

IS THE GERMAN PERFEKT A PERFECT PERFECT? *

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Abstract

Descriptive accounts of German tense forms largely agree in the Perfekt being ambiguous between (at least) a past and a resultative or similar perfect meaning, or function. Recent theoretical accounts, however, favour a uniform analysis, e.g. Klein (1999) and Musan (2000). In this paper it will be argued that the German Perfekt is genuinely ambiguous in a way these approaches are unable to account for. Mainly drawing on evidence from narrative passages, temporal clauses and the aspectual particles *schon* and *noch* it is argued that these basic semantic data require the assumption of both a non-perfect past and a non-past perfect reading of the form.

1 Introduction

The semantics of the Perfekt¹ is a notoriously difficult matter. No doubt the form has been, and still is, taking over functions of the Past. According to Behaghel (1924:271), the replacement of the Past by the Perfekt in German already began in Early Old High German. Today, the Past is by and large restricted to special contexts and constructions and even then mainly used with a restricted set of verbs (including *sein* 'be', *haben* 'have' and the modals).² In colloquial Southern German the process of replacing Past by Perfekt is almost complete. On the other hand, there are cases where the Perfekt clearly has retained its classical function of expressing a present state resulting from an earlier event. In view of these facts it appears natural to consider the Perfekt an ambiguous form with two functions, present perfect and past tense.

Nevertheless, various attempts have been made to account for the different uses of the Perfekt by means of a uniform semantic analysis, among them the most recent ones in Klein (1999) and Musan (2000). In these approaches the form is interpreted compositionally as the result of combining the past participle of the verb with the stem *sein* or *haben* and adding present tense to the auxiliary. The apparent past tense uses of the form are accounted for in various ways. In view of these proposals it is worthwhile to re-raise the simple question: Is the Perfekt ambiguous or not? The discussion here will focus on the tense contributed by the form in its various uses. If the form is not ambiguous, its tense must be present tense in all its uses, and this is

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1 This special spelling is used for the form called 'Perfekt' in German, which morphologically resembles the present perfect form of English, except for the fact that the auxiliary is not uniformly *haben* 'have' but in many cases *sein* 'be'. For the other German verb forms the terms of the morphologically corresponding English forms will be used; they are written with a capital letter ('Past', 'Future' etc.) in order to indicate reference to the German forms. The use of the same terms is not to be understood as implicitly claiming semantic equivalence. When terms such as *perfect*, *present* etc. are used with lower case letters, they refer to the generic semantic categories of tense and aspect to be introduced in section 2.1.

2 For a recent survey see Hennig (2000). Carefully evaluating written and spoken data from different types of texts, she states that the frequency of Perfekt vs. Past is 16.3% vs. 14.9% of all finite verb forms, but 23.9% vs. 9.9% if forms of *sein* and *haben* are excluded. Thus, about 57% of Past form occurrences are such of *sein* and *haben*; in a talk show corpus, 14 verbs (*sein*, *haben*, *werden* 'become'; the modal verbs *können* 'can', *müssen* 'must', *dürfen* 'may', *wollen* 'will'; *denken* 'think', *geben* 'give', *gehen* 'go', *kommen* 'come', *sagen* 'say', *stehen* 'stand', *wissen* 'know') make up 80% of all Past form occurrences; 356 different verbs occur in the Perfekt, but only 72 in the Past (cf. Hennig 2000:74, 179ff).

what the proponents of a uniform analysis propose. If the Perfekt is ambiguous, it contributes present tense in its present perfect function and past tense in the functions it has taken over from the Past. In what follows I will present evidence for the ambiguity of the Perfekt by showing that there are cases where the Perfekt must be regarded as a past tense form.

The paper will be restricted to pointing out certain facts that are relevant for a semantic account of the Perfekt, but I will not be able to offer a precise semantic description of its readings. Several issues connected to the question of ambiguity will not be addressed: (i) the question whether or not the ambiguity of the Perfekt is paralleled in the Past Perfect and the Future Perfect; (ii) the functions of the Perfekt infinitive and of non-indicative Perfekt forms such as *er hätte gewonnen* (he have-SUBJUNCTIVE PAST win-PP, 'he would have won'); (iii) the question whether or not the meaning of the Perfekt in its past tense function is the same as the meaning of the Past.

The discussion will take the following course. First, the basic functions of the Perfekt form will be described within a simple paradigm of tense and aspect functions; then the Perfekt will be distinguished from Resultative constructions, which partly coincide in form. In the third section the relevant features of current accounts of the Perfekt will be reported, in particular those of Musan (2000) and Klein (1999). Section 4 presents arguments for the ambiguity of the Perfekt; these include tense and aspect features of the form both for itself and in combination with other tense and aspect operators, notably temporal conjunctions and aspectual particles (*schon* 'already' and *noch* 'still'). In the last section, the consequences are pointed out for a semantic analysis of the form.

2 The German Perfekt

2.1 A minimal sketch of a framework for tense and aspect

In what follows I will apply a simple framework for distinguishing T&A (tense and aspect) functions. It is based on common general descriptions of aspect and tense such as Comrie (1976) and (1985). Three aspects are distinguished: perfective, imperfective and perfect. These are combined with three tenses for past, present and future time reference. In an approach to tense and aspect based on Galton (1984), sketched in Löbner (1988) and elaborated in Herweg (1990), the semantics of tense and aspect are interrelated as follows:

The perfective case. A clause in the perfective aspect represents a predication about an event *e* the type of which is specified by the clause minus tense and aspect. Tense provides a second predication about the event argument *e* which concerns its location in time (past, present or future).

The imperfective case. A clause in the imperfective aspect represents a predication about a contextually given (or bound) time *t_e*; at this time a certain kind of situation specified by the clause minus tense and aspect is said to hold. Tense provides a second predication about *t_e* which concerns its location in time (past, present or future).

Thus, in both cases tense and the clause constitute a predicate about a common argument, an event in the perfective case and a time in the imperfective case. Galton's approach to aspect crucially rests on a basic distinction between events and states (see Galton 1984:15ff). Perfective forms denote events. Events constitute a special kind of situations: they are individual entities located in time; they are temporally bounded and countable; they necessarily involve change and are therefore only definable in terms of conditions involving at least two different times. Imperfective forms express states. States are properties of times; they need not involve change; they may be temporally unlimited; they are defined in terms of conditions on a single

time; unlike events, states possess negative counterparts. States and events are interrelated. For one, there are state-related events. The beginning of a state S, i.e. a change from not-S to S constitutes a certain type of event related to S, as does the ending of S. Likewise the occurrence of a state, taken as a change from not-S to S followed by a complete interval of S and then a change back to not-S, constitutes another kind of S-related event. Conversely, there are event-related states. One type is the state of an event's going on, expressed, for example, by a progressive form. To Galton, the progressive and the imperfective in general are operators that yield states from events. Another such operator is the perfect: it yields for an event the state resulting from it.

The distinction between the two aspects along the traditional lines (discussed in Comrie 1976:16ff) is a by-product of this account and the general Presupposition of Indivisibility (Löbner 2000:239) according to which any predication applies to any argument as an integral whole. Perfective aspect, resulting in a predication about an event of the sort described, concerns this event *as a whole*, in particular its location in time by the tense of the clause. Imperfective aspect, rendering a predication about a time, allows for partial involvement of the situation specified.

Perfect aspect is in some sense a combination of perfective and imperfective aspect. It interacts with tense like imperfective aspect, but the situation constructed involves an event as a whole:

The perfect case. A clause in the perfect aspect represents a predication about a contextually given (or bound) time t_e ; at this time a situation is said to hold that results from a previous event of the kind specified by the clause minus tense and perfect aspect. Tense provides a second predication about t_e which concerns its location in time (past, present or future).

With respect to the resulting state expressed, perfect aspect can be considered as a special case of imperfective aspect, since it renders a stative predication. With respect to the original situation expressed by the verb, SV for short, perfect aspect is of course different from imperfective aspect.

Three basic **tenses** are distinguished as usual: present, past and future. One general consequence of the framework adopted here is the fact that present tense with perfective aspect usually does not yield reference to present time but to imminent future time.³ This is due to the fact that present time reference is defined in terms of the time of the utterance event U. In the case of imperfective (or perfect) aspect with strict present tense, the state expressed is applied to the time of U. In the case of perfective aspect, location of the event expressed *at* the time of utterance would mean coincidence of the event time with the utterance time, or location of the event time within utterance time. This is only possible under special circumstances, e.g. in the case of explicit performatives and on-the-spot reports. The event expressed by the performative verb in an explicit performative coincides with the utterance event; in the case of on-the-spot reports, e.g. sports castings, coincidence of utterance time and the reported events is built into this special mode of speaking, as it were. If else the event E expressed in the perfective aspect is independent from the event U of utterance, temporal location of E relative to U in terms of the simple basic tense distinctions can only result in $E < U$ or $E > U$. Partial overlap of E with U is ruled out by the Presupposition of Indivisibility: this would mean a

3 Galton (1984:3) puts it this way: "Roughly speaking, we may say that perfective aspect is logically incompatible with present tense meaning, so where a grammatical present tense exists in conjunction with the perfective aspect, the tense cannot be read as referring straightforwardly to the present time." Languages like Russian illustrate the effect: present tense with perfective verbs yields future time reference and is therefore often considered a future tense; the same forms with imperfective verbs yields present time reference. There is an extra future tense form for imperfective verbs only.

splitting-up of E with respect to the tense predication that locates E relative to U. Since the relation $E < U$ is expressed by past tense, the latter will lead to the use of either future tense or a weak present tense, i.e. a non-past tense that allows reference both to present and future time.⁴

Another point of importance concerns the past tense (and the future tense, analogously): a situation expressed in the past perfective necessarily lies entirely in the past, while a situation expressed in the past imperfective may extend into present time.

2.2 The German T&A system

Following Herweg (1990) I assume that there are basically three tenses grammatically distinguished in German: Future, Past and a weak Present. Future time reference is the default case for Present perfective sentences, while present time reference is the default case for Present imperfective sentences (because the time of utterance is the default value for t_e); for future time reference, the Present imperfective needs contextual support, but if such support is given the Present is perfectly natural:

- (1) Helene kommt morgen
 H. comes tomorrow⁵
 ‘Helene is coming tomorrow.’

The six basic (indicative active) verb forms in German will be referred to as follows:

Present	<i>ich sag-e</i>	stem + ending
Past	<i>ich sag-t-e</i>	stem + <i>t</i> + ending
Future	<i>ich werde sagen</i>	Present of <i>werden</i> + infinitive
Perfekt	<i>ich habe gesagt</i>	Present of <i>sein/haben</i> + PP
Past Perfect	<i>ich hatte gesagt</i>	Past of <i>sein/haben</i> + PP
Future Perfect	<i>ich werde gesagt haben</i>	Future of <i>sein/haben</i> + PP

Table 1 Six basic T&A verb forms in German

These forms can be used for the combinations of aspect and time reference displayed in Table 2; square brackets indicate exceptional cases, parentheses the need of contextual support. These data are largely uncontroversial (cf. the comprehensive account in Thieroff 1992).

		time reference		
		<i>past</i>	<i>present</i>	<i>future</i>
aspect	<i>imperfective</i>	Past Perfekt	Present	(Present) Future
	<i>perfective</i>	Past Perfekt	[Present]	Present Future
	<i>perfect</i>	Past Perfect	Perfekt	(Perfekt) Future Perfect

Table 2 Primary T&A functions of German verb forms

The left subcolumn of the ‘future’ column is due to the fact that the German Present tense is a weak present tense, i.e. a non-past. In standard German, there is no distinction between the expression of imperfective and perfective aspect; the marginal differences are inherent to the

⁴ These considerations do not apply to the so-called historic present and other non-standard tense uses. Note that in the case of the historic present time reference is not anchored to the utterance event.

⁵ In order to reduce the complexity of glosses, verb forms are glossed by the morphologically corresponding English forms rather than categorized; thus *ist* is glossed as ‘is’ rather than ‘be-3SG-PRES-IND’. Categorizations are added only if necessary.

respective aspect. Perfect aspect, however, is marked by perfect forms. One remarkable exception is the use of Past *sein* with variant operands in a present perfect meaning:

- (2) Ich war weg/ krank/ einkaufen.
 I was away/ ill / shop.INFINITIVE
 'I have been away / ill / shopping.'

As for the Perfekt, Table 2 can be summed up as follows:

- The German Perfekt has two functions:
 (i) *non-past perfect*
 (ii) *past non-perfect*

The distinctions in Table 2 are not to be taken as full semantic descriptions of the Perfekt or the other forms. For example, there is more to the Past than just past time reference and non-perfect aspect. In German, the Past may be inadequate in cases where in English the past tense is mandatory. Without a special context, e.g. a narrative, (3b) is definitely odd, while (3a) is quite natural.

- (3) a. Letztes Jahr *sind* wir nach Spanien *gefahren*. (Perfekt)
 last year are we to Spain gone
 lit. 'Last year we have gone to Spain.'
 b. Letztes Jahr *fuhren* wir nach Spanien. (Past)
 last year went we to Spain
 lit. 'Last year we went to Spain.'

The following examples illustrate the four possible readings of the Perfekt:

- (4) a. past imperfective
 Als ich die CD *gebrannt habe*, stürzte der Computer ab.
 when I the CD burn.PP have, crash.PAST the computer PARTICLE
 'When I was burning the CD, the computer crashed.'
 b. past perfective (*als* clause), past imperfective (main clause)
 Als der Computer *abgestürzt ist*, *habe* ich gerade eine CD *gebrannt*.
 when the CD crash.PP is, have I just a CD burn.PP
 'When the computer crashed, I was just burning a CD.'
 c. present perfect
 Du kannst den Text nicht drucken, der Computer *ist abgestürzt*.
 you can the text not print, the computer is crash.PP
 'You can't print the text, the computer has crashed.'
 d. future perfect
 Ruf mich, sobald der Computer *abgestürzt ist*.
 call me as soon as the computer crash.PP is
 'Call me as soon as the computer will have crashed.'

2.3 Distinguishing the aspects in German

In view of the fact that the aspectual distinctions are not consistently marked in German, a word should be said about the criteria that allow the distinction between imperfective, perfective and perfect. The following diagnosis can be employed:

Perfective aspect. The clause specifies a certain kind of event and states that such an event takes place within some period of time to be specified by tense and/or context. If tense is Past or Future, the event lies completely within the past or within the future; if a certain time is contextually given (e.g. by a frame adverbial), the event is completely included within that time. Strict present tense is strongly restricted. Perfective aspect necessarily involves some change (or the absence of change). If a perfective clause is used within a narrative, narration time moves on.

Imperfective aspect. The clause provides a predication about a contextually given time t_e ; it answers the question ‘What kind of situation holds at t_e ?’. The clause denotes a state. Change is not necessarily involved. Tense locates t_e , not the state expressed. Present time reference is possible if tense is Present. The whole duration of the state expressed includes t_e but it is not necessarily completely included within past or future time if tense is Past or Future. When an imperfective clause is used in a narrative, it contributes to the description of the state of affairs at the previously established time t_e ; narration time does not move on.

Perfect aspect. The clause is primarily stative; it provides a predication about a contextually given time t_e ; it answers the question ‘What has happened?’ The clause describes a state which results from a certain kind of situation having occurred; the situation itself is completed; the state is irreversible⁶. Tense specifies the location of t_e . When a perfect clause is used in a narrative, it contributes to the description of the state of affairs at previously established time t_e ; narration time does not move on.

It must be added that the distinction between imperfective and perfective aspect is not only unmarked in German but also not predictable from the aspectual verb class (e.g. according to Vendler’s classification). One and the same sentence may take on an imperfective or an perfective interpretation. This does not mean, however, that German sentences have an aspectually neutral meaning. The perfective/imperfective distinction is a matter of the predication structure of the sentence, which must be settled in order to obtain any interpretation of the sentence at all.

2.4 Perfekt vs. Resultatives

One point to be observed in the following is that the Perfekt is partially homophonous with a set of forms called Resultatives.⁷ Resultatives denote a state that is essentially expressed by the PP of the verb and therefore understood as the kind of state that results from the kind of event expressed by the verb. Unlike the Perfekt, however, Resultatives are only available for resultative verbs, i.e. such verbs with a semantically defined resulting state. In addition, they underlie further restrictions which, as far as I know, are not yet fully understood. Although Resultatives are logically related to corresponding ‘eventive’ (Litvinov & Nedjalkov 1988:8) Perfekt constructions, the two sets of constructions are not equivalent. Table 3 lists examples of five types of Resultatives; the list is not exhaustive.

⁶ The states denoted by perfect clauses are in many cases not factually unlimited; for example, the state expressed by *I have eaten* ceases to hold in a natural course of events some hours after the event. Nevertheless, clauses in the perfect aspect are generally incompatible with adverbials that require an upper temporal bound of the state expressed, for example *for*-adverbials or *until*-adverbials. The irreversibility of perfect-states is due to the situation structure created by perfect aspect: it does not include anything temporally following the resulting state.

⁷ For a comprehensive descriptive account of German Resultatives see Litvinov & Nedjalkov (1988).

Construction P is known as stative passive ('Zustandspassiv'); it could more systematically be called Passive Resultative. The constructions in A are Active Resultatives, possible both for *sein*-verbs (A_s) and *haben*-verbs (A_h); they are homophonous with the corresponding Perfekt constructions. R and M can be regarded as Reflexive Resultative and Middle Resultative, respectively (or uniformly as Middle Resultatives, if reflexives are subsumed under middle constructions, cf. Kaufmann 2001:228ff). The Reflexive Resultative ('Zustandsreflexiv') corresponds to reflexive Perfekt sentences; note that the auxiliary is *haben* for the Perfekt, but *sein* for the Resultative. The example *sie ist angezogen* also has a Passive Resultative reading, because the verb *anziehen* can also be used as a transitive verb. The Middle Resultative is only superficially homophonous with a Perfekt construction. It is restricted to cases where the subject referent is related to the object referent in a specific way, e.g. as inalienable possession. The restriction is reflected by the presence of a dative reflexive pronoun in the corresponding active Perfekt: the reflexive turns the construction into a variant of middle voice. Active, Reflexive and Middle Resultatives are subject to constraints not yet fully understood; the state expressed must be a state that affects the subject referent or is under its control.⁹ For example, in the case of A_h , the subject referent is conceived of as either maintaining the state of the file being open or being otherwise affected by that state of the file. No such constraint on the part of the subject referent is connected with the simple perfect readings of the homo-

	Resultative	corresponding eventive Perfekt
A_s	Sie ist verreist. she is gone-away 'She is gone away.'	Sie ist verreist. 'She has gone away.'
A_h	Sie hat die Datei geöffnet. she has the file open.PP 'She has the file open[ed].'	Sie hat die Datei geöffnet. 'She has opened the file.'
R	Sie ist angezogen. she is dress.PP 'She is dressed.'	Sie hat sich angezogen. she has REFL dressed 'She has dressed.'
M	Sie hat den Arm verbunden. she has the arm bandage.PP 'She has her arm bandaged.'	Sie hat sich den Arm verbunden. she has REFL the arm bandage.PP 'She has bandaged her arm.' Sie hat sich den Arm verbinden lassen. she has REFL the arm bandage let.PP 'She has had her arm bandaged.' Sie hat den Arm verbunden bekommen. she has the arm bandage.PP get.PP 'She has got her arm bandaged.'
P	Sie ist verhaftet. she is arrest.PP 'She is under arrest.'	Sie ist verhaftet worden. she is arrest.PP become.PP ⁸ 'She has been arrested.'

Table 3: Major German Resultative constructions

⁸ The Perfekt of the standard passive is formed by the auxiliary *werden* 'become' plus PP. The regular PP *geworden* of *werden* is reduced to *worden* when in auxiliary function.

⁹ An appropriate notion of control is Kaufmann's 'S-control' (situation control): An individual controls a situation if she or he is the one who decides whether or not it comes about and how long it lasts (Kaufmann 2001:58).

phonous eventive sentence. The following are examples with natural contexts for the Active Resultatives mentioned in Table 3:

- (5) A_s Ich gieße ihre Blumen, solange sie verreist ist.
 I water her flowers as long as she gone-away is
 'I'm watering her flowers as long as she is away.'
 A_h Solange sie die Datei geöffnet hat, kannst du sie nicht öffnen.
 as long as she the file open.PP has, can you her not open.
 'As long as she has the file open[ed], you can't open it.'

Compared to the Active, Reflexive and Medium Resultatives, the Passive Resultatives are much less restricted.

In view of the fact that the perfect is often characterized as expressing a situation resulting from a former event, the distinction between resultative Perfekts and Resultatives is subtle. Resultatives are genuine state predicates. For example, the Resultative in A_s has the same quality as, say, *she is away*. Although the situation expressed logically arises from her having gone away some time before, this event is not a component of the situation referred to. Accordingly, it cannot be further qualified with adverbials that relate to the event itself; these select the Perfekt reading(s):

- (6) Sie ist gestern/ eilig/ heimlich verreist. (Perfekt only)
 she is yesterday/ in a hurry/ secretly gone away
 'She has gone away/went away yesterday/in a hurry/secretly.'

On the other hand, the Resultative is capable of adverbials not possible in the perfect reading, for example *solange* clauses as in (6) or *bis* adverbials:

- (7) Sie ist bis nächste Woche verreist (Resultative only)
 she is until next week gone away
 'She is gone away until next week.'

The same applies to the other Resultatives. Being plain stative forms, all Resultatives are capable of the full range of T&A forms, including the Perfekt itself (as well as Past Perfect and Future Perfect). The same does not hold for the Perfekt correspondents.¹⁰

- (8) a. Sie ist zwei Wochen verreist gewesen.
 she is two weeks gone-away been
 'She has been gone away for two weeks.'
 (Perfekt of Active Resultative)
 b. Sie hatte den Arm eine Zeitlang verbunden gehabt.
 she had the arm a while bandage.PP have.PP
 'She had had her arm bandaged for a while.'
 (Past Perfect of Middle Resultative)

The distinction between Resultatives and the Perfekt is not always properly observed in the literature. It will play a role in section 4.4.

¹⁰ Double Perfect forms, i.e. a Present Perfect Perfect or Past Perfect Perfect are not impossible in German, but very rare (s. Hennig 2000:78 ff).

3 Analyses of the Perfekt

3.1 Former approaches

The literature about the German Perfekt provides compositional and non-compositional analyses. A non-compositional analysis is given in Nerbonne (1982) and (1985: 224ff). Adopting a Reichenbachian approach, Nerbonne reduces the meanings of the T&A forms to temporal relations. To him, the Perfekt is ambiguous in the following way: in one reading it is used to express a situation at a reference time R prior to the time of utterance S (this is Reichenbach's 1947:290 description of the simple past); in the other reading, the Perfekt denotes a situation that is prior to a reference time R which in turn is identical with S or later than S, rendering the present perfect and future perfect readings of the form, respectively (this is essentially Reichenbach's analysis of present perfect and future perfect).¹¹ As far as the temporal relations are concerned, Nerbonne's account is in accordance with the picture given in Table 2.

Among the compositional approaches, one type treats the Perfekt as the result of applying a perfect operator to the verb, yielding [verb.PP+Aux.]¹², and then applying present tense to the auxiliary (Bäuerle 1979 and Herweg 1990, among others). According to this type of approach, [verb.PP+Aux.] denotes a state that (in some sense or other) results from SV, i.e. the situation expressed by the verb itself; thus a finite Perfekt form is considered a combination of perfect aspect and present tense. This type of analysis has two advantages: (a) If applied to the Perfekt as well as the Past Perfect and Future Perfect, it reduces the number of tenses in German to three; (b) It captures properties common to the Perfekt, the Past Perfect and the Future Perfect, in particular their (genuine) perfect readings. On the other hand, in analysing the Perfekt and its kin as a genuine perfect form, the analysis obviously does not capture the uses of the Perfekt where it functions like a past tense form with non-perfect aspect. Both Bäuerle and Herweg acknowledged this point, assuming that the Perfekt has a second type of use in which it serves as a substitute of the Past form. This type of approach too is in line with the proposal given in Table 2 for the perfect readings of the Perfekt.¹³

More recently, two new approaches to the German perfect have been put forward in Klein (1999) and Musan (2000). Both authors claim to offer compositional analyses that cover not only the perfect readings of the Perfekt but also its uses with an apparent past tense function.

3.2 Musan (2000)

According to Musan (2000:355),

“[...] every occurrence of a [German, S.L.] present perfect construction necessarily contains (a) a resultant-state component [...] expressed by the complex consisting of the past participle and the auxiliary, and (b) a genuine, canonically interpreted present tense [...]. This result proves many accounts of the present perfect untenable, e.g., accounts that take the present perfect as ambiguous between past tense and aspectual readings, [...]“

Musan's claim is based on a problematic, partly invalid argument which I will not discuss in detail.¹⁴ In her account, the semantic contribution of the complex consisting of the past

11 Nerbonne deviates from Reichenbach in providing for the possibility that in the future perfect E is located prior to S.

12 'Aux.' indicates the stem of the auxiliary.

13 A different compositional account with approximately the same result is given in Wunderlich (1996). He attributes the perfect meaning not to the participle but to the auxiliary alone.

14 One respect in which Musan's argument is inadequate is her treatment of aspect. Her analysis is based on the untenable assumption that German sentences by default have perfective aspect (p.359). Musan appears to be unaware of the fact that stative sentences have imperfective aspect. So she assumes default perfective aspect for prototypical examples of imperfective aspect such as the second sentence of *Sie fanden Barschel in der Badewanne. Er war tot.* ['They found B. in the bathtub. He was dead.' (p.360)]. Explicitly, she also claims 'default perfective aspect' for perfect clauses which at the same time she emphasizes are 'stative'.

participle and the auxiliary, [verb.PP+Aux.], is described as follows. The verb stem denotes a situation (our SV) which occupies some time interval E.¹⁵ Context picks out a ‘relevant subinterval’ of E, where only such subintervals are relevant that constitute a complete, though not necessarily completed, situation of the type specified by the verb (p.396f).¹⁶ [PP+Aux.] then expresses a state after some such subinterval; no further relationship is claimed between SV and the subsequent state. To the stative form [verb.PP+Aux.] is then added present tense in its usual meaning with stative VPs: it refers to a reference time R which by default is taken as the time of utterance, but may be later in appropriate contexts.¹⁷ Thus, the Present component is analysed as non-past tense. In terms of temporal relations, Musan’s theory takes care of all possible uses of the Perfekt, but it differs from the picture developed above in the following points:

- Present tense is assumed even for the past imperfective and past perfective uses of the Perfekt.
- No distinction is drawn between the present perfect and the past perfective readings of the Perfekt.
- Perfect aspect as such is eliminated from the meaning of the form; it is replaced by mere anteriority of a relevant part of SV.

In the following, it will be argued that these features of Musan’s theory are problematic.

3.3 Klein (1999)

Klein’s 1999 approach to the Perfekt is different in that it is based on a theory of semantic types of verbs. Most details of his analysis will not concern us here. According to Klein, the meaning of a verb can be captured by an ordered sequence of what he calls AT specifications (‘AZ-Angaben’, A for *Argument*, Z for *Zeit* ‘time’). Essentially, these are predications about pairs consisting of a classical argument A of the verb and a time T. The meanings of stative verbs contain just one such predicate about one AT pair. Verbs expressing a change of state such as *entlaufen* ‘run away’ predicate about a first pair and a second pair with the same argument, the runner-away, but different time arguments, that of the second AT pair being later than the other; the two predications are linked by a causal relation (the second would not apply if the first one did not, Klein calls the relation H-relation, in honour of Hume). A typical transitive action verb such as *close* is characterized by three predications, one concerning the ‘subject’ at the time of its action, the other two the ‘object’ at two different times roughly corresponding to the state before and after the action, respectively.

In Klein’s theory, the meaning of any complex [verb.PP+Aux.] contains specifications about two AT pairs, $\langle A, T_1 \rangle$ and $\langle A, T_2 \rangle$ with $T_2 > T_1$, and A the topmost argument of the verb; there

15 For the sake of a uniform terminology in this paper, Musan’s parameters are replaced by Reichenbach’s. Her terms for E and R are TS (‘situation time’) and TR (‘reference time’), respectively.

16 Like many other authors, Musan assumes that every subinterval of a ‘homogeneous’ situation, in particular a state or an activity, constitutes a situation of the same kind as the whole.

17 Actually, Musan’s treatment of the present tense is more complicated, and again inadequate. In absence of a context of future time reference, the combined effects of ‘default perfective aspect’ and present tense on a stative clause, in particular a perfect clause, are modelled as follows (cf. p.394f). The Present locates U within R: $R \supseteq U$. ‘Default perfective aspect’ cuts out a ‘contextually relevant part’ P of the state following E, where E is a part of SV that constitutes a complete event of the type stated; P too is located within R: $R \supseteq P$. Because P is part of the state following E, we get $E < P$. These conditions, however, are too weak. First, the fact that both U and P are located within R does not secure that P and U actually overlap, whence the result is not a proper present tense reading. Second, for the same reason the conditions do not warrant $E < U$, another crucial condition for the perfect reading. I assume that Musan did not intend these consequences of her account since her informal description of the Perfekt indicates that $E < U$ and $P \supseteq U$ are assumed for the non-future reading of the form. Therefore, this part of her analysis is ignored in the following.

may be more AT specifications. If Present tense is applied to the complex, the later time T_2 is related to a non-past topic time (essentially Reichenbach's R) and the whole predication to A . However, Klein claims, the predication is to be taken as concerning not A alone but either the pair $\langle A, T_1 \rangle$ or $\langle A, T_2 \rangle$, i.e. *A at the time T_1* or *A at the time T_2* . Thus, two readings are claimed for every Perfekt sentence, which Klein refers to as the 'present perfect' and the 'preterital' reading. For example, in (9)

- (9) Die Calla hat geblüht.
 the Calla has bloom.PP
 'The Calla [has] bloomed.'

the specification of $\langle A, T_1 \rangle$ would be something like BE-IN-BLOOM- $\langle A, T_1 \rangle$. In the present perfect reading, the sentence is about the flower at the present or future time T_2 , expressing a state where the plant, as it is at T_2 , has had its blooming, maybe for the last time. In the preterital reading, the predication is applied to the flower at the previous time T_1 : it then was in bloom. Nevertheless, the statement is primarily about a non-past topic time T_2 : at that time the world is such that there has been a blooming of the Calla. The second reading, unlike the first one, does not entail that the Calla still exists. However, the later situation at T_2 is linked to the blooming at T_1 by the causal H-relation. This distinguishes the case of the preterital reading from a simple past, as in (10):

- (10) Die Calla blühte.
 the Calla bloom.PAST
 'The Calla bloomed/was blooming.'

According to Klein, past tense relates a past topic time to the first AT-pair, in this case the only specification available, i.e. BE-IN-BLOOM- $\langle A, T_1 \rangle$. The sentence is about the Calla then; it does not address a later situation. Klein (1999) does not subscribe to the view that the Perfekt may function as a simple past, although he attributes it a reading similar to that of the Past. In assuming that the Perfekt always carries Present tense, Klein's approach parallels Musan's. It differs in that Klein assumes a causal relation between the specifications of $\langle A, T_1 \rangle$ and $\langle A, T_2 \rangle$. Whether or not this is intended to capture what is commonly considered the aspectual meaning component of the perfect is not clear, since the topic of aspect is not addressed in Klein (1999). It should be added that neither approach is fully compositional: both authors take the auxiliary *haben* in a meaning which is not related to its usual meaning 'to have'. Also it is not clear how such analyses could account for the semantic differences between Perfekt forms and homophonous Resultatives.

4 Arguments in favour of the ambiguity

4.1 Positional time adverbials

We will first consider a non-argument for the ambiguity, the behaviour of simple positional time adverbials. It has often been observed that the Perfekt, unlike its English counterpart, is compatible with past, present and future time adverbials, such as in (12):

- (12) a. Karla *ist* gestern hier *eingezogen*.
 K. is yesterday here move-in.PP
 'K. [has] moved in here yesterday.'
- b. Jetzt/Morgen *ist* Karla hier *eingezogen*.
 now/tomorrow is K. here move-in.PP
 'Now K. has moved in here'/'Tomorrow K. will have moved in here.'

The phenomenon has often been taken as evidence for the past/perfect ambiguity, e.g. by Nerbonne (1982, 1985). Maybe under the influence of English, this kind of view is based on the assumption that positional time adverbials necessarily apply to the same argument as tense. Since (canonical) present tense is incompatible with past time reference, (12a) would then have to be considered an instance of past tense. The assumption, however, does not apply to German, as was argued, among others, by Herweg (1990) and Klein (1999). (12a) can be interpreted as a present perfect statement; one component of the meaning of any such statement is SV (the situation specified by the verb itself), and there is no reason why the time adverbial should not be able to specify this part of the meaning, on a par with manner adverbials and other specifications applying to it. In a context as the following, only a perfect reading is possible:¹⁸

- (13) Jetzt, wo Karla gestern hier *eingezogen* ist,
 now where K. yesterday here move-in.PP is
 brauchen wir einen Schlüssel fürs Klo.
 need we a key for the loo
 ‘Now that K. has moved in here yesterday, we need a key for the toilet.’

Thus, (12a) has a present perfect reading in addition to its past perfective reading. The combinability of the Perfekt with both past time and non-past time adverbials (including such that specify a future time) does not constitute an argument in favour of the ambiguity of the Perfekt. The observation that the Perfekt is compatible with a past time specification of SV will, however, be relevant in the following.

4.2 The Perfekt in narrative contexts

In standard present day German, the Perfekt can be used in the main clauses of narrative passages in the same way as the Past. Data are abundant. (14) is a passage from a phone call reported in Brons-Albert (1984:45). A young woman, referred to as B, who is just back from a visit at her parents’ place is telling a close friend about her stay; the passage relates to a minor kitchen sink disaster she caused in her parents’ house. The verb forms are annotated for perfective [pf] and imperfective [ip] aspect according to the criteria mentioned above; Perfekt forms are italicized. The transcription is moderately phonetic.

- (14) Das *hab* ich ja *versucht* [pf]! Ich *hab* da heißes Wasser reinlaufen *lassen* [pf]
 that have I yes try.PP I have there hot water run-in let.PP
 un dann gleichzeitig noch so [name of product] *reingekippt* [pf],
 and then at the same time in addition such ... tip-in.PP
 weil ich *gedach hab* [ip], das neutralisiert, aber das *hat* nix *genutzt* [pf].
 because I think.PP have that neutralizes but that has nothing help.PP
 ‘I tried that! I let hot water flow down and at the same time [I] poured some [...] down
 because I thought that that would neutralize it, but it didn’t help.’

There is no way in which these occurrences of the Perfekt can be considered as having present tense; they are all used for reporting past situations in a past context: clearly Reichenbach’s R is in the past. The same passage might be used in the present perfect mode in a different situation, say when B’s parents return while she is in the kitchen trying to handle the sink problem; B might then use the same sentences for an account of the present situation. But the

18 I take it that the *jetzt, wo* construction selects the present perfect reading of the Perfekt. Clearly, *jetzt* in the matrix clause defines the reference time of that clause as present time; circumstantial *wo* marks the situation expressed in the subordinate clause as relevant for what is said in the matrix clause.

context is not like that. At this point of the conversation, B's listener already knows that the sink problem was taken care of later; the situation B talks about is of no relevance for the present time. It is just part of a story.

In the same talk, B tells her friend another story. Here she uses Perfekt and Past forms indiscriminately both in past imperfective and past perfective function. Past forms are marked with bold type.

- (15) Und dann *simmer*¹⁹ in die Kneipe *gegangen* [pf], nem,
 and then are we in the pub gone, (discourse particle)
 viertel nach neun **kam** [pf] der erste Anruf.
 quarter past nine came the first phone call.
 'And then we went to the pub, you know. At a quarter past nine, the first phone call came in.' (Brons-Albert 1984:39)
- (16) die **war** [ip] nich sauer, die *hat* nur so *getan* [ip]
 she was not mad, she has only so done
 'She wasn't mad, she only pretended.'

4.3 The Perfekt in temporal-clause constructions

Where English has one temporal conjunction *when*, German distinguishes between *als* and *wenn*; *als* is incompatible with present or future time reference, and hence not combinable with Present or Future forms in their canonical use (*als* can be used, however, with Present in its historical present function). *Wenn* on the other hand, in its non-generic temporal function, is incompatible with past or present time reference, (Herweg 1990:267ff). (17) illustrates the difference:

- (17) a. Als/*Wenn ich sie gestern traf [Past], erzählte sie mir
 when I her yesterday met, told she me ...
 'When I met her yesterday, she told me ...'
- b. *Als/Wenn ich sie nachher treffe [Present], wird sie mir erzählen ...
 when I her later on meet, will she me tell ...
 'When I will meet her later on, she will tell me ...'

Now, the Perfekt is perfectly combinable with *als*. For example, the Past form in (17a) with *als* can be replaced by the Perfekt *getroffen habe* as in (18a). Thus, the Perfekt in temporal *als* clauses cannot have non-past tense, except for its non-canonical historical variant. On the other hand, in non-generic temporal *wenn* clauses as in (18b), the future perfect reading of the Perfekt is the only one available. Note that in such cases future time reference need not be otherwise established in the context:

- (18) a. Als ich sie gestern *getroffen habe*, ...
 when I her yesterday meet.PP have, ...
 'When I met her yesterday, ...'
- b. Wenn ich sie *getroffen habe*, weiß ich mehr.
 when I her meet.PP have, know I more
 'When I [will] have met her, I will know more.'

In the same clear way, the Perfekt proves ambiguous between a past non-perfect and a present perfect reading in other temporal-clause constructions. Temporal *bevor* ('before') constructions with Perfekt forms allow for two readings of the temporal clause:²⁰

19 The form *simmer* is a colloquial contraction of *sind wir* 'are we'.

- (19) Bevor sie nach Hause *gekommen ist*, hat er *gespült*.
 before she home come.PP is has he wash.PP the dishes
 a. 'Before she came home, he [has] washed the dishes.'
 b. 'Before she will have come home, he will have washed the dishes.'

Both clauses of a *bevor*-construction must refer either to past SV's or future SV's (see the discussion in Herweg 1990:242f). The Perfekt lends itself to both alternatives. According to Herweg (1990:234ff), the *bevor* clause requires either perfective or perfect aspect. The former is given in reading (a), the latter in (b).

In reading (a), the fact that the person referred to has come home by the time of utterance is treated as given; if the Perfekt is taken as a non-past perfect expressing a resulting state, time reference must be present rather than future, i.e. a case of R=S.²¹ This, however, is generally excluded for *bevor* clauses (as it is for *als* and non-generic temporal *wenn*). Thus, if SV of the *bevor* clause is taken to lie in the past, the clause cannot carry present tense; the function of the Perfekt is a past perfective rather than a present perfect. The Perfekt in the matrix clause, however, is open to both readings. The *bevor* clause yields a temporal location for the matrix SV in terms of the *bevor* SV. More precisely, the clause defines an interval that ends when the *bevor* SV begins. As the location in time is defined in terms of an upper temporal bound, it cannot be applied to the *state* resulting from the matrix clause SV, but only to SV itself. Consequently, the Perfekt in the matrix clause can be taken either as a past perfective or as present perfect (recall section 3.1 for the compatibility of SV specification with perfect aspect). With the latter reading, the whole construction can be embedded in a *jetzt wo* context:

- (20) Jetzt, wo er *gespült hat*, bevor sie nach Hause *gekommen ist*, ...
 'Now that he has washed the dishes before she came home ...'

In the case of future perfect reading (b), the *bevor* clause yields a time interval that ends when the clause SV is complete, i.e. when 'she' is at home. As this point lies in the future, the clause defines an interval that extends into the future, whence the matrix SV too is taken to denote a future event. In this case, the matrix Perfekt can only be taken as a future perfect, and this is, in fact, the reading one gets.

In *nachdem* clauses, too, the Perfekt is possible although present time reference is barred. The following example is taken from a test in which 50 native speaker individuals were asked to fill in their favoured verb forms in the two clauses of a *nachdem* construction. As many as 16 of them chose the following combination (the majority preferred the Past Perfect in the *nachdem* clause):

- (21) Nachdem Klaus den Kamin *angemacht hat*, wurde es wieder warm.
 after K. the fireplace light.PP has become it again warm
 'After K. lit the fireplace, it became warm again.'

Again, the non-past perfect reading of the Perfekt would require present time reference, which is impossible.

4.4 The Perfekt with *schon* and *noch*

The particles *schon* and *noch* can be used for distinguishing between different readings of the T&A forms due to the fact that they carry aspectual restrictions on their IP (Infl phrase) operands. In its basic use, referred to as type 1 in Löbner (1989), the particle *schon* operates on a stative IP, where 'stative' includes imperfective and perfect aspect. The time t_e is a common

20 The ambiguity was pointed out to me by Ruth Ropertz in a seminar paper on *bevor* clauses.

21 It is absolutely impossible to take (19) as stating that, at a *future* time, a state holds that results from a *past* event of his washing the dishes which took place before the *past* event of her coming home which still results in the state given at that *future* time.

argument of tense, time adverbials and the particle, which imposes a phase quantification on the simple predication “IP(t_e)”.²² Phase quantification with *schon* introduces the presupposition that there exists a phase of not-“IP” that begins before t_e and either lasts on until t_e (including it) or has ended by the time of t_e and been followed by a phase of “IP” which includes t_e . In the latter case the *schon* clause is true, otherwise it is false (Löbner 1989:173 ff). Consider a simple example:

- (22) Die Tomaten waren schon reif.
 the tomatoes were already ripe
 ‘The tomatoes were already ripe.’

The IP operand of *schon* in (22) is a past imperfective that provides a stative predication about t_e . Due to *schon*, the state is said to hold at t_e rather than not yet being reached.

Since this use of *schon* selects a stative IP, it is compatible with two readings of the Perfekt: a non-past perfect and a past imperfective. With verbs that admit both T&A combinations, *schon* with a Perfekt IP is therefore ambiguous:

- (23) Sie *hat* schon *gefrühstückt*.
 she has already have-breakfast.PP
 a. ‘She has already had breakfast.’ (present perfect)
 b. ‘She was already having breakfast.’ (past imperfective)

In reading (a), the sentence refers to the present situation. The state “IP” is the state resulting from SV and thus following SV. Whenever *schon* of this type is combined with a perfect IP, the phase quantification schema is almost congruent with the situation structure induced by perfect aspect: the initial negative phase coincides with the time of SV (plus, possibly, the time preceding it) and the second phase is identical with the resulting state component of the perfect situation (see Fig.1). Due to this special constellation, *schon* and its negation *noch nicht* form a near-redundant match with perfect operands.

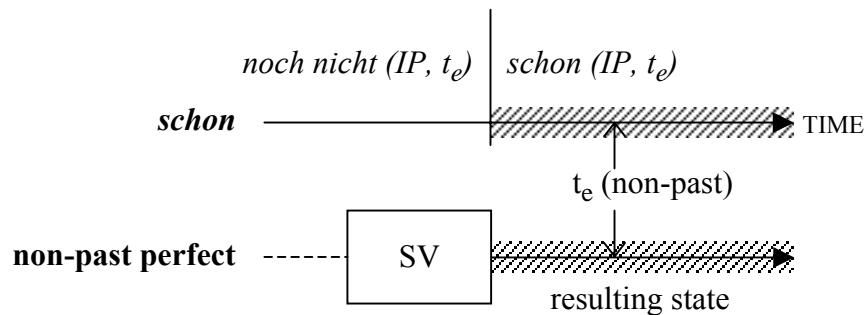


Fig. 1: Non-past perfect reading of (23)

In reading (b) of (23), t_e is a past time.²³ The second phase of the *schon* schema is the interval of time occupied by SV itself. This phase is contrasted with the phase preceding SV (i.e. the phase of her not [yet] having breakfast, cf. Fig.2). Thus the Perfekt here is subject to a past imperfective interpretation. In this reading, the sentence is equivalent to (24).

²² Double quotes are used for referring to the predicate expressed.

²³ This reading is perfectly natural, in fact inevitable, in contexts such as this: *Als Heinrich sie suchte, hat sie schon gefrühstückt*. (‘When H. looked for her, she was already having breakfast.’).

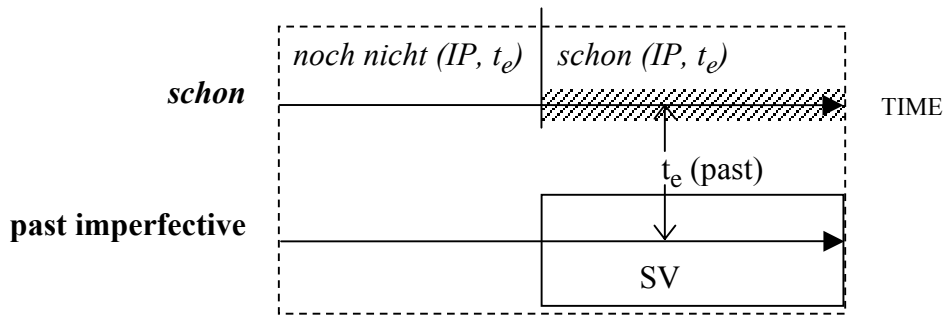


Fig. 2 Past imperfective reading of (23)

- (24) Sie frühstückte schon.
 she have-breakfast.PAST already
 ‘She was already having breakfast.’

Reading (b) of (23) is incompatible with a non-past perfect analysis of the Perfekt: in absence of any other time specifications, the location in time of t_e must be due to tense; since the reading requires a past time t_e , tense must be past. In addition, the non-perfect reading of the Perfekt here is reflected by the fact that the state resulting from SV lies completely outside the stretch of time cut out by the phase-quantification schema (see Fig.1, this stretch of time is indicated by the frame in broken lines). The resulting state is not a component of the overall meaning of the sentence.

The particle *noch* behaves differently. There are two variants, *noch*₁ and *noch*₂. *Noch*₁ serves as the dual of type 1 *schon*; it requires a stative operand that denotes a situation with a (potential) upper bound (cf. Löbner 1989:181f). This is due to the fact that *noch*₁ introduces a phase quantification schema that starts with a positive phase of “IP” which is eventually followed by a negative phase. Hence, the IP must not denote a state that never ends. For example, replacement of *schon* by *noch*₁ in (22) would result in a contradictory construction, because the state of being ripe is irreversible. For this reason, perfect IPs are generally ruled out as operands of this type of *noch*₁ and its negation *nicht mehr*₁ (‘no more’), as perfect forms in general relate to irreversible states. If *noch* is taken as *noch*₁, (25) only admits the past imperfective reading:

- (25) Sie *hat* noch *gefrühstückt*. [past imperfective]
 she has still have-breakfast.PP
 ‘She was still having breakfast.’

we may note that (25) does not pass the *jetzt wo* test: it cannot mean that she was still having breakfast *and* that that past situation is presently relevant.²⁴

- (26) *Jetzt, wo sie *noch*₁ *gefrühstückt* *hat*, fühlt sie sich besser
 now that she still have-breakfast.PP has, feels she REFL better
 ‘Now that she still was having breakfast, she feels better.’

At this point the distinction between the Perfekt and Resultatives proves to be relevant: unlike the Perfekt, Resultative constructions do not necessarily express irreversible states and are, to this extent, compatible with *noch*₁ (see Table 3 for glosses):

- (27) a. Er ist *noch*₁ verreist. (Active Resultative)
 ‘He is still on a trip.’

24 The sentence only has an irrelevant metalinguistic reading, meaning something like ‘Now that I know that ...’.

- b. Er hat noch₁ den Arm verbunden. (Middle Resultative)
 ‘He still has his arm bandaged.’

The second variant of *noch*, called *noch*₂ in Löbner (1989:199f) and elsewhere, is not a phase quantifier and not closely related to any type of *schon*; it has no equivalent in English. *Noch*₂ imposes a perspective on the situation which can be roughly described as follows: there is a contextually given time limit or circumstantial limit up to which the event described can take place; when this limit is reached, SV becomes impossible. The *noch* construction is true if SV ‘managed’ to come about before the limit was reached, otherwise the negation *nicht mehr* applies. (25) has a *noch*₂ reading too, but (28) probably provides a better illustration of the use of the particle:

- (28) Er *hat* den Bus noch₂ *gekriegt*.
 he has the bus still get.PP
 ‘He reached the bus eventually.’

*Noch*₂ in (28) locates SV before the implicit temporal limit. If we apply the *jetzt wo* test, the construction proves compatible with perfect aspect:

- (29) Jetzt, wo er den Bus noch₂ *gekriegt hat*, ist er in Sicherheit.
 now that he the bus still get.PP has, is he in safety
 ‘Now that he has reached the bus, he is safe.’

Thus, in one reading, the Perfekt is a real perfect. But a past perfective reading is likewise possible. For example, (28) could be embedded in a narrative and would then express just one event in a chain of others:

- (30) Er *hat* den Bus noch₂ *gekriegt* und kam pünktlich bei Karl an.
 he has the bus still get.PP and arrive.PAST in time at K. PARTICLE
 ‘Eventually he reached the bus and arrived in time at Karl’s place.’

5 Conclusion

The data discussed prove that the Perfekt is ambiguous between a non-past perfect and a past non-perfect. In some cases, both readings are available, e.g. in isolated sentences with or without past time adverbials, with type-1 *schon* or in *bevor* constructions (cf. (9), (12a), (19), (23), (28)). Among these are cases where the two readings are not only different, but incompatible ((19) and (23)); consequently, the past reading is not simply a necessary concomitant of the perfect reading, obtained by disregarding the resulting state component. Then there are quite a few T&A environments which select either reading of the form such as narrative passages, *als*, *wenn*, *noch*₁ and others.

Klein (1999) and Musan (2000) rightly assume that time adverbials may relate either to the evaluation time or to SV on which the resulting state is based. But they both state that the Perfekt *always* carries present (non-past) tense. In view of the counter-evidence presented here, this claim cannot be maintained. On the one hand, there are uses of the Perfekt without any significant relation to a present or future situation: it makes no sense to assume in the past narrative passages in (14) to (16), in the past readings of the *bevor* example (19), the *schon* example (23) or the *noch*₁ example (25) that a non-past evaluation time (Reichenbach’s R) is involved: at least such a parameter should be capable of explicit specification by *jetzt* ‘now’ or other adverbials; but clearly this is impossible. On the other hand, the Perfekt can be used in syntactic and pragmatic contexts where Present Tense is ruled out but nevertheless a past event involved (notably temporal clauses with *als*, *bevor*, *nachdem* and probably others). Here, one is not free to assume that a present resulting state is involved in the situation expressed.

As to the problematic temporal clauses, the proponents of a uniform analysis could retreat to the position that these are cases where the Present in general is barred, but allowed if it is carried by a Perfekt form. This would relativize Musan's claim that the Perfekt *always* constitutes a 'genuine present tense'. Furthermore, one would be forced to assume that all temporal conjunctions that yield identical readings with Perfekt and Past forms are ambiguous. For example, one would have to postulate two conjunctions *als*₁ and *als*₂ for the sentences in (31):

- (31) a. *Als*₁ der Computer *abgestürzt ist*, *habe* ich gerade eine CD *gebrannt*.
 when the computer crash.PP is, have I just a CD burn.PP
 'When the computer crashed, I was just burning a CD.'
- b. *Als*₂ der Computer *abstürzte*, *habe* ich gerade eine CD *gebrannt*.
 when the computer crash.PAST, have I just a CD burn.PP
 'When the computer crashed, I was just burning a CD.'

*Als*₂ would share its argument with tense, while *als*₁ ignores tense and picks out the operand of [.PP+Aux.]. Thus the technical disambiguation of the Perfekt into a uniform meaning would create a multitude of artificial technical ambiguities elsewhere in the system of time related expression.

Certainly, attempts at establishing a compositional and uniform semantic account of the Perfekt have their merits: they help to understand the *perfect* readings of the form as well as the motivation and historical development of the past reading. However, they do not do justice to the synchronic facts of modern German. Standard German displays a picture with an ambiguous Perfekt along with a genuine Past on its retreat; in some dialects, the Past is all but completely out of use, with *sein* constituting the last exception. Apart from the inconsistencies pointed out above, this situation provides a further challenge to the one-meaning approach: if the loss of the perfect meaning for the past variant of the Perfekt is denied, this would imply the highly implausible consequence that a language community should have chosen to use a 'genuine present tense' whenever they want to relate to past situations.

References

- Bäuerle, Rainer. 1979. Temporale Frage, temporale Deixis. Tübingen: Narr.
- Behaghel, Otto. 1924. Deutsche Syntax. Band II, Die Wortklassen und Wortformen. B. Adverbium. C. Verbum. Heidelberg: Carl Winter's Universitätsbuchhandlung.
- Brons-Albert, Ruth. 1984. Gesprochenes Standarddeutsch. Telefondialoge. Tübingen: Narr.
- Comrie, Bernard. 1976. Aspect. Cambridge: Cambridge University Press.
- Comrie, Bernard. 1985. Tense. Cambridge: Cambridge University Press.
- Galton, Antony. 1984. The Logic of aspect. An axiomatic approach. Oxford: Clarendon.
- Hennig, Mathilde. 2000. Tempus und Temporalität in geschriebenen und gesprochenen Texten. Tübingen: Niemeyer.
- Herweg, Michael. 1990. Zeitaspekte. Die Bedeutung von Tempus, Aspekt und temporalen Konjunktionen. Wiesbaden: Deutscher Universitäts-Verlag.
- Kaufmann, Ingrid. 2001. Medium. Eine Studie zur Verbsemantik. Habilitationsschrift. Düsseldorf: Heinrich-Heine-Universität, Philosophische Fakultät.
- Klein, Wolfgang. 1999. Wie sich das deutsche Perfekt zusammensetzt. Das deutsche Perfekt, ed. by Wolfgang Klein and Renate Musan. Zeitschrift für Literaturwissenschaft und Linguistik 113.42-85.

- Litvinov, Viktor P., and Vladimir P. Nedjalkov. 1988. Resultativkonstruktionen im Deutschen. Tübingen: Narr.
- Löbner, Sebastian. 1988. Ansätze zu einer integralen semantischen Theorie von Tempus, Aspekt und Aktionsarten. *Temporalsemantik: Beiträge zur Linguistik der Zeitreferenz*, ed. by Veronika Ehrich and Heinz Vater, 163-191. Tübingen: Niemeyer.
- Löbner, Sebastian. 1989. German *schon – erst – noch*: an integrated analysis. *Linguistics and Philosophy* 12.167-212.
- Löbner, Sebastian. 2000. Polarity in natural language: predication, quantification and negation in particular and characterizing sentences. *Linguistics and Philosophy* 23.213-308.
- Musan, Renate. 2000. The present perfect in German: outline of its semantic composition. *Natural Language & Linguistic Theory* 19.355-401.
- Nerbonne, John. 1982. The German perfect. *Proceedings of the 18th Regional Meeting of the Chicago Linguistics Society*, 390-399.
- Nerbonne, John. 1985. German temporal semantics: Three-dimensional Tense Logic and a GPSG fragment. New York and London: Garland.
- Reichenbach, Hans. 1947. *Elements of Symbolic Logic*. New York: Dover.
- Thieroff, Rolf. 1992. *Das finite Verb im Deutschen*. Tübingen: Narr.
- Wunderlich, Dieter. 1996. Participle, Perfect and Passive in German. *Arbeiten des Sonderforschungsbereichs 282 'Theorie des Lexikons'*, Nr. 99. Düsseldorf: Seminar für Allgemeine Sprachwissenschaft.