Catalytic conversion : Effects of partial cause on argument structure

Andrew McKenzie · University of Kansas

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The machinery for implicative verbs (like *manage to*) involves a propositional 'catalyst' that contributes to causing the event. I explore the idea that this machinery can also occur in the event domain. As a result it affects argument structure, and what looks like a valence difference can be re-analyzed as having roots in partial causation.

This talk focuses on the detransitive form in Kiowa [kio; Kiowa-Tanoan; USA]. At first the detransitive seems to be simply a valence-reducing morpheme, making transitive verbs (1-2a) intransitive (1-2b).

(1) a. á: mę̨n= bǫ̨n–hèl
stick 2SGA:3DUO= bend–PFV–HSY
'You bent the (2) sticks.'

b. á: ę̀= **bǫ́n–dé**–hèl
stick 3DUS= **bend$_{\text{DETR}}$–DETR.PFV**–HSY
'The (2) trees bent over.'

(2) a. á: mę̨n= k'ɔ̂:bè–hèl
tree 2SGA:3DUO= topple.PFV–HSY
'You pushed the (2) trees over.'

b. á: ę̀= **k'ɔ́:báj**–hjèl
tree 3DUS= **topple.DETR.PFV**–HSY
'The (2) trees fell over.'

However, this form also is used with a variety of meanings: anticausative and passive, but also out-of-control, (proven) ability, manage-to, and reach/finish/get done. For these last four readings, an indirect agent/subject can be added via a dative argument (3a). Oddly, a handful of path-based unaccusatives have a detransitive as well (3b).

(3) pį́:+à: nę́n= **p$^{\text{h}}$ít–té**–hèl
eat+wood 2SGD:3DUO= **wipe$_{\text{DETR}}$–DETR.PFV**–HSY
'You finished/got done cleaning the (2) tables'
'You managed to clean the (2) tables'
'You are/were able to clean the (2) tables'
'You accidentally wiped/ erased the tables'

(4) k$^{\text{h}}$ɔ̂:–kʲà ę̀m= **tsą́n–dé**–hèl
car–at 2SGS= **arrive**–DETR.PFV–HSY
'You reached the car'

To wrap all these together we will apply the approach to implicative verbs from Nadathur (2016), who improves the 'catalyst' approach of Francez & Baglini (2015). This approach covers many of these meanings, so we tweak it here for the event domain. A catalyst is an event c that is causally necessary but not sufficient for another event e to have a certain description P. With this in place, we can rely on context for most of the other readings: If the other necessary conditions for $P(e)$ are met, the 'manage to' reading emerges. If not, the 'able to' reading emerges.

If the event is an accomplishment, whose necessary conditions and causes are ordered, the 'finish' reading emerges if the other conditions are met, even if it is a path unaccusative ('reach'), while 'get done' emerges if not. The out-of-control reading (6) asserts only that the subject conducted an event c that was necessary for the event to happen. This implicates ability rather than asserting it (cp. Davis et al 2009 for St'at'imcéts). The out-of-control detransitive stands in contrast to the simple active transitive (5), which requires complete control over the event (Watkins 1984). Perhaps these are different versions of a Voice/v head.

(5) dɔ̀â:tɔ bé= **ôl**–hèl
dish.INV 2SGA:3INVO= **drop.PFV**–HSY
'You dropped the dish (deliberately)'

(6) dɔ̀â:tɔ gɔ́= **ót–té**–hèl
dish.INV 2SGD:3INVS= **drop$_{\text{DETR}}$–DETR.PFV**–HSY
'You dropped the dish (on accident)'

The use of implicative machinery in the event domain reinforces Nadathur's idea that implicatives are built from an abstract component of partial causation whose catalyst event is merely described by the implicative verb (like *dare* or *bother*). It might also be that *manage* merely describes it as well, while in the Kiowa case, there is no modifying verb.

We can then explore the more speculative hypothesis that partial causation opens the door to a variety of readings, including anticausatives. That is, the nature of the catalyst converts the verb from transitive to intransitive. For instance, (1b) would describe simply that there was a tree bend that had a catalyst $\lambda c.\ \exists e[$ bend(trees)(e) & c is nec. for e]. The agentive form would perhaps indicate that this catalyst was (wholly) sufficient for the described event, rather than merely one of its necessary conditions.