possible descriptions of certain situations. According to her, in general the causative variant is preferred as a description of a change of state, as stated here:

- (24) 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, p. 23, (65))

Rappaport Hovav then discusses two types of situations where ‘things are not equal’ so that the anticausative variant provides the preferred description: when the cause is recoverable in context or when the speaker does not know the identity of the cause. I now show that the intransitive *push open* pattern is used in precisely the same circumstances, while elaborating on Rappaport Hovav’s discussion.

First, I consider situations where the cause is recoverable in context. Rappaport Hovav proposes that these are of two types. In some situations, the cause is identifiable given what the discourse participants know about the natural course of events; thus, the felicitous anticausative variant *The days lengthened as summer approached*. In other situations, the cause may have been established earlier in the discourse; in such situations the anticausative variant is also felicitous, as Rappaport Hovav illustrates with *I leaned against the door and it opened* (2014, p. 25, (72b)). Rappaport Hovav’s example involves the verb *open*, whose corresponding adjective is prevalent in the intransitive *push open* pattern. I propose that the intransitive *push open* examples (10) and (23), repeated here with preceding context as (25) and (26), are felicitous for the same reason.

- (25) 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**. (Montgomery, Y. (1990). *Scavengers*, p. 129. Avon.)

- (26) ... 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. (Cribb, L. (2013) *The fo'c'sle door*, p. 24. iUniverse.)

In these examples the agent is mentioned in the first sentence and described as engaging in an activity that is likely to lead to the change of state described in the intransitive *push open* pattern in the second sentence.

Next, let me turn to the other type of situation that according to Rappaport Hovav can be felicitously described using an anticausative: situations where the speaker does not know the exact cause, but where a cause is clearly present. For instance, a relevant situation may involve an agent who is hidden from view, yet its unfolding requires an agent's involvement. In making this point, Rappaport Hovav refers to an example discussed in McCawley (1978, pp. 246–248), repeated in (27), which has the verb *open* in the anticausative variant.

- (27) The door of Henry's lunchroom opened and two men came in. (McCawley, 1978, p. 246, (1a))

As McCawley notes, this sentence must be uttered in a context where the speaker cannot see who opened the door, e.g., the speaker is in the lunchroom and the men are outside the lunchroom. In this context, it is likely that the two men opened the door, but the speaker cannot know this for sure. As McCawley adds, (27) would no longer be an appropriate description if the lunchroom has glass walls so that a speaker inside the room could see what is happening outside of it and saw two men opening the door. Drawing on McCawley's observation, Rappaport Hovav argues that the anticausative variant in (27) is used because the speaker does not know the cause of the change of state.

Interestingly, Rappaport Hovav illustrates this option too with the verb *open*, and her discussion carries over directly to certain examples of the intransitive *push open* pattern, such as (11), repeated as (28), and (29).

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

These examples are being used in precisely the same type of context as McCawley's example (27): the narrator is inside a room and cannot see who is opening the door. The only difference is that they include a verb describing how the opening came about. In fact, the use of the verb *push* in these examples, which makes explicit that the door is opening inward, reinforces that the narrator is unable to see who is opening the door, but knows that someone who is not visible must be manipulating it.

In summary, this section has underscored the parallels between the causative alternation and the transitive and intransitive *push open* patterns. Verbs of exerting force and verbs of contact are found in the intransitive *push open* pattern under the precise discourse conditions that allow verbs of change of state to be found in the anticausative variant. The question that arises for future research is how the conditions that allow for the absence of an agent or other cause in the anticausative variant come into play in the verb-result phrase combinations that characterise the intransitive *push open* pattern.

Let me briefly point to a further property of this pattern that may bear on this question. Besides undergoing a change of state, the subject of the intransitive *push open* pattern is also a ‘projectile’, a moving entity imbued with a force that qualifies it as self-energetic (Kearns, 2000, p. 241; Levin, 2020, pp. 210–211); thus, it is effector-like, as also noted by a reviewer. This same property holds of the subjects of verbs of contact when they occur in directed motion event descriptions, as in *A large wave swept over the deck*, which also feature intransitive uses of these verbs (Levin & Rappaport Hovav, 2022).

Conclusion

As the data explored in this paper show, the Direct Object Restriction introduced in Simpson’s landmark 1983 paper on the English resultative construction continues to be relevant to discussions of this construction. The understudied English resultatives examined in this paper conform to this restriction, and further involve what she identifies as one of two paradigm classes of verbs found in this construction, verbs of contact, as well as a closely related set of verbs, verbs of exerting force. I hope that by expanding the landscape of data that come under the DOR this study will serve as another stepping stone towards a fuller understanding of the resultative construction. Moving beyond the resultative construction, the ability to use verbs that generally lack intransitive uses intransitively in the context of certain result phrases should also contribute to our understanding of the causative alternation, as such data have not figured in the causative alternation literature either.¹¹ Finally, these data suggest that the semantic analysis of verbs of contact and verbs of exerting force, if not manner verbs more generally, must be revisited. Is it appropriate to posit that these verbs ‘lexicalise’ an effector argument as so often assumed when this argument need not be realised in certain resultatives? Levin & Rappaport Hovav (2022) have recently argued for independent reasons that the verb of contact *sweep* does not lexicalise an effector, and the intransitive *push open* resultative construction suggests that their conclusion may extend more broadly.

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¹¹ A reviewer points out that the verb of contact *slam* is found in the causative alternation, as in *Sam slammed the door/The door slammed*, where the door is most often understood as closing rather than opening. My intuition is that *slam* is only used intransitively when its subject is a door or other barrier; thus, this ‘bare’ intransitive has the same interpretation as the intransitive resultative *The door slammed shut* and most likely is licensed for the same reason as this resultative. I also believe that the strong preference for a closing interpretation over an opening interpretation will be shown to stem from these licensing conditions.

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