Статьи

Haspelmath, 1993 — *More on the typology of inchoative/causative verb alternations*

Haspelmath, 2016 — Universals of causative and anticausative verb formation and the spontaneity scale

An inchoative*/causative verb pair is defined semantically: it is a pair of verbs which express the same basic situation (generally a change of state, more rarely a going-on) and differ only in that the <u>causative verb meaning includes an agent</u> participant who causes the situation, whereas the inchoative verb meaning <u>excludes a causing agent</u> and presents the situation as <u>occurring spontaneously</u>.

*Термин условный, позднее Хаспельмат от него отказывается и использует более общий 'noncausal'

Haspelmath, 1993; Падучева 2001

inchoative member The of an inchoative/causative verb pair is semantically similar to the passive of the causative *(the stick*) was broken), but it crucially differs from it in that the agent is not just unexpressed; rather, the situation is conceived of as occurring without an agent, spontaneously. This does not mean that there cannot be an agent in the objective situation. In (4a), the melting process is presumably caused by the same factors as in (4b), but only in (4a) is it conceptualized as occurring spontaneously.

(4) a. (inchoative) The snowman melted.

b. (causative) The sun melted the snowman.

- (1) a. John broke the window 'Джон разбил окно';
 - б. The window broke 'окно разбилось';
- (2) a. John opened the door 'Джон открыл дверь';
 - б. The door opened 'дверь открылась'.

У декаузатива, как и у пассива, объект исходного употребления становится субъектом — переходит в позицию подлежащего. Но судьба бывшего субъекта у пассива и декаузатива разная: глагол, переведенный в пассивную форму, по-прежнему понимается как агентивный, т. е. среди участников обозначаемой им ситуации есть целеполагающий каузатор — Агенс; а декаузативы broke, opened в (16), (26) обозначают ситуацию, в которой нет целеполагающего Агенса. Так что таксономическая категория глагола в декаузативном употреблении — это не действие, а происшествие (термин «происшествие» — перевод англ. happening из [Wierzbicka 1980], предложенный в [Булыгина 1982]; см. также [Падучева 1996: 103]).

Inchoative VS Middle Voice

As shown in (5), both cut verbs and break verbs participate in the middle. The difference between inchoative and middle forms is that **inchoatives**, unlike middles, **may refer to individual events under specific time reference**, and do not introduce a cause or agent of these events into the discourse representation.

(5) a. The vase breaks/cracks/shatters easily.b. The bread cuts/cubes/slices easily.

Direction of semantic derivation is not matched by a uniform direction of formal derivation: central claim of this solution is that the kind of meaning that is relevant for diagrammatic iconicity is <u>conceptual meaning</u>, <u>not objective</u> **meaning**. **Objectively**, the meaning 'melt (tr.)' may be more complex than and derived from the meaning 'melt (intr.)', but <u>conceptually</u>, the relation between the two meanings could be quite different (cf. Lakoff (1987) for the distinction between objective and conceptual meaning).

If the semantic properties of a word are only the objective semantic features discovered by semantic decomposition (as, for instance, in Mel'cuk 1967), then eausatives are always semantically more complex than inchoatives and the existence of or even preference for anticausatives is a mystery. But iconicity in language is based on conceptual meaning, and the correlation between formal and semantic basic-derived (or markedness) relationships should be understood in cognitive terms, as in Givón's (1991:106) principle:

(24) Categories that are **cognitively** marked tend also to be **structurally** marked.

Verbs like 'break', 'burn', 'melt', 'roll', 'open', typically occur in such alternations (cf. examples (2)-(ll)), but verbs like 'work', 'dance', 'cut', 'build', 'criticize', 'sleep', never do.

The basic situation must be <u>a change of state</u> or <u>a going-on</u>. This excludes three large classes of situations. First, a state cannot be the inchoative member of an inchoative/causative alternation. Second, an action that does not express a change of state (e.g. 'help', 'invite', 'cite', 'criticize', 'read') cannot be the causative member of such an alternation. Third, agentive intransitive verbs like 'talk', 'dance', 'work', etc. cannot be the inchoative member of an inchoative/causative pair because they are not conceived of as <u>occurring spontaneously</u>. This still leaves us with a large class of transitive verbs such as 'wash', 'build', 'cut', 'dig', 'paint', etc., which do express a change of state.

Absence of **agent-oriented meaning components**: since the inchoative member implies the absence of an agent, <u>it cannot contain agent-oriented semantic elements</u>.

'cut' (='by means of a sharp instrument') VS 'tear (tr.)'

- (11) a. The girl tore her pants.b. The pants tore.
- (12) a. The tailor cut the cloth.
 b. *The cloth cut.⁸

- (13) a. 'wash': agent-oriented meaning element 'by means of soap and/or washing instruments' no inchoative alternant possible
 - b. 'clean (tr.)': no agent-oriented meaning element
 alternation: e.g. Russian očiščat' 'clean (tr.)' anticausative
 očiščat'-sja 'become clean'
- (14) a. 'execute': agent-oriented meaning element 'sanctioned by the regime'

no inchoative alternant possible

- b. 'kill': no agent-oriented meaning element alternation: e.g. Lezgian (labile verb) q'in 'kill'/'die'
- (15) a. 'tie': agent-oriented meaning element 'by wrapping with strings, etc.'
 - no inchoative alternant possible (Gothic bindan 'tie' / anticausative *bund-nan)
 - b. 'untie': no agent-oriented meaning element alternation: e.g. Gothic andbindan 'untie' / anticausative andbund-nan 'become loose'

Guerssel et al. (1985) (see also Hale and Keyser 1987) argue that the syntactic differences between break-type and cut-type verbs derive from their **semantic representations** (their lexical conceptual structure; henceforth, LCS), as illustrated for break and cut in (6)–(7):

(6) break LCS: y comes to be broken

(7) cut LCS: x produces "cut" on y, by sharp edge coming into contact with y

Break verbs are semantically monadic, encoding a state change event without attributing a cause to it. On this account, the inchoative reading is basic; the causative reading is the result of a productive rule that introduces a (generic) causal event whose participant is linked to subject. Cut verbs, in contrast, are semantically dyadic—they lexicalize causal impact on a theme as the result of contact between the theme and some instrument or body part. This type of LCS blocks inchoative readings, but licenses conative alternations.

On Guerssel et al.'s account, the conative reading comes about when the cut component is removed from the main clause of the LCS and inserted into a purposive clause; the main clause is replaced by a motion description. The result is (7'):

(7') cut Conative LCS: x causes sharp edge to move along path toward y, in order to produce cut on y, by sharp edge coming into contact with y

Guerssel et al.'s account of the syntactic properties of cut and break verbs hinges critically on the assumption that break verbs, unlike cut verbs, are semantically monadic. But this assumption is far from uncontroversial. Levin and Rappaport Hovav (1995) assume that the causative form of break verbs is the basic form in English; the inchoative form is derived by an A-structure operation. If A-structure alternations in the narrow sense are viewed as polysemy patterns, as in the present article (in line with, e.g., Cruse 1986: 74–76; Jackendo. 2002: 339–342), it is not obvious that either direction of derivation is privileged. Either sense may arise as a metonymic extension of the other. And Haspelmath (1993) shows that both directions are found in A-structure derivations in the languages of the world: some languages have unaccusative break verbs that causativize; others have base-transitive break verbs that anticausativize. Once it is acknowledged that break verbs may be just as dyadic as cut verbs, Guerssel et al.'s explanation for why the former, but not the latter, produce inchoative forms can no longer be maintained.

An alternative account of the A-structure properties of C&B verbs, which rests on two basic principles of the lexiconsyntax interface, stated in (8)–(9):

(8) Morpholexical Transparency: productive A-structure alternations that relate two lexemes in a semantically transparent fashion can add or delete generic, but not specific, subevent representations from the event structure of the verb.

(9) Complete Linking: a well-formed syntactic projection from a verb lexeme requires all thematic relations spelled out in the verb's semantics to be linked to arguments or obliques specified in the verb's A-structure, unless they are blocked from linking by voice operations.

Principles (8)–(9) predict the possibility of A-structure alternations that relate a lexeme meaning 'cause to become broken' to one meaning 'become broken' (while barring a lexeme with the meaning, say, 'cause to become rich' from being transparently related to a lexeme meaning 'cause to become broken'). The <u>causal subevent of break verbs can be removed</u> by A-structure alternations because it is semantically generic (similarly Levin and Rappaport Hovav 1995: 107, 242; Pinker 1989: 106, 198). There is any number of conceivable ways in which one can break, shatter, tear, or split something—<u>no particular manner of action and no use of a particular kind of instrument, or indeed any instrument at all, is entailed.</u>

Cut verbs, too, are rather flexible about the action performed and the instrument used. What sets cut verbs apart is the notion of contact between the theme and some kind of instrument (including an Agent's body part). <u>Cut</u> verbs specify some property of the instrument or of the way it is used* (cf. Koenig et al., forthc.; e.g., cut, slice, hack and saw entail use of some blade-like object, whereas bore, puncture, and prick entail use of a pointy object). A particular result state may or may not be specified as well; this seems to motivate the distinction between cut verbs (sensu stricto), which undergo the conative alternation in English, and carve verbs (e.g., carve, slice, cube, grind), which do not (Levin 1993: 156–158)—the latter are the ones with specific result states.

* VS break-verbs <u>no particular manner of action and no use of a particular kind of instrument, or indeed any</u> <u>instrument at all, is entailed.</u>

The fact that carve verbs, which specify clear result states, do not appear in conative clauses, whereas **cut verbs** sensu stricto do, strongly suggests that the latter **are not semantically specific on the change the theme undergoes**. As Levin and Rappaport Hovav (1995: 103) argue, <u>what blocks cut verbs from producing transparently related inchoative lexemes is the impossibility of referring, however implicitly, to an instrument without referring to a cause (Keyser and Roeper 1984). It is this same impossibility that prevents inchoative forms of break verbs from combining with instrument phrases (though not with causal adjuncts):</u>

(10) The cup cracked/broke/shattered (*with a hammer/stone/kick).

Since cut verbs entail the involvement of an instrument in the event, reference to the cause of the event cannot be suppressed, and thus the verb is blocked from producing transparently related inchoative forms.

Cut verbs (sensu stricto, i.e., not carve verbs) cannot appear in conative constructions because they specify only a generic result. For instance, a cut can vary from mere incision in the theme's surface all the way to separation of the theme into two parts. In line with (8), this lack of specificity licenses <u>deletion of</u> the state change event and theme from the semantic representation. The theme is then reintroduced as a goal, since its presence is still required by the contact component. The result is the conative construction. Break verbs, of course, are barred by (8) from producing conative variants, since they cannot be transparently related to lexical items that do not encode a specific state change.

i) Across languages, C&B verbs fall into two semantic classes: those that specify use of a particular kind of instrument and a generic state change (cut verbs) and those that specify a particular kind of change or a particular type of theme argument, but are nonspecific regarding instruments involved (break verbs).

ii) Across languages, break verbs may (but need not) occur in transparently related causative and inchoative lexemes, whereas cut verbs never produce transparently related inchoatives. Cut verbs, in turn, may (but need not) occur in transparently related causative and conative lexemes, while break verbs do not produce transparently related conatives.

(iii) Four of the languages—Biak, German, Mandarin, and Yukatek— have complex predicates **that are semantically specific on both the properties of an instrument used in the action (or the manner in which it is used) and the state change inflicted on the theme. These bipolar verbs represent a third type, distinct from both the cut- and the break-type.** In line with the principles of Morpholexical Transparency (8) and Complete Linking (9), bipolar verbs are inert regarding A-structure alternations: since both the causal and the resulting subevent representations are specific, neither can be removed from the meaning of a transparently related stem. This inertness can be illustrated with the English carve verbs, which are simplex bipolar verbs. Carve verbs undergo neither the conative (11b) nor the causative-inchoative alternation (11c):

- (11) *a. Carole carved the stone.*
 - b. *Carole carved at the stone.
 - c. *The stone carved. (Levin 1993: 158)

Bipolar verbs make a bipartition of the C&B domain in cut and break A-structure classes impossible in those languages in which they occur, refuting prediction (ii). At the same time, their failure to participate in A-structure alternations offers another source of support for the validity of the crosslinguistic generalizations (8)–(9).

тип глагола	спецификация инструмента	=> возможность non-causal	спецификация change of state?	=> возможность conative (неудачной попытки)
CUT	+	нельзя	-	можно
BREAK	-	можно	+	нельзя
CARVE	+	нельзя	+	нельзя

Филатов Андрей 18:27 Сегодня

=> неубираемость агенса из ситуации

Voice VS Anticausative

Many languages have polysemous constructions that encompass both anticausative and middle-voice or passive-like interpretations. Since the latter interpretations occur with both cut- and break-type verbs, such constructions can make it difficult to test hypothesis (ii) that only break verbs have transparently related inchoative lexemes.

Let us assume that <u>anticausative derivations produce inchoative stems from causative bases by removing the causal subevent from the base's</u> meaning, whereas middle voices merely block linking of the causal subevent's participant:

- Anticausative derivations satisfy (9) by removing the causal subevent from the semantics of the verb. The result is a derived inchoative stem that encodes the state change lexicalized in the base without expressing the cause of this event. The principle of Morpholexical Transparency(8) restricts this process to break verbs: break verbs encode a semantically generic causal subevent that can be removed by a semantically transparent A-structure-changing derivation, whereas cut verbs encode a semantically specific causal subevent that cannot be deleted without loss of Morpholexical Transparency.

- **Middle voice operations** satisfy (9) by <u>blocking the linking of the agent role</u>. The result is a verb form that presents the event as caused, but leaves the agent unspecified. Since voice operations do not change the semantics or A-structure of the verb, they are not restricted to break verbs.

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Spanish has a form—the pseudoreflexive— that has **both anticausative and middle-voice functions**. **This form also has a passive function**. As the predictions of (i) and (ii) specify, the anticausative interpretation of the pseudo-reflexive is restricted to break verbs such as *romper* 'break' (18). The pseudo-reflexives of cut verbs like *serrar* 'saw' cannot receive an anticausative interpretation; instead, they require a middle (19a) or a passive (19b) reading (cf. Maldonado 1992):

(18)Spanish La taza se rompió. broke the cup **REFL** 'The cup broke/was broken.' (anticausative or passive) (19) Spanish de éste árbol se sierran fácilmente. a. Las ramas the branches of this tree easily REFL saw 'The branches of this tree saw (off) easily.' (middle) b. La rama serró. se the branch REFL sawed 'The branch was sawed.' (passive)

'decapitate': no agent-oriented meaning components

no inchoative alternant ->

inchoative alternation: <u>no agent-oriented meaning components</u> + <u>spontaneity</u>

A verb meaning that refers to a change of state or a going-on may appear in an inchoative/causative alternation unless the verb contains agent-oriented meaning components or other highly specific meaning components that make the spontaneous occurrence of the event extremely unlikely.

VS

Three main types of inchoative/causative verb pairs:

Causative: the inchoative verb is basic and the causative verb is derived. The causative verb may be marked by an affix (6a), by a causative auxiliary (6b), or by stem modification (6c).

(6)	a.	Georgian	duy-s	'cook (intr.)
			a-duy-ebs	'cook (tr.)'
	b.	French	fondre	'melt (intr.)'
			faire fondre	'melt (tr.)'
	c.	Arabic	darasa	'learn'
			darrasa	'teach'

Anticausative: the causative verb is basic and the inchoative verb is derived (hence the term *anticausative*, which was coined in Nedjalkov and Sil'nickij 1969). The anticausative may be marked by an affix (7a), by an anticausative auxiliary (7b), or by stem modification (7c).

(7)	a.	Russian	katat'-sja	'roll (intr.)'
			katat'	'roll (tr.)'
	b.	Lezgian	xkaž <i>x̂un</i>	'rise'
			xkažun	'raise'
	c.	Hindi-Urdu	khul-naa	'open (intr.)
			khol-naa	'open (tr.)'

This alternation is particularly regular in verbs that are derived from adjectives. For example, every German factitive derivation can form an **anticausative** with the particle *sich*, and every Russian factitive derivation can form an anticausative in *-sja*.

(17) German adjectives, factitives, and anticausatives

j	flüssig	'liquid':	verflüssigen sich verflüssigen	'make liquid' 'become liquid'
	anders	'different':	verändern sich verändern	'change (tr.)' 'change (intr.)'
	voll	'full':	füllen sich füllen	'fill (tr.)'
	stark	'strong':	verstärken sich verstärken	'reinforce' 'become strong'
(18)	lučšij	'better':	ulučšiť ulučšiť -sja	'improve (tr.)' 'improve (intr.)'
	vysokij	'high':	povysiť povysiť -sia	'raise'
	širokij	'wide':	rasširit' rasširit'-sja	'widen (tr.)' 'widen (intr.)'

MWA

La čik§ēx Sal_anna corsa, ičber. (Hanne) Don't sit on this chair, it is broken.

Hanna ḥabla ikțe, *škōl_iḥrēna.* (Abu Šādi, Abū Šaḥīn, Ḥanne) This rope is torn, take another one.

Hanna korsa ičle. (Abū Šahīn; Hanne) This bag is ripped.

Hanna xūza minəčbar, ŭ hōc_cuppoyta ču minčabra. (Abu Šādi, Obəs_Sarcis) This teapot is breakable, while this glass is not breakable.

Non-directed alternations (or oppositions):

Equipollent alternations: both are derived from the same stem which expresses the basic situation, by means of different affixes (8a), different auxiliary verbs (8b), or different stem modifications (8c).

a.	Japanese	atum-aru atum-eru	'gather (intr.)' 'gather (tr.)'
b.	Hindi-Urdu	šuruu honaa	'begin (intr.)'
		šuruu karnaa	'begin (tr.)'
c.	Lithuanian ⁶	lūžti	'break (intr.)'
		laužti	'break (tr.)'

Suppletive alternations: different verb roots are used

(9)	Russian	goret'	'burn (intr.)'
		žeč'	'burn (tr.)'

Labile alternations: the same verb is used both in the inchoative and in the causative sense

(10) Modern Greek svíno

(8)

1. 'go out'

2. 'extinguish'

The main criteria for identifying the basic stem:

- <u>phonological markedness</u> Arabic: *darasa* 'learn' / *darrasa* 'teach'
- <u>direction of neutralization</u> Arabic:

CaCaCa (e.g. darasa), CaCiCa (e.g. rakiba 'ride' / rak-kaba 'make ride'), and CaCuCa (e.g. sarufa 'be noble') > CaCCaCa (II) Hindi-Urdu:

phir-naa/pher-naa 'turn (intr.)/(tr.)', pit-naa 'take a licking' / piit-naa 'beat up'

• <u>criterion of productivity</u>

Arabic: ** *CaCCaCa* -> *CaCVCa*

MWA

iqtel VS inəqtal

iqtel – equipollent (?)

inəqtal – anticausative (?)

	total	Α	С	Е	L	S	A/C	% non-dir
Russian	31	23	0	5	0	3	46.00	26
German	31	14.5	0	4	11.5	1	29.00	53
Greek	31	13.5	0	0	16.5	1	27.00	56
Rumanian	30	24	1	0	3	2	24.00	17
French	31	20.50	2	0	7.5	1	10.25	27
Lithuanian	31	17.5	6	6	0.5	1	2.92	24
Hebrew	31	20.5	7.5	2	1	0	2.73	10
Arabic	31	17	8.5	3	1	1.5	2.00	18
Georgian	31	9	4.5	15.5	0	2	2.00	56
Armenian	31	16	8.5	5.5	0 ·	1	1.88	21
Swahili	31	11	11	8	0	1	1.00	29
Finnish	28	12	13.5	0.5	0.5	1.5	0.88	9
Udmurt	31	10.5	12.5	4.5	2.5	1	0.84	26
Hungarian	31	7	9	12	0	3	0.78	48
Lezgian	31	8	12	6	5	0	0.66	35
Hindi-Urdu	31	7.5	14	7.5	2	0	0.54	31
Turkish	30	9	17.5	2.5	0	1	0.51	12
Mongolian	31	6	22	2	0	1	0.27	10
Indonesian	31	0	14	17	0	0	0.04	55
English	31	2	0	1	25	3		94
Japanese	31	3.5	5.5	20.5	0.5	1		71
total	636	243	164.5	128.5	69	310		

Abbreviations:

A = anticausative alternation

C = causative alternation

E = equipollent alternation

L = labile alternation

S = suppletive alternation

A/C = ratio of anticausative to causative pairs

% non-dir. = percentage of non-directed pairs

Table 4. Expression types by verb pairs

	total	Α	С	Е	L	S	A/C
18. 'boil'	21	0.5	11.5	3	6	0	0.04
25. 'freeze'	21	2	12	3	4	0	0.17
29. 'dry'	20	3	10	4	3	0	0.30
1. 'wake up'	21	3	9	6	2	1	0.33
20. 'go out/put out'	21	3	7.5	5.5	3	2	0.41
11. 'sink'	21	4	9.5	5.5	1.5	0.5	0.42
8. 'learn/teach'	21	3.5	7.5	6	2	3	0.47
13. 'melt'	21	5	10.5	3	2.5	0	0.48
31. 'stop'	21	5.5	9	3.5	3	0	0.61
23. 'turn'	21	8	7.5	4	1.5	0	1.07
26. 'dissolve'	21	10.5	7.5	2	1	0	1.40
3. 'burn'	21	7	5	2	5	2	1.40
14. 'destroy'	20	8.5	5.5	5	1	0	1.55
27. 'fill'	21	8	5	5	3	0	1.60
22. 'finish'	21	7.5	4.5	5	4	0	1.67
7. 'begin'	19	5	3	3	8	0	1.67
10. 'spread'	21	11	6	3	1	0	1.83
24. 'roll'	21	8.5	4.5	5	3	0	1.89
16. 'develop'	21	10	5	5	1	0	2.00
15. 'get lost/lose'	21	11.5	4.5	4.5	0	0.5	2.56
21. 'rise/raise'	21	12	4.5	3.5	0	1	2.67
28. 'improve'	21	8.5	3	8	1.5	0	2.67
19. 'rock'	21	12	40	3.5	1.5	0	3.00
17. 'connect'	21	15	2.5	1.5	1	1	6.00
12. 'change'	21	11	1.5	4.5	4	0	7.33
9. 'gather'	21	15	2	3	1	0	7.50
5. 'open'	21	13	1.5	4	2.5	0	8.67
2. 'break'	21	12.5	1	4	3.5	0	12.50
6. 'close'	21	15.5	1	2.5	2	0	15.50
30. 'split'	20	11.5	0.5	5	3	0	23.00
4. 'die/kill'	21	0	3	1	1	16	
total	636	243	164.5	128.5	69	31	

Table 5. Expression types by verb pairs (Nedjalkov 1969)

	total	Α	С	Е	L	S	others	A/C
'laugh/make laugh'	60	0	54	6	0	0	0	0
'boil'	60	2	36	5	9	7	1	0.05
'burn'	60	8	19	5	14	14	0	0.42
'break'	60	22	9	8	19	0	2	2.44
total	240	32	118	17	42	21	3	0.27

MWA

ičbar ~ yičbur ~ č \bar{o} bar ~ ičber 'to break (tr); ičbar ~ yičbar ~ č \bar{o} bar ~ ičber 'to break (intr)

 $iktas \sim yiktus \sim kotas \sim iktes$ 'to cut, tear (tr); $iktas \sim yiktas \sim kotas \sim iktes$ 'to cut, tear (intr)

ičleh ~ yičluh ~ čolah ~ ičleh 'to tear (tr); ičlah ~ yičlah ~ čolah ~ ičleh 'to tear (intr)

ifrat ~ yifrut ~ foret ~ ifret 'to dismantle'; ifrat ~ yifrut ~ foret ~ ifret 'to fall apart'

ifşal ~ yifşul ~ fōşel ~ ifşel 'to separate, divide, cut off (tr); ifşal ~ yifşal ~ fōşel ~ ifşel 'to cut off, disconnect (intr)

iġraḥ ~ yiġruḥ ~ ġōraḥ ~ iġreḥ 'to hurt (tr)'; iġraḥ ~ yiġraḥ ~ ġōraḥ ~ iġreḥ 'to get hurt (intr)'

iḥrab ~ yiḥrub ~ ḥōreb ~ iḥreb 'to destroy (tr)'; iḥrab/iḥreb ~ yiḥrab ~ ḥōreb ~ iḥreb 'to break down, be ruined'

 $if\underline{t}ah \sim yif\underline{t}uh \sim f\overline{o}\underline{t}ah \sim if\underline{t}eh$ 'to open (tr)'; $if\underline{t}ah \sim yif\underline{t}ah \sim f\overline{o}\underline{t}ah \sim if\underline{t}eh$ 'to open (intr); become sighted'

A factor favoring the anticausative expression type is the **probability of an outside force bringing about the event**. Conversely, the **causative expression type is favored if the event is quite likely to happen even if no outside force is present**.

Events such as freezing, drying, sinking, going out, and melting occur commonly in nature around us and do not need an agentive instigator.

On the other hand, events such as splitting, breaking, closing, opening, gathering and connecting are typical of the kinds of things that human beings do. In both cases, the correlation is only typical, not necessary.

Direction of derivation: spontaneous vs. caused events



 sk^{c} (B \overline{G} auch mit s) [مقع] II sakka^c, ysakka^c (1) auskühlen, abkühlen, kalt werden (etwas) - subj. 3 pl. B mahhćilli ta ysakka^c sie nehmen (die Milch vom Feuer) herunter, damit sie abkühlt I 39.44; (2) |B| kalt werden (jd-m); frieren (intr.) - prät. 1 sg sákka^cit ana es wurde mir kalt I 56.18 - perf. 2 sg. m. ćsikke^C? ist dir kalt geworden? frierst du?

 $IV \ M \ G$ $aṣka^c$, $yaṣka^c$ kalt werden (jd-m); frieren (intr.); erfrieren - prät. 3 sg. m M $aṣka^c$ hann askra die Armee fror III 99.50 - prät. 1 sg. G $aṣk^c it$ II 57.42 - prät. 3 pl. M $aṣka^c$ III 99.57 - präs. 3 pl. m. ^cammaṣk^cin III 99.51; G mas^ək^cin II 40.38 484

uns zurück II 64.11 - ipt. sg. m. mit suff. 3 sg. f. B $kuş^{\partial}rna!$ laß von ihr ab! I 68.20 - perf. 3 sg. m. kaşşer M III 91.19 - perf. 3 pl. c. B kişşīrinCORRELL 1969 IX,20

kuşşur kurz, klein (Person) - M wakča kuşşur kurze Zeit III 52.19; i ib wa kuşşur wenn er klein(er) gewesen wäre II 18.28 - m. sg. det. kuşşöra M SP 355 - f. sg. indet. M kuşşör IV 15.5 - pl. m. indet. kuşşūrin i 11 22.15

akşar el. kürzer

ksr

- kşt² kaşra [≺ مصر > صرi ≺ اat. castrum] (1) Burg, Schloß, Palast M IV 4.317; B I 84.13; G II 69.18 - cstr. M kaşril malka Königsschloß IV 4. 314 - pl. kaşrō; (2) Zimmer im Obergeschoß [cf. BARTH. 8. 661] M PS 71,29
- kşş [قص, jüd.-pal. γ٤٦, cf. قص, I M akaş, yikkuş, B Ğ ikkas, yukkuş (1) abschneiden, beschneiden, (Bäume) fällen - prät. 3 sg. f. mit doppelt. suff. M kasslalla liššona sie schnitt ihr die Zunge ab PS 4,7 - ipt. sg. m. B koss I 88.190 - mit suff. 3 sg. f. M kussa IV 55.2 - präs. 3 sg. m. mit suff. 3 sg. f. B kaşeşla I 32.11 - präs. 1 sg. f. G nkaşşol lanna xlosa ich schneide die Nachgeburt ab II 6.11 - präs. 3 pl. c. B kossin I 32.4 - präs. 2 pl. c. mit doppelt. suff. ćkaşşlilli rayši ihr schneidet ihm seinen Kopf ab I 88.185 - präs. 1 pl. m mit suff. 3 sg. f. M nkassilla ca felka wir schneiden sie in zwei Hälften PS 50,28 - mit

suff. 3 pl. c. B nkassillun I 35.10; (2) (Haare) schneiden - prät. 3 sg. m. mit doppelt. suff. M kasslele sacre er schnitt ihm sein Haar III 49.28 präs. 3 sg. f. kaşşõs sa^cra sie schneidet ihr Haar ST 3.2.1,3; (3) scheren (Schafe) - prät. 3 pl. m. mit suff. 3 pl. m. M kassunnun III 23.7 - subj. 3 sg. m. B vukkus I 39.21 - subj. 1 pl. mit suff. 3 pl. f. G nkuşşennen II 8.1 präs. 3 sg. m. B köses I 39.23 - mit suff. 3 sg. f. M kasesla III 23.4 präs. 1 pl. m. B nkassitt tarša wir scheren die Herde I 39.20; nkassill camrun miclen wir scheren ihnen die Wolle I 49.11; (4) zuschneiden, zurechtschneiden - präs. 1 sg. f. Ğ nkaşşōl lān dahōta ich schneide die Ärmel (beim Nähen) zu II 7.5; (5) formen, zurechtbiegen - präs. 3 pl. m. mit suff. 3 sg. m. G hanna kassille hattato xsūsav l-na^cla die Schmiede formen es speziell als Hufeisen II 28.3

IV ökeş, yökeş zuschneiden lassen, schneidern lassen - präs. 3 pl. m. *makişşîl baţlöţun* sie lassen sich ihre Anzüge schneidern NAK. 2.7,16 (dort irrt. maksīl)

 I_7 inkas, yinkas geteilt werden, aufgeteilt werden, entfallen - \square inkas Ca xull ahhad hammes emCa riyāl es entfielen auf jeden 500 Rial I 60.144

ikses abgeschnitten, zugeschnitten, geformt M PS 4,8; G II 28.2 kassa As (im Kartenspiel)

Universals of causative and anticausative verb formation and the spontaneity scale

In simplified terms, the basic generalization is that:

- **causative coding**, especially analytic coding, of a verb pair is more likely when the noncausal verb's meaning is **on the higher end** (the left-hand part) of the scale,
- **anticausative coding** is more likely when the noncausal verb's meaning is **on the lower end** (the right-hand part) of the scale
- **basic** (non-derived) **verbs** (with either a causal or a noncausal meaning) are most likely to occur **in the middle** of the scale.

(2) the spontaneity scale

transitive	>	unergative	>	automatic	>	costly >	agentful
('cut')		('talk')		('freeze (intr.)')		('break (intr.)')	('be cut')

<----- more causatives

In simplified terms, the basic generalization is that:

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(2) the spontaneity scale				intran	sitive		
transitive ('cut')	>	unergative ('talk')	>	automatic ('freeze (intr.)')	>	costly > ('break (intr.)')	agentful ('be cut')
< more	e causat	ives				more anticausat	ives>

In simplified terms, the basic generalization is that:

- **causative coding**, especially analytic coding, of a verb pair is more likely when the noncausal verb's meaning is **on the higher end** (the left-hand part) of the scale,
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- **basic** (non-derived) **verbs** (with either a causal or a noncausal meaning) are most likely to occur **in the middle** of the scale.



- **Transitive:** an agent impinges directly on a patient, especially in a physical way.
- Unergative: agentive intransitive, (typically volitional) human actions that are not directed specifically at another participant and that have no inherent limit.
- Unaccusative: intransitive verbs with non-agentive meanings implying changes of state, typically of inanimate participants
 - **automatic:** a process that is easily construed as occurring on its own, without any external energy input
 - **costly:** a process that does not so easily occur on its own, but typically involves some energy input ("cost")
- Agentful: (potential) verb meanings that refer to processes such as 'be cut', 'be washed', 'be beaten' which are quite difficult to construe as occurring on their own, without an agent, because of agent-oriented manner components in their meaning (i.e. they seem to require reference to an agent in their definition).

Table 1: Five types of verb meanings on the spontaneity scale: Some examples

Transitive	These	Unacci	isative	Agentful
(most spontane- ous)	Unergative	Automatic	Costly	ous)
<pre>'cut', 'wash', 'throw', 'eat', 'hit', 'see'</pre>	'talk', 'dance', 'walk', 'play', 'work', 'scream'	'melt', 'freeze', 'dry', 'wake up', 'sink', 'go out (fire)'	<pre>'break (intr.)', 'split (intr.)', 'open (intr.)', 'close (intr.)', 'change (intr.)', 'gather (intr.)'</pre>	'be cut', 'be washed', 'be thrown', 'be eaten', 'be hit', 'be seen'

(3)		basic	verb
		(noncausa	al meaning)
a.	Turkish	öl-	'die'
b.	Japanese	kawak-u	'dry (intr.)'
c.	Lithuanian	deg-ti	'burn (intr.)'

(4)		basic verb
		(causal meaning)
a.	Russian	otkryt' 'open (tr.)'
b.	Hebrew	picel 'split (tr.)'
c.	Swahili	vunj-a 'break (tr.)'

a. b.

C.

causative ver	b (with special coding)
(causa	l meaning)
öl-dür-	'kill' (= 'make die')
kawak-as-u	'dry (tr.)' (= 'make dry')
deg-in-ti	'burn (tr.)' (= 'make burn')

anticausative verb (with special coding) (noncausal meaning) otkryt'-sja 'open (intr.)' *hit-pacel* 'split (intr.)' vunj-ik-a 'break (intr.)'

The term **noncausal** comprises what has sometimes been called "inchoative", but it is used in a much broader sense here, for any verb meaning that contrasts with a **causal** verb meaning and lacks its 'cause' component.

Thus, *break* (intr.) is **noncausal** when compared to *break* (something), but *break something* is **noncausal** when compared to *make someone break something*.

For verb pairs that make no formal difference between the causal and the noncausal use (e.g. *break*), the term **labile** is used.

	CAUSAL	NONCAUSAL
transitive	'make cut'	'cut'
unergative	'make talk'	'talk'
automatic	'make freeze'	'freeze'
costly	'break (tr.)'	'break (intr)'
agentful	'cut'	'be cut'

(2) the spontaneity scale

transitive	>	unergative	>	automatic	>	costly >	agentful
('cut')		('talk')		('freeze (intr.)')		('break (intr.)')	('be cut')

<----- more causatives

- Universal 1: the higher the noncausal meaning of a causal-noncausal pair is on the spontaneity scale, the longer and the more analytic any causative marker on the causal verb form will be.
- Universal 2: the lower the noncausal meaning of a causal-noncausal pair is on the spontaneity scale, the longer and the more analytic any anticausative marker on the noncausal verb form will be.

(2) the spontaneity scale

transitive>unergative>automatic>costly >agentful('cut')('talk')('freeze (intr.)')('break (intr.)')('be cut')

<----- more causatives

- (7)a. (causative pair) English
 - b. (causative pair) Japanese
 - (causative pair) C. Japanese
 - d. (labile pair) English
 - e. (anticausative pair) Russian
 - (anticausative pair) f. Lezgian

basic causal xkaž-un 'raise'

analytic causative (anaC) basic noncausal believe

long causative (lgC) 'make s.o. run' 'run'

short causative (shC) kawak-as-'dry (tr.)'

make s.o. believe

hasir-ase-

basic causal break (tr.)

basic causal otkryt' 'open (tr.)'

basic noncausal hasir-

basic noncausal kawak-'dry (intr.)'

basic noncausal break (intr.)

anticausative (A) otkryt'-sja 'open (intr.)'

analytic anticausative (anaA) xkaž *x̂un* 'rise'

Given these six categories,⁶ we can say that the causative-anticausative coding scale in (8a) roughly corresponds to the spontaneity scale in (8b).

- (8) a. anaC > lgC > shC > labile > A > anaA
 - b. transitive > unergative > automatic > costly > agentful (= 2)

Labile pairs are generally used for automatic and costly meanings (e.g. *melt* (tr./intr.), *split* (tr./intr.)), and analytic **anticausatives** are mostly used for agentful meanings (e.g. *be cut, be eaten*).

These universals **are special cases** of the primary Universals 1 and 2, using the less abstract comparative concepts of (7a-f):

Universal 3: If an analytic causative can be used with base verbs of some type, it can be used with base verbs of all types higher on the spontaneity scale.

Universal 4: If a synthetic causative can be used with base verbs of some type, analytic causatives will not be required with base verbs lower on the spontaneity scale.

Universal 5: If an analytic anticausative can be used with base verbs of some type, it can be used with base verbs of all types lower on the spontaneity scale.

transitive	>	unergative	>	automatic	>	costly >	agentful
('cut')		('talk')		('freeze (intr.)')		('break (intr.)')	('be cut')

<----- more causatives

Universal 6: If a language has synthetic causatives of transitive verbs, it also has synthetic causatives of intransitive verbs.

- (12) a. *ašak ool-du ette-en* old.man boy-ACC hit-PST 'The old man hit the boy.'
 - b. *Bajïr ašak-ka ool-du ette-t-ken* Bajyr old.man-DAT boy-ACC hit-CAUS-PST 'Bajyr made the old man hit the boy.'
- (11) a. *ool doŋ-gan* boy freeze-pst 'The boy froze.'
 - b. *ašak ool-du doŋ-ur-gan* old.man boy-ACC freeze-CAUS-PST 'The old man made the boy freeze.'

transitive	>	unergative	>	automatic	>	costly >	agentful
('cut')		('talk')		('freeze (intr.)')		('break (intr.)')	('be cut')

<----- more causatives

Universal 6: If a language has synthetic causatives of transitive verbs, it also has synthetic causatives of intransitive verbs.

Table 2: Synthetic causatives: Some language types (C = synthetic causative, anaC = analytic causative)

	Transitive	Intransitive
Tuvan	С	С
Indonesian	(anaC)	C
(unattested)	С	anaC

transitive	>	unergative	>	automatic	>	costly >	agentful
('cut')		('talk')		('freeze (intr.)')		('break (intr.)')	('be cut')

<----- more causatives

transitive ('cut')

Universal 7: If a language has synthetic causatives based on unergative verbs, it also has synthetic causal verbs corresponding to unaccusative noncausal verbs.

> Table 3: Synthetic causatives: Some language types (C = synthetic causative, anaC = analytic causative)

			Transitive ('cut')	Unergative ('talk')	Unaccusative ('freeze; break')
		Tuvan	С	С	С
		Indonesian	(anaC)	C	С
		O'odham	(anaC)	(anaC)	С
		(unattested)	anaC	С	anaC
		(unattested)	С	С	anaC
		(unattested)	С	anaC	С
transitive ('cut')	>	unergative > ('talk')	automatic ('freeze (intr.)')	<pre>> costly > ('break (intr.)')</pre>	agentful) ('be cut')
< more	e causa	tives		more anticaus	satives>

Long and short causative markers:

- (22) Georgian: a-X-eb- vs. a-X-ineb- (Nedjalkov & Sil'nickij 1969)
 a. duy- 'boil (intr.)' a-duy-eb-s 'boils (tr.)'
 b. c'er- 'write' a-c'er-ineb-s 'makes s.o. write'
- Malayalam (Dravidian): -CC vs. -(pp)ikk- (Asher & Kumari 1997: 276-277)
 a. muruk-'be tight' murukk- 'tighten'
 b. koll- 'kill' koll-ikk- 'make s.o. kill'
- (24) Guaraní: m(b)o- vs. -uka (Velázquez-Castillo 2002)
 a. ngakua 'be big' mo-ngakua 'make big'
 b. mopoti 'clean (tr.)' mopoti-uka 'make s.o. clean s.th.'

Universal 8: If a language has several causative markers of different lengths, then the longer markers tend to be used with transitive bases, and the shorter markers tend to be used with intransitive bases.

Length of the markers

In another type of language, the choice between the two markers is conditioned by the distinction between unergatives and unaccusatives. Examples are given in (28)-(31), where the (a) examples have an unaccusative base, and the (b) examples have an unergative base.¹⁴

- (28) Halkomelem (Suttles 2004: 234-237)
 a. mé? 'come off' mé?-x 'take off'
 b. ?íməx 'walk' ?íməx-stəx" 'make s.o. walk'
- (29) Japanese (Shibatanai & Pardeshi 2002: §2.1)
 a. kawak- 'dry (intr.)' kawak-as- 'dry (tr.)'
 b. hasir- 'run' hasir-ase- 'make s.o. run'
- (30) Amharic: a- vs. as- (Amberber 2000: §3.1)
 a. k'əllət'ə 'melt (intr.)' a-k'əllət'ə 'melt (tr.)'
 b. č'əffərə 'dance' as-č'əffərə 'make s.o. dance'

Universal 9: If a language has several causative markers of different lengths, then the longer markers tend to be used with unergative bases, and the shorter marker tend to be used with unaccusative bases.

Table 4: Synthetic causatives: Some language types (shC = short synthetic causative, lgC = long synthetic causative)

	Transitive ('cut')	Unergative ('talk')	Unaccusative ('freeze; break')
Tuvan	С	С	С
Indonesian	(anaC)	C	С
O'odham	(anaC)	(anaC)	С
Georgian	lgC	shC	shC
Halkomelem	lgC	lgC	shC
(unattested)	shC	lgC	anaC
(unattested)	lgC	anaC	shC
(unattested)	anaC	shC	lgC

Universals 6'-7': If a language has an analytic and a synthetic causative, then the analytic causative tends to be used with transitive/unergative base meanings, and the synthetic causative with intransitive/unaccusative verb meanings, respectively.

This universal shows that Universals 8 and 9 are very similar to Universals 6 and 7, and all follow from Universals 1 and 2.

The other side

Automatic noncausal verbs are more likely to have a causative counterpart, while costly noncausal verbs are more likely to be anticausatives, with a causal basic verb as their counterpart.

(36)	au	tomatic ve	erb meanings	noncausal	causal
	a.	'melt'	French Arabic Hindi-Urdu	fondre saaħa pighal-	faire fondre sayyaħa pighl-aa-
(37)	co	stly verb 1	neanings	noncausal (anticausative verbs)	causal (basic verbs)
	a.	'break'	Armenian Hebrew	jard-v-el ni-šbar	jard-el šavar
			Japanese	war-e-ru	war-u
	b.	'open'	Arabic Finnish	in-fataħa ava-utu-a	fataħa ava-ta

Prominence

Different languages have different propensities for using causatives or anticausatives.

Languages like Russian, which are anticausative-prominent, tend to have anticausatives also for automatic verb meanings (e.g. rasplavit'-sja 'melt (intr.)').

And languages like Indonesian, which are causative-prominent, tend to have causatives also for costly verb meanings (e.g. me-matah-kan 'break (tr.)').

Languages like Udmurt are intermediate, with an equal number of causatives and anticausatives.

Universal 9: If a language generally has causatives of costly base verbs, then it also generally has causatives of automatic verbs (and all base verbs higher on the spontaneity scale).

Table 5: Causatives and anticausatives: Some language types (caus = causative, analytic or synthetic, anticaus = anticausative)

	Transitive ('cut')	Unergative ('talk')	Automatic ('freeze')	Costly ('break')	
Russian	caus	caus	anticaus	anticaus	
Udmurt	caus	caus	caus	anticaus	
Indonesian	caus	caus	caus	caus	
(unattested)	caus	caus	anticaus	caus	
(unattested)	caus	anticaus	caus	caus	

Universal 10: If a language has causatives of any kind of base verb, then it also has causatives of all base verb types higher on the spontaneity scale.

Universal 11: If a language has anticausatives of any kind of base verb, then it also has anticausatives of all base verb types lower on the spontaneity scale.

Table 6: Causatives and anticausatives: Some language types (caus = causative, analytic or synthetic, anticaus = anticausative)

	Transitive ('cut')	Unergative ('talk')	Automatic ('freeze')	Costly ('break')	Agentful ('be cut')
Russian	caus	caus	anticaus	anticaus	anticaus
Udmurt	caus	caus	caus	anticaus	anticaus
Indonesian	caus	caus	caus	caus	anticaus
(unattested)	caus	caus	anticaus	caus	anticaus
(unattested)	caus	caus	caus	anticaus	caus

of course, just as Universal 10 is a special case of Universal 1, Universal 11 is a special case of Universal 2.

Hypothetical patterns

Table 7: Causative/anticausative patterns allowed by Universals 1 and 2

	Transitive ('cut')	Unergative ('talk')	Automatic ('freeze')	Costly ('break')	Agentful ('be cut')
type 1	anaC	lgC	shC	labile	А
type 2	anaC	anaC	anaC	anaC	anaA
type 3	anaC	anaC	anaC	lgC	shC
type 4	shC	labile	labile	labile	labile
type 5	А	А	А	А	anaA
type 6	anaC	С	С	С	С

More universals

Universals 11a-d (absolute cut-off points for causatives, labile verbs and anticausatives):

a. analytic causatives occur only as far down the scale as automatic meanings.
b. anticausatives occur only as far up the scale as automatic meanings.
c. Labile verbs occur only as far up the scale as automatic meanings.
d. (Synthetic) causatives occur only as far down the scale as costly meanings.

No language allows analytic causatives for costly or agentful meanings (cf. 11a). In other words, no language says '*make s.o. break s.th.*' to express '*break (tr.)*', let alone '*make s.th. be cut*' for '*cut*'.

No language allows anticausatives for unergative (let alone transitive) meanings (cf. 41b). In other words, no language says '*be made to talk*' to express '*talk*', let alone '*be made to cut*' to say '*cut*'.

Almost no language allows labile verbs for meanings higher than automatic (cf. 41c). Unergatives such as '*talk*', '*work*' or '*walk*' are almost never labile, with additional causal meanings '*make s.o. talk*', '*make s.o. work*' or '*make s.o. walk*'.

In the European languages, labile verbs are generally not used for agentful meanings either (i.e. labile verbs never mean 'cut' and 'be cut'), but there seem to be quite a few languages elsewhere where such labile verbs are common (especially in African languages, e.g. in Mandinka, where transitive verbs can be used in a passive-like construction without any coding). Thus, labile verbs actually have the same cut-off behavior as anticausatives.

Finally, almost no language allows causatives for causal counterparts of agentful meanings (cf. 41d). In other words, languages almost never say 'make something be cut' for 'cut'.

Actual patterns

Table 8: Five language types exemplified with concrete languages

	Transitive ('cut')	Unergative ('talk')	Automatic ('freeze')	Costly ('break')	Agentful ('be cut')
English	anaC	anaC	labile	labile	anaA
German	anaC	anaC	labile	А	anaA
Latvian	lgC	lgC	shC	А	anaA
Japanese	lgC	lgC	shC	А	А
Indonesian	anaC	С	С	С	anaA

Explanations

- 1. Frequency and expectedness/predictability.
- 2. Alternative explanations (e.g. ease of conceptualisation, iconicity via the notion of transparency, etc.)

"Whatever the virtues of these competing explanations of the correlation between the forms and meanings of causative markers, they are less general than my explanation in terms of form-frequency correspondence, because they do not explain why languages tend to employ anticausatives lower on the spontaneity scale."