Dissecting Inchoatives and Causatives
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Nutshell: Contra recent arguments that causatives are not built on inchoatives, we present data from colloquial English and from Northern Iroquoian that show that these two functional projections can be distinct. We argue that while they are bundled in other languages, they can be split as described here. This line of research follows recent trends in investigating the fine structure of the *v*P layer (Alexiadou et al., 2015, Harley, 2013, Kim, 2011, Marantz, 2013, Pylkkänen, 2008, Ramchand, 2008).

Background: The references cited above showcase the range of possible structures in the *v*P layer. In particular, it has been shown that a single functional projection is not sufficient to account for the range of cross-linguistic data. Nevertheless, the early notion from generative semantics that CAUSE and BECOME form distinct layers (Dowty, 1979) has been argued against (Marantz, 2007, 2013, Von Stechow, 1996). Specifically, the following representation for *John closed the door* has been challenged.

(1)   [$_{v\text{P}}$ [$_{\text{DP}}$ John] CAUS [$_{\text{VP}}$ BECOME [$_{\sqrt{\text{P}}}$ [$_{\text{DP}}$ door] closed]

Evidence against this representation comes in two forms: (i) the lack of adverbs such as *again* to modify all three projections in (1), and (ii) the lack of distinct inchoative and causative morphology on one and the same verbal complex. We review these briefly here in turn. First, the following sentence has two interpretations, the repetitive reading and the restitutive reading.

(2)   John closed the door again.

The structure in (1) predicts a third reading in which *again* modifies BECOME, but not CAUSE. As has been discussed in the literature, no such reading is available (see Alexiadou et al., 2015: 23ff for a lucid discussion). Second, the lack of the sequence V-INCH-CAUS cross-linguistically has led researchers to abandon the structure in (1). We now turn to some data that suggests the decomposition in (1) may actually be on the right track in some situations.

English *get* Constructions: Colloquial English has a causative and inchoative construction formed with *get* that differs from the *get*-passive (Fleisher, 2006, Haegeman, 1985). In particular, the *get*-inchoative does not permit an agentive *by*-phrase:

(3)   a. My car got broken into by a thief.   b. My flowers got wet (*by the gardener)

Unlike the causative example in (2) above, the following example with a *get*-causative does have three possible interpretations.

(4)   John got the car wet again.
   (i)   The car was wet before (in an original wet state, say from the manufacturer). It became dry. Then John got it wet again.
   (ii)   The car got wet before (from the rain, say). It became dry. Then, John got it wet again.
   (iii)   John had gotten the car wet before and he did it again.

Iroquoian Causatives: Northern Iroquoian languages provide morphological evidence for the independence of inchoatives and causatives. Consider the following examples. (6) contains a dislocative, which, like CAUSE is a flavour of an agent-oriented *v*.

(5)   waʔhanasgwayenęʔdaʔ   jihah   [Onondaga, Woodbury (2003)]

waʔ-	ha-	naskw-	a-	yenę	-ʔ	-ht	-aʔ	jihah
FACT-	3SG.M.NOM-	animal-	EPEN-	fall	-INCH	-CAUS	-PUNC	dog

'He hit the dog.' (Literally: 'He caused the dog to become fallen.')

(6)   wakyʌtá:sleʔ   [Oneida, Michelson & Doxtator (2002)]

wak-	yʌt	-aʔ	-sl	-eʔ
1.SG.PAT-	have/place	-INCH	-DISLOC	-ASP

'I'm going to get it.'

Analysis: Given the facts above, an analysis in which the verbal root merges either with an inchoative *v* or a causative *v*, but not both, is not tenable. We propose that features may or may not bundle in one and the same language (in the sense of Pylkkänen, 2008). To accomplish this, we assume that feature bundling boils down to Merge between heads in the workspace, apart from the rest of the tree (Bobaljik and Brown, 1997). Once two heads merge, they form a complex head and thus project only a single phrase. We illustrate this here. Assume two heads, A and B, are not bundled in a particular construction.

They merge into the construction independently and project accordingly:

(7)   [$_{AP}$ A [$_{BP}$ B [$_{CP}$ …]]]

Now assume that A and B are bundled. We propose, assuming parallel derivations, that more than one subtree can be formed in the workspace at once. Assume that CP has been built. Now a parallel derivation starts. The derivation selects the two heads A and B from the Lexicon and merges them together to form a complex head. Assume for convenience that the label of the complex head is A.

(8)   [$_{CP}$ …]   [$_A$ A B]

This complex head now merges with CP and forms the following structure.

(9)   [$_{AP}$ A B [$_{CP}$ …]]

Note crucially that the structure in (7) allows three adjunction sites for an adverb (such as *again*), while the structure in (9) allows only two adjunction sites. We propose, then, that Onondaga causatives and the English *get* causative allows for the structure in (7), whereas the other structures studied to date allow only the structure in (9). This explains the three possible readings for *again* in the English *get* causative as well as the morphological properties of the Onondaga causatives. Whether feature bundling takes place in a particular construction depends on the morphological properties of the elements introduced into the derivation; however, space does not permit us to explore this kind of variation here.

Vocabulary Insertion: The choice between the two options in (9) and (9) boils down to morphological properties of vocabulary items in the language, assuming late insertion. English *get* lexicalizes bare INCH, while bare CAUSE does not correspond to an overt morpheme. Thus, inchoative *get* (3b) can only be inserted when INCH and CAUSE are merged separately as in (9). Passive *get* (3a), on the other hand, entails an external causer, whether overt or not. Compare: *My car got broken into (on purpose)* with *My flowers got wet (*on purpose)*. Thus, we propose passive *get* lexicalizes the bundle [INCH, CAUSE]. Dynamic roots such as *break into* require the [INCH, CAUSE] feature bundle, while stative roots such as *wet* can appear with a bare INCH; however, we leave the Vendlerian aspectual implications of this proposal to future research.

Conclusion: We have argued based on the English *get* construction and on Onondaga causatives that the *v*P layer is more complex than previously though. In particular, we have shown that distinct inchoative and causative heads are necessary. We have proposed a theory of feature bundling which allows for these heads to remain distinct in the environments discussed, but allows for them to merge as a single head (i.e., as a bundled head) in other environments. This proposal impinges on our understanding of head movement and intra-linguistic variation.

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