

Adjectival passives and event kinds

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1 Introduction

- German morphologically distinguishes between verbal/eventive and adjectival/stative passives (Kratzer 1994, 2000; Rapp 1996; Maienborn 2007a, among others):

- *werden* ‘become’ with verbal passives ((1-a)) (BECOME-passives)
- *sein* ‘be’ with adjectival passives ((1-b)) (BE-passives)

- (1) a. Die Reifen werden aufgepumpt.
the tires become up-pumped
‘The tires are being inflated.’
b. Die Reifen sind aufgepumpt.
the tires are up-pumped
‘The tires are inflated.’

(examples after Kratzer 2000)

- Traditional view (Wasow 1977; Bresnan 1982; Borer 1984; Levin & Rappaport 1986):¹

- Adjectival passives: Copula-adjective constructions
- Verbal passives: Periphrastic verb forms

- The underlying event is still accessible: Availability of event-related modifiers ((2)) (Kratzer 1994, 2000; Rapp 1996, 1997; Schlücker 2005; Maienborn 2007a, 2009)

- (2) a. Der Brief ist mit roter Tinte geschrieben.
the letter is with red ink written
‘The letter is written with red ink.’
b. Das Haar war schlampig gekämmt.
the hair was sloppily combed
‘The hair was combed in a sloppy manner.’

- Two views:
 - * Possibility of phrasal adjectivisation of VPs (Kratzer 1994, 2000; Rapp 1996)
 - * Such modifiers are merely pragmatically licensed (Schlücker 2005; Maienborn 2007a).

- (Different kinds of) more fine-grained distinctions among adjectival passives:

- Target state vs. resultant state (Kratzer 2000) (see also Anagnostopoulou 2003)
- Resultative vs. stative (in English) (Embick 2004) (see also Travis 2005a,b)

This paper:

- Restrictions on event-related modification
- Semantic account of BE-passives based on the difference between event kinds and tokens
- Integration of different readings and comparison with previous proposals

¹This distinction is also made for other languages (even when they lack morphological differentiation); see, e.g., Embick (2004); Emonds (2006) and literature cited therein, for English; Dubinsky & Simango (1996) for Chichewa; Anagnostopoulou (2003) for Greek; Travis (2005a,b) for Malagasy.

2 German BE-passives

- (More or less) general agreement:
 - The participle is not verbal but adjectival.²
 - The participle expresses the result or outcome of an event.
- BE-passives as copula-adjective constructions (Kratzer 1994, 2000; Rapp 1996; von Stechow 1998; Maienborn 2007a)³: A stative property is ascribed to an individual.
- BE-passives co-exist with ‘true’ copula-adjective constructions, which employ primary adjectives ((3)) (examples from Maienborn 2009).
 - (3) a. Die Schublade ist geöffnet / offen.
the drawer is opened / open
 - b. Die Schublade ist geleert / leer.
the drawer is emptied / empty

2.1 The contribution of the underlying verb in BE-passive constructions

- Relation to the **argument structure** of the underlying verb:
 - The stative property is ascribed to the internal (theme) argument of the underlying verb.
 - The external argument is completely absent ((4), (6-a)).⁴

This contrasts with BECOME-passives, where (even) the (implicit) external argument is syntactically active ((5), (6-b)) (see also Gehrke & Grillo 2009, and literature cited therein).

 - (4) a.???Der Reifen war aufgepumpt, um die Fahrt fortsetzen zu können.
the tire was inflated in order the journey continue to can
 - b.???Das Buch war mit Absicht / betrunken geschrieben.
the book was with purpose / drunk written
 - (5) a. Der Reifen wurde aufgepumpt, um die Fahrt fortsetzen zu können.
the tire became inflated in order the journey continue to can
‘The tire was (being) inflated in order to continue the journey.’
 - b. Das Buch wurde mit Absicht / betrunken geschrieben.
the book became with purpose / drunk written
‘The book was written on purpose / drunk.’
 - (6) *Kratzer’s (1994) examples*
 - a. Das Kind war schlampig gekämmt.
the child was slopp(ily) combed
‘The child was combed in a sloppy manner.’ *±reflexive*
 - (i) Someone (else) (has) combed the child.
 - (ii) The child (has) combed his/herself.
 - b. Das Kind wurde schlampig gekämmt.
the child became slopp(ily) combed
‘The child was combed in a sloppy manner.’ *-reflexive*
 - (i) Someone (else) (has) combed the child.
 - (ii) *NOT*: The child (has) combed his/herself.

²There are a few verbal analyses of BE-passives (e.g. Helbig 1987; Leiss 1992); see also Emonds (2006) for English.

³Following Lieber (1980), it is generally assumed that the participle is turned into an adjective by zero-affixation:

i. COP [_{AP} [_A [_{VPart} geöffnet] ∅]].

⁴According to Kratzer (1994, 2000), the participle morphology licenses the absence of verbal inflection, but is in itself meaningless (see also von Stechow 1998), and the lack of verbal inflection implies lack of an external argument.

- The stative property is recovered from the **event structure** licensed by the underlying verb.

Input requirements (first attempt): Only verbs which license an event structure with a stative component derive BE-passives (this is basically the hypothesis in Rapp 1996).

- BE-passives are fully acceptable with transitive verbs which lexically specify a consequent state (in the sense of Moens & Steedman 1988), i.e. with accomplishments and achievements ((1-b), (7)).

- (7)
- a. Die Tür ist geöffnet / geschlossen.
the door is opened / closed
 - b. Der Antrag ist eingereicht.
the application is submitted
 - c. Die Lampe ist repariert.
the lamp is repaired

- With other verbs, BE-passives are not acceptable, except in certain contexts ((8)-(10), b. examples from Maienborn 2009) (see also Kratzer 2000):

- * Activities ((8), (9)): The event structure does not contain a stative component.⁵
- * Stative predicates ((10), though see (12), below): This is not expected if all we need is a stative component.

- (8)
- a. #Die Katze ist gestreichelt.
the cat is petted
 - b. Anna hat ihre Nachbarspflichten erfüllt: Der Briefkasten ist geleert, die Blumen sind gegossen, und die Katze ist gestreichelt.
Anna has her neighbour-duties fulfilled the mail-box is emptied the flowers are watered and the cat is petted
'Anna has done her neighbourly duties: the mailbox is emptied, the flowers are watered and the cat is petted.'
 - c. Die Katze ist ??(genug/ fertig) gestreichelt.
the cat is enough/ ready/done petted
'The cat has been petted enough / (Someone) is done petting the cat.'
(example from Rapp 1996, 259)

- (9)
- a. #Das Manuskript ist zitiert.
the manuscript is cited
 - b. Das Manuskript ist von Chomsky zitiert.
the manuscript is by Chomsky cited
'The manuscript is cited by Chomsky.'

- (10)
- a. #Die Antwort ist gewusst.
the answer is known
 - b. Ist die Antwort gewusst oder geraten?
is the answer known or guessed

- Many speakers do not even accept (9-b) and (10-b) with the additional context, whereas examples like (8-b) and (8-c) seem acceptable to everyone.

(11) **Hypothesis:** Only verbs that lexically specify a consequent state derive BE-passives.

⁵The terms activity, accomplishment, and achievement are used in the sense of Rothstein (2004). It could be debated whether semelfactives like *streicheln* 'to pet' in (8-b), or performatives like *zitieren* 'to cite' in (9-b), are activities, but there is general agreement that semelfactives and performatives do not lexically specify a consequent state.

- The subject is always the internal (theme) argument of the underlying verb: Changes of state, as a rule, affect theme arguments.
 - Accomplishment/achievement verbs, whose internal argument undergoes a change of state and as a result is the bearer of a consequent state
 - Stative verbs that allow an inchoative (re-?)interpretation (see also Gehrke & Grillo 2009); cf. contrast between (10-a) and the acceptable BE-passives of the psych predicates in (12).

(12) Marie ist genervt / verärgert / amüsiert.
 Marie is annoyed / angered / amused

2.2 Restrictions on event-related modification

- The underlying event can be modified by event-related modifiers ((2), (9-b)), foremost instrumentals and manner modifiers, but sometimes also *by*-phrases⁶.
- However, not all event-related modification is possible; there are two types of modifiers.

Type 1 Consequent state modifiers, e.g. (14)

- Observation in the literature: Only those modifiers are allowed that relate to event participants that belong to / still have an impact on / are still ‘visible’ during the consequent state; cf. (13)-(15) (examples after Rapp 1996).

(13) Der Mülleimer ist (*von meiner Nichte / *langsam / *mit der Heugabel) geleert.
 the rubbish bin is by my niece / slowly / with the hay fork emptied

(14) a. Das Haus ist von Studenten bewohnt.
 the house is by students in-lived
 b. Er ist von der Musik beeindruckt.
 he is by the music impressed

(15) a. Die Zeichnung ist von einem Kind angefertigt.
 the drawing is by a child made
 b. Der Brief war mit einem Bleistift geschrieben.
 the letter was with a pencil written
 c. Das Haar war ziemlich schlampig gekämmt.
 the hair was rather slopp(il)y combed

Type 2 Event kind modifiers (also (15))

- The event cannot be temporally or spatially modified.
 - * A modifier like *recently* cannot modify the underlying event but only the state ((16)).

(16) Die Tür war kürzlich geöffnet.
 the door was recently opened.
 The door was in the opened state recently, but probably is no longer.
 (NOT: The door is in the opened state, the opening having taken place recently.)

⁶A German PP headed by *von* ‘of, from’ in these contexts, such as the one in (9-b), is commonly translated into English with a *by*-phrase. However, since it is generally claimed for English that *by*-phrases are not possible with stative passives, it is not fully clear whether (a) this claim is simply wrong (exceptions for English exist; German data are discussed in more detail in section 4); or (b) whether German *von*-phrases are not fully equivalent to English *by*-phrases. Given the general absence of an external argument (recall data in (4) and (6-a)); the observations there extend to combinations with acceptable *by*-phrases), we have to assume that these *by*-phrases are still different from the *by*-phrases with eventive passives, which introduce ‘true’ external arguments.

* BE-passives are incompatible with temporal frame adverbials ((17)) (examples from von Stechow 1998) (see also Rapp 1996, 1997).

- (17) a. *Der Computer ist vor drei Tagen repariert.
 the computer is before three days repaired
 ('The computer is repaired three days ago.')
- b. Der Computer ist seit drei Tagen repariert.
 the computer is since three days repaired
 'The computer has been in a state of being repaired since three days.'

→ BE-passives are statements about the present (in contrast to present perfect verbal passives, which are statements about the past⁷).

* Spatial modifiers that pick out the location of the event that brought about the consequent state are also generally bad ((18)).⁸

- (18) a. #Die Reifen sind in der Garage aufgepumpt.
 the tires are in the garage inflated
- b. #Das Kind war im Badezimmer gekämmt.
 the child was in the bathroom combed

⇒ The event lacks spatiotemporal location.

Idea: BE-passives involve event kinds, not event tokens.

3 The proposal

- A BE-passive refers to the instantiation of a consequent state kind of an event kind ((19)).

- (19) a. Die Tür ist geschlossen.
 the door is closed
- b. $\exists e_k, s_k, s [\text{BECOME}(e_k, s_k) \wedge \text{THEME}(e_k, \mathbf{door}) \wedge \mathbf{closed}(s) \wedge \text{THEME}(s, \mathbf{door}) \wedge \mathbf{R}(s, s_k)]$

NB: **R** is Carlson's (1977) realisation relation.

- The use of BECOME is motivated by the hypothesis in (11).⁹

Motivating event kinds

- The event in BE-passives has no spatiotemporal manifestation. → It is an event *kind*.
- Event kinds are natural to expect if we assume:
 - Events form a subsort in our ontology of (token) individuals (Reichenbach 1947; Davidson 1967; Parsons 1990);
 - Kinds form another subsort in that ontology (Carlson 1977); and
 - As a rule, any token in the ontology should be the realisation of some kind in that ontology.

⁷See also Rapp (1996); Kratzer (2000); Maienborn (2007a) and literature cited therein for arguments against treating BE-passives as an ellipsis of a verbal passive perfect construction.

⁸The incompatibility of spatial and temporal modifiers with (many or most) stative predicates is discussed extensively in Katz (2003, 2008); Maienborn (2007b) (but see also Mittwoch 2005).

⁹We can assume any event semantic reformulation of Dowty's (1979) BECOME here, e.g. von Stechow (1996) or Rothstein (2004) (see also section 5).

- Event kinds have an analog in e.g. the Situation Semantics notion of event type (Barwise & Perry 1983), though the formal details are quite different.
- Under a Neo-Davidsonian view (e.g. Parsons 1990), events can be decomposed into subevent, which motivates the additional assumption of the existence of subevent kinds.
- Empirical arguments for event kinds as an ontological category have been made in e.g. Landman & Morzycki (2003); Ginzburg (2005); Sailer (2010); Gehrke & McNally (to appear).

3.1 Modeling manner in terms of kinds (Landman & Morzycki 2003)

- Semantic and syntactic parallels with *so*-anaphora in the nominal and verbal domains across various languages; examples from German are given in (20).

- (20) a. so ein Hund (wie dieser)
 so a dog (like this)
 ‘such a dog like this one’ *adnominal use*
- b. Er hat so getanzt (wie Maria).
 he has so danced (like Mary)
 ‘He danced in the same manner as Mary.’ *adverbial use*

- Elements like *so* under the adnominal use ((20-a)) are commonly treated as kind anaphors, following Carlson (1977).
- Landman & Morzycki (2003) treat adverbial *so* analogously, as anaphor to event kinds: *so* denotes a property of events that realise a (particular contextually supplied) kind ((21)).

- (21) $\llbracket \text{so}_i \rrbracket = \lambda e.e \text{ realises } k_i$

- An additional argument that kinds are involved comes from the fact that temporal and locative adverbials generally cannot antecede adverbial *so* ((22)), unless they can be seen as creating a new (or sub-)kind ((23)) (examples from Landman & Morzycki 2003).

- (22) a. *Maria hat am Dienstag getanzt, und Jan hat auch so getanzt.
 Mary has on Tuesday danced and John has also so danced
- b. *Maria hat in Minnesota gegessen, und Jan hat auch so gegessen.
 Mary has in Minnesota eaten and John has also so eaten

- (23) Maria schläft in einem Schlafsack, und Jan schläft auch so.
 Mary sleeps in a sleeping bag and John sleeps also so
 ‘Mary sleeps in a sleeping bag and John does so, too.’

- They conclude that it is viable to treat manner modifiers as modifying event kinds in general.

3.2 The same kind of modifiers are (un)acceptable with BE-passives.

- Spatial and temporal modifiers, which modify an event token, are not acceptable.
- Manner modifiers, which modify an event kind, are acceptable.
- Other modifiers, such as instrumentals and *by*-phrases, are acceptable as long as they modify an event kind (e.g. by creating a new event subkind) (e.g. (15) as opposed to (13); (24), (25)), or if they modify the consequent state directly (see next section).

- Welke (2007): Sometimes a BE-passive is only possible with an additional modifier ((24), (25)).

- (24) a. ?Der Brief ist geschrieben.
the letter is written
- b. Der Brief ist mit roter Tinte geschrieben.
the letter is with red ink written
'The letter is written with red ink.'
- (25) a. ?Das Brett ist gesägt.
the plank is sawn
- b. Das Brett ist in zwei Teile gesägt.
the plank is in two parts sawn
'The plank is cut in two pieces.'

4 Different types of *von*-‘by’-phrases with BE-passives

4.1 Schlücker (2005): Two types of *von*-phrases

- *VP-adjuncts*: do not form a prosodic unit with the participle (following Maienborn 2004) ((26))

- Neutral stress is on the participle; secondary stress on the modifier (the latter point is not noted in Schlücker; see Hoekstra 1999; Gehrke 2008, for similar facts from Dutch).

- (26) a. weil Peter von dem GeJAmmer genervt ist
because Peter from the lamentation annoyed is
'because Peter is irritated by the lamentation' *contrastive*
- b. weil Peter von dem GeJAmmer geNERVT ist
because Peter from the lamentation annoyed is
neutral

- *V-adjuncts*: form a prosodic unit with the participle ((27), (28))

- Neutral stress is on the modifier.

- (27) a. weil die Wände von FEUer geschwärzt sind
because the walls from fire blackened are
'because the walls are blackened by fire' *neutral*
- b. weil die Wände von Feuer geSCHWÄRZT sind
because the walls from fire blackened are'
contrastive
- (28) a. weil seine Töchter von der SANGesmuse geküsst sind
because his daughters from the muse of singing kissed are
'because his daughters are kissed by the muse of singing' *neutral*
- b. weil seine Töchter von der Sangesmuse geKÜSST sind
because his daughters from the muse of singing kissed are
contrastive

- Behave like other event-related modifiers that are allowed with BE-passives ((29), (30))

- (29) a. weil die Birnen in ROTwein gedünstet sind
because the pears in red wine steamed are
'because the pears are steamed in red wine' *neutral*
- b. weil die Birnen in Rotwein geDÜNStet sind
because the pears in red wine steamed are'
contrastive

- (30) a. weil der Brief mit WACHS versiegelt ist
because the letter with wax sealed is
'because the letter is sealed with wax' *neutral*
- b. weil der Brief mit Wachs verSIEgelt ist
because the letter with wax sealed is' *contrastive*

- Different kinds of complements with the two types of *von*-phrases:

- VP-adjuncts

- * The *von*-phrase denotes the agent or direct causer of the underlying event which is often an animate and / or a volitional entity.
- * Animate entities: Proper names or members of a group denoted by a collective noun, e.g. *Polizist* 'police-man'
- * Inanimate entities: Definite uses of mass nouns, e.g. *vom Feuer* 'by the fire', or appellatives used definitely, e.g. *von der Bombe* 'by the bomb'

- V-adjuncts

- * The *von*-phrase denotes the theme of the underlying event or an indirect causer and can sometimes be replaced by a *durch*-'through'-phrase; It often has an instrumental character and provides information about the manner or reason of the event.
- * Animate entities: Collective nouns, e.g. *von der Polizei* 'by the police'
- * Inanimate entities: Generic uses of mass nouns (*von Feuer* 'by fire') or indefinite uses of appellatives (*von einer Bombe, von Bomben* 'by a bomb, by bombs')

Some qualifications

- The **V-adjuncts** discussed by Schlücker are parts of fixed expressions and idioms ((27), (28)).

- Other 'V-adjunct' *by*-phrases: (9-b) & (15-a), repeated in (31) (with neutral stress pattern)

- (31) a. Das Manuskript ist von CHOMsky zitiert.
the manuscript is by Chomsky cited
'The manuscript is cited by Chomsky.'
- b. Die Zeichnung ist von einem KIND angefertigt.
the drawing is by a child made

- The **VP-adjuncts** discussed by Schlücker are fully acceptable only with stative predicates, but rather questionable with other predicates.

- An example from previous sections, which displays this intonation pattern, is the stative one in (14-b), repeated in (32) (with neutral stress pattern).

- (32) Er ist von der MuSik beEINdrückt.
he is by the music impressed

- Other alleged VP-adjuncts, i.e. those that do not combine with stative predicates, if acceptable at all, behave like V-adjuncts ((33), Schlücker's examples, my and other native speakers' judgments about stress).¹⁰

¹⁰Further syntactic tests to distinguish between V- and VP-adjuncts, mentioned by Schlücker (2005), such as the relative placement (with respect to modifier and participle) of sentence negation, sentence adverbials and floating quantifiers, yield the same results.

- (33) a. (??) weil der Saal von der Heinrich-BÖLL-Stiftung gemietet ist.
 because the hall from the Heinrich-Böll-foundation rented is
 'because the hall is rented by the Heinrich-Böll Foundation' *neutral*
- b. (??) weil der Saal von der Heinrich-Böll-Stiftung geMIETet ist
 because the hall from the Heinrich-Böll-foundation rented is
contrastive

⇒ *By*-phrases that behave like 'VP-adjuncts' are fully acceptable with states only.

4.2 Rapp (1996)

- *By*-phrases that relate to an action / process are incompatible ((34)), those with stative verbs are compatible with *un*-prefixation ((35)) (examples due to Lenz 1993).

- (34) a. Die Suppe ist (*von Maja) ungewürzt.
 the soup is (*by Maja) unseasoned
- b. Der Brief ist (*von Maja) ungeschrieben.
 the letter is (*by Maja) unwritten
- (35) a. Die Dresdner Bürger sind von solchen Problemen unbeeindruckt.
 the Dresden- citizens are by such problems unimpressed
 'The citizens of Dresden are not concerned with such problems.'
- b. ... weil sie von ihrer Arbeit unbefriedigt ist.
 because she by her work unsatisfied is
 '... because she is not satisfied by her work.'
- c. Zwar sei auch herkömmlicher Kaffee nachweisbar von Pestizid-Rückständen
 though is also conventional coffee verifiably by pesticide-residues
 unbelastet, ...
 unencumbered
 'Although also conventional coffee does not show residues of pesticides, ...'

→ Such *by*-phrases express arguments of the adjective [i.e. of the (consequent) state]: The construction expresses the attitude of an experiencer with respect to his stimulus.

- Word order differences between non-action-related *by*-phrases ((36)) and other event-related modifiers in the BE-passive ((37)).

- (36) a. Die Dresdner Bürger sind unbeeindruckt von solchen Problemen.
 the Dresden- citizens are unimpressed by such problems
- b. ... weil sie unbefriedigt von ihrer Arbeit ist.
 because she unsatisfied by her work is
- c. Zwar sei auch herkömmlicher Kaffee nachweisbar unbelastet von
 though is also conventional coffee verifiably unencumbered by
 Pestizid-Rückständen, ...
 pesticide-residues
- (37) *... weil der Brief geschrieben von einem Experten / mit roter Tinte war.
 because the letter written by an expert / with red ink was

→ The modifiers in (36) modify the adjective, while those in (37) modify a VP.

4.3 Taking stock: The licensing of *by*-phrases

- Different kinds of *by*-phrases with BE-passives:
 - *By*-phrases that behave like V-adjuncts: Event kind modifiers
 - * Only with idioms or when they serve to create a new (sub-)kind (e.g. (15-a))
 - * Behave like other event-related modifiers of BE-passives
 - *By*-phrases that behave like VP-adjuncts: (Consequent) state token modifiers
 - * Fully acceptable only with stative predicates
 - * Contrast with other event-related modifiers
- Schlücker's observations about the different complements (more or less) follow:
 - 'V-adjuncts': If the *by*-phrase modifies an event kind rather than an event token, the potential agent of such a kind naturally has a more generic character.
 - 'VP-adjuncts': *By*-phrases modifying an actual state token → less generic¹¹

5 Different readings in previous proposals

- Even with accomplishments and achievement verbs, BE-passives are most natural if the state expresses some opposite state.
 - E.g. (7-a) is rather 'neutral' and only expresses the stative property of the door being open/closed.
 - In contrast, (7-b) and (7-c) have an additional 'the job is done' flavour (in the sense of Kratzer 2000).
- ⇒ *Alternative hypothesis*: Only verbs that lexically specify a state which can be interpreted as an opposite state are fully acceptable in BE-passives.
- Accomplishments, achievements(, states): Consequent and inchoative states are generally in contrast with a prior opposite state.
 - Other verbs: A BE-passive is only possible if an opposite state can be derived contextually:
 - * Temporal scale in (8-b): The cat is now in the state it was supposed to be in; opposition between the job not being done yet and the job being done.
 - * Scale of quality in (9-b): The manuscript is cited by Chomsky and not just by some undergrad student in a term paper.
 - * Scale of quality in (10-b): The answer is more certain (more likely to be correct), because it is known and not just guessed.
- (see also Maienborn 2009; Gese 2010, on temporal and qualitative readings)
- However, apparently not all speakers accept the qualitative readings (as noted in section 2).
- ⇒ Two types of readings, depending on the underlying scale:
- Temporal scalar dimension (the state expressed by the construction is a consequent state opposed to some state the subject has previously been in).
 - Qualitative scalar dimension (the state expressed by the construction is a state of a particular qualitative kind as opposed to some other state on that scale that the subject could be in).

¹¹Remember that Schlücker also claims that such *by*-phrases often denote 'agents', but I assume these are rather (albeit more concrete) causes of psych predicates, or those *by*-phrases with eventive predicates that are not fully acceptable in the first place, such as in (33).

Back to BECOME

- The state in BE-passives is a state evaluated with respect to an opposite state (on some scalar dimension, which is not necessarily - at least not for all speakers - temporal).
 - The most straightforward opposition is given by the event structure of predicates involving a BECOME component (the scalar dimension is temporal in the course of the derivation).

(38) $[\text{BECOME } \phi]$ is true at I iff there is an interval J containing the initial bound of I such that $\neg\phi$ is true at J and there is an interval K containing the final bound of I such that ϕ is true at K .
Dowty (1979, 140)

(39) *Informal event semantics of BECOME* (Beck 2005, 7)
 $[[\text{BECOME}]] (P)(e) = 1$ iff e is the smallest event such that P is not true of the prestate of e but P is true of the result state of e .

- In other cases, an opposite state has to be contextually licensed (the scalar dimension could be one of quality).

5.1 The pragmatic approach (Maienborn 2007a, and subsequent work)

- BE-passives are always pragmatically licensed and possible across all verb classes (with a few lexical exceptions).¹²
- Unlike nonderived adjectives, which assign ‘a lexically coded property, which has a fixed place in the subject referent’s property space’ ((40-a)), BE-passives ascribe a ‘pragmatically salient *ad hoc* property, conceived as resulting from the event referred to by the participle’ ((40-b), (41)).

(40) a. Das Manuskript ist neu.
the manuscript is new
 $\exists s [s: \text{new}(\text{the manuscript})]$
b. Das Manuskript ist eingereicht.
the manuscript is submitted
 $\exists s [s: \mathbf{Q}(\text{the manuscript}) \wedge \text{result}(e, s) \wedge \text{submit}(e)]$

(41) Adjectival \circ -affix: $\lambda P \lambda x \lambda s \exists e [s: \mathbf{Q}(x) \wedge \text{result}(e, s) \wedge P(e)]$

- The free variable \mathbf{Q} stands for the property that holds for the subject referent x in a state s .
 - \mathbf{Q} is further restricted as resulting from the verbal event e . The grammar does not supply any more information than that about the actual kind of property.
- A BE-passive is pragmatically licensed if the context provides a contrasting alternative state s' which differs from s with respect to either the temporal or the qualitative dimension.
 - Maienborn’s interpretation of Kratzer’s (2000) resultant vs. target state passives (see below):¹³
 - Resultant state reading ((42-a)): Post state of a submitting event; the context provides a salient alternative state s' that precedes s and in which x does not have the property \mathbf{Q} .
 - Target state reading ((42-b)): The manuscript belongs to the class of submitted papers; s' exemplifies a contextually salient property \mathbf{Q}' that is distinct from \mathbf{Q} .

¹²I will mainly focus on the most recent paper, Maienborn (2009), and all direct quotes are from this paper. Works that build on Maienborn’s account include Schlücker (2005); Gese (2010).

¹³Maienborn notes that Kratzer’s (2000) understanding of the target state reading is more narrow, restricting it to only those target states that are reversible; her characterisation of the two readings is quite similar to Rapp’s (1996) (see below).

- (42) Das Manuskript ist eingereicht ...
 the manuscript is submitted ...
 ‘The manuscript is submitted ...’
 $\exists s [s: \mathbf{Q}(\text{the manuscript}) \wedge \mathbf{result}(e, s) \wedge \mathbf{submit}(e)] \dots$
- a. (... jetzt können wir uns an den Projektantrag machen.)
 now can we us to the project-proposal make
 ‘... now we can turn to the project proposal’
 $\dots \wedge \mathbf{contrast}(s, s') \wedge s': \neg \mathbf{Q}(x) \ \& \ s' < s$
- b. (... aber nicht angenommen / veröffentlicht / ...)
 but not accepted / published / ...
 ‘... but not accepted / published / ...’
 $\dots \wedge \mathbf{contrast}(s, s') \wedge s': \mathbf{Q}'(x)$

NB: A similar distinction is already found in Brandt (1982) (via Rapp 1996):

- (43) a. Das Fleisch ist gekocht. Wir können jetzt essen.
 the meat is cooked we can now eat
 ‘The meat is done. We can eat now.’
- b. Das Fleisch ist gekocht. Es ist nicht gebraten.
 the meat is cooked it is not fried
 ‘The meat is cooked. It is not fried.’

Rapp’s (1996) assessment: In both cases we are dealing with an adjective-copula construction, the difference is a mere pragmatic one between:

- A consequent state reading (‘Nachzustand’) ((43-a)); and
- A characterisation reading (‘Charakterisierung’) ((43-b))

Maienborn’s uniform account seems too weak

- Maienborn points out that the state of BE-passives is evaluated with respect to some opposite state, but this does not follow from her account in (41).
- Intuitively, not all BE-passives have an ‘ad hoc’ flavour or are in need of pragmatic licensing:
 - BE-passives are fully acceptable with verbs that lexically specify a consequent state, without additional pragmatic effects (e.g. there are no such effects with *geöffnet* ‘opened’) (see also Welke 2007).
 - Context dependency seems relevant only in combination with other verbs.

⇒ There are input requirements. When these are not met, the construction can still be pragmatically licensed (possibly involving some kind of coercion of the event type).¹⁴

5.2 Target state vs. resultant state passives (Kratzer 2000)¹⁵

- Diagnostics: (In)compatibility with *immer noch* ‘still’:

- (44) a. Die Reifen sind (immer noch) aufgepumpt.
 the tires are (still) up-pumped
 ‘The tires are still pumped up.’ TARGET STATE PASSIVE
- b. Das Theorem ist (*immer noch) bewiesen.
 the theorem is (*still) proven
 ‘The theorem is proven.’ RESULTANT STATE PASSIVE

¹⁴See also Rapp (1996) who proposes that these cases require a reinterpretation of an ‘activity’ into a ‘process’.

¹⁵See also Kratzer (1994). The terminology is adopted from Parsons (1990), though Kratzer seems to have a more narrow notion of ‘target state’.

- **Target state passives**

- Characterise reversible, transitory states
- Are only possible with category-neutral stems with an event *and* a target state argument (unspecified for syntactic category because they can be used to build verbs or adjectives)
- Can be lexical ((45)) or phrasal ((46)) (example: *(das Boot) aufgepumpt* ‘(the boat) inflated’) (already in Kratzer 1994: Possibility of lexical and phrasal adjectivisation)

(45) *Target state passive, lexical case*

Stem: $\lambda x \lambda s \lambda e [\mathbf{pump}(e) \& \mathbf{event}(e) \& \mathbf{inflated}(x)(s) \& \mathbf{cause}(s)(e)]$

Stativiser: $\lambda \mathbf{R} \lambda s \exists e \mathbf{R}(s)(e)$

Output: $\lambda x (\lambda \mathbf{R} \lambda s \exists e \mathbf{R}(s)(e) (\lambda s \lambda e [\mathbf{pump}(e) \& \mathbf{event}(e) \& \mathbf{inflated}(x)(s) \& \mathbf{cause}(s)(e)]))$

= $\lambda x \lambda s \exists e [\mathbf{pump}(e) \& \mathbf{event}(e) \& \mathbf{inflated}(x)(s) \& \mathbf{cause}(s)(e)]$

(46) *Target state passive, phrasal case*

Stem+object: $\lambda s \lambda e [\mathbf{pump}(e) \& \mathbf{event}(e) \& \mathbf{inflated}(\mathbf{the\ boat})(s) \& \mathbf{cause}(s)(e)]$

Stativiser: $\lambda \mathbf{R} \lambda s \exists e \mathbf{R}(s)(e)$

Output: $\lambda s \exists e [\mathbf{pump}(e) \& \mathbf{event}(e) \& \mathbf{inflated}(\mathbf{the\ boat})(s) \& \mathbf{cause}(s)(e)]$

- **Resultant state passives**

- Refer to states resulting from an event, which is over by the time of reference; the state ‘has to hold forever after’.
- Can be derived from category-neutral stems as well as from verbs (as long as they allow a ‘the job is done’ reading)
- Have perfect aspect, since the derivation involves an aspectual operator ((47)).

(47) *Resultant state passive*

Stem+object: $\lambda e [\mathbf{prove}(\mathbf{the\ theorem})(e)]$

Stativiser: $\lambda \mathbf{P} \lambda t \exists e [\mathbf{P}(e) \& \tau(e) < t]$

Output: $\lambda t \exists e [\mathbf{prove}(\mathbf{the\ theorem})(e) \& \tau(e) < t]$

5.2.1 *Adapting the current proposal to the two readings*

- Rephrasing the distinction by referring to the difference between event kinds and event tokens:
 - Consequent states of actual events that took place: similar to a perfect of result.
→ resultant state / temporal reading?
 - The state is merely of the correct kind to have resulted from an event of some type.
→ target state / qualitative reading?
- Problem now: We do not really want an event token, since there is no spatiotemporal location.
⇒ If event kinds lack spatiotemporal location, don’t we get non-temporal readings for free?

5.2.2 *Doubts about the still-diagnostics*

- The (un-)availability of modification by *still* seems to have more to do with whether or not the consequent state of the event type associated with a verb can be *and* is expected to be reversed.¹⁶
⇒ The verbs whose participles are compatible with *still* (e.g. *hidden*, *screwed off*, *evacuated*, *obstructed*) have clear antonyms, whose consequent states express something like a more ‘natural’ state.

¹⁶If we treat *still* as a focus-sensitive aspectual particle, along the lines of Krifka (2000), the expectation that a state modified by *still* seizes to hold at some later point in time, should follow automatically, though I have not worked out the details of such an account.

- Different reasons why other participles do not allow *still*:
 - The underlying verb does not lexically encode a consequent state, e.g. *greeted*: A BE-passive is quite bad even without the modifier.
 - The underlying verbs are derived from adjectives (e.g. *emptied, dried*): Even with the underlying adjectives, the use of *still* seems more marked (48).
- (48) a. Die Wäsche ist immer noch trocken.
 the laundry is still dry
 ‘The laundry is still dry.’ *Isn’t this ideally the state laundry should be in?*
- b. Der Briefkasten ist immer noch leer.
 the mailbox is still empty
 ‘The mailbox is still empty.’ *Expectation: Someone should put mail in it; but this is not necessarily the more natural state for a mailbox to be in.*
- Negation of the participle renders *still*-modification possible (see also Schlücker 2005, for similar observations).

6 Conclusion

- German BE-passives refer to the instantiation of a consequent state kind of an event kind.
- Event-related modifiers with BE-passives are only acceptable if they modify either the event kind or the (consequent) state token.
- Given that the event kind is not spatiotemporally located, it is also possible to interpret the scale underlying BECOME in a non-temporal way.
- In some cases (for some speakers), BE-passives can also be derived from verbs which do not license an event structure with a consequent state component; these cases might involve coercion.
- Speculation: Unlike commonly assumed, might it be possible, after all, to ascribe the same semantics to past passive participles across different constructions, i.e. a **consequent state** (in the broadest sense)?
 - Adjectival passives: A consequent state is predicated over the internal argument; there is no prior process in the semantics, just a state resulting from a change of state, but still associated with the event type (the state meaning is due to the BE-auxiliary).
 - Verbal passives: A consequent state is predicated over the internal argument, resulting from a process (in most cases) (the process meaning is due to the BECOME-auxiliary) (see Gehrke & Grillo 2009, for more details).
 - Perfect tenses: The external argument is in the consequent state of having done something (at least from a diachronic perspective; in many languages perfect tenses have been fully grammaticalised as past tenses).
- General question: How much of the event remains a kind and how much is instantiated or realised?

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