

Inner and outer aspect in language change: the case of *stun*¹

Elly van Gelderen
Arizona State University

SUMMARY

Much is known about diachronic changes in *psych*-verbs: English verbs such as 'like' and 'fear' are reanalyzed from object experiencer verbs to subject experiencers with a change in inner aspect from telic to stative. Thus, in older English, 'like' used to mean 'please' and 'fear' meant 'frighten.' Cognitive factors may prefer subject over object experiencers because sign languages also use subject experiencers and early acquisition shows that subject experiencers are acquired first. However, new object experiencers arise, e.g. from borrowings (e.g. *please* and *anger*) and from internal change (e.g. *stun* and *worry*). One of the latter will be the focus of this short paper, namely *stun*. I explore two possible kinds of conditions that may make it possible for a verb with an Agent and a Theme, meaning 'to give a blow', to be reanalysed as a verb with a Causer and an Experiencer, meaning 'to impress'. The two are the animacy of the arguments and coercion by outer aspect.

RÉSUMÉ

Les changements diachroniques dans les verbes psychiques nous montrent que les verbes anglais tels que 'like' et 'fear' sont réanalysés des verbes expérencier de l'objet aux verbes expérenciers de sujet, avec un changement de l'aspect interne de telic à stativ. Ainsi, en anglais ancien, 'like' signifiait 'plaire' et 'fear' signifiait 'effrayer'. Les facteurs cognitifs peuvent préférer les sujets aux expérenciers d'objets parce que les langages des signes utilisent aussi des expérenciers et des acquisitions précoces. Cependant, de nouveaux expérenciers d'objets apparaissent, par ex. d'emprunts (*please* and *anger*) et de changement interne (*stun* and *worry*). Un de ces derniers sera l'objet de ce court article, à savoir *stun*. J'explore deux types de conditions qui peuvent rendre possible un verbe avec un Agent et un Thème, signifiait «donner un coup», être réanalysé comme un verbe avec un Causer et un Experiencer, signifiait 'étonner'. Les deux sont l'animalité des arguments et la coercition par l'aspect extérieur.

¹ The general framework is as in van Gelderen (2018) but the data have been expanded.

1 INTRODUCTION

A crucial part of the meaning of a verb is its inner aspect (as used in Travis 2010 for lexical aspect or Aktionsart) and its theta-role(s). For example, *eat* will be durative with an Agent theta-role and *fall* telic with a Theme. Grammatical or outer aspect can temporarily coerce a verb into a different aspectual meaning. Examples include past tense marking functioning as perfective on durative verbs, such as *eat*, rendering the sentence telic, especially if a definite object is involved, as in (1). In (1), the adverbial *in an hour* also helps with the coercion to change of state.

- (1) He ate the pie in an hour. Durative verb coerced to telic
 perfective definite telic

In this short paper, I examine if these temporary aspectual coercions have an effect on the permanent change of a verb's inner aspect, focusing on one psych-verb, *stun*. Psych-verbs change in predictable directions. The verb *feran* 'frighten' changes to its current meaning of 'fear', i.e. it goes from telic to stative; the verbs *love* and *like* may be going from stative to durative; and the verbs *stun* and *worry* go from durative to telic in the history of English. The main question to be answered is if outer aspect aids in this change. So, as verbs become telic, are they more often marked perfective, etc.?

The outline is as follows. In section 2, I provide a little background on *psych*-verbs and their history in English. In section 3, I specifically examine one verb as its argument structure changes, first regarding animacy factors and then for outer aspect. Section 4 is a conclusion.

2 PSYCH-VERBS

Psych-verbs involve mental perception, cognition, and emotion and, cross-linguistically, show frequent alternations between verbs that have a Causer, as in (2), and those that have an Experiencer, as in (3), as their grammatical subject.

- (2) **This** frightened me.
 Causer
- (3) **They** feared it.
 Experiencer

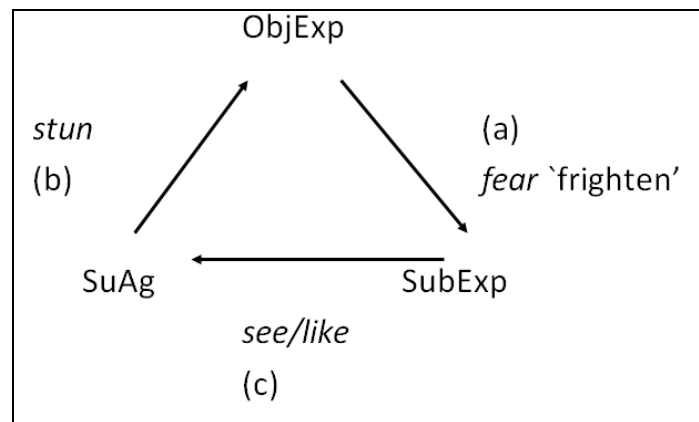
The causative constructions have an Experiencer in object position. As is well-known, object experiencers are reanalyzed as subject experiencers in the history of English, for instance, when Old English *ferian* 'frighten', as in (4), starts to be used in its modern meaning of *fear*; other verbs also change in this direction.

- (4) *Pa bodan us færdon*
 those messengers us frightened
 'The messengers frightened us.' (OED, Ælfric *Deut* i. 28)

Cognitive factors may prefer subject over object experiencers since sign languages also use subject experiencers (Oomen 2017) and early acquisition shows that subject experiencers are acquired first (van Gelderen 2018).

Interestingly, it turns out that many of the current object experiencer verbs are loans from after the Old English period, e.g. *anger* is a loan from Old Norse and *please* from Old French. Another source for renewal is through internal change and, in some cases, this use is quite recent, e.g. *worry* has the meaning of 'kill' in Old English and only appears with the meaning of 'to vex' in the 19th century. This use remains in certain varieties of English where 'dogs can worry sheep' by biting their throats or holding on to things in a persistent manner. Figure 1 summarizes these two changes, where (a) represents the change involving *fear* from Object Experiencer (ObjExp) to Subject Experiencer (SuExp) and (b) the renewal of Object Experiencers. Currently, verbs such as *love* and *like* seem as if they are being used as duratives but that change ((c) in Figure 1) is ignored in this paper.

Figure 1: Three changes in argument structure affecting *psych*-verbs



These are very drastic changes in both theta-roles and inner aspect and, in the next section, I will examine the change represented as (b), i.e. what the aspectual characteristics of the verbs and animacy restrictions of the arguments are as they change from durative to telic and from having an Agent and Theme to a Causer and Experiencer.

3 *STUN*

In this section, I provide examples of the early use of *stun*, changing from a verb of physical blows to one of mental astonishment, and examine which factors play a role in easing such a change, the animacy of the arguments or the outer aspect of the verb.

The etymologies of *stun* and *astonish* are not completely clear. According to the OED, the verbs *stun* and *astonish* are both loans from French *estoner*, although *astonish* doesn't appear until after 1500; neither is connected to an Old English origin. The MED has two senses for *stonen*, 'throw stones/stone to death', as in (5), and 'astonish; stunned by a blow', as in (6) and (7), respectively. The physical blow meaning appears in early Middle English whereas the mental astonishment one is from late Middle English. Late Middle English also sees a Subject Experiencer use, as in (8).

- (5) *Ȝho munnde afftterr þe laȝheboç To dæþe ben istanedd.*
 'She must after the book of law be stoned to death.' (MED, 1200 Ormulum 1968)
- (6) *He stonyed me and made me stunt Stille ...*
 'He astonished me and made me foolish, silent' (MED, c1390 Treat.Mass (Vrn) 350)
- (7) *þe fire of heuen þar has him stunt And .. kest vnto þe grund*
 'The fire of heaven has stunned him and cast him to the ground.' (MED, 1325, Cursor Mundi, Cotton 19613-4)
- (8) *Riȝtwise men shul stoneȝen vp on þat.*
 'Righteous men should wonder at it.' (MED, a1382, Wycliff Bible, (Bod 959) Job 17.8)

There is an Old English *stunian* 'make a loud noise; strike with a loud noise', as in (9), which Bosworth and Toller connect to the later meaning of 'astonish'.

- (9) *þa wearð ceald weder, stearc storma gelac;*
 'Then it became cold weather, strong storm commotion
stunede sio brune yð wið oðre ...
 struck that brown wave with another.'
 (Bosworth & Toller, *Meters of Boethius* 26.28)

There are thus two meanings, an earlier physical one and a later mental one. This involves change (b) in Figure 1 and in (8) possibly the change in (a). From browsing the examples in COHA and COCA, it becomes clear that the physical meaning persists until the present, as in (10), but initially becomes less prevalent. However, recently, with the coming of *stun guns*, its use has gone up again.

- (10) A taser and a wand stick, nonlethal types of protection that can **stun** someone just

as easy as a gun can (COCA 2016 spoken ABC)

Turning to the factors that may have helped the change in (b), I first discuss Levin & Grafmiller's (2013) findings that the use of subject and object experiencer verbs is determined by animacy considerations. Levin & Grafmiller show that only very few pure opposites, such as *fear* and *frighten* and *like* and *please*, occur and that the reason for this is the different animacy and definiteness of the subject in (2) and (3) depending if it bears the Causer or Theme theta-role. For instance, using data from COCA, they show that the Causer is more often a human and concrete with *frighten* and the Theme is less often human and more abstract with *fear*. Their table shows this and is reproduced as Table 1.

Table 1: Differences in animacy of the Theme and Causer, respectively
(from Levin & Grafmiller 2013: 26)

	<i>Fear</i>	<i>Frighten</i>	Total
Human	37 (10.1%)	110 (33.3%)	147 (21.2%)
Animate	10 (2.7%)	13 (3.9%)	23 (3.3%)
Concrete Object	20 (5.5%)	53 (16.1%)	73 (10.5%)
Event	31 (8.5%)	49 (14.8%)	80 (11.5%)
Abstract entity	142 (38.9%)	87 (26.4%)	229 (32.9%)
Proposition	125 (34.3%)	18 (5.5%)	143 (20.6%)
Total	365 (100%)	330 (100%)	695 (100%)

These facts demonstrate an animacy hierarchy, as in (11), where Causers are higher up in the syntactic structure and therefore more likely human than Experiencers with Object Experiencers. If a non-human Theme is involved, as in (3), *fear* is chosen because the human Experiencer will be the subject, i.e. the highest argument.

- (11) animate inanimate
Agent – Causer – Experiencer – Theme

Looking at the same factors as Levin & Grafmiller, van Gelderen (2018) finds no such effect for *stun* in the 19th century Corpus of Historical American English (COHA), when the mental meaning of astonishment starts to predominate with the verb *stun*. Table 2 lists the animacy for the different meanings. The mental surprise meaning is evenly split between human and non-human Causer, where Levin & Grafmiller would expect the human Causer to predominate.

Table 2: The meanings and animacy preferences of *stun* in 19th Century COHA

	Human Agent/Causer	(In)animate Agent/Causer
Mental surprise	5	5
Physical blow	10	18

Physical sound	7	14
Total	22	37

However, it may be that the high number of non-human Causers with the physical meaning verbs pushed a change in the meaning from Agent to Causer. Since the numbers are low in the COHA, I am adding data from the CLMET Corpus, ranging from 1710 to 1920. This data, based on novels by British authors who are native speakers of English, shows a much greater tendency for inanimate subjects, such as ‘blow’ or ‘sound’, with all meanings.

Table 3: The meanings and animacy preferences of *stun* in CLMET

	Human Agent/Causer	(In)animate Agent/Causer
Mental surprise	1	9
Physical blow	4	20
Physical sound	3	13
Total	8	42

Thus, it seems that the type of verb that undergoes change (b) of Figure 1 is one with an inanimate Causer as subject.

A second possible helping factor could be outer aspect of the verb. The change in (b), from durative to telic, might show an increased use of the past and perfective over the progressive aspect. That is indeed the case with *stun*, which changes in the 19th century, and displays more *-ed* endings than progressive *-ing* ones. In the COHA, from 1800 to the present, there are 95 instances of the verb *stun* with the durative *-ing*, as in (26a) above, but 3084 of the passive/resultative or perfective *stunned*, as in (11).

(11) that it has **stunned** us like the shock of an earthquake (COHA, 1829, NF)

This means that the durative verb is coerced into the telic one by the outer, perfective aspect. Additional data from the CLMET Corpus are provided in Table 4, where I have added the passives, which I didn’t count in Tables 2 and 3.

Table 4: *Stun* in CLMET

	mental surprise	physical blow	physical sound
Present	6	5	8
Progressive	1	2	3
Past	3	17	5
Passive	26	92	5
Total	38	117	21

For all three meanings, as in the COHA data, the passive/resultative or perfective *stunned*

predominates, a sign that the outer aspect coerces the physical into the mental.

4 CONCLUSION

In this short paper, I look at 'competing' meanings of the verb *stun*, those of a physical blow, the impact of sound, and mental impact. How is it possible that verbs have two different sets of theta-roles? Two types of coercion help this: inanimate subjects and perfective/passive inflection.

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