

CAUSATIVE, *v* AND AGENT IN BURYAT*

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1 Introduction

This paper focuses of the argument structure of agentive transitive verbs like ‘write’ or ‘close’:

- (1) a. **Mary** wrote the letter.
- b. **John** closed the door.

There are two semantic components usually associated with the agentivity of transitive verbs. The first component is the external argument and its theta-role (the Agent). This is the piece of syntax and semantics that takes the noun phrases *Mary* and *John* in (1) and interprets them as Agents of the writing and closing events respectively (see Hale and Keyser 1993, Kratzer 1996, Pylkkänen 2002, Harley 2008, 2010, 2013 and others). The second component is causation (the causing subevent). This is Mary’s activity in (1a) that causes the letter to appear and John’s activity in (1b) that causes the door to close (see Dowty 1979, Paducheva 2001, 2009, Ramchand 2008 and others).

These two components may either be a part of the lexical semantics of the verb itself (the lexicalist view); or they may be introduced into the structure independently from the verb, presumably as a head or heads within the functional structure of the verb phrase (the neo-Davidsonian / Distributed Morphology view). In this paper I will argue for the latter approach based on novel data from Barguzin dialect of Buryat (a Mongolic language spoken in the Republic of Buryatia, Russia).

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In particular, I will argue, firstly, that the Agent and the causation components should both be separated from the lexical semantics of the verb; and secondly, that the Agent and the causation components should be separated from each other, because they do not always come together. The argument for the first claim comes from the behavior of the passive morpheme *-gda* ‘PASS’. This argument has been presented at WAFL14 (Privoznov 2019) and will not be discussed here in much detail. The argument for the second claim is novel and comes from the behavior of the causative morpheme *-u:l/-lga* ‘CAUS’.

In what follows section 2 briefly recapitulates the argument in favor of severing the causation and the Agent components from the verb (Privoznov 2019); section 3 argues for severing the Agent from the causation; section 4 discusses two potential analyses; and section 5 is dedicated to further problems and predictions.

2 Severing causation from the verb: passives

This section discusses the Buryat derivational morpheme *-gda*, which will be called “passive” here and below. It attaches to two classes of verbs: transitives and unaccusatives. In the former case *-gda* forms the standard passive construction (2a-ab). In the latter case *-gda* forms so-called causal passive (see Lyutikova and Bonch-Osmolovskaya 2006 for the term): the passive morpheme introduces into the argument structure a novel \exists -bound Agent and a novel causation subevent (3a-b). For more details see (Privoznov 2019).

(2) Transitives: Standard Passive.

- a. [badma]₁ [ʃʌlɐ]₂ ɐd'-ɐ:
 Badma.NOM soup.ACC eat-PST
 → The soup was eaten.
 → Badma ate the soup.

- b. [ʃʌlɐn] ɐd'i-**gd**-ɐ:
 soup.NOM eat-PASS-PST
 → The soup was eaten.
 → **Someone ate the soup.**

(3) Unaccusatives: Causal Passive.

- a. [ʌxibʌ:n]₁ unt-a:
 child.NOM sleep-PST
 → The child slept.

- b. [ʌxibʌ:n] unt-**agd**-a:
 soup.NOM sleep-PASS-PST
 → The child slept.
 → **Someone put the child to bed.**

What is the semantic contribution of *-gda* in both cases? Under the simplest assumptions it is the boldfaced entailment that is shared between (2b) and (3b): an implicit \exists -bound Agent and the corresponding causation subevent. This is what *-gda* contributes in (3b). If the lexical semantics of the verb stem *ɐd'i* ‘eat’ involved its own causation, then (2b) would be interpreted as double causation: from *ɐd'i* and from *-gda*, but it is clearly not.

From that I conclude that the lexical semantics of a transitive verb stem itself does not involve causation or agentivity. A verb like *ɐd'i* denotes a predicate of non-agentive soup-being-eaten events (the dashed-boxed entailment in (2-3)). Hence in a normal transitive sentence (2a) the causation component and the Agent component come from somewhere else. Not from the verb itself, but from a separate functional head, say, *v*. For more details see (Privoznov 2019).

3.1 Causative construction

(4) badma [darim-i:je bəʃəg bəʃ]-u-l-ə:
Badma.NOM Darima-ACC letter write-CAUS-PST
'Badma made Darime write a letter.'

Buryat allows for the Causee to be marked in several different ways. It may be a noun phrase in the accusative (5a), the dative (5b) or the instrumental (5c) cases, or it may be absent (5d).

- | | | | | | | |
|-----|----|--|--------------------|--------------|--------------------|--------------|
| (5) | a. | badma | [darim-i:je | bəfəŋ | bəf] -ɯl-ə: | ACC-Causee |
| | | Badma.NOM | Darima-ACC | letter | write-CAUS-PST | |
| | b. | badma | [darima-da | bəfəŋ | bəf] -ɯl-ə: | DAT-Causee |
| | | Badma.NOM | Darima-DAT | letter | write-CAUS-PST | |
| | c. | badma | [darim-a:r | bəfəŋ | bəf] -ɯl-ə: | INSTR-Causee |
| | | Badma.NOM | Darima-INSTR | letter | write-CAUS-PST | |
| | | ‘Badma made Darime write a letter.’ | | | | |
| | d. | badma | [| bəfəŋ | bəf] -ɯl-ə: | no-Causee |
| | | Badma.NOM | | letter | write-CAUS-PST | |
| | | ‘Badma made (someone) write a letter.’ | | | | |

In what follows I will argue that in (5d) the base Agent (the Causee) is **not** syntactically projected, although may be semantically present (section 3.2), while the base causation (the activity of the unpronounced Agent that causes the letter to appear) is still there (section 3.3).¹ In short, the no-Causee construction is precisely the case when the Agent argument is absent, but the causation is still there.

From the syntactic point of view the unpronounced Causee in (5d) is not present. It does not block passivization. Causatives of transitive verbs can be further passivized. In this case the Patient argument of the base verb may be promoted to the subject position (6a). This, however, is only possible, if the Causee is unpronounced. An overt Causee blocks such promotion (6b).

¹ Cf. restructuring (Wurmbrand 1998, 2004) and *faire par* (Folli and Harley 2007) constructions.

(11) Purpose clause with *-xa-ja* ‘-FUT-REFL’.²

- a. Ungrammatical, if associated with an understood, but not projected Agent.

*hən [PRO tvorog bəldə-xə-jə] gafal-a:
 milk.NOM PRO cottage.cheese make-FUT-REFL sour-PST
 ‘The milk soured to prepare some cottage cheese.’

- b. Grammatical, if associated with the unpronounced Causee.

ojuna_i bud [PRO_{i/j} plati ojo-xo-jo:] xaxalj-u:l-ba
 Ojuna.NOM cloth PRO dress sow.make-FUT-REFL tear-CAUS-PST2
 ‘Ojuna_i made (someone_j) tear a cloth in order for her_{i/j} to make a dress.’

Interestingly, this behavior makes the unpronounced Causee somewhat similar to the implicit arguments of adjectives like *local*. They may also be bound by a quantifier within the same sentence, but are allergic to an intra-sentential linguistic antecedent:

- (12) a. [Every town]
- _i
- has local
- _i
- reporters.

- b. I know [a town near London]
- _i
- . # I always hated local
- _i
- reporters.

In sum, it seems that in the no-Causee construction the base Agent is not projected as a syntactic argument, but is still semantically present (perhaps, as an implicit variable).

3.3 The presence of the base causation

The base causation (the unpronounced Agent’s activity) is still present in the no-Causee construction. Buryat has verb phrase ellipsis, marked by a light verb idiom *baha ti:* ‘also do.so’. Its antecedent has to involve causation. In particular, *baha ti:* may not have as its antecedent the caused subevent component of an agentive transitive verb:

- (13) badma sonxo nə:-bə ...
 Badma.NOM window open-PST2 ...
 ‘Badma opened the window, ...’
 a. ... dugar **baha ti:-bə**
 ... Dugar.NOM also do.so-PST2
 ‘... Dugar did so too (= opened the window).’
 b. ... *ədən **baha ti:-bə**
 ... door.NOM also do.so-PST2
 ‘... the door did so too (= opened).’

However, *baha ti:* may have as its antecedent the no-Causee complement of the causative morpheme:

- (14) xərbə ojuna [ənə nom unʃ]-u:l-a:-ha:-n’ ...
 if Ojuna.NOM this book read-CAUS-PRT-ABL-3SG ...
 ‘If Ojuna makes (someone) read this book, ...’

² The judgements about (11a) vary, meanwhile (11b) is accepted by all the speakers.

- ... narana **baha ti:-xə**
 ... Narana.NOM also do.so-FUT
 '1. ...then Narana will make (someone) read this book too.'
 '2. ...then Narana will read this book too.'

The base causation component in the no-Causee construction can be modified by an Agent-oriented adverbial:

- (15) bagfa nom **məndə-ʒə** unf-u:l-a:
 teacher book hurry-CONV read-CAUS-PST
 '1. In a hurry the teacher made (someone) read a book (the teacher was in a hurry).'

'2. The teacher made (someone) read a book in a hurry (the reading was in a hurry).'

Negation also gives rise to multiple interpretations in the no-Causee construction:

- (16) sajana du: du:l-u:l-a:-**guj**
 Sajana.NOM song.ACC sing-CAUS-PST-NEG
 '1. It is not the case that Sajana asked someone to sing a song (nothing happened).'

'2. Sajana asked someone not to sing a song (she prevented someone from singing).'

4 The analysis

4.1 Split *v* and Agent

In what follows I am going to adopt the neo-Davidsonian approach to argument structure, according to which some arguments of verbs (e.g., Agents) are introduced by separate functional heads. In addition, I will assume complex event structure for transitive verbs, in particular, I will assume that argument introducing functional heads bear event semantics, following the general idea in Ramchand (2008).³

To sum up the previous two sections, one can distinguish three separate semantic components in the argument structure of an agentive transitive verb, like 'write' in (17). First, the caused subevent (the process associated with the Patient argument): the letter-appearing event. Second, the causation component (the causation subevent): Darima's activity that causes the letter to appear. Third, the Agent argument: the piece of syntax and semantics that interprets the noun phrase *Darima* and as the Agent of the letter-writing event.

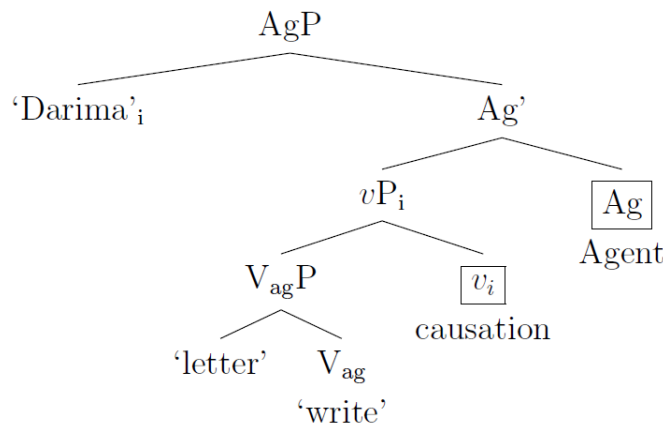
- (17) Darima bəʃəg bəʃ-ə:
 Darima.NOM letter write-PST
 'Darima wrote the letter.'

³ For a sample of such theories see Dowty (1979), Hale and Keyser (1993), Kratzer (1996), Harley (1997), Baker (1997), Miyagawa (1998), Pykkänen (2002), Folli and Harley (2004), Ramchand (2008) and Harley (2008, 2010). Not all of these theories involve event semantics, but all of them propose some sort of syntactic decomposition for the argument structure.

In section 2 I have argued that the Agent argument and the causation component should both be separated from the lexical semantics of the verb stem: the argument from passives. In section 3 I have argued that the Agent argument should be separated from the causation component: in the complement of the causative morpheme it is possible to have the latter without projecting the former. Thus, all the three components should be introduced into the argument structure independently. There are, in principle, two possible ways of separating them from each other.

The first option, which I am going to pursue here, is to assume that the causation component and the Agent argument are introduced by two different functional heads, both separate from the verb stem itself: *v* and Ag, see (18a).⁴ The lexical verb denotes a predicate of non-agentive letter-appearing events (18b). The causation subevent is introduced by a separate functional head *v*. This head bears an index: *v_i* – it has an implicit Agent variable in its semantics (18c). The Agent argument is introduced as the Specifier of another functional head, i.e. Ag, which may or may not be present above *v_i*. If Ag is present, its Specifier binds *v_i* (this is encoded in the semantics of Ag, see 18d). If *v_i* remains unbound at the root level, it gets \exists -bound by the sentence level \exists -closure. This explains the “dual” behavior of the unpronounced Causee in the no-Causee construction: *v_i* can be bound sentence-internally, but it is always \exists -bound at the root level and thus may not have a discourse antecedent. In sum, if there is an Ag-head that takes the *v_i*P as its complement, the implicit Agent of *v_i* is bound by the Specifier of the *v_i*P-selecting Ag (due to the semantics of Ag). Otherwise *v_i* can be bound by a higher quantifier within the same sentence. If it isn’t, it is \exists -closed at the root level.

- (18) a. Syntax (V_{ag} for an agentive transitive verb stem, like ‘write’):



- b. Semantics for a transitive lexical verb like *b9/9* ‘write’:

$$\llbracket V_{ag} \rrbracket^{w,g} = \lambda x_e. \lambda e_v. \text{being-written}(e) \ \& \ \text{Patient}(x)(e).$$

- c. Semantics for *v_i*:

$$\llbracket v_i \rrbracket^{w,g} = \lambda P_{\langle vt \rangle}. \lambda e_v. \exists e': P(e') \ \& \ \text{cause}(e)(e') \ \& \ \text{Agent}(g(i))(e).$$

- d. Semantics for Ag (using intensional Functional Application):

$$\llbracket Ag_i \rrbracket^{w,g} = \lambda P_{\langle sg \langle vt \rangle \rangle}. \lambda y_e. \lambda e_v. P(w)(g^{i \rightarrow y})(e).$$

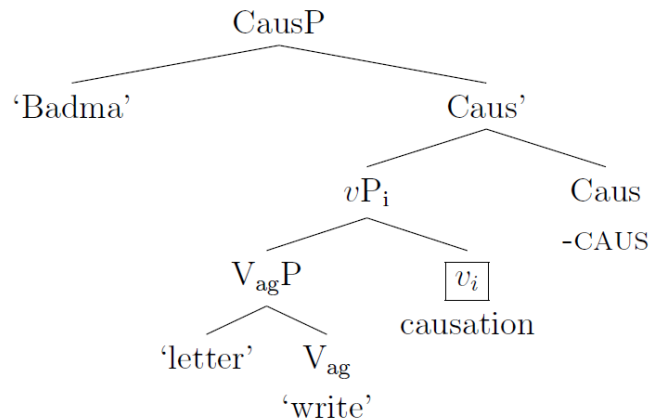
- e. Semantics for AgP:

$$\llbracket AgP_i \rrbracket^{w,g} = \lambda e_v. \exists e': \text{letter-being-written}(e') \ \& \ \text{cause}(e)(e') \ \& \ \text{Agent}(\text{Darima})(e).$$

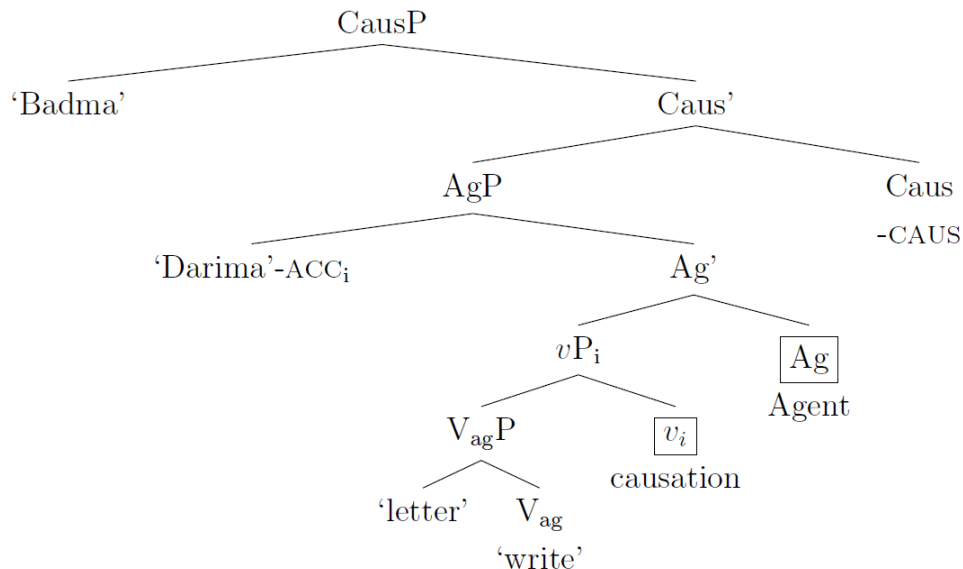
⁴ Cf. *v* and Voice in Pyllkänen (2002) and Harley (2013).

The causative morpheme then may take as its complement verb phrases of different size. It can take just the v_i P (the no-Causee construction, 19a) or the AgP (the ACC-Causee construction, 19b). In the former case the Causee is not projected, but semantically present. In the latter case the Causee is projected and receives the accusative case.

- (19) a. badma [bəʃəŋ bəʃ]-u:l-ə:
Badma.NOM letter write-CAUS-PST
'Badma made (someone) write a letter.'



- b. badma [darim-i:jə bəʃəŋ bəʃ]-u:l-ə:
Badma.NOM Darima-ACC letter write-CAUS-PST
'Badma made Darima write a letter.'



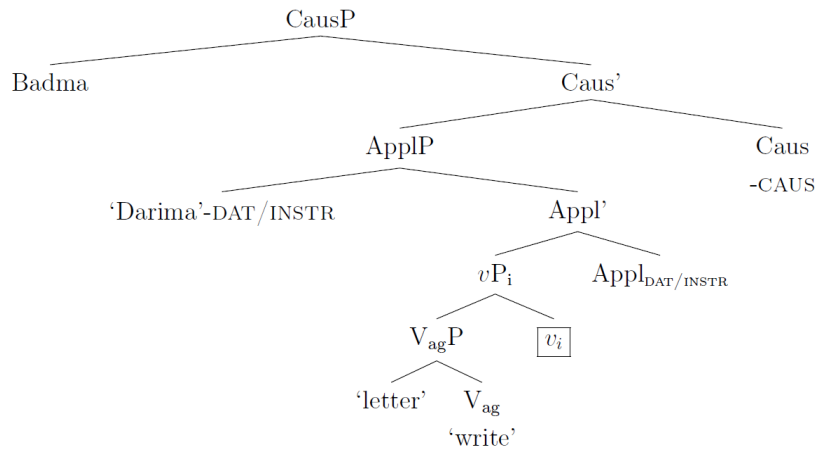
An alternative solution is to assume that the causation component and the Agent argument come with the same functional head, but this head does not have to project its Specifier. As before, the verb stem denotes a predicate of non-agentive letter-appearing events. The causation subevent is introduced by a separate functional head v . This head bears an index: v_i . In other words, it has an implicit Agent variable in its semantics (cf. context-dependent index bearing elements in Heim

and Kratzer's 1998 system). This head v_i may or may not project a Specifier (an overt Agent). If v_i projects a Specifier, the Specifier necessarily binds the variable inside it (it is necessarily co-indexed with v_i). This fact, as well as the Agent's optionality, can only be captured by introducing a special composition rule, see Appendix. If v_i remains unbound at the root level, it gets \exists -bound by the sentence level \exists -closure. Thus, if v_i projects a Specifier, the implicit Agent of v_i is bound by this Specifier (by the means of a special composition rule). Otherwise v_i can be bound by a higher quantifier within the same sentence. If it isn't, it is \exists -closed at the root level. For the purposes of space, I am not going to explore this alternative here, even though it seems as a promising route (for some details see Appendix).

4.2 A note on dative and instrumental Causee's

Remember that the Causee may also receive the dative or the instrumental case. However, there are reasons to believe that dative and instrumental Causees are not arguments, but rather adjuncts, perhaps introduced by separate applicative heads:

(20) Dative/Instrumental Causee:



Firstly, dative and instrumental Causees do not have to be interpreted as Agents/Causers. Their theta-role is semantically weak (Helper/Instrument/Receipient/Causer):

- (21) dugar zargal-a:r bəʃəg bəʃ-u:l-ə:
 Dugar.NOM Zhargal-INSTR letter write-CAUS-PST
 '1. Dugar made Zhargal write a letter.'
 '2. Dugar made someone write a letter with the help of Zhargal.'

Dative and instrumental Causees can stack on top of each other:

- (22) sajana darima-da səsəgma:-ga:r ojo:r uga:-lg-a:
 Sajana.NOM Darima-DAT Sesegma-INSTR floor wash-CAUS-PST
 '1. Sajana made Sesegma wash the floor for Darima.'
 '2. Sajana told (/caused/asked) Darima to make Sesegma wash the floor.'

Dative and instrumental Causees can stack on top of an accusative marked Causee:

- (23) badma darim-a:r dugar-i:jə du: du:l-u:l-a:
 Badma.NOM Darima-INSTR Dugar-ACC song sing-CAUS-PST
 ‘Badma made Dugar sing a song with the help of Darima.’

5 Conclusion and a combinatoric problem

This paper argues for a neo-Davidsonian view of the argument and event structure of agentive transitive verbs like ‘write’ or ‘open’, according to which both the Agent argument and the causation component associated with these verbs are not actually part of their lexical semantics. Rather they are introduced into the structure by a separate head or heads within the functional structure of the verb phrase.

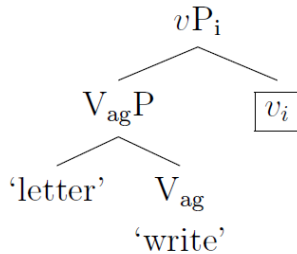
The first argument comes from the distribution of the passive morpheme *-gda* in Barguzin Buryat. It suggests that both the Agent argument and the causation component should be separated from the verb stem (originally published in Privoznov 2019). The second argument comes from the no-Causee construction formed with the causative morpheme *-u:l/-lga*. It suggests that the Agent argument should be separated from the causation component, since it is not the case that they always come together. This can be achieved in two ways. Either the Agent and the causation component are introduced into the argument structure by two different functional heads (*v* and Ag). Or they are introduced by the same head (*v*), whose Specifier is an optional argument. The latter option requires a new composition rule (see Appendix).

It should be noted that an explosion of the functional structure of the verb phrase inevitably leads to a combinatoric problem. In particular, why do agentive transitive verbs **have to** be selected by either v_i or the passive morpheme *-gda*? An agentive transitive stem may not surface on its own: **The soup ate*. A potential answer to this question is given in Privoznov (2019) and is based on the Maximize Presupposition principle from Heim (1991). The present paper raises a new question of the same sort. If the Agent is optional (either Ag or the Specifier of v_i are optional), why is it only optional in the complement of a causative morpheme? Why is it not optional in a simple transitive sentence? This question will have to be left for future research.

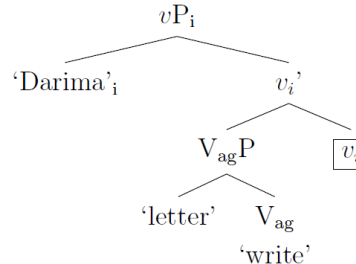
Appendix

An analysis without Ag assumes only one functional head (v_i) with an optional Specifier:

(24) Without a Specifier.



With a Specifier.



The semantics of v_i is the same, as before (18c). The new composition rule (a) allows for the Specifier to be optional and (b) forces the Specifier to bind v_i :

(25) A special composition rule for neo-Davidsonian arguments.

$$[[DP_e \Theta P_{\langle i, \langle vt \rangle \rangle}]^{w,g} = \lambda e_v. [\lambda y_e. [[\Theta P_{\langle i, \langle vt \rangle \rangle}]^{w,g:i \rightarrow y}([DP_e]^{w,g})]]$$

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