Appendix: Semantic composition

Let us show how the resultative structure in (1) can be interpreted compositionally.

(1) a. pẽ-gue
   break-RES
   ‘broken’

   b. [AspP RESTARGET [vP [v √BREAK vCAUS ] [θP [θ ST θ THEME ] DP ] ] ]

The interpretation of the abstract predicate of states ST is context sensitive, as illustrated in (2):

(2) ST = λs. broken(s) s. bury(s)

   ... ...

Its denotation is a function of the identity of the root that c-commands it. This context sensitivity is treated as a case of contextual allosemy (see Wood & Marantz 2017 for a motivation of contextual allosemy in the analysis of event structure and argument structure in Distributed Morphology).

The ST predicate combines with the thematic head θ THEME by event identification (Kratzer 1996). The resulting function is then applied to the denotation of the theme:

(3) θP = λs. broken(s) & theme(s) = DP

I assume following Kratzer (2000) that the RESTARGET head denotes a function whose domain consists of curried relations between events and states, and I define the denotation of the causative head vCAUS as a function of type \langle v, t \rangle, \langle v, t \rangle, which maps a property of states (type \langle v, t \rangle) to a curried relation between states and events (type \langle v, t \rangle):

(4) a. RESTARGET = λR. λs. ∃e [R(s)(e)]

   b. vCAUS = λP. λs. λe. cause(e, s) & P(s)

The event argument of vCAUS must be identified with that of the property denoted by its adjoined √BREAK root. The two heads are combined using a generalization of the principle of event identification. The generalized event identification principle in (5) states that if an expression β has only one event argument and another expression γ is a property of events, one can combine them by identifying their event arguments:

(5) Generalized event identification (GEI):¹

   If y and w are the only variables of type v in $\vec{x}\vec{y}\vec{z}\vec{w}$, β and γ are of type t, and y is free in γ then:
   GEI(λw. y, λxλyλz. β) = λxλyλz. γ[y/w] & β

¹ Note: $\vec{x}$ is a sequence of variables $x_1, ... x_n$, so is $\vec{x}\vec{y}\vec{z}\vec{w}$. If $\vec{x} = x_1, ... x_n$, $\lambda x_1...\lambda x_n \varphi = \lambda x_1...\lambda x_n \varphi$. 
(6) a. \[ \square \text{BREAK} \] = \lambda e. \text{breaking}(e)

b. \[ \square \text{BREAK}_{\text{vCAUS}} \] = \lambda P. \lambda s. \lambda e. [ \text{breaking}(e) \& \text{cause}(e,s) \& P(s) ]

In the absence of a target stativizer, the state argument of a causative vP would be bound by default existential closure:

(7) Existential Closure (EC):

EC(\lambda u. \lambda v. \beta) = \lambda v. \exists u \beta

In (1) however, the target stativizer binds the event argument of the function denoted by the little vP:

(8) a. \[ \square \text{vP} \] = \lambda s. \lambda e. \text{breaking}(e) \& \text{cause}(e,s) \& \text{broken}(s) \& \text{theme}(s) = \square \text{DP} \]

b. \[ \square \text{AspP} \] = \lambda s. \exists e [ \text{breaking}(e) \& \text{cause}(e,s) \& \text{broken}(s) \& \text{theme}(s) = \square \text{DP} ]

This shows that our analysis of the structure of Mbyá resultative predicates supports a compositional interpretation.

References

