Narrowing down the ExtendedNow

Renate Musan

1. Introduction

... die Wolkenkratzer ragen nicht mehr als schwarze Türme
vor der gelben Dämmerung, nun hat die Nacht gleichsam
ihre Körper verschluckt, und was bleibt, sind die Lichter darin...
('the skyscrapers do not anymore like black towers loom
in front of the yellow twilight, now the night has as it were
their substance erased, and what remains are the lights therein')
- Max Frisch, Stiller -

What do these lines speak about? The adverb nun makes it very clear – it is the situation “now”: the silhouette of the skyscrapers is no longer visible in the evening light. But it seems no less clear that the event described – the night’s erasing the silhouette of the skyscrapers – is in the past. In a way, therefore, the text speaks about the now and the time which leads up to this now – about an “ExtendedNow”. It is the perfect which gives the sentence this particular temporal contour.

In his comprehensive review of various theories of the English perfect, McCoard (1978) characterizes approaches which take this fact to be the central property of the perfect as ExtendedNow theories, and he favors them over other, competing analyses, such as theories based on the notion of indefinite past or of current relevance. Dowty (1979) was the first to give it a precise semantic formulation. In the German tradition, the notion of the “ExtendedNow” has never played a significant role, with the exception of Fabricius-Hansen (1986), who speaks of a “unechter Vergangenheitsbereich” (‘improper past interval”). But now, Arnim von Stechow has worked out an account of the German perfect, as well (von Stechow 1999). In this paper, I will critically examine the approach and confront it with a different analysis.

More specifically, von Stechow proposes the following account of the German present perfect: Under its canonical (i.e., non-futurate) interpretation, a present perfect clause in German involves a reference time R (more or less in the Reichenbachian 1947 sense) that is identical to the time of utterance, i.e., the “now” of the clause. The present perfect opens up an interval that includes the reference time R and extends it into the past. Since in the case of the canonical present perfect, the reference time is
Narrowing down the ExtendedNow

identical to the time of utterance or the “now”, one may say that the construction provides thus an “ExtendedNow”. At its left edge, this interval is limited by a time that may be contextually given or determined by certain temporal adverbials (p. 88). Finally, at least a truth interval of the event time or situation time of the VP embedded in the perfect construction is located properly within the ExtendedNow.

These basic assumptions of the analysis are illustrated with regard to the examples (1.1a) and (1.2a) with the pictures in (1.1b) and (1.2a), respectively. In (1.1a), the time that limits the ExtendedNow on its left side must be provided by the context somehow. Or, when (1.1a) is uttered out of the blue, the ExtendedNow can presumably extend over all the time before now that could possibly be a time where Arnim is looking for a staircase in the Empire State Building (ESB), i.e., his lifetime from a certain age on. In (1.2a), the limiting time is provided by the adverbial seit drei Stunden (‘since three hours ago’).

(1.1) a. Arnim hat im Empire State Building eine Treppe gesucht.
   Arnim has in-the Empire State Building a staircase searched

   b. _________________ooooooo___________|________>
   ExtendedNow

(1.2) a. Arnim hat seit drei Stunden im Empire State Building eine
   Treppe gesucht.
   Arnim has since three hours in-the Empire State Building a
   staircase searched

   b. _________________ooooooo___________|________>
   three ExtendedNow
   hours ago

Note that while the searching for the staircase in (1.1) takes up only part of the ExtendedNow, in (1.2) it takes up all of it. We will come back to this difference below.

How is the semantics of the present perfect in this analysis composed? – Leaving aside details that are irrelevant for the present purpose (e.g., tenses that are interpreted as variables), the tense of a clause denotes a contextually determined time interval which corresponds to the reference time. For example, the past tense denotes a time before the time of utterance. And the present tense denotes a time that includes the time of utterance; this also holds of the present tense contained in a present perfect clause. The perfect auxiliary haben/sein denotes the ExtendedNow interval. The ExtendedNow is combined with the untensed clause by the help of a quantificational adverb that may
be overt or phonetically empty. In the latter case, it receives an existential default interpre-
tation. The ExtendedNow (EN) serves as a restrictor of the quantificational adverb. The nuclear scope of the quantificational adverb contains the participle VP, which may or may not contain an aspect, too. The participle morpheme itself is semantically empty. The quantificational adverb is in principle free to quantify over times (as in (1.3a)) or over events (as in (1.3b)). Both the times and the events are combined with the ExtendedNow by a proper inclusion relation IN. Hence, (1.1a), for instance, may be schematically represented as in (1.3a) or as in (1.3b). (Von Stechow assumes with Herweg 1990 that stative VPs are properties of times while non-stative VPs are properties of events. Hence, strictly speaking the VP in (b) is reinterpreted as an event.)

\[(1.3)\] a. \(\text{EX}_t [\text{IN (EN (t))}] \text{[Arnim eine Treppe im ESB such- (t)]}\)
   = ‘There is a time t properly included in the ExtendedNow such that Arnim looks for a staircase in the ESB at t.’

b. \(\text{EX}_e [\text{IN (EN (e))}] \text{[Arnim eine Treppe im ESB such- (e)]}\)
   = ‘There is an event e properly included in the ExtendedNow such that e is an event of Arnim looking for a staircase in the ESB.’

The future perfect and the past perfect receive the same interpretation, the only difference to the present perfect being that the reference time cannot be identified with the time of utterance, i.e., now. Instead, the position of the reference time must somehow be provided by the context. Moreover, the future tense is analogously analyzed with an ExtendedNow that reaches into the future instead of the past. For reasons of space, however, we will in this paper concentrate on von Stechow’s analysis in as far as it concerns the present perfect.

The remainder of this paper is organized as follows. Section 2 shows that von Stechow’s approach accounts for many readings the present perfect can in fact have and correctly excludes some readings it cannot have. This supports the analysis proposed by von Stechow. Still, the predictions concerning the semantic composition of the present perfect do not seem to be correct. Moreover, the approach does not quite adequately hit what one may consider the spirit of the present perfect in German. Thus, section 3 presents counterarguments to the analysis. Section 4 sketches a more adequate analysis. Finally, building on section 4, section 5 explains where the impression that the present perfect introduces an ExtendedNow comes from.

2. Achievements of the Analysis

It is well known that perfect clauses can give rise to numerous readings which differ from each other in various ways. In his 1999 paper von Stechow focuses on two main readings, the so-called universal reading and the existential reading. He attributes these readings to semantic factors. More subtle reading differences may result from the effects of pragmatic principles (cf. Musan 1999). In von Stechow’s analysis, which of
these two main readings arises depends on the choice of the quantificational adverb. In the remainder of this section, we will look in more detail at these readings, at how they come about, and at their special effects as they are described by von Stechow.

2.1 Existential Perfect Readings

We have already seen examples of the existential perfect reading in section 1. Recall (1.1a) and its readings that were represented in (1.3), repeated here as (2.1) and (2.2).

(2.1) Arnim hat im Empire State Building eine Treppe gesucht.
    Arnim has in-the Empire State Building a staircase searched

(2.2) a. EX\_t [IN (EN (t))] [Arnim eine Treppe im ESB such- (t)]
    = ‘There is a time t properly included in the ExtendedNow such that Arnim
    looks for a staircase in the ESB at t.’

    b. EX\_e [IN (EN (e))] [Arnim eine Treppe im ESB such- (e)]
    = ‘There is an event e properly included in the ExtendedNow such that e is an
    event of Arnim looking for a staircase in the ESB.’

In both representations, there is an existential adverb of quantification. In (2.2a), it quantifies over times while in (2.2b), it quantifies over events. According to von Stechow, the existential quantification in both cases leads to anteriority effects, i.e., Arnim’s searching for the staircase must be located before the time of utterance. Moreover, in the case of event quantification, it triggers a completedness effect, i.e., Arnim’s searching for the staircase must be over at the time of utterance. How do these effects arise?

First, in both (2.2a) and (2.2b), Arnim’s searching for the staircase must obviously be located before the time of utterance because it must be located within the ExtendedNow, which in turn is a time interval reaching from the time of utterance into the past, simply because of the semantics of the auxiliary haben/sein.

Second, the completedness effect in (2.2b) arises because an event of a certain kind, e.g., an event of Arnim looking for a staircase in the Empire State Building, is identified with the maximal time which has the characteristics of this kind of event. That is, the event quantification in (2.2b) provides a time interval at which Arnim looks for the staircase and which is limited both on its left side and on its right side by times at which Arnim does not look for the staircase. The time quantification in (2.2a), however, only requires a time within the ExtendedNow at which Arnim looks for the staircase; it allows for the searching, however, to go on beyond the boundaries of the ExtendedNow interval.
2.2 Universal Perfect Readings

The universal perfect reading arises in at least two cases, first, when the perfect clause contains the quantificational adverb *immer* (‘always’) as in (2.3a), and second, when the perfect clause contains a duration adverbial like *seit drei Stunden* (‘since three hours ago’) as in (1.2a), repeated here as (2.3b).

(2.3) a. Das habe ich doch (schon) immer gesagt.
   that have I indeed (already) always said

b. Arnim hat seit drei Stunden im Empire State Building eine Treppe gesucht.
   Arnim has since three hours in-the Empire State Building a staircase searched

In (2.3a), the situation time of the VP is at least preferably understood as reaching from some time in the past up to the time of utterance; when *schon* (‘already’) or expressions like *bis einschließlich jetzt* (‘up to and including now’) are added, this effect is obligatory. In (2.3b), it is obligatory, too.

In this respect, the meaning of present perfect clauses differs from the meaning of past tense clauses. Von Stechow concludes from this that the present perfect cannot be interpreted as a direct or indirect temporal relation between the situation time of the VP and the time of utterance – if it could, how should one be able to capture the intuition that in some cases, the situation time of the VP is located before the time of utterance (e.g., in the existential readings in (1.2)) but in other cases can reach up to the time of utterance (e.g., in the universal readings in (2.3))? In the ExtendedNow analysis, both kinds of readings can be captured easily. Under the existential reading, the ExtendedNow contains a possibly short VP-situation-time or VP-event. Under the universal reading, however, the VP-situation-time covers all of the ExtendedNow interval. This can be represented roughly as in (2.4) for the examples in (2.3). (Examples like (2.3b) are not explicitly dealt with in von Stechow 1999. The representation in (2.4b) is thus what I consider a plausible approach within the ExtendedNow account. The interpretation of the adverbial *seit drei Stunden* is sensitive to the reference time of its clause, i.e., in present perfect clauses the time of utterance.)

(2.4) a. ALLₜ [IN (ExtendedNow (t)) [ich das sag- (t)]]
   = ‘For all times t that are properly included in the ExtendedNow, I have said it at t.’

b. ALLₜ [IN (ExtendedNow (t)) & seit drei Stunden (t) [Arnim im ESB eine Treppe such- (t)]
   = ‘For all times t that are properly included in the ExtendedNow and contained in the three hour interval counting backwards from now, t is a time where Arnim looks for a staircase in the ESB.’
According to this analysis, the occurrence of existential and universal perfect readings is thus due to the choice of the quantificational adverb: existential perfect readings arise with existential, and universal perfect readings with universal adverbs of quantification.

Recall that the inclusion relation IN that connects the situation time of the VP to the ExtendedNow interval requires proper inclusion. Does this amount to a problem for the derivation of the universal readings in the ExtendedNow account? One may assume at first sight that if the situation time of the VP has to be properly included in the ExtendedNow interval, then perhaps it is not allowed to reach up to the time of utterance in this account either. There are, however, at least two conceivable ways to avoid problems resulting from the semantics of IN. First, the proper inclusion may be guaranteed on the left side of the ExtendedNow interval, i.e., there may be a short subinterval contained in the ExtendedNow interval where the situation time of the VP has not yet begun. For instance, in the case of (2.3b), the ExtendedNow may exclude the very left edge of the three-hour-interval mentioned. Second, the proper inclusion may be guaranteed on the right side of the ExtendedNow interval. This can be achieved if the ExtendedNow does by stipulation not reach from the right side of the reference time (or: the time of utterance) inclusively into the past but from its right side exclusively. This requires, of course, that the time of utterance (or: the reference time) is not represented as a point of time but as a time interval. But since this appears quite plausible in any case, it is unproblematic for the analysis. Interestingly, Rathert (1999:18) argues that the ExtendedNow in fact excludes the time of utterance: when seeing a certain red Mercedes for the second time, one can say (2.5).

(2.5) Diesen roten Mercedes habe ich schon einmal gesehen.

If the ExtendedNow did not exclude the time of utterance, then one should say instead: “Diesen roten Mercedes habe ich schon zweimal (‘twice’) gesehen.” In the situation described, however, (2.5) sounds much more natural.

3. Counterarguments

Adequate as the ExtendedNow analysis seems so far, there are some points that raise doubt about it. In order to present the criticism, it is useful to look at some characteristics of the ExtendedNow analysis separately: first, the idea that there is a time interval constructed backwards from the time of utterance to a salient time in the past within which the situation time of the VP is located; second, the choice of the quantificational adverb; third, the hypothesis that the anteriority component within the perfect is associated with the auxiliary haben/sein; and fourth, the situation type that is denoted by perfect constructions.
3.1 The Extension of the Now

In many concrete cases it is not at all clear how the construction of appropriate ExtendedNow intervals works and how it interacts with the functions of temporal adverbials in perfect constructions. Consider, for instance, (3.1a), an example that is constructed out of (1.1a) by supplementing it with the position adverbial *an jenem Tag* (‘on that day’). Clearly, one would not want to claim that the adverbial in (3.1a) determines the left edge of the ExtendedNow: if it did, then (3.1a) should be judged true whenever the situation time of the VP is located anywhere on the stretch of time reaching from (some time contained in) yesterday up to now. This, however, contradicts the intuition that no interval of Arnim’s looking for a staircase is able to make (3.1a) true. Rather, the adverbial locates the situation time of Arnim’s looking for a staircase on the day in question as is indicated in the paraphrase in (3.1b). This may be achieved in a representation like (3.1c), where *an jenem Tag* is intersected with the ExtendedNow.

(3.1) a. Arnim hat *an jenem Tag* im Empire State Building eine Treppe
   gesucht.
   Arnim has at that day in-the Empire State Building a staircase
   searched

   b. = ‘There is a time t that is included in that day such that Arnim looks for a
      staircase in the ESB at t.’

   c. EX_1 [IN (EN (t)) & an jenem Tag (t)] [Arnim im ESB eine Treppe such- (t)]

Hence, *an jenem Tag* presumably has two functions: it must intersect with the ExtendedNow as well as provide the left side of the ExtendedNow by introducing the left side of yesterday.

Similarly, *seit*-adverbials do not in general directly name the left side of the ExtendedNow either. Rather, they introduce an interval whose right side is given by the reference time, but – in the case of *seit drei Stunden* – the left side of the ExtendedNow can only be determined by calculating back the three hours from the reference time into the past. In fact, with the possible exception of adverbials like *seit Anfang Mai* (‘since the beginning of May’) no adverbial in perfect constructions seems to be able to directly name the left side of an ExtendedNow.

Moreover, in the case of universal perfect readings, it is not obligatory that the situation time of the VP reaches up to now. Thus, in an appropriate context as in (3.2a), a perfect clause containing *immer* (‘always’) can have a reading as paraphrased in (3.2b), where the situation time of the VP does not reach up to now. This reading may be represented as in (3.2c), where the contextual restriction given by the preceding clause is intersected with the ExtendedNow.
Narrowing down the ExtendedNow

(3.2) a. \[\text{Schon als Kind hatte Arnim einen guten Geschmack:}\]
\[\text{already as (a) child had Arnim a good taste}\]
\[\text{Arnim hat immer Donald Duck geliebt.}\]
\[\text{Arnim has always Donald Duck loved}\]

b. = ‘For all times t that are times of Arnim’s childhood, Arnim loves Donald Duck at t.’

c. \[\text{ALL}_{t} \left[\text{IN (EN (t)) } \& \text{ t is contained in Arnim’s childhood}\right] \left[\text{Arnim Donald Duck lieb- (t)}\right]\]

Although we get the correct truth conditions by the representations in (3.1c) and (3.2c), it seems unintuitive that the implicit or explicit adverbials that specify the situation time of the VP are associated with the interpretation of the perfect auxiliary.

3.2 The Quantificational Adverb

Recall that according to the present analysis, the occurrence of existential or universal perfect readings depends solely on whether the obligatory quantificational adverb in the semantic representation receives an existential or a universal interpretation. Although this gives us the correct readings, it does not seem very convincing – why should an adverbial like \textit{seit drei Stunden} (‘since three hours ago’) only be able to cooccur with a universal quantifier but not with an existential one? Rather, one would expect that any adverbial can in principle combine freely with both existential and universal quantifiers. But if this were the case, then an example like (2.3b), Arnim hat \textit{seit drei Stunden im Empire State Building eine Treppe gesucht} should be able to have a reading like “There is a time t that is properly included in the ExtendedNow and contained in the three hour interval counting backwards from now, such that t is a time of Arnim looking for a staircase in the Empire State Building.” Such a reading, however, is not available.

Of course, there may be independent factors that rule out the missing reading. I cannot see, however, a plausible explanation for why the reading should be missing. Hence, the dependence of the obligatory universal reading of (2.3b) on the presence of the universal adverb of quantification appears to be stipulated.

3.3 The Anteriority Component

A more crucial point of criticism aims at the assumptions concerning the semantic composition of the perfect meaning out of its morphosyntactic components. More specifically, it is not convincing to associate the anteriority meaning component of the perfect construction with the auxiliary. Rather, it seems more plausible to associate it with the past participle. (For a more detailed argument, see Musan 1998 and Musan, to appear.)
This is so because the interpretation of the past participle in other constructions remained quite mysterious under the assumption that its semantics does not express anteriority. The crucial point is that in all other constructions in which the past participle can appear, it implies an anteriority component – either synchronically or diachronically. Hence, associating the anteriority meaning in perfect constructions with the auxiliary amounts to imposing a meaning on the auxiliary that one could get cheaper by associating it with the participial verb. In addition, one would have to stipulate that the past participle in perfect constructions lost its anteriority component.

(3.3) lists constructions containing past participles which obviously imply an anteriority meaning component. Note that especially the attributive constructions (3.3c,d) strongly suggest to associate the anteriority with the past participle form: in attributive constructions, past participle forms appear without any other item that might be able to carry the anteriority component; yet they imply anteriority. The escaping in (3.3c) must have taken place before the time of utterance of the nouns, and also the covering of the cabin by snow mentioned in (3.3d) fits into the anteriority pattern insofar as the covering of the cabin must have started before the time of utterance. The same holds for (3.3e,f): the assertions in (3.3e,f) both concern the time before the time of utterance.

(3.3) Perfect constructions:
- a. Arnim hat einen Nussbaum gepflanzt. Arnim has a nut-tree planted
- b. Der Baum ist gewachsen. the tree is grown

Attributive constructions:
- c. Die ausgerissene Lore von Singapore sitzt auf dem Dach. the escaped Lore from Singapore sits on the roof
- d. Die von Schnee bedeckte Hütte ist urgemütlich. the by snow covered cabin is extremely-cosy

Stative passive:
- e. Das ist nicht ausgearbeitet. that is not out-worked
- f. Die Briefe sind sicher aufbewahrt. the letters are safely kept

The only potential problem is the occurrence of the past participle in “eventive” passive constructions: eventive passives as in (3.4) contain past participles, too, but do not seem to express anteriority at all.

(3.4) Eventive passive:
- Christus wird erschlagen. Christ becomes/is slain (‘He is slain’)
But still, eventive passives do not provide a good counterargument against the generalization that past participles generally imply anteriority, because eventive passives have developed historically from a past participle construction that clearly contained an anteriority component. Specifically, the predecessor of the eventive passive construction in Old High German is a semantically compositional \textit{werden}-construction as illustrated in (3.5) \textit{(Isidor 471; cited after Grønvik 1986:24)}. The construction in (3.5) expresses a futurate change of the object, i.e., Christ, by getting into a state caused by the action, i.e., the slaying (cf. also Grimm 1960:258, Oubouzar 1974:87 and others; the construction serves as a translation of a Latin future tense construction; cf. Grønvik 1986:23). Analogously to today’s ingressive predicative \textit{werden}-constructions, (3.5) may be paraphrased as “Christ is now in the process of becoming a person that is slain by x.”

(3.5) arslagan uuirdet Christ  
\textit{slain becomes Christ}  
\textit{´Christ becomes a (by x) slain individual´}

Thus, in (3.5) the participial form brings about an anteriority component together with a stative component, cf. subsection 3.4. below. Later this construction was grammaticalized into the eventive passive construction in (3.6) (cf. Grimm 1960, Betten 1987, Gronvik 1986, Oubouzar 1974 and others).

(3.6) Christ wird erschlagen.  
\textit{Christ becomes/is slain}  
\textit{´Christ is slain (by x)´}

As is typical for grammaticalization processes, the original construction lost its compositional semantics so that the original anteriority of past participles in passives is not intuitively accessible anymore nowadays. Thus, it is just an historical accident that eventive passives lost their anteriority component by grammaticalizing the combination of the past participle and the auxiliary \textit{werden}. So it remains perfectly plausible that in other environments, e.g., in perfect constructions, the past participle has kept this anteriority component.

Moreover, just like the predecessor of the eventive passive construction, also the predecessors of today’s perfect constructions were semantically compositional and contained past participle forms that express a state and anteriority. (3.7a) shows an early example with \textit{haben} (\textit{Tatian 102:2; cited after Gronvik 1986:34}), (3.7b) an example with \textit{sein} (\textit{Tatian 11,1; cited after Gronvik 1986:17}). (3.8a,b) show the corresponding modern constructions. As the agreement of the participial verbs with the object \textit{phigboum} in (3.7a) and with the subject \textit{thie} in (3.7b) shows, the participial verbs in these constructions are predicates of the object and the subject, respectively.
(3.7) a. phigboum habeta sum giflanzotan in sinemo uuingarten
   figtree had someone as-a-planted-one in his vineyard
   (‘Someone had/owned a figtree that was planted in his vineyard’)

   b. arstorbane sint thie thar suohtun thes knehtes sela
   died are the there searched the child’s life
   (‘Dead are those who searched for the child’s life’)

(3.8) a. Er hatte in seinem Weingarten einen Feigenbaum gepflanzt.
   he had in his vineyard a figtree planted
   (‘He had planted a figtree in his vineyard’)

   b. Die, die das Leben des Kindes suchten, sind gestorben.
   those who the life the child’s searched have/are died
   (‘The ones who searched for the child’s life have died’)

Given these historical facts, the hypothesis that the auxiliary in perfect constructions carries the anteriority component is quite implausible with regard to the grammaticalization of perfect constructions. It must assume (a) that the past participles in both (3.7a) and (3.7b) lost their anteriority meaning component while (b) both the verb haben in (3.7a) and the copula verb sein in (3.7b) somehow obtained an anteriority meaning component during the development towards the perfect constructions in (3.8a) and (3.8b), respectively.

Moreover, there is some evidence that the auxiliary in perfect constructions as such is indeed semantically empty. Note that only elements with semantic content can be topicalized to the sentence-initial position in German (Wolfgang Klein, pc). Thus, correlate es in German cannot be topicalized (3.9).

(3.9) a. Onkel Donald erlaubt es nie, dass wir einen Papagei mitbringen.
   Uncle Donald allows it never that we a parrot along-bring

   b. *Es erlaubt Onkel Donald nie, dass wir einen Papagei mitbringen.
   it allows Uncle Donald never that we a parrot along-bring

Consider now the data in (3.10). They illustrate the attempt to topicalize perfect auxiliaries (3.10a,b) and modal verbs (3.10c,d) that are embedded under a finite modal verb. It is not at all possible to topicalize the perfect auxiliaries alone to the sentence-initial position in German (3.10a,b), while it is possible to topicalize the modal verbs to this position (3.10c,d), at least with the “roof intonation contour” indicated.

(3.10) a. *[Haben] muss Lore ein Loch in den Sack gebissen.
   have must Lore a hole in the sack bitten
   (‘Lore must have bitten a hole into the sack’)

   b. *Es muss Lore ein Loch in den Sack gebissen.
   it must Lore a hole in the sack bitten
   (‘Lore must have bitten a hole into the sack’)

b. *[Sein] muss Lore zum Hafen geflogen.  
   be must Lore to-the harbour flown  
   (‘Lore must have flown to the harbour’)

    /   
   can must Lore a hole into the sack bite  
   (‘Lore must be able to bite a hole into the sack’)

    /   
  d. [Können] muss Lore zum Hafen fliegen.  
   can must Lore to-the harbour fly  
   (‘Lore must be able to fly to the harbour’)

To summarize, the hypothesis that the auxiliary rather than the past participle in perfect constructions contains the anteriority meaning component is quite problematic in several respects.

3.4 The Situation Type

A yet other point of criticism is that German perfect constructions can be shown to be stative, a point that has repeatedly been made for the English perfect (cf. Parsons 1990 and Vlach 1993). This is not reflected in the ExtendedNow analysis.

Temporal adverbials in perfect constructions can modify either the situation time of the embedded VP or the reference time of the clause (cf. Bäuerle 1979, Ehrich 1992, Fabricius-Hansen 1986, Herweg 1990 and others). This is illustrated with past perfect examples in (3.11a) and (3.11b), respectively (The reason why this is illustrated with past perfect forms is irrelevant to the present purpose.). Thus in (3.11a), the positional adverbial im Dezember (‘in December’) indicates the time at which the leaving took place whereas in (3.11b) it indicates the time at which the event is over. The preference of a particular reading depends on various factors, among those the position of accent. For instance, accent on the auxiliary often supports interpretations where temporal adverbials are interpreted as modifiers of the reference time; this is crucial for the following argument. Thus, due to the accent on the participial verb verschwinden (‘disappear’) in (3.11a), the adverbial here is preferably understood as a modifier of the situation time of the VP, and due to the accent on the auxiliary war (‘was/had’) in (3.11b), the adverbial is preferably understood as a modifier of the reference time of the clause, which is in (3.11b) associated with the post-state or resultant-state (cf. section 4 below) of having disappeared.

(3.11)  

a. Situation time modification:

   Der Dachs war im Dezember verschwinden.  
   the badger was in-the December disappeared  
   = ‘The badger’s disappearing took place in December’
b. Reference time modification:

Der Dachs WAR im Dezember verschwunden.

*the badger was in-the December disappeared*

= ‘The badger was gone in December’

Since the reference time of a clause is mainly determined by the tense of the clause and the auxiliary is the item on which tense is realized, this is not surprising – one may roughly say that accent on the auxiliary affects the interpretation of the clause on the constituency level on which tense applies. This is the level where the perfect construction as such is morphosyntactically complete, i.e., where the whole construction consisting of the VP, the past participle morpheme, and the nonfinite auxiliary is present.

As a consequence, accent on the auxiliary makes sure that adverbials apply to the perfect construction as a whole; hence, accent on the auxiliary makes sure that the situation type of the perfect construction as a whole is tested. In light of these observations, let us now take a look at a couple of tests for the identification of stativity.

First, as is well-known, how-long-questions can be used to ask for the duration of states or activities, but not achievements or accomplishments. Consequently, (3.12a), which is a question about the duration of an achievement in the past tense, is not acceptable – unless the question is understood as a question about the duration of the badger’s being away. However, the present perfect version of the example is fine if the auxiliary is focused (3.12b). This shows that the sentence has at least a stative reading on the perfect construction level.

(3.12) a. ?*Wie lange verschwand der Dachs?

*b* how long disappeared the badger

b. Wie lange IST der Dachs (schon) verschwunden?

*b* how long is the badger (already) disappeared

The test as applied in (3.12b) does not, however, say anything about the stative or non-stative nature of the VP that is embedded in the perfect construction, of course. In order to apply the test in such a way that it helps to identify the situation type on the VP-level, one would have to focus the participial verb, for this focus pattern makes sure that temporal adverbials are understood as modifiers of the VP and hence, of the situation time of the VP. In fact, it turns out that with accent on the participial verb, the sentence is rather bad (3.12c).

(3.12) c. ?*Wie lange ist der Dachs schon verSCHWUNden?

*b* how long is the badger (already) disappeared

Since verschwinden (‘disappear’) is an achievement verb, this is precisely what one expects.

Second, the what-the-badger-did-construction used in (3.13), a kind of pseudo-cleft construction, is unacceptable with states because states are not done. It is acceptable, however, with all other situation types. Interestingly, with the perfect infinitive in
Narrowing down the ExtendedNow

The test thus indicates again that we have a state on the perfect construction level while the embedded VP within the perfect construction can very well be of another situation type. Unfortunately, the ExtendedNow analysis presented above does not supply such a stative level.

To summarize, although the ExtendedNow account captures some aspects of the behavior of perfect constructions very well, it cannot deal with others. Hence, section 4 introduces an alternative account.

4. An Alternative Account: the Anteriority Theory

I propose that present perfect constructions are semantically composed as follows: the VP combines with the past participle morpheme, yielding a post-state or resultant-state of the VP in the sense of Parsons (1990:235), according to whom the resultant-state expressed by a perfect construction corresponds to all the time after the time at which the embedded VP holds:

It is important not to identify the Resultant-state with its ‘target’-state. If I throw a ball on the roof, the target state of this event is the ball’s being on the roof, a state that may or may not last for a long time. What I am calling Resultant-state is different, it is the state of my having thrown the ball on the roof, and it is a state that cannot cease holding at some later time.

This resultant-state is then located by the present tense at or around the reference time of the clause. The auxiliary haben/sein is treated as semantically empty; it has only the grammatical function to carry the tense and agreement morphemes of the clause. Moreover, similar to the ExtendedNow account, also the present account makes use of quantificational adverbs that can be overt or phonetically empty, in which case they usually receive an existential interpretation. It introduces, however, not only one but two quantificational adverbs – one comes in on the interpretation level of tense while the other comes in on the interpretation level of the past participle morpheme. The present tense receives a non-past interpretation and hence locates the time interval corresponding to the reference time at or after the time of utterance. The past participle morpheme introduces a second time parameter which properly or improperly precedes the reference time; as a consequence, perfect constructions express anteriority relative to the reference time. Hence, the present analysis may be labelled as an anteriority.
theory (For a different view on the advantages and disadvantages of ExtendedNow theories and anteriority theories, cf. Rathert (this volume)). The semantic analysis of the past participle morpheme is motivated by the fact that the situation time of the participial attributive modifier in (3.3d), for instance, can (and in this example in fact must) reach up to the evaluation time.

Thus, for the example in (1.1a), for example, the account yields something like the logical form in (4.1) with the paraphrase below.

(4.1) \( \text{EX}_t [\text{PRES} (t)] [ \text{EX}_* \text{PARTICIPLE} (t^*) (t)] [\text{Arnim im ESB eine Treppe such-} (t)] \)

= ‘There is a time t such that t is located at the time of utterance and there is a time t* (possibly nonproperly) before t such that Arnim looks for a staircase in the ESB t*.’

This example illustrates that the present account can capture the existential reading of the present perfect. But can it also deal with the other data and problems sketched above? And does it have advantages as compared to the ExtendedNow account? The following section serves to answer these questions.

5. How Data and Problems Can Be Accounted for

The account sketched in the preceding section locates the anteriority component of the perfect construction in the past participle morpheme. Hence, it matches the historical development of past participial forms in various constructions as well as the anteriority components in other past participle constructions whereas this is not the case for the ExtendedNow approach sketched above.

Second, we have seen above that perfect constructions are stative, and that the ExtendedNow account does not provide for the stativity of the construction. The present account, however, explicitly names a resultant-state of the VP-situation.

Third, interestingly, the assumption of the stative component in the present analysis also has the useful side effect that it is able to explain the possible readings of past, present, and future adverbials in present perfect constructions: they cause unexpected restrictions on the possible readings of the construction as has already been observed to some extent by Ehrich (1992:145), Fabricius-Hansen (1986:112f., 115) and Herweg (1990:199ff.). Positional temporal adverbials in past perfect clauses do not show the corresponding restrictions; they are ambiguous between reference time and situation time specification readings (cf. (3.11)). As will become clear shortly, this is as one would expect.

Consider the data in (5.1). (5.1a) contains a positional temporal adverbial that relates to the past; the adverbial can specify the situation time of the VP but not the reference time of the sentence, i.e., the time of utterance (at least, provided it is not understood as “historical perfect” clauses analogously to “historical present tense” clauses). Con-
Narrowing down the ExtendedNow

Contrasting with this, present adverbials and future adverbials in present perfect clauses as in (5.1b) and (5.1c), respectively, can only specify the reference time of the clause but not the situation time of the VP. This distribution of possible readings is unexpected. Since present perfect clauses can obviously contain temporal adverbials that specify the situation time of the VP as in (5.1a) as well as temporal adverbials that specify the reference time as in (5.1b,c), and moreover, the situation time of the VP in present perfect clauses can be located in the future as is possible in (5.1c), it seems that for each of the clauses in (5.1), two readings should be available.

(5.1) a. Der Dachs ist gestern um zehn verschwunden.
   the badger is/has yesterday at 10 disappeared
   ≠ ‘Yesterday at 10, the badger had already disappeared.’
   = ‘Yesterday at 10, his disappearing took place’

b. Der Dachs ist jetzt verschwunden.
   the badger is/has now disappeared
   = ‘At this moment, the badger is already disappeared.’
   ≠ ‘At this moment, his disappearing takes place’

c. Der Dachs ist morgen um zehn verschwunden.
   the badger is/has tomorrow at 10 disappeared
   = ‘Tomorrow at 10, the badger will have disappeared already.’
   ≠ ‘Tomorrow at 10, his disappearing will take place’

Why are three of the readings unavailable? – Under the present account, the restrictions illustrated in (5.1) are easily explained as a consequence of the present tense being combined with the stative component of the present perfect construction. This is so because the present tense in German can in principle be used to describe present as well as future situations. The availability of future interpretations, however, is subject to a restriction depending on the Aktionsart exhibited in a clause: activity and state predicates like stagnieren (‘stagnate’) with a present tense allow for such a future reading only when they occur with a future adverbial as in (5.2c), but not when they occur without such an adverbial as in (5.2a). Contrasting with this, accomplishment and achievement predicates like einen Höchststand erreichen (‘reach a peak’) can always get a future time reading, regardless of whether they occur together with a future time adverbial as in (5.2d) or without one as in (5.2b) (cf. Ehrich 1992:69).

(5.2) a. Der DAX stagniert.
   the DAX stagnates

b. Der DAX erreicht einen Höchststand.
   the DAX reaches a peak

c. Der DAX stagniert morgen.
   the DAX stagnates tomorrow
In light of the data in (5.2), it turns out that the examples in (5.1) behave exactly as one would expect given the assumption of a state combined with a present tense in present perfect constructions. Since the present perfect construction as a whole is stative, one expects that it needs a future adverbial in order to obtain a future meaning with present tense. In order to get the situation time reading of the adverbial in (5.1c), the reference time of the clause must be located in the future. Consequently, if one tries to construct the situation time reading of the adverbial in this clause, another future adverbial is needed in order to locate the reference time in the future as desired, this being so because of the stative nature of the construction. But since there is no such adverbial present in the clause, the reading cannot be constructed and hence, is unavailable. Similarly, in order to get the situation time reading of the adverbial in (5.1b), the reference time of the clause must be located in the future, too. If it is not, then the situation time of the VP cannot be located around the time of utterance. Again, since it the perfect construction is stative, it needs a future adverbial in order to have its reference time located in the future. The clause, however, does not provide a future adverbial. Hence, the situation time reading of the adverbial in (5.1b) is not available, either. Finally, the unavailability of the reference time reading of the adverbial in (5.1a) simply follows from the fact that a present tense locates the reference time of its clause in the present or future but not in the past – except for the historical present tense. This accounts exactly for the general unavailability of the reference time reading of the adverbial in (5.1a) and the intuition that it is marginally acceptable with a historical present perfect flavor. – As far as I can see, the ExtendedNow account is not able to derive the restrictions in (5.1). Thus, so far it seems that the present account is to be preferred above the ExtendedNow account.

Fourth, recall that the universal perfect readings were a main motivation for the introduction of an ExtendedNow interval in von Stechow’s account. But do we need an ExtendedNow analysis in order to derive the fact that the situation time of the VP in a perfect clause can reach up to the reference time? We will see shortly that we do not; universal perfect readings can be explained in the present account very well. – Let us first consider the representation of the universal perfect reading of (2.3a), the case with the quantificational adverb *immer* (‘always’). As in von Stechow’s account, the overt quantificational adverb replaces an existential default quantifier also in the present account. But here it replaces the lower quantifier, i.e., the one that appears on the interpretation level of the past participle morpheme. Hence, in this context we get the logical form in (5.3) with the paraphrase below; note that as presumably in all cases of quantification, the restriction of the universal quantifier can be supplemented by appropriate contextual restrictions (cf. Westerståhl 1984, von Fintel 1994) such as Arnim’s life-time or something else.
(5.3) EX, [PRES (t)] [ ALL_{t'}[PARTICIPLE (t') (t)] [ich das immer sag- (t)]]

= ‘There is a time t such that t is located at the time of utterance and for all times t' (possibly nonproperly) before t, I say it at t’.

This gives us exactly the reading we want to have for (2.3a). But how about the universal perfect reading in examples like (2.3b), i.e., examples involving duration adverbials like seit drei Stunden (‘since three hours ago’)? Consider the logical form of (2.3b) in (5.4) and its paraphrase below; I assume here that the adverbial seit drei Stunden in any clause denotes the set of time intervals that reaches from the time three hours before the reference time up to the reference time. It functions in (5.4) as a restrictor of the quantificational adverb that is introduced on the interpretation level of the past participle.

(5.4) EX, [PRES (t)] [ EX_{t'}[PARTICIPLE (t') (t) & seit drei Stunden (t')] [Arnim eine Treppe im ESB such- (t)]]

= ‘There is a time t such that t is located at the time of utterance and there is a time t' (possibly nonproperly) before t which reaches from the time three hours before the reference time t up to the reference time t, Arnim looks for a staircase in the ESB at t’.

Again, we get exactly the truth conditions we want. Moreover, we do so without having to assume that (2.3b) contains a silent universal quantifier.

Thus, the present analysis can account for the universal perfect readings easily. The fact that the situation time of the VP can in these readings reach up to the reference time is attributed to the semantics of the past participle morpheme; the semantics of the past participle leaves space in order to implement the crucial property of universal perfect readings.

6. What Is the ExtendedNow?

In the ExtendedNow account, the ExtendedNow interval is made responsible for the availability of universal perfect readings. In the anteriority account presented in sections 4 and 5, the availability of universal perfect readings was ultimately attributed to the semantics of the past participle morpheme. In this account, no ExtendedNow interval is part of the perfect semantics. Rather, the “extendedness” of the perfect on the one hand is solely due either to the semantics of the quantificational adverb on the interpretation level of the past participle morpheme itself (in the case of it’s being triggered by universal quantifiers as in (2.1a)) or to the presence of a duration adverbial in its restrictive clause (in cases like (2.1b)). The “now” on the other hand is due to the fact that the past participle semantics does not require any distance of the VP’s situation time to the time from which it is calculated. Hence, the semantics of the present perfect can be captured without an ExtendedNow.
The two theories compared in this paper are based on two diverging intuitions. It seems that the ExtendedNow theory is based on the intuition that some part of what was the case reaches up to the now. The anteriority theory presented in sections 4 and 5, however, takes to a stronger extent into account that – also when packed into a perfect construction – the situation time of the embedded VP counts in its own right. This sometimes appears to come out very clearly. Consider, for instance, the rudimentary perfect clause in (6.1) – where, by the way, the participle gewesen clearly expresses anteriority without the presence of an auxiliary.

(6.1) Leuchtende Tage; nicht weinen, da sie vorüber; lächeln, weil sie gewesen.

But also this clause in (6.1) connects the past situation to the present, by means of making a causal connection explicit. Such causal connections are often observed, sometimes being explicit and sometimes implicit. Although I do not believe that the ExtendedNow theory is adequate in all other respects, it seems to be a nice feature of the theory that – by implementing a special relationship between past and present – it captures the intuition of the basic relevance of these connections.

References

Narrowing down the ExtendedNow


