

A uniform syntax for non-valency-increasing causatives

In languages like Greek and Hebrew, *middle* or *non-active* morphemes have been argued to expone a single functional head—a specifierless Voice head (Voice_[-D]). This analysis is tenable because middle and non-active forms have a common syntax: they lack an external argument. Differences in the interpretations of non-active forms (e.g. anticausative, passive, reflexive, dispositional middle) can be attributed to *contextual allosemy* of Voice_[-D]: its interpretation depends on the root with which it occurs. (Schäfer 2008, Alexiadou & Doron 2012, Alexiadou et al. 2015 a.o.).

In this talk I consider whether *causative* morphemes may have a similarly uniform syntax. On the one hand a uniform analysis seems fairly simple: analyses like Harley (2008) and Nie (2020) hold that causative morphemes expone a functional head that must take a specifier (e.g. Voice_[+D]). This head then takes the XP corresponding to the stem as its complement. The uniform analysis appears tenable because Voice_[+D] always introduces an argument in its specifier. However, one challenge to a uniform perspective comes from **non-valency-increasing** causative morphemes (Kulikov 1993, Kittilä 2009, 2013, Aikhenvald 2011, a.o.). These are causative morphemes which, in addition to their canonical argument-adding usage, also have a *non-valency-increasing* (NVI) usage. In these uses, the causative morpheme alters the interpretation of the verb in some way, without adding a syntactically-projected argument, or even an implicit argument, as in (1).

- (1) *Henkilö laih{d/t}u-(tt)-i 4.86 kiloa.*
 person.NOM lose.weight-(CAUS)-3SG.PST 4.86 kilograms
 ‘A person lost 4.86 kilos (**intentionally**).’ (Finnish, Kittilä 2009:80)

Thus it seems that in languages with NVI causatives, a causative morpheme associates with two different syntactic structures: one where an additional, external causer argument is introduced (canonical), and one in which it is not (NVI). This is a clear problem for a syntactically-uniform analysis. One solution would be to postulate two homophonous, syntactically-distinct ‘causative’ heads for such languages: one which introduces a specifier, and one which doesn’t. However, a homophony analysis fails to capture the restricted ways in which NVI causatives are interpreted (see below). Instead I argue that a syntactically-uniform analysis can and should be maintained: all causative morphemes expone a Voice head that takes a specifier (Voice_[+D]), *including* in their NVI uses—an NVI causative morpheme *is the same syntactic head as a canonical causative morpheme*. In NVI uses, exceptionally, the causee-introducing head is deprived of its ability to introduce its own argument, and thus the number of arguments in the whole clause goes unchanged. I also argue that some of the interpretations of NVI causatives follow from their syntax and compositional semantics. **Syntax.** I assume an analysis of canonical morphological causatives along the lines of Harley (2008) and Nie (2020): Voice_[+D] may select a complement of various sizes—a VoiceP (as in (2a)), or a vP, or a RootP—leading to different semantic/syntactic properties. To account for NVI usages of causative morphemes, I extend the list of possible complements to Voice_[+D]: Voice_[+D] may select “a projection of Voice that has not yet projected its external argument” (Bruening 2013)—i.e. it may select a “bar”-level projection of Voice_[+D], as in (2b). Consequently the lower Voice_[+D] head fails to introduce an argument.

- (2) a. [_{VoiceP} DP Voice_[+D]] [_{VoiceP} DP [_{Voice'} Voice_[+D]] [_{vP} ...] (Canonical, VoiceP-selecting)
 b. [_{VoiceP} DP Voice_[+D]] [_{Voice'} Voice_[+D]] [_{vP} ...] (NVI, Voice'-selecting)

This is essentially the same mechanism as in Bruening’s analysis of passives—for him, Pass⁰ in English selects a bar-level projection of Voice_[+D], ensuring that external arguments are suppressed in passives. However, while Pass⁰ does not have a specifier of its own, here the selecting head Voice_[+D] *does* introduce a specifier.

Compositional semantics. The **lower Voice_[+D] head** in (2a) and (2b) introduces an unsaturated thematic role – let’s call it an ‘agent/causer’ role for now. It composes with its complement vP by Event Identification (Kratzer 1996), forming the (underlined) Voice' node. In (2a), Voice' composes with the causee DP by Functional Application, so the causee DP is identified with an agent/causer role; but in (2b), Voice' must instead compose directly with the **higher Voice_[+D] head**, which *also* introduces an unsaturated agent/causer role. In (2b), Voice' and **higher Voice_[+D]** therefore combine by

Predicate Conjunction (Pylkkänen 2008, Wood 2015). And so when the subject DP is merged in the specifier of **higher Voice_[+D]**, that DP is identified with *two* agent/causer roles: the one introduced by **higher Voice_[+D]**, and the one introduced by **lower Voice_[+D]**. Note that each Voice_[+D] head is associated with its own event – this may require a more elaborate syntax (e.g. Nie 2020).

Deriving the interpretations of NVI causatives. The interpretations of NVI causatives can be characterized as (i) increased volitionality of the subject ((1)), (ii) increased intensity or affectedness of the object ((3)), and (iii) event-internal pluractionality ((4)) (in the sense of Henderson 2012), though not necessarily all three at once (Aikhenvald 2011).

(3) *John-at ashanni-(chi)-tok.*
 John-NOM twist-(CAUS)-PST
 ‘John twisted it (**hard/with difficulty/and broke it**).’ (Choctaw, Broadwell 2006:131)

(4) *Ašak Bajyr-ga inek-ti dile-t-(tir)-gen.*
 old.man Bajyr-DAT cow-ACC look.for-CAUS-(CAUS)-PST
 ‘The old man caused Bajyr to look for the cow (**several times**).’ (Tuvan, Kulikov 1993)

These interpretations can be attributed to the ‘doubling up’ of the semantics of the Voice_[+D] head, detailed above. In the causative structures considered by Folli & Harley (2007) and Wood & Sigurðsson (2021), the lower Voice_[+D] introduces a specific kind of agent/causer role that we can term a *doer*: an agent undertaking an event with a *duration*. I propose this is true of NVI causative structures like (2b) too – the lower Voice_[+D] head introduces a doer role, and thus forces the subject of an NVI causative to be a doer. A speaker’s decision to employ an NVI causative therefore serves to exaggerate the agency or the duration of the event, pragmatically. Property (i) (increased volitionality) is explained by the requirement that an animate doer be volitional (Folli & Harley 2005) (*N.B.* I discuss NVI causatives with *inanimate* subjects in the talk). Property (iii) (pluractionality) is explained by the requirement that a doer engage in an event with a duration: pluractionality turns achievements into accomplishments or activities. Property (ii) (increased intensity/affectedness) can be understood either as a concomitant of (i), or as a way to supply an event with a (greater) duration.

Distribution of NVI causatives. This account predicts that causative morphemes (exponents of Voice_[+D]) can be NVI only when they take as their complement a VoiceP headed by Voice_[+D] – i.e. an unergative, causative or transitive verb stem. In (4), a NVI causative morpheme is stacked on an overt causative morpheme (i.e. a Voice_[+D] head); In (1) and (3), a NVI causative morpheme is stacked directly onto a verb stem—since the verbs in these examples have an external argument, I assume they contain a *null* Voice_[+D] head. This account predicts that causative morphemes cannot be NVI when added to unaccusative stems (which I assume are headed by a specifierless Voice_[-D], or by vP alone, as in Alexiadou et al. 2015). Tentatively, this prediction appears to be borne out typologically (with a class of exceptions found in *trivalent* voice systems, e.g. Creek (Martin 2011), discussed in the talk).

Conclusion. A syntactically-uniform analysis of causative morphemes can be upheld. An NVI causative morpheme is a Voice_[+D] head with a specifier, just as in its canonical, valency-increasing use. Exceptionally, it is able to select as its complement an external-argument-introducing head *which has not yet introduced an external argument*. The account combines two pieces of existing formal technology in a novel way: selection of bar-level constituents (Bruening 2013), and a semantic composition rule of *Predicate Conjunction* (Wood 2015). The account also points to an explanation of why NVI causatives are interpreted the way they are, based on the semantico-pragmatic consequences of the proposed syntax.

Selected references. Aikhenvald 2011. Causatives which do not cause: Non-valency-increasing effects of a valency-increasing derivation. In *Language at Large*. • Alexiadou, Anagnostopoulou & Schäfer 2015. *External arguments in transitivity alternations: A layering approach*. • Harley 2008. On the causative construction. In *Handbook of Japanese linguistics*. • Kittilä 2009. Causative morphemes as non-valency increasing devices. • Martin 2011. *A grammar of Creek (Muskogee)*. • Nie 2020. *Licensing Arguments*. NYU PhD. • Schäfer 2008. *The syntax of (anti-) causatives: External arguments in change-of-state contexts*.