

Linguistic expression(s) of indirect causation

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Cocoa, December 13, 2024

1. Introduction

- Causative constructions denote situations where one event – the causing event - brings about another event – resulting event.
- Causation can be universally expressed periphrastically (1), but most languages have a lighter strategy, (2-3)*

In (1-3), causative layer is **in bold** and resulting layer is between [square brackets]

(1) Sam **caused/forced/ordered** [Kim to translate the book]

- (2) a. **Sam made/had** [Kim translate the book]
b. **Sam a fait** [traduire le livre à Kim/par Kim]

- (3) a. **Müdür** [Bekçi-ye kapı-yı aç]-**tır**-dı.
director watchman-DAT door-ACC open-CAUS-Past
'The director made the watchman open the door.' [Turkish. Key 2013:187]
- b. **Nungu** [i-na-phik-]**its**-a [(kadzidzi) maungu (kwa kadzizi)
9 porcupine 9 S-PS-cook-CAUS-FV 1 owl 6 pumpkins (to 1 owls)]
'The porcupine made the owl cook the pumpkins' [Chichewa. Alsina 1992:518]

- Causative constructions in (2) are called analytical and those in (3) morphological.

Since Marantz (1984) and Baker (1988), it is widely assumed that morphological and analytic causatives have the same underlying structure. As causative marker in analytical causatives is a (light) verb, the causative morpheme is analyzed as verb too.

(4) make/have/faire = -tir- /-its- CAUSATIVE MARKERS

The main reason why analytical and morphological causatives are treated parallelly is due to (i) same meaning; (ii) same case patterns in causatives of transitives and intransitives.

- Analytical and morphological causatives mark
 - o causee of intransitives as object/internal argument:
French/Turkish/Chichewa
 - o causee of transitives as indirect object (French/Turkish), or as oblique:
French/Hindi/Chichewa

Causative markers in (4) select the resulting event, which can be anything from CP, VoiceP (active or passive), ApplP, vP, VP, V-NP, RootP. Robust literature deals with different *selection properties* of the causative marker in (4).

The purpose of this talk is to recentre the debate rather on the *categorial status of the causative marker*. My main claim is that causative marker is a verb (little *v*) in some languages, but is a transitivizer in others, categorially Voice. (Nash 2020, Nie 2020, Sigurðsson & Wood 2021). In other words, markers in (4) are not categorially uniform, as initially proposed 40 years ago.

This claim is immediately challenged by the following question:

- If causative marker is not a verb and does not carry event semantics— an important ingredient of indirect causation—why do (2) and (3) have the same meaning?

Indirect causation:

- (1) temporal distinctness between causing event and the resulting event (Fodor 1970).
- (2) existence of intermediate cause(r) between the causer and the resulting event (Wolff 2003)

- How is bi-eventuality requirement satisfied in languages where the causative marker is not a verb?

To support my claim, I will show that in some languages

- causative markers do not behave as verbs. Rather they are *transitivizers* [akin to *-ify*, as in *clarify*]. They add an agent/initiator to non-agentive predicates;
- they also add agent to transitive verbs but in combination with an additional morpheme that functions as *agent demoter* of the embedded predicate.
- causatives of transitives are transitivized (medio)passives and have indirect causation readings not because they can be decomposed into two eventualities (à la Fodor) but because they transparently show the existence of the intermediary causer/agent (à la Wolff) via special passive/detransitivizing morpheme.

2. Case of Halkomelem

- Intransitive base condition: causatives are only formed on intransitive bases. (Gerdt 2004)

In Halkomelem, transitive verbs are marked by the affix **-ət-** (6a). The causative marker **-stəx^w**- combines with intransitive verbs (5). But it cannot combine with transitive verbs, (6b). In order to be causativized, the transitive verb must first be turned into antipassive in (7). Antipassive is formally intransitive where semantic agent appears with oblique case. The causative **-stəx^w**- can attach to the antipassive variant of transitive predicate in (7b).

- (5) a. ni? ʔiməš t^θə swiwləs.
 aux walk det boy
 ‘The boy walked.’
- b. ni? cən ʔiməš-stəx^w t^θə swiwləs.
 aux 1sub walk-cs+3obj det boy

- (6) a. niʔ q̣ʷəl-ət-əs lə sʎeniʔ kʷθə səplil.
 aux bake-tr-3erg det woman det bread
 'The woman baked the bread.'
- b. *niʔ cən q̣ʷəl-ət-stəxʷ lə sʎeniʔ (ʔə) kʷθə
 aux 1sub bake-tr-cs+3obj det woman obl det
 səplil.⁷
 bread
 'I had the woman bake the bread.'
- (7) a. niʔ q̣ʷəl-əm⁸ θə sʎeniʔ ʔə t^θə səplil.⁹
 aux bake-mid det woman obl det bread
 'The woman baked the bread.'
- b. niʔ cən q̣ʷəl-əm-stəxʷ θə sʎeniʔ ʔə t^θə səplil.
 aux 1sub bake-mid-cs+3obj det woman obl det bread
 'I made the woman bake the bread.'

Data from other languages are less transparent than in Halkomelem, where causativisation amounts to valency increasing, according to Gerdts (2004).

Lack of transparency is due to absence of morphological evidence that the embedded predicate in causatives is detransitivized.

3. CAUS1 vs CAUS2

Number of languages have two different causative markers conditioned by valency of the complement, and neither can be easily qualified as a causative verb.

- CAUS1 - basic
- CAUS2 - morphologically more complex than CAUS1
- CAUS2=CAUS1+another morpheme

Georgian, Hindi, Amharic, Kinande have CAUS1 and CAUS2

(8)	Georgian	Hindi	Amharic	Kinande
CAUS1	a-	-aa	a-	-i-
CAUS2	a-...-in-	-vaa	as-	-is/ik-...-i-

- CAUS1 combines with intransitives
- CAUS2 combines with transitives

- (9) a. Makaan ban-aa
 house make-perf.m.sg
 'The house was built.'
- b. Anjum-ne makaan ban-aa-yaa
 Anjum-erg house make-CAUS1-perf.m.sg
 'Anjum built a house.'
- c. Anjum-ne (mazdurō-se) makaan ban-vaa-yaa
 Anjum-erg labourers-instr house make-CAUS2-perf.m.sg
 'Anjum had the labourers build a house.'

[Hindi: Ramchand 2017, from Butt 2003]

3.1. Direct and indirect causation

According to typological studies (Haiman 1983, Haspelmath 2008), if a language has two ways to mark causation, the basic one is associated with direct causation and the more complex one is associated with indirect causation.

Direct and indirect causation differ with respect to involvement of another causer/agent in the causal chain. Causing event and result event do not have to be temporally adjacent in the case of indirect causation.

- causing event → result event: direct causation
- causing event → causing event → result event: indirect causation

- lexical causatives: *grow, soften* are direct
- causatives of transitive verbs like *caus-translate* (e.g. in Turkish) are indirect

Haspelmath's (2008) principle of economy: direct causation is more frequently used in languages than indirect causation. Therefore, the less frequent terms tend to be longer.

Dixon (2000:74-8): Iconicity: markers of indirect causation should not only be less cohesive (root suppletion, irregular morphology) than direct causation, but should also tend to be *longer*. [temporal cohesion ↔ linguistic cohesion]

Levshina (2016) looked at 46 languages from different linguistic families that distinguish between direct and indirect causation. The most common difference associated with (in)directness of causation is *formal length of causative markers*, i.e. number of segments. Direct causatives are shorter than indirect causatives in 39 (of 46) languages.

- I propose that the relative length of markers of indirect causation can be accounted for in syntactic terms, rather than in terms of frequency or iconicity.

- CAUS2 is longer than CAUS1 because it is a bimorphemic extension of CAUS1: it expresses two syntactic operations: (i) transitivisation/valency increasing (CAUS1) and (ii) detransitivisation/valency decreasing of the embedded predicate (extra morpheme combined with CAUS1)

- CAUS1 is active Voice, it introduces Causer/Agent. It is a transitivizer. Verbs with CAUS1 express direct causation because they denote eventualities where the agent acts directly on the causee (object) and there is no other intermediary initiator.

- CAUS2 reflects two functional elements, active Voice (=CAUS1) and mediopassive Voice which shows that the embedded predicate is deagentivised.

- Meaning of CAUS2: the causer of the eventuality is not the direct causer that brings out the result because there exists an implicit disjoint causer/agent spelled out by special morpheme.

Causatives of transitives: Voice_{ACT} — Voice_{NACT} — vP

In Georgian/Hindi/Amharic/Kinande/Halkomelem: causation is achieved by retransitivizing a ditransitived predicate

Consequences:

- CAUS1: on causatives of non-agentive verbs
- CAUS2: on causatives of agentive verbs
- causee of CAUS2 verbs is not the structural subject of embedded transitive verb; it is optional argument added to causative predicate

Let's see if the predictions turn out to be true.

4. Georgian causatives

Two causative markers: CAUS1 **a-** and CAUS2 **a-...-in-**

CAUS1 combines with unergatives/psych verbs/ingestive transitive verbs, turning them to transitive verbs with causative semantics.

(10) causatives of unaccusatives, unergatives, psych-verbs, ingestive verbs

- a. ketim naq'ini **ga=a-dn-o**
Keti.ERG icecream.NOM prev=CAUS1-melt-AOR.3sg
'Keti melted ice-cream' 'Keti made ice-cream melt'
- b. ketim gogo **a-cek'v-a**
Keti.ERG girl.NOM CAUS1-dance-AOR.3sg
'Keti made the girl dance'
- c. ketim gogos ludi **še=a-q'var-a**
Keti.ERG girl.DAT beer.NOM prev=CAUS1-love-AOR.3sg
'Keti made the girl love the beer'
- d. ketim gogos ludi **ga=a-sinj-a**
Keti.ERG girl.DAT beer.NOM prev=CAUS1-taste-AOR.3sg
'Keti made the girl taste the beer'

CAUS2 (=CAUS1+??) combines with transitive verbs, yielding indirect causation readings

(11) causatives of regular transitive verbs

- ketim gogos botli **da=a-xat'-in-a**
Keti.ERG girl.DAT bottle.NOM prev=CAUS1-draw-??-AOR.3sg
'Keti made the girl draw a bottle'

4.1. CAUS1 combines with unaccusative complement

CAUS1: prefix a-

- found on COS transitive verbs with stative Roots
- productive
- not found on intransitive verbs
- does not occur on non-finite forms, nominalisations or participles

(12) transitive verbs PRES.3sg [Georgian does not have infinitives]

a-k'et-ebs make
a-mzad-ebs prepare
a-lag-ebs tidy up

(13) corresponding unaccusative/mediopassive verbs PRES.3sg [-d- nonactive marker]

k'et-d-eba is made
mzad-d-eba is prepared
lag-d-eba is tidied up

(14) nominalisations

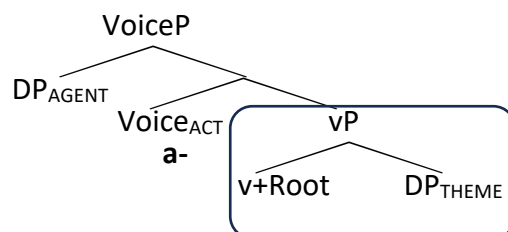
k'et-eba (making), mzad-eba (preparation), dn-oba (melting)

Transitive verbs in (12) are structured as other transitive verbs without CAUS1.

(16) a. nia q'avas **mal-avs**
Nia.NOM coffee.ACC hide-PRES.3sg
'Nia hides coffee'

b. nia otaxs **xvet'-avs**
Nia.NOM room.ACC sweep-PRES.3sg
'Nia is sweeping the room'

- Skeleton of agentive transitive verbs
Voice_{ACT} – vP – v+ Root



Q. Why are verbs in (12) transitives and not causatives? [*dry* (tr.) vs. *make dry* (caus)]?

In Georgian (and in most languages with morphological causatives I've looked into), there is only one way to create causative/transitive counterpart of intransitive verb.

(19) niam ga=a-dn-o sp'ilendzi/ Jok'oladi
 Nia.ERG prev=CAUS1-melt-AOR.3sg copper/chocolate.NOM
 'Nia melted copper/chocolate', 'Nia made copper/chocolate melt'

When the transitive counterpart of inchoative verb is irregular in Georgian [without CAUS1], a "regular" counterpart with CAUS1 is ruled out. [no *kill*≠*make die* asymmetry]

(20) a. nia mo-k'v-d-a
 Nia.ERG prev=die-nact-AOR.3sg
 'Nia died'
 b. ketim nia mo=k'l-a
 Keti.ERG Nia.NOM prev=kill-AOR.3sg
 'Keti killed Nia'
 c. *ketim nia mo=a-k'v-a
 Keti.ERG Nia.NOM prev=CAUS1-die-AOR.3sg
 'Keti made Nia die'

4.3. Causatives of unergatives

Causatives of unergative verbs are marked with CAUS1. Formally, they are not distinct from transitive verbs in (12). Yet, their respective structures differ: semantic causee (direct object) is interpreted differently in each case.

- Causee in causatives of unergatives does not undergo change in the resulting eventuality and controls the embedded activity

(28) Unergatives [Pres.3sg]	Causatives of unergatives [Pres.3sg]
cek'v-avs danse	a-cek'v-ebs make danse
curav-s swim	a-curav-ebs make swim
varjiš-obs exercise	a-varjiš-ebs make exercise
muša-obs work	a-mušav-ebs make work

- Common-held idea that external argument of unergative verbs and transitive verbs is structurally identical is contested in Tollan (2018), Nash (2021).

Tollan (2018), (cf. Massam 2009): unergative subjects are merged lower than transitive subjects in Samoan: the former in Spec, VoiceP and the latter in Spec, vP. Samoan transitive subjects are marked with ergative case, but unergative subjects, even with cognate objects, are marked with absolutive case. Ergative case is due to different positions of arguments and not to case competition.

(29) a. Sā fau e le tamāloa le fale
 PST build ERG DET man DET house.ABS
 'The man built the house.'

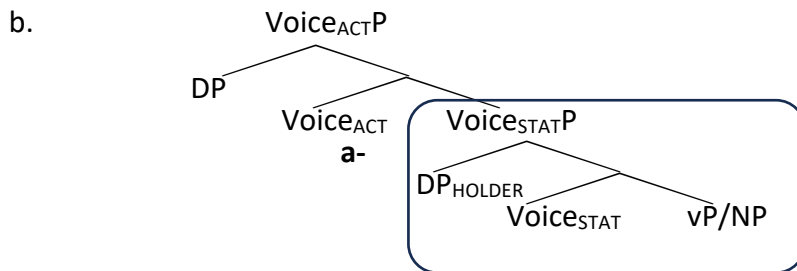
- b. Sā siva **le teine** (i le siva).
 PST dance DET girl.ABS ACC DET dance
 'The girl danced (a/the dance).' [Samoan: Tollan 2018:2]

Nash (2021): unergatives are underlyingly structured as stative predicates in Georgian. Their external argument is Holder of Process and not Agent of Event. Agentive reading of external argument of unergative verbs is due to other functional categories that combine with stative VoiceP in different tenses.

- Causatives of unergatives are formed by transitivity, i.e. merging CAUS1 with the underlyingly stative structure.

(31) Causatives of unergative verbs in Georgian

- a. ketim st'udent'i a-varjiš -a / a-q'vir-a /
 Keti.ERG student.NOM CAUS1-laugh-AOR.3sg CAUS1-scream-AOR.3sg
 a-cek'v-a
 CAUS1- dance-AOR.3sg
 'Keti made the student exercise/scream/dance'



- Causatives of unergatives are structured as bivalent verbs where Initiator and Holder of process/state are different individuals

Conclusion: CAUS1 transitivity non-agentive predicates: inchoatives [vP] and unergatives [Voice_STATP].

4.4. CAUS2 combines with transitive complements

Transitive verbs are causativized by means of CAUS2. CAUS2 is bimorphemic: prefix a- and suffix -in-. CAUS2 cannot combine with intransitive predicates.

- **-in-** is found only on causatives of transitives
- **-in-** is correlated with agentivity of embedded verb

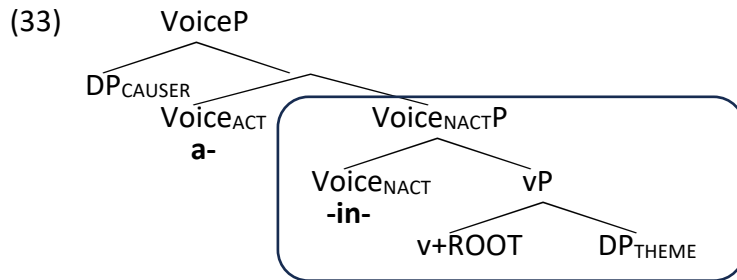
- (32) a. ketim gogos botli **da=a-xat'-in-a**
 Keti.ERG girl.DAT bottle.NOM prev=CAUS1-draw-??-AOR.3sg
 'Keti made the girl draw a bottle'
- b. niam st'udent's c'igni **gada=a-targmn-in-a**
 Nia.ERG student.DAT book.NOM prev=CAUS1-translate-??-AOR.3sg
 'Nia made a student translate a book'

c. ekimma p'oliciels bandit'i da=a-ç'er-in-a
 doctor.ERG policeman.DAT bandit.NOM prev=CAUS1-catch-??-AOR.3sg
 'The doctor made the policeman catch the bandit'

What is **-in-**?

Hypothesis:

- **-in-** detransitivizes the embedded agentive predicate. Nash (2020): **-in-** realizes mediopassive non-active Voice. [glossed hereafter as nact]
- **-in-** expresses implicit external argument of the embedded verb



The structure in (33) is compatible with selection requirement of CAUS1: always combine with complement lacking *structurally projected Agent*.

If (33) is correct, dative causee in (32) is not the agent argument of the embedded verb. (cf. Alsina 1992, Guasti 1996). It should therefore be analysed as an adjunct. (cf. Kaye 2013).

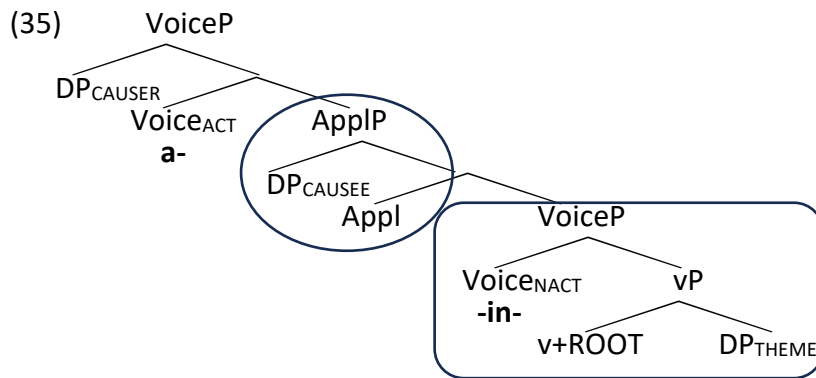
The prediction is correct. The suppressed dative causee in (34) is not necessarily understood as missing discourse specific argument.

(34) a. ketim iat'aki ga=a-c'mend-in-a
 Keti.ERG floor.NOM prev=CAUS-clean-nact-AOR.3sg
 i) 'Keti had the floor cleaned by them_{sg/pl}'
 ii) 'Keti had the floor cleaned'

b. ketim romani gada=a-targmn-in-a
 Keti.ERG novel.NOM prev=CAUS1-translate-nact-AOR.3sg
 i) 'Keti had her/them translate the novel'
 ii) 'Keti had the novel translated'

- Georgian allows subject, object and indirect object pro-drop.
- dropped dative *indirect object* of ditransitive verbs is understood as discourse-specific silent pronominal.
- dropped *dative causee* in causatives of transitives is ambiguous between: (i) silent discourse specific pronominal or (ii) non-specific implicit argument.

Dative causee is not the embedded agent in (32). It is introduced by Appl above Voice_{NACTP}. ApplP in (35) is optionally projected.



- prediction: If a language has oblique OR dative causee in causatives of transitives, it can be dropped yielding a reading identical to (36) in English and in French.
- Georgian and Turkish have only dative marked causees in causatives of transitives. In both languages, the causee is not obligatory.

- (36) a. Kim a fait traduire ce livre
 b. Kim had the book translated
 c. Müdür kapı-yı aç-tır-dı.
 director door-ACC open-CAUS-Past
 'The director had the door opened'

5. Monoeventivity and indirect causation

Georgian causatives of transitives and unregatives are monoeventive. Agent-oriented adverbs may only modify the causing eventuality: dative causee cannot *normally* control adverbs *with pleasure, intentionally/intelligently*.

- (38) a. ketim gogo gangeb a-cek'v-a
 Keti.ERG girl.NOM intentionally CAUS1-dance-AOR.3sg
 =Keti acts on purpose
 (≠)the girl dances on purpose
- b. ketim sp'ort'smeni siamovneb-it a-varjiš-a
 Keti.ERG athlete.NOM happiness-with CAUS1-exercise-AOR.3sg
 = Keti happily acts
 (≠)the athlete happily exercise
- (39) ketim gogos k'at'a č'k'vianurad/ gangeb/ siamovneb-it
 Keti.ERG girl.DAT cat.NOM intelligently/intentionally/ pleasure-with
 da=a-malv-in-a
 prev=CAUS1-translate-nact-AOR.3sg
 'Keti made the girl hide the cat intelligently/with pleasure/intentionally'
 =Keti did this intentionally/intelligently/with pleasure
 (≠)the girl hid intentionally/intelligently/with pleasure

- Georgian causatives share this property with Turkish and Hungarian and differ from Japanese, where the causee controls agent-oriented adverbs. (Harley 2017).

But effects in (38-39) may be attenuated (even disappear) when the causer is inanimate. (cf. Akkus 2023). It may very well be that these effects have little to do with bieventivity of the predicate itself and more with the pragmatic considerations related to the centre of perspective or attitude holders. (cf. Charnavel 2019).

Another idea: inanimate causers are disguised event-denoting entities. (Martin 2018). They ‘add’ an event, rather than ‘identify’ the event, that causes the eventuality described by the predicate.

(40) a. ʔam kʻanonma stʻudentʻebs ganzrax /demonstraciulad
 this law.ERG students.DAT intentionally/demonstratively
da=a-toveb-in-a darbazi
 prev=CAUS1-leave-nact-AOR.3sg hall.NOM
 ‘This law made students leave the hall intentionally/demonstratively’
 =students acted intentionally/demonstratively

b. ʔmolebis gabrazebis survilma is iraneli msaxiobi ganzrax
 mollahs.GEN angering.GEN desire.ERG that Iranian.NOM actress.NOM deliberately
a-cekʻv-a tavšišveli
 CAUS1-dance-AOR.3sg head-nude.NOM
 ‘The desire to anger mollahs made that Iranian singer deliberately dance without
 covering her head’
 =the Iranian actress acted intentionally

Monoeventivity of Georgian causatives argues against the existence of affixal causative *verb* with its own temporal specification.

Causative constructions

- can contain two verbs with event semantics: *faire* causatives in French, *make* causatives and embedded verb.
- can contain one verb with event semantics with two stacked Voice heads. In the latter scenario, the lower Voice must be nonactive and the higher Voice is active.
- nonactive lower Voice in monoeventive causatives is spelled out in Georgian/Hindi/Amharic as part of the bimorphemic CAUS2. (Ayelow 2011, Bhatt & Embick 2017, Nash 2020, Nash & Bhatt 2024)

Coming back to general questions:

- Two conceptions of indirect causation: two temporally separated events (Fodor 1970) or intermediary causer between the initiation and the result (Wolff 2003). (Nash & Bhatt 2024)
- Languages like Georgian/Hindi/Amharic are compatible with the Wolffian definition, they morphologically convey this implicit intermediary causer.

Causative constructions in some languages do not express situations where the action initiated by one participant causes another participant to initiate an event, but rather the point of initiation of one event is pushed back by virtue of adding another initiator. (Ritter &

Rosen 1996, Bjorkman & Cowper 2013). Adding another initiator is possible only if the closest initiator is demoted.

Can CAUS2 be CAUS1+∅?

- Turkish? The causative morpheme on agentive and non-agentive verbs are identical. The dative causee in causatives of transitives is optional. But no extra marking on causatives of transitives.

Is deagentivisation of embedded transitive predicate confined to languages with CAUS1 qua Voice?

- French *faire-par* constructions are often analysed to contain ‘agentless’ embedded clause (Kayne 1975, and many others). There are reasons to think that *faire-à* constructions and *faire-par* constructions share the same embedded structure and that the dative causee in *faire à* constructions is introduced in the upper causing layer. (Alsina 1992, Guasti 1996, Nash 2020)
- Icelandic *let* constructions studied by Sigurðsson & Wood (2021)

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* Glosses: 1S -subject person marker; 1O-object person marker; ACC-accusative; AOR-aorist; Appl-applicative; CAUS1-transitivizer; ERG-ergative; DAT-dative; FUT-future; nact-nonactive; PRES-present; TS-thematic suffix; P.IMP-past imperfective; PLPRF-pluperfect