

Building Event-Based *Ad Hoc* Properties: On the Interpretation of Adjectival Passives

Claudia Maienborn
German Department
University of Tübingen

claudia.maienborn@uni-tuebingen.de

Abstract

The paper develops a new perspective on the semantics and pragmatics of adjectival passives that focuses on their characteristic context dependency. Adjectival passives are analyzed as a flexible grammatical means of creating a potentially new *ad hoc* property based on the verbal event by which the subject referent is categorized according to contextually salient goals. The post state vs. target state ambiguity of adjectival passives is accounted for by deriving the two readings from a semantically underspecified representation that requires the pragmatic machinery to infer a suitable contextual instantiation.

1 Introduction

The aim of this paper is to develop a new perspective on the semantics and pragmatics of adjectival passives that accounts properly for the impact the context has on their formation and interpretation. There are two ways in which the context comes into play when dealing with adjectival passives. First, context appears to greatly influence which verbs get to build adjectival passives. Typical cases of adjectival passives discussed in the literature are based on transitive resultative verbs like *to close* or *to submit*, i.e. verbs with a lexically specified result state; see e.g. the German sentences in (1).¹

- (1) a. Die Schublade war geschlossen.
The drawer was closed.
b. Das Manuskript ist eingereicht.
The manuscript is submitted.

¹ Note that (1) only has an adjectival passive reading; the verbal passive is built with the auxiliary *werden* in German; see below.

Kratzer (2000) briefly mentions the case of activity verbs like *streicheln* ‘to pet’. These verbs do not have a designated result state and they seem to resist adjectival passive formation. A sentence like (2) sounds odd out of the blue.

- (2) ? Die Katze ist gestreichelt.
The cat is petted.

Yet under certain contextual conditions adjectival passives may also be built with activity verbs. In particular, sentences like (2) are fine if the context supports what Kratzer (2000: 4) calls a “job is done” interpretation; see also Rapp (1998: 243f), Maienborn (2007a). A natural setting for such a “job is done” interpretation for (2) is given in (2’).

- (2’) Anna hat ihre Nachbarspflichten erfüllt: Der Briefkasten ist geleert,
Anna has her neighbor-duties fulfilled: The mail-box is emptied

die Blumen sind gegossen und die Katze ist gestreichelt.
the flowers are watered, and the cat is petted.

‘Anna has done her neighborly duties: the mailbox is emptied, the flowers are watered and the cat is petted.’

Judgments are also improved if the subject triggers a figurative use of the participle as in (2’); cf. Gese et al. (2009).

- (2’’) Meine Seele ist gestreichelt.
My soul is petted.

‘My soul is caressed.’

Thus, in light of perfectly natural variants like (2’) and (2’’), the adjectival passive formation of activity verbs such as *streicheln* ‘to pet’ should not be ruled out as ungrammatical. The same holds true for other seemingly ill-formed cases, such as stative verbs. According to Kratzer (2000: 5) stative verbs like *wissen* ‘to know’ are categorically excluded from the adjectival passive formation; sentence (3) is judged ungrammatical by Kratzer. Yet in a contrastive setting like the one in (4), where it is at issue whether an answer has been given on the basis of firm knowledge or by guessing, sentence (3) is perfectly fine and by no means deviant.

- (3) Die Antwort ist gewusst.
The answer is known.

- (4) Ist die Antwort gewusst oder geraten?
Is the answer known or guessed?

Thus the context plays an important role in the formation and admissibility of adjectival passives. Moreover – and this is the second way how context comes into

play – adjectival passives have two readings, depending on their contextual environment: a “post state reading” as indicated by the continuation in (5a) and a “target state reading” illustrated in (5b).

- (5) Das Manuskript ist eingereicht ...
The manuscript is submitted ...
- a. ... jetzt können wir uns an den Projektantrag machen post state reading
... let’s turn to the project proposal now
- b. ... aber nicht angenommen / veröffentlicht / ... target state reading
... but not accepted / published / ...

Roughly speaking, the post state reading of sentence (5) means that the manuscript is classified as being in the post state of a submitting event, while the target state reading of (5) expresses that the manuscript belongs to the class of submitted papers, rather than being, e.g., accepted or published or rejected. A first indication for the existence of these two readings can be found in Brandt (1982: 31) and has been independently observed and elaborated by Kratzer (2000).² Kratzer’s account will be presented in more detail below.

This provides a first overview of the kind of data that will be discussed in the present paper. In the following I will argue that adjectival passives are subject to a particular kind of contextual variance resulting from the interplay between grammar and pragmatics. More specifically, adjectival passives will be analyzed as a flexible grammatical means of creating a potentially new *ad hoc* property based on the verbal event by which the subject referent is categorized according to contextually salient goals. Under this view post state and target state readings of adjectival passives will turn out to be contextual specifications of a common, more abstract semantic representation.

The paper is organized as follows: Section 2 summarizes the relevant facts and assumptions concerning adjectival passives that constitute the background for the present analysis. Section 3 develops the idea of event-based *ad hoc* properties as the core notion behind adjectival passives. This leads to the formulation of an underspecified semantics for adjectival passives in section 4, which in turn provides the starting point for deriving post state and target state readings of adjectival passives by means of contextual enrichment in the final section 5.

2 Background

Let’s start with some introductory remarks on adjectival passives. In the literature on passives it has widely been observed that many languages display two kinds of

² Kratzer (2000) uses the term “resultant state reading” instead of the term “post state reading”, which I will use here. She also has a somewhat narrower understanding of the target state reading in mind, restricting it to only those target states that are reversible (as indicated by the admissibility of the modifier *immer noch* ‘still’).

passives: an eventive, or verbal, passive and a so-called “stative”, or “adjectival”, passive; see the overview in Emonds (2006). English does not mark this difference overtly – both verbal and adjectival passives are expressed by an *-en/-ed* participle in combination with a form of *to be*. Thus, a sentence like (6) is ambiguous between an eventive and a stative reading and can only be disambiguated by the linguistic or extralinguistic context; see (6a) vs. (6b). The manner adverbial *quietly* and the agent phrase *by the thief* in (6a) highlight the verbal passive’s eventive reading whereas the durative adverbial *for years* in (6b) selects for the adjectival passive’s stative reading.

- (6) The drawer was closed. adjectival or verbal passive
 a. The drawer was quietly closed by the thief. verbal passive
 b. The drawer was closed for years. adjectival passive

That is, the same form *to be* is used both in the verbal and in the adjectival passive. This makes it difficult to tease apart verbal and adjectival passives in English. In a language like German the situation is more transparent, because verbal and adjectival passives are expressed by different means. The verbal passive is built by combining an *-en/-t* participle with the passive auxiliary *werden* (‘become’); cf. (7).³ The adjectival passive is formed by using *sein* (‘be’) instead; cf. (8).

- (7) Die Schublade wurde geschlossen. verbal passive
 The drawer became closed
 ‘The drawer was closed.’
 a. Die Schublade wurde leise von dem Dieb geschlossen.
 The drawer became quietly by the thief closed
 ‘The drawer was quietly closed by the thief.’
 b. *Die Schublade wurde jahrelang geschlossen.
 The drawer became for years closed
- (8) Die Schublade war geschlossen. adjectival passive
 The drawer was closed
 ‘The drawer was closed.’
 a. *Die Schublade war leise von dem Dieb geschlossen.
 The drawer was quietly by the thief closed
 b. Die Schublade war jahrelang geschlossen.
 The drawer was for years closed
 ‘The drawer was closed for years.’

³ The ungrammatical sentence (7b) could only be rescued by an iterative reinterpretation of the verbal expression.

3 Event-based *ad hoc* properties

While the view that adjectival passives are in fact combinations of the copula *sein* / *to be* with an adjectivized participle has become widely accepted, the implications that such a view on the *structure* of adjectival passives has for their *interpretation* haven't been explored up to now. This is what I want to pursue here. If adjectival passives are to be seen as a special instance of the form 'copula plus adjectival predicate', we expect their meaning to follow the general pattern of copula expressions.

For our purposes it suffices to say that a copula sentence ascribes to the subject referent the property given by the predicate. For instance, sentence (12) expresses that the manuscript has the property of being new. That's fairly simple; see Maienborn (2003, 2005a, 2005b, 2007b) and the literature discussed therein for a more thorough consideration of the semantics of the copula.

(12) The manuscript is new.

So the question is whether we can view adjectival passives along these lines and analyze them as ascribing a certain property to their subject referent. What would be a plausible candidate for such a property? I propose that adjectival passives assign a pragmatically salient *ad hoc* property to the subject referent. This *ad hoc* property is conceived of as resulting from the event referred to by the verbal participle. That is, while a standard copula sentence with an adjectival base predicate assigns to the subject referent a lexically coded property, which has a fixed place in the subject referent's property space, adjectival passives are a grammatically supplied means of creating *ad hoc* potentially new, event-based properties, whose exact import, and therefore the place they occupy in the subject referent's property space, is more or less shaped by the context and by our contextually available world knowledge.

What do I mean by event-based *ad hoc* properties? Let's take (13) for an illustration.

(13) Das Manuskript ist eingereicht.
The manuscript is submitted

Sentence (13) does not just express that the manuscript is in some result state of having been submitted; it tells us more. In fact, we may interpret (13) as a statement about the quality of the manuscript. Our background knowledge as (linguistic) scientific community provides us with rich information about possible stages and gradings for scientific papers. We know that – at least when it comes to some assessment – a manuscript that is submitted is better than a manuscript that isn't finished yet or a manuscript that is published in some less prestigious place. But of course it would be better if our manuscript were accepted or even published in a high impact journal.

Adding an event-related modifier as in (14) makes the differentiation of potential properties for the subject referent even finer.⁵

- (14) a. Das Manuskript ist bei *Nature* eingereicht.
The manuscript is to *Nature* submitted
- b. Das Manuskript ist von Chomsky zitiert.
The manuscript is by Chomsky cited
- c. Das Manuskript ist in einer Nacht geschrieben.
The manuscript is in one night written

The modifiers in (14) activate bits of background knowledge which then trigger certain inferences about the kind of manuscript we are dealing with. For instance, from (14a) we may infer, given the reputation of the Journal *Nature*, that the manuscript is of very high quality – at least that is what the author believes. To be cited by Chomsky, as expressed in (14b), is kind of an accolade in generative linguistics. And a manuscript that is written in one night (14c) could be either ingenious or awfully sloppy.

As these examples already show the inferences drawn in a given context may vary considerably and depend largely on our particular background knowledge and attitudes. Providing a full account of this kind of contextual variance is not our job as linguists. However, what is crucial is that the adjectival passive *requires* us to draw some such inference by which we derive a certain property that is ascribed to the subject referent in the given context. This requirement is part of the semantics of adjectival passives.

The *ad hoc* nature of the property expressed by adjectival passives becomes particularly evident in adjectival compounds such as (15).

- (15) a. Das iPhone ist PIN-gesichert.
The iPhone is PIN-secured
- b. Alle Mitglieder des Berliner Senats sind stasi-überprüft.
All members of the Berlin senate are stasi-checked
- c. Die Realität ist heute weitgehend Diana-bereinigt.
The reality is today largely Diana-purged
(Spiegel-online 18.07.2007)⁶

⁵ The ability of adjectival passives to combine with typical verbal modifiers like agent phrases, instrumentals and locatives plays a prominent role in the current discussion. Kratzer (1994, 2000) proposes to account for data such as (14) by assuming that the adjectival \emptyset -affix may attach at the lexical level as well as at the phrasal level. In the latter case adjectivization applies to a whole VP including verbal modifiers. Kratzer's solution has been taken up and developed further by several authors; cf. e.g. (Rapp 1997, 1998), von Stechow (1998), Anagnostopoulou (2003), Embick (2004), Alexiadou & Anagnostopoulou (2007). I don't have place to discuss this issue here, but see Maienborn (2007a) for arguments against using phrasal adjectivization to account for the combination of adjectival passives with verbal modifiers and an alternative solution that assumes only lexical adjectivization of the verbal participle. In short, I propose to analyze the modifiers in (14) as being *integrated* into the verbal complex (in the sense of Jacobs 1993, 1999), thus building a complex predicate.

⁶ From a report about the 10th anniversary of Princess Di's death.

- d. Ich hatte Sorge wie der Japaner das Oktoberfest finden würde,
 aber es stellte sich heraus,
 dass er schwedentrainiert war. (overheard on 11/2007)
 that he Sweden-trained was
 ‘I was worried about what the Japanese guy would think about the
 Oktoberfest, but it turned out that he was Sweden-trained.’

Predicatively used compounds such as *PIN-gesichert* (‘PIN-secured’) or *stasi-überprüft* (‘stasi-checked’) are widespread. Besides more or less lexicalized forms such compounds are also readily built “online”; cf. the occasional compounds *Diana-be-reinigt* (roughly: ‘Diana-purged’) or *schwedentrainiert* (‘Sweden-trained’) in (15c/d). E.g., the intended interpretation of *schwedentrainiert* in (15d) is that the Japanese referred to was “trained” in Sweden and thus got used to drinking (lots of) alcohol.

Both the modifier data in (14) and the compound data in (15) provide further support for the claim that adjectival passives are a means of creating more or less *ad hoc* a possibly complex adjectival predicate by which the subject referent is assigned a certain property that is shaped by contextually salient knowledge, attitudes and goals.

The view of adjectival passives as expressing *ad hoc* properties is inspired by Barsalou’s (1983, 1991, 1992, 2005) notion of *ad hoc* categories such as ‘things to take on a camping trip’. These are goal-derived categories that are created spontaneously for use in more or less specialized contexts. Under this perspective adjectival passives may be seen as a means to extend and contextualize a concept’s property space with respect to contextually salient goals.

To sum up, there is more to the meaning of adjectival passives than some kind of aspectual shift between the verb’s event referent and some result state. I propose that adjectival passives are, in fact, nothing but a special case of a copula sentence. By taking a (possibly complex) verbal predicate and converting it into an adjective which then is combined with the copula, the subject referent is assigned a certain property that is linked to the verb’s event argument. The crucial point is that this link may be mediated more or less heavily by context and world knowledge. This accounts for the characteristic *ad hoc* nature of adjectival passives.

- (16) a. Das Manuskript ist von Chomsky zitiert.
 The manuscript is by Chomsky cited
 b. Das Manuskript ist von Chomsky zitiert worden.
 The manuscript has by Chomsky cited been

With an adjectival passive such as (16a) we classify the manuscript and assign it a certain place within the concept’s property space, e.g. as being recommended reading for the generative linguistics community. The perfect tense verbal passive counterpart in (16b) expresses that there is a post state of an event of citing the manuscript by Chomsky, and nothing more. We may go on and draw some inferences here too, but there is no need to do so. Adjectival passives, on the other hand, force us to derive a suitable *ad hoc* property. A semantics for adjectival passives should take account of this subtle difference.

4 An underspecified semantics for adjectival passives

In the following I will sketch a proposal for a formal semantic account of adjectival passives that implements the analysis developed above. First I will briefly summarize the very influential proposal by Kratzer, which set the frame for a series of further developments and variants (e.g. von Stechow 1998, Anagnostopoulou 2003, Embick 2004, Alexiadou & Anagnostopoulou 2007).

Kratzer (2000) proposes to assume two zero-affixes by which the verbal participle (whose semantics is identical to that of the verbal stem) is converted into an adjective. These so-called “stativizers” are intended to account for the two readings of adjectival passives. The semantics of the post (or resultant) state zero-affix is given in (17a), its target state variant is given in (17b).

- (17) a. Post state \emptyset -affix: $\lambda P \lambda t \exists e [P(e) \ \& \ \tau(e) < t]$ Kratzer (2000: 12)
 b. Target state \emptyset -affix: $\lambda R \lambda s \exists e [R(s)(e)]$ Kratzer (2000: 8)

The examples in (18) and (19) illustrate the result of applying these affixes to a verbal form.⁷

- (18) **Post state reading:** Kratzer (2000: 12)
 a. Das Theorem ist bewiesen.
 The theorem is proven
 b. beweis-: $\lambda x \lambda e [\text{prove}(x)(e)]$
 c. [_{IP} das Theorem bewiesen sei]: $\lambda t \exists e [\text{prove}(\text{the theorem})(e) \ \& \ \tau(e) < t]$
- (19) **Target state reading:** Kratzer (2000: 8)
 a. Der Reifen ist aufgepumpt.
 The tire is pumped-up
 b. aufpump-: $\lambda x \lambda s \lambda e [\text{pump}(e) \ \& \ \text{inflated}(x)(s) \ \& \ \text{cause}(s)(e)]$
 c. [_{IP} der Reifen aufgepumpt sei]: $\lambda s \exists e [\text{pump}(e) \ \& \ \text{inflated}(\text{the tire})(s) \ \& \ \text{cause}(s)(e)]$

Assuming the zero-affix in (17a) yields a semantic analysis of the post state reading according to which an adjectival passive expresses a resultant state (given over times t) that starts with the culmination of the verb’s event and holds forever after; see Parsons (1990: 234) for this view on resultant states. Kratzer’s target state affix in (17b) may only apply to a subgroup of resultative verbs, more specifically those verbs that specify a characteristic (and in principle reversible) target state that is compositionally accessible via the verb’s argument structure; see e.g. the lexical entry for the verb

⁷ For the time being I neglect further complications in connection with Kratzer’s suggestion that these affixes may apply both at the lexical and the phrasal level (see footnote 5).

aufpumpen ('to pump up') in (19b).⁸ According to this analysis the target state reading of an adjectival passive expresses a lexically specified target state that is caused by the verb's event.⁹

These are the aspects of Kratzer's proposal that are relevant for our present purposes in a nutshell. Under the perspective on adjectival passives developed above this analysis has three shortcomings. First, Kratzer analyzes the adjectival passive ambiguity as a case of lexical homonymy. Her post state stativizer in (17a) and the target state stativizer in (17b) have nothing in common (apart from the existential binding of the verb's event argument). This does not seem to me a particularly attractive feature of Kratzer's account given the apparent relatedness of the two readings. Second, the application of the stativizers is determined exclusively by the verb's argument structure. The target state reading is only available for the lexical subgroup of target state verbs. This is in conflict with the characteristic contextual flexibility of adjectival passives observed above. The previous discussion of the data has shown that the target state reading of adjectival passives is much more broadly available than Kratzer's lexical account predicts. In fact, with a little contextual help both readings are available for nearly any verb. And third, Kratzer's account reduces the semantic contribution of the adjectival zero-affixes to a merely aspectual shift from the verbal event to some subsequent state (either post or target state). This ignores the subtle but crucial difference between adjectival passives and perfect tense; see the discussion of (16).

In sum, all the ingredients of Kratzer's account of the meaning of adjectival passives are to be found either in the lexicon or in the grammar. There is no particular place for a systematic contextual import. This does not fit very well with the empirical evidence presented above.

What would a more balanced division of labor between grammar and pragmatics look like? As for the grammar, I want to propose that the meaning of adjectival passives should be accounted for by assuming a unique adjectival zero-affix. This affix is semantically underspecified in two respects. First, it does not fully determine what kind of property is assigned to the subject referent. And, secondly, it is underspecified with respect to the post state / target state ambiguity of adjectival passives. A respective semantic representation for a zero-affix that turns a verbal into an adjectival participle is given in (20).

(20) Adjectival \emptyset -affix: $\lambda P \lambda x \lambda s \exists e [s: Q(x) \ \& \ \text{result}(e, s) \ \& \ P(e)]$

According to (20) the adjectival affix introduces a free variable Q for the property that holds for the subject referent x in a state s . 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. An illustration is given in (22). For comparison see the representation of a standard copula sentence with an adjectival base predicate in (21).

⁸ Recall that Kratzer's conception of the target state reading is more narrow than the one I advocate here (see footnote 2)

⁹ Sentence (19a) may have an additional post state reading besides that.

- (21) Das Manuskript ist neu.
 The manuscript is new
 $\exists s$ [s: new (the manuscript)]
- (22) Das Manuskript ist eingereicht.
 The manuscript is submitted
 $\exists s$ [s: Q (the manuscript) & result (e, s) & submit (e)]

As for the semantics of the copula, I have argued in Maienborn (2005a, 2007b) that copula constructions and other stative verbs differ fundamentally from Davidsonian event and state expressions. In order to account for this difference I introduced a new ontological sort of so-called “Kimian states” (or K-states) that supplements the ontological sort of Davidsonian eventualities (which also include Davidsonian states). K-states are to be understood as reifications for the exemplification of a property Q at a holder x and a time t. From this it follows that K-states are ontologically poorer and more abstract than Davidsonian eventualities; see Maienborn (2005a, 2007b) for details. I’ll come back to this issue below.

Turning back to our adjectival passives, a comparison of the semantic structures given in (21) and (22) shows that the semantics of the adjectival zero-affix laid out in (20) leads to an analysis of adjectival passives that follows the pattern of regular copula sentences. Adjectival passives only differ from adjectival base predicates in that they express an internally more complex and semantically underspecified property. For the adjectival passive to be interpretable, the free variable Q must be given a suitable value by the context.

5 Deriving post state and target state readings

The semantic analysis advocated in the previous section takes adjectival passives to express a semantically underspecified, event-based *ad hoc* property. The task of pragmatics is to legitimate this *ad hoc* property in a given context. More specifically, pragmatics must provide a contextually suitable value for the free variable Q, and it must justify the choice of an *ad hoc* formation instead of a pre-established, lexically coded property. This will lead to the post state / target state differentiation.

I will not present a formal account for the pragmatics in this paper but will only point towards the basic idea. In searching for a value for the free variable Q, the best/most economic instantiation for it is the one that gets by with the fewest contextually not licensed additional assumptions. If the conceptual knowledge associated with the verb’s event referent happens to already specify a resulting property, this will of course be the best choice for Q. In this case, there is no need to draw further inferences and derive more remote *ad hoc* property candidates – unless the context explicitly forces us to.

This explains why virtually no pragmatic effort is needed for interpreting adjectival passives in the case of resultative verbs. These verbs already specify a result state within their lexical entry. Thus Q may simply be identified with the property

introduced at the lexical level. Non-resultative verbs will need more contextual support to derive a suitable value for *Q* and to localize *Q* within the category's property space. That is, while the pragmatic effort needed to derive a contextually suitable value for *Q* may vary considerably, sometimes being completely predictable from the verb's lexical semantics and sometimes relying heavily on context and world knowledge, the basic mechanism is the same.

A pragmatic justification for favoring an *ad hoc* formation over a lexically coded property follows from independent pragmatic economy principles (e.g. Blutner 1998, 2000; Levinson 2000; see also Ackerman & Goldberg 1996). Using an *ad hoc* property will only be pragmatically licensed if the context supports a salient alternative. That is, for an adjectival passive to be interpretable, the context must provide a contrasting alternative *K*-state *s'*.

As I indicated above, *K*-states are ontologically sparse entities and therefore offer few possibilities for establishing suitable alternatives. There are basically two options. This gives us the two readings of adjectival passives. A contextually salient contrasting state *s'* may differ from *s* with respect to either the temporal or the qualitative dimension. In the first case the context provides a salient alternative state *s'* that precedes *s* and in which *x* does not have the property *Q*. This corresponds to the adjectival passive's post state reading; see (23a). In the second case, *s'* exemplifies a contextually salient property *Q'* that is distinct from *Q*; see (23b).

- (23) Das Manuskript ist eingereicht.
 $\exists s$ [s: *Q* (the manuscript) & result (e, s) & submit (e)]
- a. **Post state reading:**
 ... & contrast (*s*, *s'*) & *s'*: $\neg Q(x)$ & *s'* < *s*
 - b. **Target state reading:**
 ... & contrast (*s*, *s'*) & *s'*: *Q'*(*x*)

Whether the contrasting state *s'* is construed along the temporal or the qualitative dimension affects the truth conditions of the adjectival passive. This is shown by the fact that we can simultaneously affirm and deny a particular state of affairs; see Zwicky & Sadock (1975), Kennedy (2009). In a context where an author finally succeeded in finishing a manuscript and submitted it to a journal but already received the sad note that the paper was rejected, he could answer (24) when asked about the manuscript.

- (24) Das Manuskript ist zwar eingereicht, aber es ist nicht eingereicht,
 The manuscript is though submitted but it is not submitted
 sondern abgelehnt.
 but rejected

The present proposal accounts for this post state / target state ambiguity by letting *s* be contextually determined relative to a salient contrasting alternative *s'*.

Finally, Kratzer's "job is done" reading by which the adjectival passive of, e.g., an activity verb like *streicheln* ('to pet') can be "rescued" (cf. (2') repeated in (25) below) turns out to be a specific instance of the post state reading.

- (25) Anna hat ihre Nachbarspflichten erfüllt: Der Briefkasten ist geleert,
 Anna has her neighbor-duties fulfilled: The mail-box is emptied
 die Blumen sind gegossen und die Katze ist gestreichelt.
 the flowers are watered, and the cat is petted.
 'Anna has done her neighborly duties: the mailbox is emptied, the flowers are watered and the cat is petted.'

The particular context given in (25) supports an *ad hoc* categorization of cats into two contrasting sets, cats that still need to be petted and cats that have already been petted. With the adjectival passive sentence *The cat is petted* the subject referent is assigned the property of belonging to the second class.

The semantic and pragmatic analysis achieves the goals laid out in the beginning: First, it takes seriously the structural insights into the nature of adjectival passives and exploits them for their interpretation in taking adjectival passives to be a special instance of copula sentences. And, secondly, it accounts for the characteristic context dependency and *ad hoc* feel of adjectival passives by introducing a free variable at the semantic level that requires the pragmatic machinery to infer a suitable contextual instantiation. All in all this yields a more balanced division of labor between grammar and pragmatics in accordance with the empirical facts.

Acknowledgements

Work on this paper was supported by the German Science Foundation (DFG) as part of the Project B18 "Grammar and Pragmatics of the Stative Passive" within the collaborative research center SFB 441 "Linguistic Data Structures". I would like to thank my project members, Helga Gese and Britta Stolterfoht, as well as the SuB 13 conference audience for very helpful discussion and comments.

References

- Ackerman, Farrell & Adele Goldberg (1996): "Constraints on adjectival past participles", in A. Goldberg (ed.), *Conceptual Structure, Discourse and Language*, 17–30.
- Alexiadou, Artemis & Elena Anagnostopoulou (2007): "Structuring participles", ms, Stuttgart and Crete.
- Anagnostopoulou, Elena (2003): "Participles and voice", in A. Alexiadou, M. Rathert and A. von Stechow (eds.), *Perfect Explorations*, Berlin: Mouton de Gruyter, 1–36.

- Barsalou, Lawrence (1983): “Ad hoc categories”, *Memory & Cognition* **11**, 211–227.
- Barsalou, Lawrence (1991): “Deriving categories to achieve goals”, in G. Bower (ed.), *The Psychology of Learning and Motivation* **27**, New York: Academic Press, 1–33.
- Barsalou, Lawrence (1992): “Frames, concepts, and conceptual fields”, in A. Lehrer and E. F. Kittay (eds.), *Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization*, Hillsdale, NJ: Lawrence Erlbaum Associates, 21–74.
- Barsalou, Lawrence (2005): “Situating conceptualization”, in H. Cohen and C. Lefebvre (eds.), *Handbook of Categorization in Cognitive Science*, St. Louis: Elsevier, 619–650.
- Blutner, Reinhard (1998): “Lexical Pragmatics”, *Journal of Semantics* **15**, 115–162.
- Blutner, Reinhard (2000): “Some Aspects of Optimality in Natural Language Interpretation”, *Journal of Semantics* **17**, 189–216.
- Brandt, Margareta (1982): “Das Zustandspassiv aus kontrastiver Sicht”, *Deutsch als Fremdsprache* **19**, 28–34.
- Embick, David (2004): “On the Structure of Resultative Participles in English”, *Linguistic Inquiry* **35**, 355–392.
- Emonds, Joseph (2006): “Adjectival passives: The construction in the iron mask”, in M. Everaert, H. van Riemsdijk and B. Hollebrandse (eds.), *The Blackwell Companion to Syntax*, Malden, Mass: Blackwell, 16–60.
- Gese, Helga, Claudia Maienborn & Britta Stolterfoht (2008): “On the formation of adjectival passives: The case of unaccusatives”, Ms (submitted).
- Gese, Helga, Britta Stolterfoht & Claudia Maienborn (2009). “Context effects in the formation of adjectival resultatives”, in: S. Winkler and S. Featherston (eds.), *The Fruits of Empirical Linguistics. Volume 2: Product*, Berlin: de Gruyter, 231–262.
- Jacobs, Joachim (1993): “Integration”. In M. Reis (ed.), *Wortstellung und Informationsstruktur*, Tübingen: Niemeyer, 63–116.
- Jacobs, Joachim (1999): “Informational Autonomy”, in P. Bosch and R. van der Sandt (eds.), *Focus: Linguistic, Cognitive, and Computational Perspectives*, Cambridge: Cambridge University Press, 56–81.
- Kennedy, Christopher (2009): “Ambiguity and Vagueness: An Overview”, to appear in C. Maienborn, K. von Heusinger and P. Portner (eds.), *Semantics: An International Handbook of Natural Language Meaning* (HSK series), Berlin, New York: Mouton de Gruyter.

- Kratzer, Angelika (1994): "The event argument and the semantics of voice" Ms, Amherst.
- Kratzer, Angelika (2000): "Building statives", in: *Berkeley Linguistic Society* 26. [<http://semanticsarchive.net/Archive/GI5MmI0M/kratzer.building.statives.pdf>]
- Levinson, Stephen C. (2000): *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. Cambridge Mass.: The MIT Press.
- Lieber, Rochelle (1980): *On the organization of the lexicon*. Cambridge Mass.: MIT Press (PhD Dissertation).
- Maienborn, Claudia (2003): *Die logische Form von Kopula-Sätzen*. Berlin: Akademie-Verlag.
- Maienborn, Claudia (2005a): "On the limits of the Davidsonian approach: The case of copula sentences", *Theoretical Linguistics* 31, 275–316.
- Maienborn, Claudia (2005b): "A discourse-based account of Spanish *ser/estar*", *Linguistics* 43: 155-180.
- Maienborn, Claudia (2007a): "Das Zustandspassiv: Grammatische Einordnung – Bildungsbeschränkungen – Interpretationsspielraum", *Zeitschrift für Germanistische Linguistik* 35, 83–114.
- Maienborn, Claudia (2007b): "On Davidsonian and Kimian States", in I. Comorovski and K. von Heusinger (eds.), *Existence: Semantics and Syntax*, Kluwer, Dordrecht: 107–130.
- Parsons, Terence (1990): *Events in the Semantics of English. A Study in Subatomic Semantics*. Cambridge Mass.: The MIT Press.
- Rapp, Irene (1997): *Partizipien und semantische Struktur. Zu passivischen Konstruktionen mit dem 3. Status*. Tübingen: Stauffenburg.
- Rapp, Irene (1998): "Zustand? Passiv? - Überlegungen zum sogenannten Zustandspassiv", *Zeitschrift für Sprachwissenschaft* 15, 231-265.
- Stolterfoht, Britta, Helga Gese & Claudia Maienborn (2008): "Syntactic category conversion causes processing costs: evidence from adjectival passives", Ms (submitted).
- Zwicky, Arnold & Jerrold Sadock (1975): "Ambiguity tests and how to fail them", in John P. Kimball (ed.), *Syntax and Semantics*, Vol. 4, New York: Academic Press, 1–36.