

Causative alternation:

*She hit the glass_x with her forehead. **It_x cracked** and fell away from the center*
(<http://corpus.byu.edu/coca/x4.asp?t=4041008&ID=511642844>) (indices mine)

*Every time **the wrapped-up rock broke glass**, Gem's toes curled in his boots.*
(<http://corpus.byu.edu/coca/x4.asp?t=1034857&ID=359823107>)

*The marchers stopped at the British and U.S. embassies to hurl rocks, with a great roar rising whenever a **rock broke glass**.*
(<http://corpus.byu.edu/coca/x4.asp?t=3043155&ID=196090962>)

*The **glass balls shattered** as they hit the floor, doorframe, and ground outside*
(<http://corpus.byu.edu/coca/x4.asp?t=4162290&ID=755196225>)

*Her exhausted voice shook, but she gave me all the details of Lia's accident. That the car had rolled on the highway and **hit** a **tree**, that Lia had been crushed but not killed, that in the hospital they'd operated.*
(<http://corpus.byu.edu/coca/x4.asp?t=4161436&ID=770451729>)

*Slamming the bottle down, he whooped and **slapped the table**.*
(<http://corpus.byu.edu/coca/x4.asp?t=4162719&ID=756826461>)

*A person **kicked** a **door** of an acquaintance's vehicle, damaging it.*
(<http://corpus.byu.edu/coca/x4.asp?t=4114639&ID=678784663>)

Compare:

The car had rolled on the highway and shattered
The car had rolled on the highway and shattered a tree
He shattered
He shattered the table
A person shattered
A person shattered a door

But:

*The car had rolled on the highway and hit
*He slapped
*A person kicked

Stative availability:

*I saw a house on Vashon Island where the whole foundation **was cracked by blackberry vines** (<http://corpus.byu.edu/coca/x4.asp?t=4161586&ID=765298095>)*

Where the blackberry vines are responsible for the cracking of the foundation. Compare this to a modified version:

*I saw a house on Vashon Island where the whole foundation **was cracked.***

Where the cracking action was undertaken by no known entity; this tells us more about the state of the foundation rather than who put it in such a state. Crack, here, is a characteristic of the foundation

*The bride told authorities she **was slapped** and choked during the altercation, the Lewiston Tribune reports.*
(<http://corpus.byu.edu/coca/x4.asp?t=4078886&ID=528563528>)

It is difficult or impossible to retrieve a stative reading here; it is assumed the bride was slapped and choked by an entity, not that she is in the state of being slapped and choked.

Compare these two sentences:

1. I saw a house on Vashon Island where the whole foundation **was cracked.**
2. The bride told authorities she **was slapped**

Where (1) can be read as stative—being cracked is a property of this foundation. However, it is difficult or impossible to read (2) as stative—being slapped is not some property of the bride, but rather something that has happened to the bride.

Body part alternation:

*With her luck, she'd merely **break a leg** and lie sprawled half-naked across the street for all of Delhi to see. (<http://corpus.byu.edu/coca/x4.asp?t=4090459&ID=645007829>)*

*Honora whirls around and **slaps** Pauline on the **cheek**.
(<http://corpus.byu.edu/coca/x4.asp?t=1050183&ID=426030945>)*

*He **slaps** Weener on the **arm**
(<http://corpus.byu.edu/coca/x4.asp?t=1050252&ID=427165797>)*

But consider:

*He **breaks** Weener on the **arm**

Object-instrument:

***With skilled fingers he would fold the paper** around the weed and bring it up to his tongue to lick it shut.* (<http://corpus.byu.edu/coca/x4.asp?t=4162249&ID=754938853>)
(He would fold the paper with skilled fingers)

*And now she has lifted a chair_x -- it's heavy but she's very strong -- and she raises it and turns on Paul, and it's high above her head, and PAUL realizes that this might be it, she might **shatter him with it_x**, crunch his skull -- and that's just what she seems she's about to do -- and then she swings it, not against him but against the wall, and it shatters and she's panting from the effort as she turns on him again, her voice surprisingly soft.*
(<http://corpus.byu.edu/coca/x4.asp?t=1050029&ID=423185556>) (indices mine)

*He **hits** them **with** a broom.*
(<http://corpus.byu.edu/coca/x4.asp?t=4121910&ID=665987025>)

*He **hits O'Briant with a gun**, taking his jacket and car.*
(<http://corpus.byu.edu/coca/x4.asp?t=4132896&ID=722530600>)

Notice that omission of some crucial participants of each sentence forces a change in the syntax:

He hits O'Briant with a gun
*Hits O'Briant with a gun
A gun hits O'Briant. (Perhaps guns fell from a cargo aircraft)
*Hits with a gun
*A gun hits
A gun shatters

Again diagnostic:

*"BAD! You're bad!" When he reaches to **hit again**, Rex cringes, tail between the legs and eyes tightly closed. (<http://corpus.byu.edu/coca/x4.asp?t=1005814&ID=396811520>)*

Roger has hit Rex once, just recently, and aims to hit Rex again as part of a repetitive series of hits.

*The CIA, claiming national security, had censored most of the information, except for one startling fact that **would shatter the Olson family again**. (<http://corpus.byu.edu/coca/x4.asp?t=228511&ID=585814695>)*

The Olson family was once shattered. The CIA has information that would return them to this shattered state.

It could also be read as the Olson family being shattered an additional time in a series of shatterings, but it is much harder to arrive to this reading.

A habitual reading may be more obvious here (while still maintaining a clear restitutive meaning as well):

*It can mend a broken heart, this life, and then **shatter it all over again**, in a million and one different ways and twice that many pieces. (<http://corpus.byu.edu/coca/x4.asp?t=4120926&ID=662271619>)*