

# The *En/Ed*-Participle in English

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# Passive without Passive

In this talk, I will argue that there is no such thing as Passive, in the following sense:

- No piece of morphology called the passive morpheme associated distinctively with the 'passive' construction, however abstract we want that to be or how we choose to label them. .
  - No syntactic head or feature called Pass, distinctively associated with the 'passive' construction.
  - No semantic primitive which effects 'passive' semantics (external argument demotion, internal argument promotion or whatever).
- There *is* such a thing as the English participle in *En/Ed* however.

- (1)
- (a) The cat was chased by the dog.
  - (b) The dog has chased the cat.
  - (c) The cat has been chased by the dog.
  - (d) The recently chased cat....

# How Many *en/ed*-Participles?

- (a) **Post Copular Stative Predicative use** . (Target State Passive, Resultant State Passive)
- (b) **Attributive use**
- (c) **(Dynamic) Verbal Passive (with BE auxiliary)**
- (d) **The Perfect (with HAVE auxiliary)**

See Wasow 1977, Bruening 2014 for the differences between (a) and (c). See (Kratzer 2000, Embick 2004) for internal differences within (a). It is generally assumed that (b) is just a species of (a), but see Lundquist (2008) for the claim that (c) can also give rise to an attributive participle. Within DM, it is standard to analyse the difference between (a) and (c) in terms of different heights of attachment of the participial morphology (Embick 2004, Anagnostopoulou 2003) ), but to my knowledge there is no formal account unifying (a) and (c) with (d).

## Kratzer's 2000 Semantics for Target State Participle

- (2) (a) *cool*:  $\lambda x \lambda s [\text{cool}(x)(s)]$   
(b) *cooled*:  $\lambda x \lambda s \exists e [\text{cool}(x)(s) \wedge s = f_{\text{target}}(e)]$

# Kratzer's 2000 Semantics for Resultant State Participles

- (3) Stem+object:  $\lambda e[\text{prove}(\text{the theorem})(e)]$   
 Stativizer:  $\lambda P \lambda t \exists e [P(e) \wedge \tau(e) < t]$   
 Output:  $\lambda t \exists e [\text{prove}(\text{the theorem})(e) \wedge \tau(e) < t]$

Kratzer states that the participle denotes the state that Parsons (1990) calls the 'resultant state'.

# Resultant States

“For every event  $e$  that culminates, there is a corresponding state that holds forever after. This is “the state of  $e$ ’s having culminated,” which I call the “Resultant state of  $e$ ,” or “ $e$ ’s Rstate.” If Mary eats lunch, then there is a state that holds forever after: The state of Mary’s having eaten lunch ”  
Definition from Parsons (1990).

# Event Implications as a Diagnostic?

Using adverbs to test for event implications turns out to be a tricky business. Many adverbs tested are good with target state participles and pure adjectives as well.

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- (4) The windows were all *recently open*, and that's why its so cold in here.
- **Event Actuality Implications:** An event of the type named by the verb *must have actually occurred* for the state ascription to be true. In Kratzer's account both Target and Resultant state have these. In Embick's account, only Resultant state passives have these.
  - **Conceptual Event Implications:** An event of the type named by the verb *typically has this kind of state as its result*. (Plausibly present for all stative passives, as opposed to the bare adjective)



# English and the Stative Passive Construction

If we control for stativity (adapting a test from Hallman 2009), we see that target state stative passives in English are rather restricted.

- (5)
- (a) The inspector revealed the box to be open/empty.
  - (b) The inspector revealed the box to be closed/broken.
  - (c) \*? The inspector revealed the box to be opened/emptied.
  - (d) \*?The inspector revealed the metal to be hammered.

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- (6) The box has been opened/emptied/hammered.

# Availability of Target state reading is Sensitive to Verb type.

Kratzer's generalization concerning Target states turns out to be correct: Only verbs that have resP in their base meaning give rise to good target state stative participles (without coercion). Attempts to form stative passives with non-resP verbs are successful only under coercion— the accommodation of a contextually derived target state (using a null res head).

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**All stative participles In English express resP in a phrase structure**

(What has been called) 'Target' State: Verb has res in its lexical specification

(What has been called) 'Resultant State' : Verb has no res, ResP is coerced and added constructionally

# Blocking by Stative Adjectival Root

In cases where the verb that contains resP is actually derived from an adjectival source (*empty, open*), the expression of the state using the simple adjective blocks the participle from being used to spell out the target state.

- (7) (a) The box is open/\*The box is opened.  
(b) The box is empty/\*The box is emptied.

# The Verbal Passive

## Central Properties of the Passive

- A Existential binding of the external argument
- B Participle modifies only the internal argument.
- C The Passive VP lies within the lowest Event Domain of the clause

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- (9) The inspector discovered the man to own shares worth a huge amount of money./ The inspector discovered the shares to be owned by a homeless man called Nick.

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- Restrictions on Formation:

Passive does not occur with unaccusatives (Germanic), or with intransitives more generally in English.

# The Perfect

## Some Differences Between Perfect and Passive Participles:

- Perfect participles never reduce argument structure
- Tests for height reliably indicate that the position of the participle in the perfect is *higher* than the position of the participle in the passive.
- Perfect participles are always possible— never ‘blocked’

# Theories of the Perfect

(a) *The Resultant State Analysis:*

The (present) perfect is a present tense assertion of a situation that carries with it an entailment of a past event (Parsons 1990, Smith 1991, Kamp and Reyle 1993).

(b) *The Indefinite Past Analysis:*

The (present) perfect is an assertion of a past event, with a pragmatic component/presupposition requiring present relevance (Reichenbach 1947, Klein 1992, Inoue 1979).

(c) *The Extended Now Analysis:*

In the (present) perfect, a temporally complex situation is being asserted starting from the past and extending to overlap with the utterance time (McCoard 1978, Pancheva and von Stechow 2004)

# Types of Perfect

- (a) John has thrown the ball onto the roof (and it's still there).  
*Target State Perfect.*
- (b) John has thrown the ball onto the roof (before)      *Resultant State perfect*
- (c) John has driven a truck (before)      *Resultant state/experiential perfect*
- (d) John has lived in Paris all his life.      *Universal perfect*
- .

# Readings of the Perfect are Sensitive to Verb Type

(See also Portner (2003))

**The *reading* of the perfect is dependent on the nature of the verb:**

*Target state perfect*: verbs that form target state passives

*Experiential/Resultant state perfect*: All verbs

*Universal perfect*: Stative verbs.

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- All three constructions show a dependence on the verb they are formed from, with the following clear pattern:
  - (i) Stative passive dependent on the existence of *res*
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- Restricted distribution (what I will call blocking) is found in the stative and verbal passive but not in the perfect.
- The two passives involve reduced argument structure, the perfect does not.
- The stative passive does not give rise to actuality entailments for the relevant event description, the verbal passive and the perfect do.

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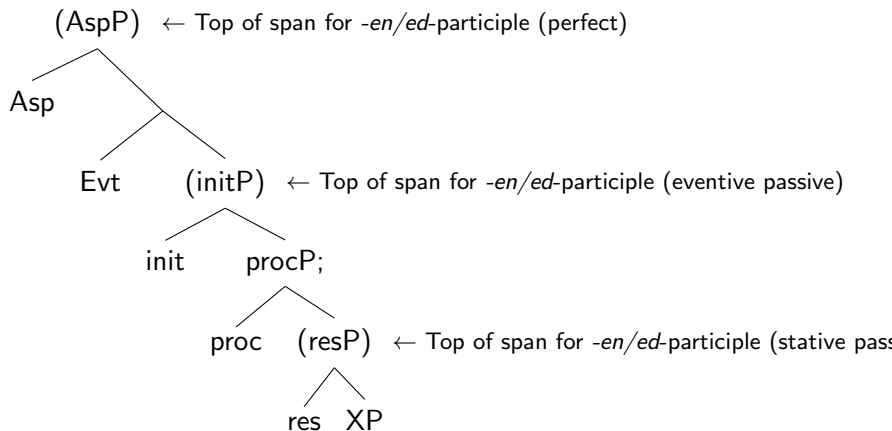
The participle in *en/ed* even for a particular verb, cannot be given a unified absolute denotation because of the deep semantic and distributional differences in the three contexts it appears in. However, the systematic dependence of the participle meaning on the verb it is 'derived' from, and how the nature of that dependence shifts with the different constructions, allows for a simple and elegant description of the situation.

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**The participle in *en/ed* is always the spellout of a truncated span of the verb it is associated with**

# Scope of Spell-Out for the -EN/ED-Participle





# Categorical Spine Denotations

- (a) Inflected Transitive Verb: < Asp (plus uT), Evt, Init, Proc, Res >
- (b) Bare Root Form: < Evt, Init, Proc, Res >
- (c) Participle in *en/ed*: < ((( Asp without uT) Evt), Init,) Proc,) Res >
- (d) Dummy *Be*: < T, Asp, Evt >
- (e) Perfect *Have*: < T, Asp >

# Inclusion Relations Relating Participle Spell Out and Inflected V

Each lexical verbal specification corresponds to a categorial *span* (see Svenonius 2012, Bye and Svenonius 2012)).  
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This derives:

- (i) the absence of *proc*, the dynamic component in the stative passive.
- (ii) the absence of the external argument in the dynamic passive (because of the absence of *Voice*).
- (iii) the presence of both those things in the perfect, but the absence of finiteness.

# Easy to State (Hard to Implement?)

The 'meaning' of the *-en/ed*-participle turns out to be extremely weak, essentially negative and relational, in comparison to the corresponding main verb. *Its role is as the spellout of subportions of the verbal denotation.*

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To unify the participle in English then, we could say that it is a stunted version of the inflected verbal form.

The other properties of the different constructions will come from the rest of the structure that the participle is embedded in.



## Accounting for Aktionsart Sensitivity in the Perfect

I propose the following denotation for HAVE in (10).

$$(10) \quad [[ \text{have} ] ] = \lambda Q \lambda x \lambda s' \exists s [ Q(s) \wedge s' \text{ is an Evidential State for } s \wedge \text{HOLDER}(s') = x ]$$

The definition EVID-STATE is in (11)

- (11) **Evidential State ( Evid-State)** (Definition)  
 EVID-STATE FOR  $s_0 =_{def} s'$  iff  $s'$  is a stative situation (i.e. which can have a moment as its temporal parameter) which is a salient situation that provides *critical evidence for the existence of  $s_0$*  in the same world as  $s'$ . The existence of  $s'$  always entails the existence of  $s_0$ .

The EVID-STATE construction effected by *have* has different consequences for situations built from different event types. (after Taylor 1977)

(I). **Temporal Properties of Simple Dynamic Events:**

A process event must have a temporal parameter longer than a moment. If a simple process is true at an interval I, then it is true at every subinterval of that interval larger than a moment.

(II). **Temporal Properties of States:**

A state can have a moment as its temporal parameter. If a state is true at an interval I, then it is true at every subinterval of that interval, including at each moment.

(III) **Temporal Properties of Complex Events:**

An event with complex subevental structure must have temporal run times corresponding to *each* of the subevents in that structure. If a complex event is true at an interval I, then we cannot guarantee that there is any subinterval of I at which the complex event is true.

# Zonal Effects

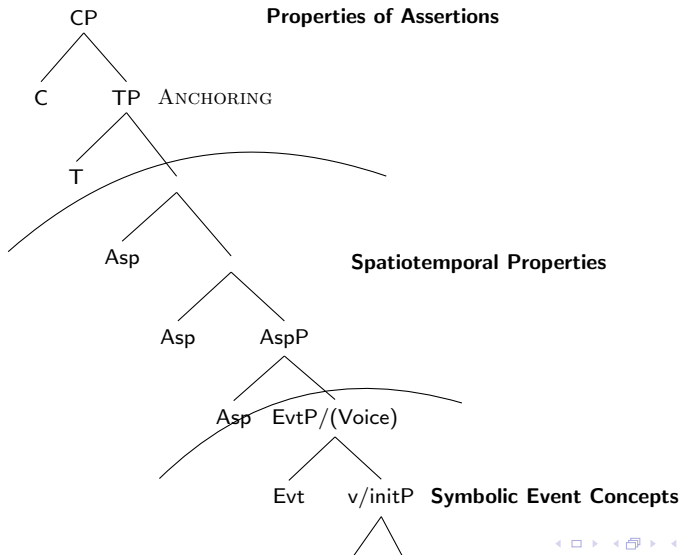
In addition, in Ramchand (to appear), I argue that the clause is divided into three zones corresponding to different semantic sorts.

**Lowest Zone: Symbolic Event Concepts**

**Inflectional Zone: Instantiation/Actuality information and spatiotemporal properties.**

**Complementizer Zone: Properties of assertions (speech act related information).**

# Independently motivated hierarchically ordered set of projections:



## Zonal Effects cont.

### **Relations in the Event Concept Domain Give Rise to Pseudo-intensionality:**

Event descriptions and derived event descriptions are related to each other at an essential level, and do not entail or require mutual instantiation in the real world. We saw this with the creation of stative result participles which are semantically related to the corresponding events that have resPs, but do not have real world 'event' implications.

### **Relations in the Event Concept Domain are subject to blocking**

# Blocking in the lowest zone

Contrary to standard D(istributed) M(orphology) ideology, I have proposed a general system of phrasal blocking, whereby a simple non-auxiliated verbal lexicalization always blocks the auxiliated version that spells out the same representation.

- ‘Attach *-ing* to any complete event structure and fill in with dummy verb *be*’:

*blocked by stative verbs.*

- ‘Spell out resP as *-en/ed* participle and spell out Evt with dummy verb *be*’

*blocked by adjectives in the case of deadjectival verbs.*

- ‘Spell out procP as *-en/ed* participle and spell out Evt with dummy verb *be*’:

*blocked by unaccusative verbs.* (see also Lundquist 2008)

# Blocking cont.

## **Blocking of Auxiliation:**

In cases where a single verbal lexical item expresses the *same Event description* as an Auxiliary structure, expression by means of an auxiliary is blocked.

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