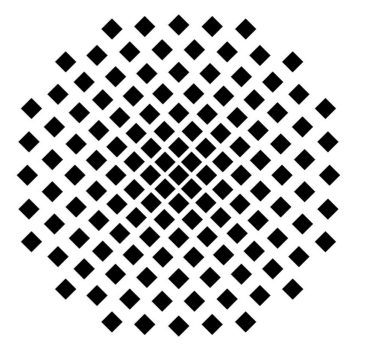


On the natural language metaphysics of dispositions



Tillmann Pross

Institute for Natural Language Processing, University of Stuttgart

I argue for the linguistic reality of dispositions in that Verbs of Emission denote the *manifestation* of a disposition and nominalizations of Verbs of Emission denote the *instantiation* of a disposition.

Verbs of Emission are mono-eventive ...

- (1) a. *germinate, radiate, ulcerate, hibernate* (in the original non-computer usage), *oscillate, pullulate, vascillate, shudder, twinkle, flicker, stink, bubble, gush, proliferate* ...
 b. *keimen* (to germinate), *strahlen* (to radiate), *bluten* (to bleed), *wirken* (to take effect), *strömen* (to stream), *knospen* (to pullulate), *quellen* (to gush), *wuchern* (to grow) ...

- Verbs of Emission (VoE) are known to be problematic with respect to classification as either unergative or unaccusative Perlmutter [1978], Zaenen [1993].
- Weighing the cross-linguistic evidence from tests for unaccusativity, Rappaport Hovav and Levin [2000] conclude that VoEs are unergative and mono-eventive.

...but in nominalizations they are bi-eventive ...

- (2) a. the germination of the plant (*by-PP) (3) a. the hibernation of the bear (*by-PP)
 b. the radiation of the caesium (*by-PP) b. the oscillation of the pole (*by-PP)
 c. the ulceration of the wound (*by-PP) c. the pullulation of the seed (*by-PP)
 (4) a. *die anhaltende Blutung der Wunde (*durch-PP) wird gestoppt*
 the constant bleed.UNG the.GEN wound (*by-PP) is stopped
 b. *die anhaltende Wirkung der Tablette (*durch-PP) wird gestoppt*
 the constant effect.UNG the.GEN pill (*by-PP) is stopped
 c. *Für mein Brot mache ich eine Kühlschrank 'Gehung' über Nacht.*
 for my bread make I a fridge prove.UNG over night

<http://bfriends.brigitte.de/foren/rezeptideen/55358-was-kocht-und-backt-ihr-zu-ostern-6.html>

- VoE nominalizations pass tests for complex event structure with adverbial modifiers *constant, anhaltend* resp. selection restrictions of verbs *to stop, stoppen*.
- "[I]t has been noted in the literature that across languages event nominals are [...] derived from unaccusative predicates, but not from unergative ones" [Alexiadou, 2001, p.78]
- "a verbal construction has an *-ung* nominalization if and only if the verb is constructed bi-eventively." [Roßdeutscher, 2010, p. 106]
- Alexiadou [2001] for English, Ehrich and Rapp [2000], Bücking [2012] for German: theme interpretation of the genitive is always possible

...because they denote dispositions.

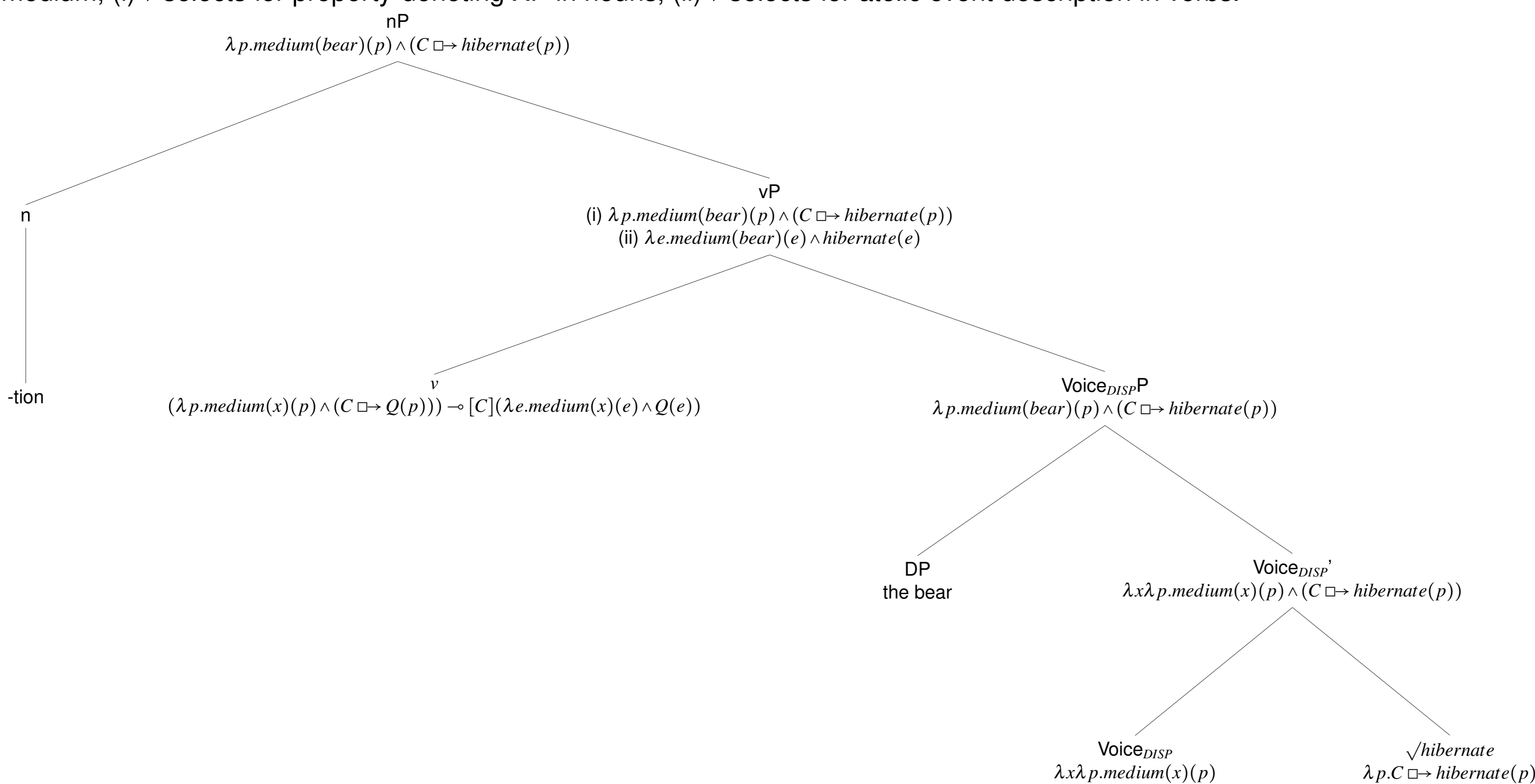
What "kinds of things and relations among them does one need in order to exhibit the structure of meanings that natural languages seem to have"? [Bach, 1986, p. 573]

- In VoEs a "reaction of the argument is the source of the eventuality", where "some property inherent to the argument of an internally caused verb is responsible for bringing about the eventuality it describes" and the inherent property is an "internal physical characteristics" of the VoE argument.
- The instantiation of the disposition is reflected by the "strong restrictions that these verbs impose on the possible emitters." [Rappaport Hovav and Levin, 2000, p. 287]

Proposal: Single argument position of a VoE is a *Medium* in which a disposition is instantiated. The dispositions manifests itself in VoEs (in line with Rappaport Hovav and Levin [2000]) but not in nominalizations of VoEs (which saves the generalizations of Alexiadou [2001] and Roßdeutscher [2010] generalization).

The Medium Construction

- (8) medium, (i) *v* selects for property-denoting XP in nouns, (ii) *v* selects for atelic event description in verbs.



Syntax of deverbal dispositions

- With respect to the disposition to hibernate instantiated in a bear, a bear is an internal argument undergoing a directed change 'into' hibernation when the disposition manifests itself but once the disposition manifests itself, the bear becomes the immediate cause of the event described and thus is an external argument of *hibernate*.
- Minimalist UTAH Harley [2011]: Medium theta-role is assigned to DPs which are in the specifier of Voice and in the specifier of the complement XP of vP.
- Syntax all the way down à la Distributed Morphology: verbalizer *v* selects for Voice and Voice merges with the verbal root √.
- Root merge with Voice explains strong restrictions on possible fillers of the single argument slot of VoEs.

Semantics of deverbal dispositions

In the simple Conditional Analysis (SCA) of dispositional adjectives (5a)↔(5b) Choi [2012], the bearer of a disposition is an internal argument of the manifestation event.

- (5) a. x is fragile \leadsto x has the disposition to shutter when struck
 b. x is fragile \leadsto x would shutter when struck

In (6a) the disposition manifests itself in the *linguistic* presence of the trigger so as to yield (6b) whereas in (6c) the disposition and trigger are causally separated and thus the disposition does not manifest itself.

- (6) a. x hibernates \leadsto x has the disposition to hibernate when food supply dropped
 b. x hibernates \leadsto x hibernates when food supply dropped
 c. hibernation of $x \leadsto x$ would hibernate when food supply dropped

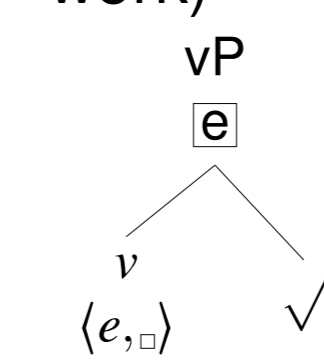
Causal relation between VoE events and VoE nominalization dispositions (6c)→ [C](6b):

- (7) a. A drop of food supply leads from a state in which a bear would hibernate if food supply dropped (= a telic property) to a state of affairs in which the bear hibernates (= an atelic event).
 b. $\lambda p.medium(bear)(p) \wedge (C \square \rightarrow hibernate(p)) \rightarrow [C] \lambda e.medium(bear)(e) \wedge hibernate(e)$
 'if a bear would hibernate if food supply dropped then - when food supply drops - it hibernates'

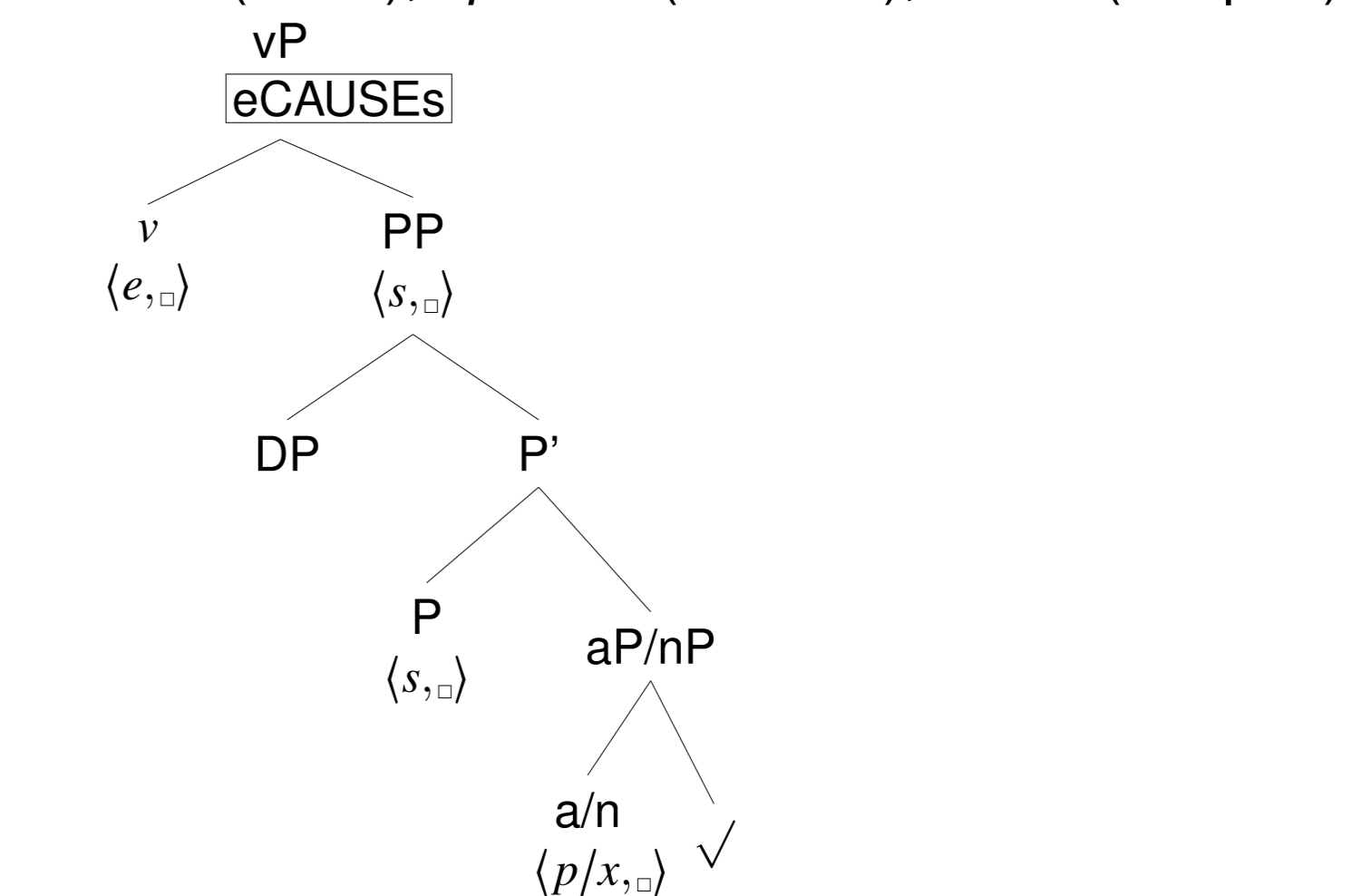
- Verbal dispositions are fixed linguistically: they can not be finked or masked without reducing verbal semantics to absurdity.
- Dispositions are necessary to exhibit the structure of meaning in VoEs and their nominalizations: dispositions are linguistically real.

Roßdeutscher [2010]'s interpretation of Marantz [2005]:

- (9) mono-eventive, no *-ung* noun, non-empty *v* selects for atelic event description
singen (to sing), *schlafen* (to sleep), *arbeiten* (to work)



- (10) bi-eventive, *-ung* noun, empty *v* selects for state-denoting XP
töten (to kill), *sperrern* (to block), *reifen* (to ripen)



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