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# The ambiguity of the English present perfect<sup>1</sup>

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This study examines grammatical and discourse-pragmatic reflexes of the existential and resultative readings of the English present perfect. I present both negative and positive arguments in favor of the claim that the present perfect is ambiguous (rather than vague) with respect to these readings. In particular, I argue that the resultative present-perfect represents a formal idiom: a morphosyntactic form characterized by idiosyncratic constraints upon grammar, meaning and use. Certain constraints upon the resultative present-perfect, in particular that which prevents it from denoting a pragmatically presupposed event proposition, can be MOTIVATED with respect to a discourse-pragmatic opposition involving the preterite. However, such constraints cannot be PREDICTED from functional oppositions or any general semantic principles. Finally, I suggest that mastery of aspectual grammar crucially entails knowledge of such idiomatic form–meaning pairings.

## 1. INTRODUCTION

Our object of inquiry is the English present perfect (PrP), a verbal periphrasis consisting of the present-tense auxiliary *have* followed by a past-participial VP (e.g. *the Eagle has landed*). Semantically, the auxiliary can be regarded as a sentential operator (*Have*) which scopes a context-free past-tense sentence. The truth of the resulting proposition is evaluated for the present interval. For example, (1) is represented as in (2):

- (1) Harry has finished.  
(2) PRES<sub>(w,i)</sub> [Have [ $\lambda w\lambda i$  Past<sub>(w,j)</sub> (Harry finish)]]

In (2), the context variables of the past-tense operator have been abstracted, so that the (past) tense in the scope of the perfect operator *Have* is context free: the time *i* – the reference point with respect to which anteriority is computed – is not anchored to the time of the utterance event. By contrast, the tense operator immediately scoping *Have* is context

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sensitive: it is anchored to the time of the utterance event. I will assume that the perfect performs a stativizing function: a perfect-form sentence allows the speaker to encode the occurrence of an event at a time  $t$  by asserting that a contingent state obtains at time  $t$ . Accordingly, (1) represents a present-tense stative predication: the state is that of Harry's having finished (Herweg 1991).

The representation given in (2) is interpreted in accordance with truth conditions requiring that the argument proposition be true somewhere within a present-contiguous interval or 'extended now':

- (3) *Have* (A) is true in M relative to  $(w, i)$  iff there is a subinterval  $j$  of  $i$  such that A is true in M relative to  $(w, j)$ . (Richards 1982)

By contrast, in the definition of the tense operator *Past*, the intervals  $i$  and  $j$  are interpreted as instants: the time of evaluation  $i$  does not include the time  $j$ , at which the argument proposition holds. Richards' definition of *Past* is given in (4):

- (4) *Past* (A) is true relative to  $i$  iff there is an interval  $j$  earlier than  $i$  such that A is true relative to  $j$ .

Under this view, what distinguishes the PrP from preterite is that, in the former case, the argument proposition must be true somewhere within the present interval. In the latter case, the argument proposition must be true at an interval which is prior to the present moment; this interval does not overlap with or subsume the present moment.

The truth-conditional definition of the PrP given in (3), while a useful point of departure, is inadequate. The definitions in (3) and (4) do not capture the meaning difference seen in contrast pairs like (5):

- (5) (a) I have willed my fortune to Greenpeace.  
(b) I willed my fortune to Greenpeace.

There seems to be no reason to presume that (5a) expresses an event proposition which is true somewhere within an interval whose upper boundary is now, while (5b) does not. The presumed meaning of (5a), in which a single event of bequest occurred at a particular point in the past, is not compatible with expressions like *before*, which denote a general present-contiguous past interval. The definition given in (3) does not capture the fact that sentences like (5a) are interpreted in a way that makes them synonymous with sentences like (5b): a single event occurred at some point prior to now.

Furthermore, (3) does not enable us to account for the array of PrP interpretations which are commonly cited (continuative, resultative, etc.). We will investigate the proposal that the PrP is ambiguous with respect to these interpretations. These readings will be represented by means of an

eventuality-based temporal logic like that proposed by Parsons (1990), augmented by 'provisos' representing conventional implicata. I will presume that each of these readings represents a distinct grammatical construction, i.e. a unique, conventionalized pairing of form and meaning. The ambiguity at issue is a nonsyntactic ambiguity: the distinct readings cannot be assigned distinct underlying syntactic structures. Therefore, the PrP form is polysemous in much the same way that words may be polysemous: a single form has several related meanings. The meanings to be examined here are the three primary readings distinguished by McCawley (1971). They are exemplified and paraphrased in (6):

- (6) (a) We've been sitting in traffic for an hour. (universal/continuative)  
*A state obtains throughout an interval whose upper boundary is speech time.*
- (b) We've had this argument before. (existential/experiential)  
*One or more events of a given type are arrayed within a present inclusive time span.*
- (c) The persons responsible have been fired. (resultative)  
*The result of a past event obtains now.*

I will argue that the PrP, although formally parallel to past and future perfects, has semantic, grammatical and discourse-pragmatic properties which distinguish it from the other perfect forms. This analysis requires that we reject the compositional semantic account offered by Klein (1992), in which the meanings of past, present, and future perfects are reducible to the semantic contribution of the particular auxiliary tense and the anteriority relation expressed by the participle. Certain grammatical characteristics of the PrP 'cannot be componentially explained from a semantic point of view' (Richards 1982: 101). One such characteristic is the constraint barring 'definite' time adverbs, exemplified in (7a):

- (7) (a) Harry has joined the navy (\*in 1960).  
 (b) [It was 1972.] Harry had joined the navy in 1960.
- (8) (a) [Yesterday, the mail arrived at two.] I had (already) LEFT at two.  
 (b) [Yesterday, the mail arrived at three.] I had left at TWO.

Sentence (7b) demonstrates that this constraint does not characterize the past perfect. Can one devise a principled account of the distinction between (7a) and (7b)? Binnick (1991) proposes the following explanation: since the reference time of the PrP is the present, and since reference time is the time of adverbial reference, the past time reference supplied by the temporal adverbial *in 1960* is excluded, because this adverbial does not describe R. Klein (1992) undermines the foundation of this argument, by demonstrating that reference time cannot be regarded as the sole time of adverbial reference for the perfect. Klein observes that past-perfect sentences like (8a, b) are

ambiguous as to whether an adverbial expression modifies E or R. In (8a), *at two* describes R. In (8b), *at two* modifies E, while R is three o'clock. Why then should the formally parallel PrP forbid modification of E?

Klein (1992) has sought to account for the anomaly of (7a) by citing a pragmatic restriction, the P(osition)-Definiteness Constraint: event and reference times cannot simultaneously be fixed to specific intervals in a given assertion. Since, in the case of the PrP, R is always fixed via identification with speech time, adverbial description of E is necessarily barred. A problem arises, however, with respect to past-perfect examples like (7b). Both E and R are adverbially specified: R is 1972 and E is 1960 – yet no anomaly results. Examples like (7b) impeach the validity of the P-Definiteness Constraint, and substantiate a view like that of Heny and Richards, in which the restriction exemplified in (7a) is an idiosyncratic feature of the PrP.

Some grammatical idiosyncrasies of this type do not attach to the PrP simpliciter. Certain constraints attach to one reading: the resultative reading (6c). These constraints amount to restrictions upon the extent to which one can elaborate upon circumstances surrounding the past event denoted by the VP complement. The restrictions to be considered here are as follows: one cannot use the resultative PrP to (a) provide further information about a pragmatically presupposed event, (b) anchor the event in time by means of a temporal adverb, (c) assert the occurrence of an event complex or 'plural event' (Bach 1986), (d) specify the manner in which an action was performed. I will demonstrate that these constraints do not attach to the existential PrP; PrP sentences starred on a resultative reading often have an acceptable existential reading.

The aforementioned restrictions have an apparent functional motivation: the resultative PrP is used to focus upon the presently accessible consequences of a past event, rather than upon the past event per se. The latter function is associated with the preterite. The preterite, according to Anderson (1981: 230), is used 'to describe a specific past event for its own sake (the essence of true narrative)'. This function is commonly contrasted with that of the PrP. The PrP is said to indicate 'current relevance' and to evoke an 'indefinite past'. A number of analysts have complained about the vagueness inherent in such descriptions of PrP meaning (see McCoard 1978). These descriptions are vague in part because they presuppose that the PrP has a unitary semantico-pragmatic definition. In fact, the role typically assigned to the PrP – that of marking an indefinite past – conflates two quite different functions. The resultative PrP, like the preterite, evokes a small, specific past interval, i.e. a unique event time. This interval happens to be unavailable for modification by a temporal adverb (see (7a)), but it can serve as the time frame in which events coded by subsequent preterite-form assertions are located. For example, as we will see below, the resultative PrP can be used in the 'lead sentences' of news reports, where later preterite-form assertions provide further information about the event expressed by the PrP-

form sentence. The existential PrP, by contrast, evokes not a specific past interval but a present-inclusive time span (general or restricted) within which one or more events of a certain type are located. Likewise, the 'current relevance' rubric can be shown to subsume both a resultant-state implication and a modal notion that has been termed the 'present possibility' requirement.

The contrast between the resultative PrP and preterite is best understood when examined from a diachronic perspective. Historically, we see the development of a discourse-functional opposition between the two closely aligned forms of past-time reference. In Old and Middle English, according to Visser (1966), the two forms – resultative PrP and preterite – were largely interchangeable in both poetry and prose. The diachronic retention of these two exponents of past-time reference can be attributed to the ability of speakers to establish a pragmatic contrast among semantically commensurate forms (Clark 1987). The diachronic resolution of 'constructional synonymy' will often involve the interaction of semantic and pragmatic factors: if two distinct constructions are semantically equivalent, these constructions will come to be seen as functionally opposed. These are cases in which 'speakers innovate pragmatic extensions of grammatical forms' (Slobin 1990: 10).

In Modern English, the resultative PrP and preterite participate in a discourse-pragmatic opposition; the preterite is the unmarked member of this opposition. This opposition arises from the contrast between anaphoric and deictic determination of reference time. The preterite is anaphoric in that preterite-form assertions locate a situation at a 'definite' past interval: a time which has either been previously evoked in the discourse or is contextually recoverable. Preterite-form assertions are said to 'refer back' to a linguistic or extralinguistic temporal antecedent.<sup>2</sup> For example, the sentence *I went swimming* might refer back to the temporal antecedent set up by the preterite-form question *What did you do yesterday?* In contrast with the preterite, the resultative PrP expresses deictic temporal reference. Sentences like *I've met someone else* are used to assert the existence of a presently accessible result

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[2] In this discussion, we will not consider narrative which entails temporal progression. In such narratives, the reference time of a preterite-form assertion is a time 'just after' the reference time of the previous preterite-form assertion. An example of temporal discourse is given in (i):

- (i) Marge walked into the room. She slipped off her shoes.

As Partee (1984) observes, the anaphoric analysis of the preterite is incompatible with the successive updating of the reference time found in narrative texts like (i). The anaphoric properties of the preterite emerge most clearly when we look at texts like (ii):

- (ii) I broke my finger. Someone slammed the closet door on it.

In (ii), the reference time of the second sentence can be identified with that of the first sentence. The text in (ii) can be said to exemplify ELABORATION MODE, rather than TEMPORAL-PROGRESSION MODE.

(for example, the current lack of romantic interest in the addressee); they do not require reference to a previously evoked or currently accessible past interval. Certain grammatical constraints upon the resultative PrP, like that related to pragmatic presupposition, can be attributed to its lack of an anaphoric function.

I will suggest, however, that the restrictions upon the resultative PrP constriction (RPC) do not follow automatically from any general grammatical or functional principles, whether universal or English specific, and that therefore the resultative PrP qualifies as a FORMAL IDIOM: a morpho-syntactic configuration characterized by otherwise unpredictable grammatical constraints and ‘dedicated to semantic and pragmatic purposes not knowable from form alone’ (Fillmore *et al.* 1988: 505). Idiomaticity is a matter of degree: the properties of idiomatic form-meaning pairings are MOTIVATED to the extent that they have a precedent elsewhere in the grammar (see Goldberg 1992b). In English, for example, the use of the definite article as a degree marker in formulaic expressions like *the better to eat you with* is semantically motivated insofar as the definite article is assigned this same function in the so-called comparative conditional (*The more, the merrier*). The inheritance relations which link constructions are analogous to derivational relationships between words. Derivational links, such as that relating the words *collate* and *collateral*, might be tenuous, as might the inheritance relations which link a given construction to one or more formally and semantically similar constructions. In such cases, knowledge of one form-meaning pairing does not relieve the learner of the obligation to learn the related pairing.

The existential and continuative readings of the PrP closely resemble the analogous readings of the PaP; the corresponding constructions are strongly motivated, since adverbial co-occurrence restrictions and interpretive constraints are largely predictable from the relevant semantics, shared by both PaP and PrP forms. In the case of the resultative PrP, however, we find grammatical and pragmatic constraints which a learner would not know simply by knowing that the perfect form may signal that ‘the result of an event continues to the reference time’. Therefore, I will presume that the knowledge that speakers use in producing sentences like (6c) is represented as a highly idiomatic pairing of form and meaning: the RPC.

The remainder of this paper will be structured in the following fashion. In the following section, I will present a discourse-pragmatic analysis of the preterite, which will serve as the basis for an account of the discourse-functional opposition in which the RPC and preterite participate. In section 3, I will present arguments in favor of the claim that the present perfect is ambiguous rather than vague with respect to the three relevant readings. In section 4, I will provide representations of the three semantic structures at issue. In section 5, I will discuss grammatical and discourse-pragmatic reflexes of the existential and resultative readings. In the concluding section,

I will suggest the consequences of this study for a conception of aspectual grammar.

## 2. THE PAST TENSE AS ANAPHOR

Partee (1984) has observed that truth-functional accounts of preterite meaning can be divided into two general types. In both accounts, the past-tense marker is viewed as an operator *Past*, which scopes a tenseless proposition. The truth of the resulting proposition is evaluated for speech time  $t$ . The first type of account, associated with Prior (1967), is that in which a proposition of the form *Past* (A) evaluates to true iff the tenseless proposition A is true at some time  $t'$  earlier than  $t$ . In the second type of account, advocated by Reichenbach (1947), a past-tense sentence is interpretable as true or false only relative to a given (past) reference time. Reference time, according to Klein (1992: 535), is 'the time for which, on some occasion, a claim is made'. Partee (1984) observes that under the Priorean view, the truth of the preterite-form assertion depends on the truth of the base sentence at *SOME* time in the past, while under the Reichenbachian view, the truth of a preterite-form assertion depends on the truth of the base sentence at *THAT* time in the past.

Most recent formal accounts of tense reference have followed the Reichenbachian view. Reichenbach's account appears preferable because there is evidence which suggests that reference-time specification must be part of the truth conditions of preterite-form sentences. For example, the sentence *I bought you a newspaper* will be judged false if the base sentence is false at the time that the hearer has in mind (e.g. that morning), despite the fact that the base sentence may be true at some other time (e.g. last year).

In accordance with Partee (op. cit.), I will presume that state predications subsume the relevant reference time. For example, the assertion *The suspect had a beard* is made relative to a specific past interval, and does not indicate whether the state referred to holds now of the individual denoted by the NP *the suspect*. In such cases, the past-tense assertion signals that the speaker wishes to vouch for the presence of the denoted state of affairs only during the relevant past interval. What do we mean when we refer to a past interval as *THE RELEVANT INTERVAL*? Presumably, this is a specific past time which the utterer of the preterite-form sentence has in mind, and believes that the hearer has in mind (or can readily call to mind).

For Hinrichs (1986) and Partee (1984), among others, the requirement of mutual knowledge of the evoked past interval is captured by a representational system in which this interval is anaphorically bound to a specific time frame that has previously been introduced in the discourse, or is otherwise recoverable from context. Accordingly, some analysts (e.g. Heny 1982) have suggested that the preterite should not be represented by an existential quantifier over past times (as Priorean treatments would have it), but by an



anaphorically bound temporal variable. This mode of representation is intended to capture the insight that the past tense ‘points to a particular (context-determined) [temporal] location’ (Cooper 1986: 237).

The analogy between this form of temporal reference and nominal anaphora is tenuous, since, as Partee (1984: 275) admits, ‘[i]ntuitively, noun phrases “refer” and tenses do not’. It stretches credibility somewhat to suggest that a tense refers to a time in the same way that a noun phrase refers to an individual. Nevertheless, in eventuality-based systems of representation like that of Parsons (1990), times are existentially bound variables, and thereby qualify as individuals, just as episodes (events) qualify as individuals. Therefore, we can speak of the past-tense operator as evoking two temporal individuals: the time of the utterance (represented as a context-sensitive variable), and the past time of occurrence. We can also speak of the time of occurrence as LOCATABLE WITHIN A HISTORY, since a history incorporates a time line: an ordered set of (temporal) individuals. A history is defined as a mental record of events locatable along a linear pathway of temporal intervals leading to the present moment. According to the Hinrichs-Partee model, the interpreter of a past-tense assertion must locate the occurrence time within a history, i.e. an ordered set of times (and attendant situations) whose upper boundary is the present moment.

As in cases of nominal anaphora, the temporal antecedent may be an element of the linguistic context or an element of the extralinguistic context. Linguistic antecedents include frame adverbials like *yesterday*, reference times evoked by previous past-tense assertions and bound temporal variables evoked by the subordinate clauses of certain habitual sentences. Examples of these three types of antecedents are given in (9a, b):

- (9) (a) Yesterday, I got a strange phone call.  
 (b) Harry threw a party. He got completely sloshed.  
 (c) Whenever he touched the door knob, he got a shock.

In (9a), the preterite-form assertion evokes a past time identified with that denoted by the adverb *yesterday*. Here, *yesterday* has a frame-adverbial reading: the time at which the phone call occurred was a time within the set of times describable as *yesterday*. In (9b), the time of the second preterite-form assertion is interpreted as the time evoked by the first such assertion: the event of Harry’s becoming drunk is located within the interval during which Harry gave the party. In (9c), a somewhat different form of anaphoric past-time reference is involved: the past tense predication appearing in the main clause does not evoke a unique time of occurrence, but a temporal variable, introduced by the subordinate-clause predication. Here, two temporal variables are co-bound: the time of each past door-knob-touching event is the time at which a shock was received.

In the case of an extralinguistic temporal antecedent, the time frame with respect to which the preterite-form assertion is interpreted must be recovered

from context. Context in this case is THAT HISTORY TO WHICH THE INTERLOCUTORS HAVE JOINT ACCESS. The history available to the interlocutors includes the immediate past period represented by the last phase of the discourse. For example, the time of the hearer's most recent discourse contribution provides an extralinguistic antecedent for the preterite-form question in (10):

(10) I didn't catch the end of your sentence.

The 'historical background' may also include events outside of the immediate context of the discourse. These are events which the interlocutors can access from a shared history at a time when some event which was previously in the offing is known to have occurred. For example, if the speaker and hearer share knowledge that the hearer was to request a raise at some point during the course of the work day, the speaker may ask the following question, upon the hearer's return from work:

(11) How did you do?

The event whose time of occurrence provides the temporal frame of reference for the preterite-form assertion need not be recent, although the event must be salient to the degree that the interpreter can recover the occurrence time. An illustration of this claim is found in an anecdote, told by Charles Fillmore (p.c.), the humorous effect of which arises from the fact that a preterite-form utterance has a remote-past reference time that is nonetheless easily recoverable. Fillmore reports that during a chance encounter on the streets of London, a fellow linguist invited him to a local fish restaurant famous for its plaice (a type of flounder). Fillmore declined the invitation but, upon meeting that same linguist five years later, greeted him with the preterite-form question *How was it?* (The addressee replied, 'Excellent.') Here, the plaice-consumption event, although certainly not recent vis-à-vis the individual histories available to each of the two speech participants, is salient, because no more recent events transpired within the representation of history HELD IN COMMON by those interlocutors.

In distinguishing between temporal antecedents which are linguistically expressed and those which can be characterized as 'belonging to the discourse context', it is useful to invoke Lambrecht's distinction between identifiability and activation status – a distinction used to describe the mental representations of nominally encoded discourse referents (Lambrecht, 1994). I will extend these concepts to the domain of discourse referents representing 'temporal individuals', i.e. occurrence times established in the 'historical record' shared by speaker and addressee. According to Lambrecht, the identifiability parameter 'has to do with the speaker's assessment of whether or not a discourse representation of a particular referent is already stored in the hearer's mind'. The activation parameter concerns the 'speakers assessment of the status of an identifiable referent as

“activated”, as merely “accessible” or as “inactive” in the mind of the hearer at the time of the speech act’. An ACTIVE CONCEPT is one which, in the words of Chafe (1987: 22), is ‘currently lit up, a concept in the person’s focus of consciousness at a particular moment’.

An entity which is identifiable is one the interlocutors can distinguish from other entities with which it shares properties criterial for category membership. A formal correlate of identifiability is DEFINITENESS, in those languages which have grammaticalized definiteness distinctions. In such languages, the definite article typically indicates that the noun to which it attaches refers to an entity which is contextually the uniquely salient exemplar of the category in question. For example, in the sentence *I picked up the package*, the definite NP *the package* refers to an entity for which a shared representation exists in the minds of speaker and addressee. In the case of ‘temporal reference’, as mentioned, identifiability arises from the ability of speaker and hearer to select the evoked past interval from a time line which forms the basis for a representation of history shared by the interlocutors. The interpreter must be able to LOCATE the relevant interval within that history.

Identifiable referents, according to Lambrecht, may be in any of three activation states: active, accessible or inactive. While an active concept is a focus of the interlocutors’ consciousness, an accessible concept is either in the hearer’s peripheral consciousness (as construed by the speaker) or is a salient member of a semantic frame that has been invoked in the discourse. A referent may be said to be in the hearer’s peripheral consciousness if, for example, it is a salient part of the text-external world. Deictic expressions like *those pictures* may be said to refer to an accessible referent in sentences like *Those pictures sure are ugly*, used to describe some pictures on the wall of the addressee’s office (where speaker and addressee are both present in the office). An accessible referent, according to Lambrecht, is more readily brought to mind by the interpreter than one which is inactive. With respect to nominal reference, Lambrecht observes that ‘the active status of a referent is formally expressed via lack of accentuation and typically (but not necessarily) via pronominal coding of the corresponding linguistic expression’. Inactive or accessible status is accordingly conveyed by accentuation of the referential expression and full lexical coding (the distinction between inactive and accessible status is not linguistically expressed).

In the case of temporal anaphora, we can say that a past period is active when it has already been invoked in the discourse, and accessible when it has not been explicitly invoked but is salient in the extralinguistic context. For example, a preterite-form assertion can be said to invoke an active past interval if the past interval to which the assertion is relativized has already been referred to by a previous past-tense predication (cf. (9b)). A past time of occurrence is accessible if it is contextually recoverable. The temporal individual evoked is in the situational context, and is therefore more easily

conjured up in the addressee's mind than one which is entirely inactive. As we observed above, the situational context may be the immediate context of the discourse (e.g. the time of the last discourse contribution in (10)), or it may be some salient portion of the history which leads up to the present discourse, e.g. in (11), the time during the work day at which the addressee requested a pay raise.

Whether the interval evoked is characterizable as active or as merely accessible in a discourse, it represents a closely circumscribed interval. If the relevant past interval were not circumscribed, one could not locate it at a particular point in a history. In the examples which we have encountered so far, the preterite evokes a past interval that is POINTLIKE. For example, sentence (10) evokes the point in time at which the addressee's last discourse contribution was made. Intuitively, it is odd to refer to the reference time as a point, since we know that the addressee's utterance must have taken time, and that therefore the reference time evoked by (10) qualifies as an interval. However, as Herweg argues (1991: 982), one cannot distinguish intervals from moments (i.e. degenerate intervals) without considering the time units relevant to the cognizer(s) (see also Talmy 1988):

Since on the conceptual level we deal with mental representations of time, ... viewing a period of time as pointlike means that its internal structure is cognitively neglected as a matter of the granularity of perspective taken by the subject. Thus, we allow that one and the same temporal entity be represented as a pointlike or complex time depending on the situation.

In the context of this analysis, 'situation' is to be construed as the particular time line invoked in the mental representation of a history – a representation which the speaker presumes is shared by the hearer. Our analysis of preterite is based on a model in which this representation of history evokes a time line whose fundamental unit of temporal measurement can be characterized as a moment. This model requires that the past moment evoked by the preterite is (a) IDENTIFIABLE (i.e. locatable at a particular point along the time line) and (b) ACTIVE or ACCESSIBLE at the time at which the preterite-form sentence is uttered.

The analysis just offered is somewhat oversimplified, since the preterite may evoke a past period that has internal structure, i.e. is divisible into subperiods. In the following sentences, the past period referred to is necessarily interpreted as an interval or 'complex time':

- (12) (a) Did Karla ever call you?  
 (b) Goldman Sachs interviewed Bruce twice.

In (12a), the adverb *ever* denotes a range of times that are potential times at which Karla's calling took place. According to W. Ladusaw (p.c.), *ever* (like its negative counterpart *never*) can be used to preempt the inference that

a past predication refers to a ‘small’ (i.e. momentaneous) period: (12a) refers to a past interval, e.g. a day. In (12b), the presence of the frequency adverb *twice* requires that the past-tense assertion be taken as evoking a period long enough to include two interviewing events. In both (12a) and (12b), the preterite-form assertion evokes an identifiable past time that is either active or accessible in the discourse context. Sentence (12b) might be used to answer the question *What happened last week?* Sentence (12a) might be used to inquire about events that occurred on the addressee’s birthday. The birthday might be an accessible time frame in the discourse, i.e. one that has not been explicitly invoked, but is presumed salient to the hearer. In (12), unlike the previous examples, the ‘definite’ time invoked by the preterite is a complex time, which includes two or more (potential or actual) event times. However, the sentences in (12) are like the previous examples in that the past time evoked can be characterized as having a linguistic or extralinguistic temporal antecedent. Therefore, the time frame referred to by the preterite, whether a pointlike or complex time, is a saliently bounded interval that can be placed at a particular location on a time line (i.e. is identifiable) and is either active or accessible in the discourse context.

The circumscribed character of the past time frame invoked by preterite emerges clearly when one contrasts the preterite with the existential PrP. The existential PrP is exemplified in (6b). Consider the contrast pair given in (13):

- (13) (a) I went to Paris.  
 (b) I’ve been to Paris.

Sentence (13b) illustrates an idiomatic grammatical property of the existential perfect: the expression *be to* can be used to mean ‘visit’; *be to* is ruled out for past-tense assertions (*\*I was to Paris*). Sentence (13a) evokes a specific, circumscribed past interval. This sentence may be a response to a question concerning activities that the speaker engaged in during the past summer. This sentence would be anomalous as a discourse-initial assertion. In order to qualify as a felicitous discourse-initial utterance, (13a) would require a past-time temporal adverb like *in 1992*. A frame adverbial of this type would ‘activate’ a particular past time within a representation of history which the speaker, by uttering (13a), signal an intention of constructing.

By contrast, sentence (13b) does not evoke an identifiable past interval. The sentence may be used to denote any number of visits to Paris by the speaker. Therefore, the question *How many times?* would be an appropriate response to (13b), but it would not ordinarily be an appropriate response to (13a). While each visit to Paris necessarily has a past time of occurrence, the interpretation of (13b), unlike that of (13a), does not require the interpreter to invoke a particular past time of occurrence. Instead, the interpreter need only envision a general time span, whose upper boundary is the present time, within which the event or events denoted in question took place. The interval itself may be denoted by a time-span adverb like *before*. Alternatively, the

lower boundary of that interval may be denoted by a *since*-adverbial expression (e.g. *since the war ended*).

The distinction between the two types of past-time reference exemplified in (13) becomes clearer when we look at the interaction of these predication types with frequency adverbials. Notice that if we add the frequency expression *three times* to each of these sentences, the circumscribed and specific character of the interval evoked in (13a) is unchanged. That is, (13a) still refers to a definite past period (e.g. last year), although this period is not a pointlike time but a complex time – an interval containing several visits to Paris. In the case of (13b), however, the times at which visits to Paris took place are not placed within any temporal boundaries; the event time or times are simply located prior to speech time. An example analogous to (13) is found below:

- (14) (a) Did Karla ever call you? (= (12a))  
 (b) Has Karla ever called you?

In (14b), *ever* refers to an interval which effectively lacks a lower boundary. The speaker's inquiry can be said to concern the history of the addressee's friendship with Karla. In (14a), by contrast, the speaker's inquiry concerns only a limited period prior to speech time. While the most likely response to (14a) would be a simple affirmation or denial, the most likely response to (14b) would include a frequency expression like *several times*. This is a reflection of the fact that preterite form sentences are ordinarily taken to refer to unique past events – since the reference times involved are closely circumscribed – while sentences like (14b) evoke any number of instances of the event type denoted, since the past period invoked is a broad expanse of time.

Another distinction between the preterite and the existential PrP involves a feature which I will treat as a conventional implicature: the present-possibility constraint. According to McCawley (1971), among others, the existential PrP requires that the event or episode denoted by the VP complement be capable of occurring at the present time. Examples (15a, b) demonstrate that the present-possibility constraint does not characterize the preterite:

- (15) (a) I went to a Neil Young concert.  
 (b) I've been to a Neil Young concert (before).

In sentence (15a), the indefinite NP *a Neil Young concert* refers to a specific performance, which took place at a definite past interval. In sentence (15b), however, the NP *a Neil Young concert* refers not to a specific performance but to a type of performance (one given by Neil Young). Sentence (15b) asserts that within an interval upper bounded by the present, there were one or more instances of the event denoted by the base sentence *I go to a Neil Young concert*. This sentence conventionally implicates that the event

denoted could recur at the present time. Therefore, Neil Young must be alive at present, capable of giving performances, etc. No such implication is attached to (15b): this assertion is felicitous if Neil Young is deceased, if he has retired from touring, etc.

There are (at least) two classes of exceptions to the analysis of the preterite offered above. In the first class, described by Heny (1982) and Partee (1984), among others, the past time of occurrence invoked by the preterite is neither active nor (necessarily) identifiable. Consider the following examples:

- (16) A: How did Cicero die?  
B: He was executed by Marcus Antonius.

- (17) Shakespeare said, 'In many's looks the false heart's history is writ.'

In these examples, the preterite-form assertions (e.g. *he was executed*, *Shakespeare said*) do not refer to a period which is under discussion or contextually salient. For example, as shown, B's assertion in (16) need not answer a question like: *What happened to Cicero in 43 BC?* Further, the event time in question need not be locatable by speaker and/or addressee at a particular point in a representation of history (in these examples, a remote-past history). The discussants in (16) need not know that the event referred to (Cicero's death) occurred in 43 B.C. Similarly, the utterer of (17) need not know even the approximate period in which Shakespeare expressed the quoted sentiment. In (16) and (17), the location of the reference time is not relevant to the concerns of the speaker and/or hearer. In such cases, the meaning of the past tense is appropriately represented by the Priorean model: an event occurred at some time prior to now. Partee (1984: 296), makes a similar observation with respect to the sentence *Who killed Julius Caesar?*: *She points out that, in interpreting this sentence*

[the hearer does] not have to know when it happened to know who did it, given that it could only have happened once if it happened at all. In [this] case, the reference time could potentially be the whole of the past.

Of course, when a sentence has a reference time equated with 'the whole of the past', the sentence in essence lacks a reference time. In another class of exceptions to the analysis of the preterite offered above, the preterite not only lacks an active and identifiable event time, but also appears to evoke a deictically determined reference time. In these cases, the preterite serves a communicative function like that of the RPC. Consider the following examples:

- (18) I already told you: I'm not interested!

- (19) Pat NIXON died.

In (18), the preterite-form assertion apparently refers to a present state of affairs: the addressee's knowledge of the speaker's lack of interest; the sentence implies that this state of affairs is the result of a past event: the

speaker's reporting his or her lack of interest to the addressee. Here, the adverb *already*, which ordinarily accompanies state predications, anchors the reference time of the assertion to the present. The usage exemplified here is, as frequently noted, mainly confined to American dialects of English, in which the preterite appears to be expanding its semantic range at the expense of the RPC. Sentence (19) is ambiguous, in that it can be taken as an argument-focus response to the question *Who died yesterday?* or as a 'sentence-focus response' to a question like *What happened in the news yesterday?* (see Lambrecht, 1994). In the context which I have in mind, however, (19) is a sentence-focus assertion, and no past interval has been invoked in the discourse context. Accordingly (19) may be a discourse-initial utterance, in which case the speaker is simply reporting a momentous event to the addressee. On this reading, sentence (19) has a function like that of the 'hot news' PrP. In sum, neither (18) or (19) invokes a past time that is active or identifiable in the minds of the interlocutors at the time of the utterance.

In light of examples like (16) and (19), I conclude, in accordance with Richards (1982: 134), that

any account of the apparent 'referentiality' of some cases of the past tense which makes it logically necessary for the well-formedness of a past-tense sentence that there be...reference to some specific [i.e. context-determined] time...cannot be correct.

Instead, I will presume that the 'anaphoric' use of the past tense is one of the communicative functions of the past tense, but not its only function. Let us propose that there is a feature [ $\pm$ anaphoric] which attaches to all exponents of past-time reference in a given language. A form which expresses a past-tense relation will be regarded as [ $+$ anaphoric] iff it requires the interpreter to 'anchor' the event expressed by the base sentence to a 'definite' past interval, i.e. an interval which is both active and identifiable. I will presume that the English past tense is unmarked with respect to the anaphoricity feature: it is capable of expressing both anaphoric and nonanaphoric past-time reference. Below, I will argue that the resultative PrP participates in a markedness opposition with the preterite, in which the resultative PrP is marked as [ $-$ anaphoric].

We will now proceed to examine the distinct readings of the PrP, exemplified in (6), after which we will look at those properties of grammar and use which are unique to the resultative reading. The next section will provide evidence that the PrP is ambiguous rather than vague with respect to the relevant readings.

### 3. VAGUENESS VERSUS AMBIGUITY

Since McCawley's 1971 paper, 'Tense and time reference in English', in which temporal logic was used to describe distinct readings of the PrP, many analysts investigating the semantics of the PrP have been concerned with the



following question: are the readings at issue simply uses inferred in particular communicative contexts, or are they distinct meanings? Among those analysts who have approached this question, most, including Bauer (1970), Brinton (1988), Dinsmore (1991), Fenn (1987), Klein (1992) and McCoard (1978), have rejected McCawley's claim that the understandings exemplified in (6) should be assigned distinct underlying semantic representations. Instead, these authors have proposed that the distinct understandings in question are computed by interpreters invoking features of the linguistic and extralinguistic context in order to decode an otherwise vague predication.<sup>3</sup> A fundamental difficulty with this kind of account emerges when we consider the unreliability of contextual cues said to signal a resultative as against existential understanding. Klein, for example, assumes that the PrP is vague with respect to both the frequency of the denoted event and the distance of event time from speech time. Accordingly, he argues

[t]he fact that both distance and frequency of TSit [event time] are left open gives rise to different readings of the perfect – experiential [existential], resultative perfect, and others. But these readings do not arise from an inherent ambiguity of the perfect. They stem from contextual information... (p. 539)

Presumably, the frequency variable in Klein's formulation relates to the potential for an existential understanding: existential perfects commonly refer to iterated events. The interpreter might therefore be said to compute an existential understanding upon encountering a PrP sentence containing a frequency expression like *twice*. For example, the sentence *Harry has visited Cleveland twice* is necessarily assigned an existential meaning. The existential understanding, however, is potentially available even when the PrP-form predication does not establish the existence of multiple events of a given kind. Consider example (6b), repeated here for convenience:

(6) (b) We've had this argument before.

This example demonstrates that an existential PrP may denote only one instance of the event in question. The interpreter of (6b) can understand this sentence as an existential PrP, even though he or she may have in mind only one instance in which the argument took place.

Under Klein's account, the possibility of a resultative understanding will typically depend upon the speaker's inferring that the event denoted by the VP complement is recent.<sup>4</sup> Result states may be of short duration; if a

[3] Not all recent analysts who have looked closely at the meaning of the PrP have focused on the distinct interpretations cited in (6). Some, like Inoue (1979), have simply equated the semantics of the PrP with one of its readings. Inoue's analysis of the PrP appears to be based on the existential reading alone. Parsons (1990), by contrast, concerns himself only with the resultative reading.

[4] Klein actually argues only that the Comrie's (1976) 'perfect of recent past' (= McCawley's 'hot news' perfect) is invoked when event time 'immediately precedes' reference/speech

temporary result is to remain in force at speech time, the causal event must be recent. However, immediacy of the event to speech time is neither a necessary nor a sufficient condition for the invocation of the resultative understanding. The argument that recency is a sufficient condition commonly proceeds from examples like (20):

(20) Have you seen my slippers?

To a question of this sort, the argument goes, only an uncooperative hearer would respond: *Yes, about a month ago*. That is, the questioner presumably intends a resultative understanding of (20): she is inquiring about a past sighting of the slippers which currently affects the hearer's ability to locate the slippers. The questioner does not intend an existential understanding, i.e. an interpretation which might cause the hearer to mention one or more slipper sightings in the distant past, having no importance for the present state of things. The contextual effects observable here are, however, reducible to relevance-based implicature, together with inference related to the temporary nature of a given slipper location. The interpreter of the PrP-form question (20) will recognize that the only relevant response is one which concerns the questioner's current quandry: the need to find her slippers. This response entails a resultative interpretation of the question. Furthermore, since the conversants know that slippers and other such objects typically remain in a given location only briefly, they also know that the hearer's knowledge of the present location of the slippers will depend upon the hearer's having sighted them recently. Therefore, the resultative reading of a PrP-form utterance does not depend upon the interpreter's awareness that the event denoted is recent. Rather, recency of the event with respect to speech time is intrinsic to the resultative interpretation IN CERTAIN SCENARIOS, like that described as the context for (20).

Recency is not a necessary condition for the adduction of the resultative interpretation. Consider sentence (21):

(21) It seems Grandpa has cut me out of the will.

Sentence (21) can be construed resultatively even in a context in which the disinheriting event occurred many years prior to the reporting of it, so long as certain effects of that event (penury, etc.) are in force at speech time. Sentence (21) shows that the causal event denoted by the RPC need not be recent.

Perhaps recognizing the recency of the VP-complement denotatum vis-à-vis speech time is not an essential component of the resultative understanding, Klein goes on to argue that in fact the resultative understanding arises when 'contextual information ... tells us ... that the consequences [of the event] are

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time. However, as I have argued elsewhere (Michaelis 1993), the hot-news PrP can be regarded as a subvariety of resultative PrP.

still to be felt' (p. 539). A similar argument is made by Dinsmore (1991). While the existence of present consequences is certainly intrinsic to the resultative understanding, adduction of the resultative understanding does not always depend upon the availability of the relevant results at speech time. As McCawley (1981) has observed, the resultative reading may be operative under circumstances in which the reference time of the PrP-form predication is decoupled from speech time. For example, the PrP has a nondeictic (variable) reading in contexts like (22):

- (22) Whenever I've seen Madge, she has just had a fight with her boyfriend.

In the main clause of (22), a PrP-form assertion has a resultative understanding. This understanding is present despite the fact that the resultant state at issue (Madge is agitated or upset) does not necessarily obtain at speech time. Rather, the resultant state in question obtains at all (past) times characterized by the speaker's sighting of Madge. In Partee's terms (1991), the sentence involves co-binding of a time variable expressed by the subordinate clause: all times at which the speaker sees Madge are times at which an event of Madge's fighting with her boyfriend has occurred. Here, the reference time of the PrP, ordinarily equated with the present, is a variable time, ranging over values within a present-contiguous past period.

As I will argue below, the semantic representation of the resultative PrP includes a conventional implicatum: the resultant state of the event denoted obtains at speech time. Examples like (22) demonstrate that speech time need not provide the temporal frame of reference for which the resultant-state implicatum is evaluated. Examples like (22) are not problematic if one views the resultative understanding as a distinct reading on the semantic level. Such examples simply show that the resultative PrP has a property in common with many other deictic expressions: its 'contextual variable' need not be anchored by the speech scene: instead, it can be equated with a value or values outside the speech context (see Partee (1991) and Fillmore (1971) for a discussion of examples in which the context sensitivity of deictic expressions is 'closed off'). Examples like (22) are difficult to reconcile with an account like Klein's, in which interpreters compute a resultative understanding on the basis of their knowledge that a resultant state of the kind at issue currently exists. Sentence (22) demonstrates that the current presence of the relevant resultant state is not a necessary prerequisite for evocation of the resultative understanding.

There is another difficulty which weakens analyses like Klein's: the distinct PrP readings have distinct grammatical reflexes. In general, contextually computed meanings do not have grammatical ramifications, while conventional meanings may. Zwicky & Sadock (1975) argue that when distinct grammatical features (of a sufficiently idiosyncratic type) attach to distinct understandings of a given construction, the construction in question is

ambiguous rather than vague with respect to those understandings. One example examined by Zwicky & Sadock involves subordinate *wh*-clauses in sentences like (23), which is ambiguous between headless-relative and indirect-question readings:

- (23) I asked what (the hell) she had asked.

Zwicky & Sadock point out that the idiomatic expression *the hell*, placed after the *wh*-complementizer/relativizer, ensures that (23) receives an indirect-question reading rather than a headless-relative reading. Therefore, they argue, the construction exemplified in (23) is ambiguous rather than vague with respect to the two understandings, since an idiosyncratic (i.e. non semantically motivated) grammatical feature will generally attach only to a conventional (i.e. non context-dependent) understanding.

Vagueness analyses like Klein's fail to countenance grammatical facts of the sort to be explored here. It is difficult to imagine how one might reconcile the claim that the PrP is semantically unambiguous with the fact that, for example, the existential understanding is compatible with manner modification while the resultative understanding is not. Consider the following example:

- (24) (a) Our committee chair has (??angrily) tendered his resignation.  
 (b) Our committee chair has angrily tendered his resignation every time we have asked him to take a controversial stand on something.

These examples indicate that the existential-resultative distinction is a conventional one, since it has a grammatical reflex (i.e. a co-occurrence restriction) which is not predictable from the two meanings involved. The argument here is similar to Zwicky & Sadock's claim about (23). Admittedly, however, the fact that the distinct perfect understandings have distinct co-occurrence constraints does not necessarily obviate a vagueness analysis. The PrP readings in (6) can be regarded as products of the interaction between a vague PrP meaning (perhaps including 'current relevance') and the lexical specifications which 'fill in' the construction. Under this analysis, the distinct readings of the PrP arise via constructional accommodation. According to Bauer (1970) and Brinton (1988), these lexical fillers include adverbial meanings and the Aktionsart properties of the VP complement. According to Brinton (p. 45), 'Consideration of the interaction of the perfect with Aktionsart leads to a rejection of the idea that there are different "types" of perfects.' Brinton's argument is based on Bauer's account of contextual-modulation effects, which is summarized in (25):

- (25) (a) If the complement is atelic and the verb is accompanied by a time-span or durational adverb (*since three, for two hours, etc.*), the perfect is continuative.

- (b) In the absence of such adverbials, and occasionally in the presence of a frequency adverb like *twice*, the perfect is existential.
- (c) If the complement is telic, the perfect is resultative.

Despite the attractive simplicity of this solution, the ‘algorithm’ summarized in (25) is inadequate in many respects. In general, it is difficult to maintain an accommodation-style vagueness analysis in light of the fact that the PrP construction is characterized by TOKEN AMBIGUITY. Let us say that a construction exhibits token ambiguity if a set of understandings attributable to a grammatical template outside of any lexical context is also available when that template has been ‘filled in’ by lexical material. As an example of a construction exhibiting token ambiguity, let us take the *way*-construction, described by Jackendoff (1990) and Goldberg (1992b). Jackendoff points out that sentences like the following are ambiguous between ‘causative’ and ‘manner’ interpretations:

- (26) Marvin joked his way into the meeting.

This sentence can be taken to mean either that (a) Marvin convinced people to let him into the meeting by joking with them, or (b) Marvin made jokes as he walked into the meeting. In (26), we see that the *way*-construction, consisting of a verb, a possessive NP headed by *way* and a directional expression, is token ambiguous, since the lexical fillers (the head verb and directional expression) do not resolve the manner-causative ambiguity associated with the constructional ‘skeleton’. By contrast, constructions whose variegated interpretations derive from the modulating effects of linguistic context do not exhibit token ambiguity. Thus, for example, while the English ditransitive construction has a large array of interpretations (see Goldberg 1992a), a given instance of that construction is unambiguous. The construction can be said to express a vague meaning: it links the direct object function to the role of POTENTIAL RECIPIENT. Where the head verb is a transfer verb like *give*, the construction encodes actual transfer (*Harry gave Marge the book*). Where the head verb is nontransfer verb (e.g. *promise*) the construction encodes intended transfer (*Harry promised Marge the car*). The ditransitive valence-construction cannot be said to exhibit token ambiguity, as either the effected- or intended-transfer reading is unequivocally associated with a sentence instantiating that argument-structure construction; the lexical verb determines the relevant reading. If, however, the relevant linguistic context fails to resolve the vagueness otherwise associated with the semantics of the construction, as in (26), then we have evidence that an accommodation-based (equivalently, integration-based) analysis is not appropriate. In what follows, we will examine evidence that the conditions set out in (25) leave room for interpretive indeterminacy vis-à-vis PrP tokens, and that therefore the PrP is token ambiguous.

Firstly, the combination of durational adverbial and imperfective aspect does not entail a continuative understanding of the PrP-form expression. As Mittwoch (1988) observes, sentences like (27) are ambiguous with respect to continuative and existential interpretations:

(27) Harry has been in Bali for two days.

*continuative*: Harry's presence in Bali obtains for all times within a present-inclusive time span whose lower bound is two days ago.

*existential*: There were one or more visits to Bali by Harry within a present-inclusive time span; each of these visits lasted two days.

Sentence (27) demonstrates that the fulfillment of condition (25a) does not render the PrP-form sentence unambiguous. The factors described in (25a) are therefore not sufficient to impose the continuative reading. However, these factors are necessary conditions: the continuative PrP indicates the cessation at speech time of a bounded state. Therefore, the complement necessarily denotes an imperfective situation – one which is typically bounded by means of a durational or time-span adverb.

Secondly, condition (25b) is neither a necessary nor sufficient condition for evocation of the existential reading. This reading is commonly ascribed to perfect sentences containing TELIC complement-VPs. Consider sentence (28):

(28) I've cleaned the whole house (before).

As Mittwoch (1988) shows, the existential interpretation itself, when adduced, imposes an episodic reading on a stative VP-complement: the sentence *Harry has been in Bali* is interpreted as meaning 'Harry has visited Bali'. Therefore, the existential reading, far from requiring the presence of an atelic or stative VP-complement, is capable of imposing an eventive construal upon an otherwise imperfective complement denotatum. This fact suggests that the existential PrP is appropriately regarded as a grammatical construction, since it is apparent that the lexical verb ACCOMMODATES to the semantic structure associated with the morphosyntactic template.

Examples like (29) further demonstrate that condition (25c) is not sufficient to determine a resultative interpretation. Sentence (29) has a telic complement-VP and is nevertheless understood as an existential PrP. Is the presence of a telic participial complement a NECESSARY characteristic of PrP sentences having the resultative reading? Sentences like (29) can receive a resultative interpretation, despite the lack of a telic VP-complement:

(29) I've knocked.

Sentence (29) might be used by one party guest to another, as the two wait on the front porch of their host's home – the hearer has just arrived, while the speaker has been waiting for several minutes. Given the interlocutors' knowledge of hailing conventions, the sentence is used to convey a result of the following sort: we should now expect our host to be receiving us. There

may be other relevant results: the hearer need not knock herself. Notice that (29) in this context is not an existential perfect: (29) does not welcome time-span adverbials like *BEFORE* or frequency adverbials like *once*.

The indeterminate and context-dependent nature of the resultant state entailed by sentences like (29) has led McCoard (1978), among others, to reject the idea that a resultant-state implication is part of the message conventionally associated with the PrP form. How can a form be said to express the existence of a present result if the form does not necessarily provide a clue as to what that present result is? Those who pursue this line of argumentation overlook the following fact: the consequences of an event reported by means of the (resultative) PrP are necessarily computed relative to the setting in which the report is made. Accordingly, a resultative PrP sentence containing a telic participial VP may also be characterized as evoking an ‘indeterminate result’. Consider the following example:

(30) OK. I’ve washed your car.

While sentence (30) entails the presence of a clean car at speech time, it might also be used to negotiate further consequences of that resultant state (the hearer must now pay the speaker, etc.).<sup>5</sup> Examples like (30) lead us to the conclusion that the resultant state entailed by the RPC is contextually determined (see also Fenn 1987; Parsons 1990); the constructional semantics specify only that *SOME* resultant state obtains. Complement-verb telicity will occasionally enable the interpreter to adduce the relevant result, but, as shown by (29), that cue is not necessarily in evidence. In such cases, as we will see in the next section, the result in force at speech time is simply that situation which is potentially significant to the interlocutors in their joint determination of immediate goals. I will argue that where a present resultant state has no role in determining an imminent course of action, that state is a poor candidate for presentation via the RPC.

Analyses like Brinton’s do not therefore succeed in reducing PrP readings to the interaction of constructional and lexical semantics. They do, however, underscore the fact that the mere presence of co-occurrence restrictions uniquely associated with one or the other of the readings is a poor diagnostic for ambiguity. As Zwicky & Sadock (1975) argue, ambiguity claims based upon this type of diagnostic (which they refer to as the ‘added material’ test) fail when the distinct co-occurrence possibilities are semantically non-arbitrary, and the lexical material in question actually induces rather than reflects the distinct understandings at issue. The present analysis does not rest upon this unreliable ambiguity test. First, the diagnostics based upon pragmatic presupposition and event sequencing do not make reference to co-occurrence restrictions. Second, while manner and time adverbs do represent

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[5] Slobin (1990) describes the role of such negotiation contexts in the acquisition of the resultative PrP by children.

'added material', it is not immediately obvious how the presence of one or the other of these elements would induce an existential as against resultative reading. As I will demonstrate, the past-time adverbs accepted by the existential (e.g. *in June*) are themselves ambiguous between definite and indefinite readings. Since these adverbs are necessarily interpreted as indefinites in the context of the existential PrP, it appears that the existential reading determines the reading of the adverb, rather than vice versa.

Additionally, as McCawley (1971) points out, the claim of ambiguity is bolstered in this case by the identity test:<sup>6</sup>

(31) Harry and Marge have been fired.

Sentence (31) cannot be used to assert both that Harry was fired at some point within his employment history (existential reading) and that Marge is currently out of work as a result of having been fired (resultative reading). Another test which supports the ambiguity claim involves the cross-linguistic potential for the distinct readings to be manifested as distinct lexical items (cf. Zwicky & Sadock 1975). For example, Mandarin formally differentiates the resultative and existential readings: the resultative reading is expressed by the coverb *le*, the existential reading by the coverb *guo* (see Comrie 1976; Li *et al.* 1982).

#### 4. SEMANTIC STRUCTURES

##### 4.1. *Time-span perfects*

The continuative and existential readings of the PrP have the following common semantic property: both locate an episode (an event or state phase) with respect to a time span which includes the present. In the case of the existential PrP, one or more events of a given type are located WITHIN this time span; in the case of the continuative PrP, a state phase occupies the entire time span. Features of adverbial co-occurrence reflect the shared semantic structure. For example, both readings are compatible with *since*-adverbial expressions:

- (32) (a) Harry has been in Bali since Saturday.  
 (b) Harry has been in Bali twice since Saturday.

In both (32a) and (32b), the *since*-adverbial expression denotes the lower boundary of a time span whose upper boundary is speech time. Mittwoch

[6] Dinsmore (1991) notices examples like the following, in which the identity test yields a different result than it does in (30):

- (i) Harry has lived in France intermittently since the war and so has Jane, continuously. In this example, the conjunction of continuative and existential understandings does not result in zeugma. One wonders, however, whether the presence of the adverbial specifications (e.g. *intermittently*) licenses what would otherwise be a 'crossed reading'.



(1988: 207ff.) notices the following distinction between ‘universally’ and ‘existentially’ interpreted *since*-adverbial expression: in the existential reading of the sentence Sam has been in Boston since Tuesday, ‘Tuesday is excluded from the range of possible intervals of Sam’s being in Boston that are covered by the sentence’. That is, episodes fall between the temporal poles represented by upper- and lower-bounding temporal specifications; states extend through those poles (and perhaps beyond them). I will presume, in accordance with Mittwoch, that the *since*-adverbial construction is polysemous, having both universal and existential readings. These readings are related by virtue of the fact that both express a time span whose lower and upper boundaries are anchored by event and reference times, respectively.

Durational adverbs (e.g. *for two hours*) overlap functionally with *since*-adverbial expressions: durational adverbs may also specify the length of a state phase which obtains through to the present time. In this capacity, durational adverbs co-occur with the continuative PrP. Consider the following examples:

- (33) (a) Myron has been upset for an hour.  
 (b) Myron has been upset since three.

As shown in (33), durational adverbs differ from *since*-adverbial expressions in that the former denote an expanse of time occupied by a state phase, while the latter denote only the lower boundary of that expanse – the upper boundary being fixed by reference time (i.e. speech time in the case of (33b)). Therefore, (33b) is synonymous with (33a) only if the former is uttered at four o’clock. *Since*-adverbial expressions like that in (33b) require that an unspecified upper boundary be fixed by a reference time distinct from the time of inception of the denoted state phase (this reference time is the present in the case of the PrP). Durational adverbs, which refer to a temporal expanse rather than a temporal boundary, do not have this requirement. Therefore, durational adverbs are compatible not only with the continuative PrP but also the preterite:

- (34) Myron sat on the porch for an hour.

Durational adverbs are not polysemous in the way that *since*-adverbials are. While durational adverbs specify the length of time occupied by a state phase, they do not have an ‘existential reading’, in which some number of events are located within the period denoted. Therefore, sentences like the following are anomalous:

- (35) \*Larry has visited us twice for the last three years.

In (35), the three-year period must be denoted by an *in*-headed expression of temporal extent. While *for*-headed durational adverbs do not have an existential reading like the comparable reading of *since*-adverbials, they can

co-occur with the existential PrP. As we saw in the previous section, sentences like (27) are ambiguous between continuative and existential readings. Sentence (27) is repeated below, along with the relevant readings:

(27) Harry has been in Bali for two days.

*continuative*: Harry's presence in Bali obtains for all times within a present-inclusive time span whose lower bound is two days ago.

*existential*: There were one or more visits to Bali by Harry within a present-inclusive time span; each of these visits lasted two days.

Dowty (1979), Richards (1982) and Mittwoch (1988) argue that the ambiguity exemplified in (27) involves the relative scopes of *Have* (the perfect operator) and the durational adverb. Richards represents this scope ambiguity in the following way:

- (36) (a) existential: PRES ( $w, i$ ) [Have [for two days (Harry be in Bali)]]  
 (b) continuative: PRES (( $w, i$ ) [for two days [Have (Harry be in Bali)]])

Evidence for this scope ambiguity is provided by the fact that when the durational adverb is preposed, (27) has only the continuative reading (*For two days, Harry has been in Bali*). The preposing is here said to reflect the wide scope of the durational with respect to the perfect operator. However, Heny (1982) argues that the scope assignment given in (36b) is not plausible. His argument is based on the truth conditions which he assigns to the perfect, which require that the base sentence be true at a NONFINAL subinterval of the interval for which the perfect sentence itself is evaluated. If the overall interval is a present-inclusive past period, the base sentence (*Harry be- in Bali*) must be true at some time prior to now. In the case of (35b), 'now' is a two-year interval, and each subinterval of that period is an evaluation time. As a consequence, at each subinterval of the two-year period, the proposition *Have (Harry be- in Bali)* must be true at some nonfinal subinterval.

Heny points out, however, that there are moments (singletons) among the subintervals of the interval denoted by a durational adverb, and a singleton cannot be said to have a nonfinal subinterval. Mittwoch argues that one can overcome this objection by dropping Heny's 'nonfinal' condition from the truth conditions for the perfect. Nevertheless, there remains a cogent argument against the scoping given in (36b): durationally bound state-propositions (in this case, *for two days [Have [Harry be in Bali]]*) cannot, as required here, be evaluated for the present moment. Bounded-state propositions like *Moe be- in the basement for an hour* are like event predications in that they lack the subinterval property: no subinterval of Harry's being in the basement for ten minutes is an instance of that whole episode. Since speech time is conceived of as an instant by convention, and since events (including state-phase events) are not instantiated at any single moment of the interval in which they occur, to assert the existence of an event is to report its culmination. Therefore, in English, neither event predications

nor bounded-state predications are amenable to present-tense reporting, e.g. \**Harry is ill for two days*.

The scope assignment in (36b) requires that the interpreter evaluate the truth of a tenseless state-phase proposition (*Have [Harry be in Bali]*) for speech time. However, as we saw above, speech time is a moment, and an event proposition cannot be said to be true at a single moment alone. Therefore, (36b) is ill formed. It should be noted that Mittwoch's analysis does not fall prey to the objection just made. Mittwoch does maintain that the continuative involves a durational adverb having wide scope with respect to the perfect operator; however, she gives truth conditions for the continuative perfect that would require that (27), on the continuative reading, be evaluated at the end of Harry's stay in Bali. This endpoint is the present time. Given this type of analysis, however, I see no need to recognize a wide scoping of the durational vis-à-vis the perfect operator. Instead, the continuative can be assigned the same scoping as the existential, in which the duration adverb has narrow scope with respect to the perfect operator. The ambiguity exemplified in (27) will then reside in the distinct semantic representations accorded the two perfect types: the existential indicates the existence of one or more events (e.g. state-phase events) within a present-contiguous time span; the continuative indicates the cessation at speech time of a phase of a state.

A logical representation for the continuative PrP, loosely based upon Parsons' (1990) formalism, is given in (37):<sup>7</sup>

- (37)  $\exists!e: [\text{State-phase}(t)]' (e) \exists!t': \text{Culminate}(e, t') \ \& \ 't' \text{ is immediately prior to now}$ <sup>8</sup>

This representation states that there is a unique event which represents a state phase, that this state holds for an interval *t*, and that the event

[7] The features of Parsons' analysis that are preserved are: quantification over events and times and use of the operator *Culminate* to assign an event an endpoint. It should be noted that Parsons does not use the operator *Culminate* to describe the perfect, since for him the current presence of a result state (denoted by the specification 'e's result-state holds now') entails culmination of the event. Since I hold that not all perfect readings involve a present result state, I cannot rely upon the presence of a present result-state specification to secure culmination of the event in question.

[8] Notice that this formulation does not require the presence of an adverbial phrase headed by *since* or *for*. While state-phase predications are usually accompanied by an adverbial specifying the duration of the phase, they need not be. Herweg (1991b) points to the possibility of 'implicit bounding' in examples like (i):

- (ii) Sue was upset with me twice last week.

This sentence denotes two phases of the 'upset state', as indicated by the presence of a cardinal count adverbial (*twice*), otherwise compatible only with event predications (cf. Herweg 1991a, b). By the same token, continuative perfect sentences may denote a state phase in the absence of a durational adverb. Note B's response in the following example:

- (ii) A: Why haven't you been around?  
B: I've been ill.

culminates at  $t'$ . The state-phase situation type is equivalent to the **POFECTIVE EVENT TYPE** recognized by Herweg (1991). The statement in single quotes is meant to represent a conventional implicature: the time at which the state phase ends (i.e., the time at which the corresponding 'pofective event' culminates) is a time 'just before' speech time. Notice that (37) presupposes the definition of **STATE PHASE**: 'a period  $t$  is a phase of state  $S$  just in case  $S$  holds at  $t$  and  $t$  is not properly included in a period  $t'$  at which  $S$  holds as well' (Herweg 1991: 992). This definition is problematic, since state-phase predicates accompanied by a durational expression are upward compatible. For example, the sentence *Harry was sick for at least a week* implies that the period during which Harry was ill in fact exceeded a week's time.

Herweg's definition of state phase entails that the state cannot obtain for times other than those for which it is asserted to obtain. However, we know that speakers may highlight phases of a state that are in fact properly included within some larger period during which that state holds as well. Accordingly, let us adopt the following revised definition of **STATE PHASE**: 'a state phase is a period during which a state holds, where any period properly including that period is outside the speaker's immediate focus of attention'. The revised definition gives us a better result when we attempt to describe sentences like the following:

(38) Paul's been living in Boulder since at least 1989.

In the case of (38), we must account for the speaker's intuition that the state of Paul's living in Boulder will probably continue past now, and may have obtained prior to 1989. Given the revised definition of state phase, we can say that a person choosing to utter (38) is directing his or her attention to a single period at which a state holds, while disregarding times outside that period at which the state may hold as well.

While (37) presupposes the definition of state phase, the definition of state phase in turn presupposes the definition of state, which in most formal models involves universal quantification: 'if  $S$  is a state which holds at time  $t$ , all subintervals of  $t$  are also times at which  $S$  holds as well'. Accordingly, McCawley (1971, 1981), refers to the continuative PrP as the 'universal perfect'. The continuative PrP is said to indicate that all times within a present-inclusive interval are times at which the denotatum of the VP complement holds. McCawley's definition provides a clear explanation for the fact that the existential and continuative PrPs are synonymous under negation. Consider sentence (39):

(39) Nobody has told me the truth.

Sentence (39) has the following equivalent readings: (a) universal: for all times within some present-inclusive time span, the base sentence *nobody tell-me the truth* holds, and (b) existential: there are no times within a present-

inclusive time-span such that the base sentence *someone tell me the truth* holds.

I will represent the semantic structure of the existential as in (40):

- (40)  $\exists e$ : Event (e)  $\exists t$ :  $t < \text{now}$  Culminate (e, t) & ‘the event type is one which is replicable at the present moment’

In (40), the existential quantifier binding event and time variables allows for multiple instantiations of a given event. As a consequence, this formula does not evoke a unique time of occurrence. The temporal variable is simply restricted to times prior to now, although a lower-boundary specifier like *since noon* may further restrict the range. All events must instantiate an event type which fulfils the ‘present-possibility’ requirement. McCawley (1981: 82) describes the requirement as follows: ‘the speaker and addressee’s shared knowledge does not rule out the continued occurrence of events of the kind in question’. This requirement is represented here by the material in single quotes; it is viewed as a conventional implicature. McCawley demonstrates the existence of this constraint by means of examples like (41):

- (41) (a) Have you seen the Monet exhibition?  
 (b) Did you see the Monet exhibition?

McCawley observes that (41a) is appropriate only given a situation in which an event of exhibition-visiting by the addressee is still possible. That is, the exhibition is still open and the addressee is capable of viewing it before it closes. If the exhibition is closed or the addressee is not in a position to see it, only the preterite-form question (41b) is appropriate.

The acceptability of a given instance of the existential PrP will depend upon the extent to which interlocutors can construe the event denoted as one which can still occur. Often, this construal requires some work. McCawley (1971) points out that the widely discussed sentence (42) is a priori anomalous on an existential reading:

- (42) Einstein has visited Princeton.

Sentence (42) is odd, since Einstein is deceased and thereby no longer capable of visiting any institution. If, however, one construes the event category at issue as containing events of ‘Princeton-visiting by a luminary’, the sentence is acceptable. This reading is aided by the presence of narrow-focus accent on the subject:

- (43) How can you say that Princeton is a cultural backwater?] EINSTEIN has visited Princeton.

The narrow-focus accent evokes the existence of an open proposition ‘x has visited Princeton’, such that Einstein, as well as living individuals representing current potential visitors, are arguments of this propositional function. This then illustrates that the formal object which corresponds to

the event type can be either a full proposition (the addressee visits the Monet exhibit) or a propositional function containing an argument variable whose range is restricted to certain entities (e.g. famous academics). Below we will encounter evidence which suggests that the present-possibility constraint is reflected in co-occurrence possibilities for temporal adverbs – possibilities which characterize the existential as against resultative PrP.

We noticed above that the existential PrP co-occurs with cardinal count adverbs like *twice*, which specify the number of instantiations of the event type denoted by the participial VP. Another class of frequency adverbs welcomed by the existential PrP are ordinal count adverbs. Consider the following sentences:

- (44) (a) This is the first time that Mel has ever eaten sushi.  
 (b) This is the second time that Mel has (\*ever) eaten sushi.

Sentence (44a) specifies that there was one instance of Mel's eating sushi within a present-inclusive time span. The adverb *ever* indicates that the time span lacks a lower boundary – an unlimited array of past times is under consideration. Sentence (44b) shows that, in a PrP context, *ever* is incompatible with ordinals greater than one. Why should this be? W. Ladusaw (pers. comm.) suggests that the time-span at issue in sentences like (44b) has an implicit lower boundary: the time of the FIRST sushi-eating event. Therefore, (44b) does not refer to an unlimited range of past times, and *ever* is not acceptable.

#### 4.2. *The resultative perfect*

McCawley (1981) and Mittwoch (1988) have suggested that the PrP has two basic readings: continuative and existential. While Mittwoch does not consider the possibility of a resultative reading, this possibility is explicitly rejected by McCawley. Abandoning his earlier claim that the PrP is three-ways ambiguous, McCawley argues that the resultative understanding 'should be treated as an existential present-perfect accompanied by an implicature (whether conversational or conventional I do not know) that the event type that is referred to would normally result in the present state of affairs that the speaker conveys is the case' (1981: 84). Under this view, a sentence like (45) is merely an existential PrP accompanied by an implicatum to the effect that a past event of Harry's moving away would ordinarily result in his current absence from the neighborhood:

- (45) Harry has moved out of the neighborhood.

McCawley reduces the resultative to an existential reading because the resultative reading fails to pass the logical 'contradictory test'. That is, the negative version of a PrP sentence bearing the resultative reading does not express the contradictory of the affirmative version. McCawley (1971)

defined the resultative reading as indicating that the ‘direct effect of a past event still continues’ (1981: 81). Given this analysis of the resultative reading, we arrive at an odd result concerning negative resultative sentences like (46):

(46) I haven’t broken my arm.

McCawley argues that under his earlier analysis of the resultative, (46) could be used to assert that an arm once broken is now healed (i.e. that the direct effect of a past event does NOT continue). This is not, however, a possible reading of (46). Sentence (46) simply indicates that there was no event of arm breaking within the relevant interval; it is therefore an existential PrP. McCawley’s argument to the contrary notwithstanding, I will give the resultative and existential readings distinct semantic representations. In what follows I will show that McCawley’s observation about (46) can be explained without discarding the assumption that the resultative reading is a distinct reading on the semantic level. I will represent the resultative reading as follows:

(47)  $\exists!e: \text{Event } (e) \exists!t: t < \text{now Culminate } (e, t) \ \& \ \text{‘}e\text{’s results state holds now}$ .

In (47), an event is an existentially bound variable described by a predicate indicating the event type. As indicated by the  $\exists!$  scoping events and times, there is only one event-time pairing prior to now. The operator *Culminate* pairs the event with its time of culmination. The material enclosed in single quotes represents a conventional implicature; as such, it cannot be cancelled. Consider the contrast in (48a, b):

(48) (a) I put your shoes in the closet, but they’re not there now.  
 (b) I have put your shoes in the closet, \*but they’re not there now.

Both sentences assert that the speaker placed the shoes in a particular location, and implicate that the shoes now reside in that location. In the case of (48a), however, the resultant-state implication is akin to a generalized quantity-based implicature: the assertion is relevant and/or informative only insofar as the event described has some present consequences. While the resultant-state implication attached to the preterite-form assertion is DEFEASIBLE (Levinson 1983), that attached to a present-perfect form assertion is not.

The existential and continuative PrPs can have resultant-state implications like that linked to the preterite in (49a):

(49) (a) I’ve read *De Oratore* three times (so I can explain it to you).  
 (b) I’ve been ill (so I haven’t gotten around to it).

The resultant-state implications attached to (49a, b) are evoked by a hearer attempting to discern the relevance of the PrP-form assertion. The

sentences in (49) can be regarded as instances in which two PrP readings are mutually compatible (see Norvig 1988). For example, (49a) has both existential and resultative readings: three reading events have occurred and, as a consequence, the reader now has knowledge of the text in question.

As noted earlier, the result state whose existence is conventionally implicated by the RPC is not necessarily determined by the linguistic context. The present result which the speaker wishes to call attention to is not always akin to the outcome coded by a telic VP-complement. Sentence (29), repeated below, illustrates that resultant states can be computed for PrP sentences which contain atelic VP-complements:

(29) I have knocked (so someone should be coming, etc.).

In general, the interpreter of an RPC construct must compute the relevant result on the basis of extralinguistic and linguistic cues (e.g. the outcome, if any, entailed by the Aktionsart of the participial complement) Only lexically encoded end-states will be subject to the defeasibility test applied (48).

McCawley's contradictory test demonstrates that when one negates a resultative PrP, one is negating only the existential assertion that the denoted event occurred. This fact, however, need not be taken as indicating that the resultative reading is reducible to the existential reading. One can instead presume that the resultative interpretation attaches to affirmative sentences only. This constraint has an obvious semantic motivation. In negating the sentence *I have broken my arm*, one necessarily denies the existential assertion. This in turn removes the possibility that the resultant-state implicatum can be satisfied; the resultant state could not possibly obtain, as the requisite causal event did not occur.

The resultant-state implicatum incorporates a pragmatic variable: it can be viewed as a directive to the interpreter to find in the context, linguistic or extralinguistic, a method of relating the past event denoted to some feature of the present situation characterizable as a consequence of that event. As Li *et al* (1981) observe with respect to the Mandarin perfect marker *le*, the presentation of a present result often represents a demand for action (including a verbal response) from the hearer. Consider, for example, the following sentence:

(50) My car has been stolen.

In (50), the absence of the car is evoked as potential catalyst for future action (e.g. phoning the police). The resultant state is that situation which determines what happens next (Slobin 1990). That is, the resultant state inferred by the hearer on the basis of the PrP-form assertion is not only the current absence of the car, but also the fact that something must be done about the absence of the car. Since some resultant states represent situations requiring immediate resolution, the felicity of the resultative PrP will often depend upon recency of the participial-VP denotatum vis-à-vis speech time.



Notice that (5) would not be an appropriate response to a questioner seeking to know, a week or so after the theft, why the speaker is driving a rental car. The resultant state arising from an event may last indefinitely, but represent a temporary situation from the point of view of ‘crisis management’: the resultant state (qua actionable situation) will cease once the interlocutors have determined a strategy for reckoning with the consequent crisis, although the situation which precipitated that crisis (e.g. the absence of the car) may not cease.

## 5. GRAMMATICAL REFLEXES OF EXISTENTIAL-RESULTATIVE AMBIGUITY

As mentioned, the existential and resultative PrP differ in that the RPC (a) cannot refer to a pragmatically presupposed event in, e.g. a content question or cleft (b) rejects temporal modification of event time (c) rejects participial complements denoting event complexes, and (d) does not welcome manner modification of the VP-complement. Let us examine each of these constraints in turn.

### 5.1. *Pragmatic presupposition*

According to Lambrecht (1991: 1), the pragmatically presupposed component of an assertion is ‘[t]he set of propositions lexico-grammatically evoked in a sentence which the speaker assumes the hearer already knows or believes or is ready to take for granted at the time of the utterance’. For example, in a sentence like *It was Harry who borrowed the rake*, an event proposition *Someone borrowed the rake* is pragmatically presupposed. A convenient shorthand to be employed here allows us to refer to the cleft sentence as pragmatically presupposing an EVENT, rather than an EVENT PROPOSITION.

In their anaphoric capacity, past-tense sentences serve to elaborate upon circumstances surrounding a pragmatically presupposed event, i.e. an event previously asserted relative to the reference time in question. An example of the ‘elaboration mode’ is provided by the second and third sentences of the narrative in (51):

- (51) Hayward police have arrested the prime suspect in last week’s string of laundromat robberies. Two off-duty officers confronted the suspect as he left a local 7-11. A back-up unit was called in to assist in the arrest.

Following Kamp & Rohrer (1983: 261), we can observe that the second and third sentences in (51) ‘are naturally understood as constitutive of, and thus as temporally included in, the event introduced by’ the first sentence. The first sentence, a resultative PrP, is used to inform hearers of the

occurrence of the arrest. Subsequent sentences, pragmatically presupposing that event, provide further details about it. The resultative PrP cannot have other than an event-reporting function in narratives like (51). Notice the oddity of (52) (where # indicates anomaly on the RPC reading):

- (52) Hayward police have arrested the prime suspect in last week's string of laundromat robberies. #Two off-duty officers have confronted the suspect as he left a local 7-11. #A back-up unit has been called in to assist in the arrest.

The anomaly of (52) can be attributed to the restriction stated in (53):

- (53) The RPC cannot be used to further describe ('elaborate upon') a pragmatically presupposed event.

Both Comrie (1976) and Dinsmore (1981) have proposed versions of (53), although both authors fail to recognize, as we will recognize, that this constraint attaches to the RPC rather than to the PrP per se. One can see further manifestations of (53) in (54) and (55):

- (54) I can't come tonight. I've broken my ankle in a skiing accident.  
 (55) A: My God! Look at that cast!  
 B: #I've broken my ankle in a skiing accident.

In (54), the speaker is both establishing the occurrence of an event (of ankle breaking) and simultaneously providing some information about that event (it occurred during skiing). In (55), by contrast, speaker B is responding to an utterance which licenses the assumption that the recent occurrence of a fracture is knowledge common to the interlocutors. The response, therefore, provides further information about that pragmatically presupposed event. As such, it cannot appear in PrP form.

There are certain grammatical constructions dedicated to providing or requesting additional information about a pragmatically presupposed state of affairs. Among these constructions are clefts, as noted, and *wh*-questions.<sup>9</sup>

[9] The RPC is not necessarily incompatible with *wh*-questions requesting information about circumstances surrounding the event denoted by the VP-complement. In particular, we find that *wh*-questions like the following are acceptable:

- (i) Who has made this terrible mess?

Here, the *wh*-question is used to request the identity of the agent responsible for the past action denoted, presumably presupposing the open proposition *x made this terrible mess*. Exceptions like (i) may be attributable to a general property of *wh*-questions: such questions may require that the addressee accommodate to the relevant presupposition, rather than necessarily exploiting shared knowledge of that presuppositional material. Lambrecht (1994), for example, cites cases like the following:

- (ii) Who wants a cookie?

The speaker of (ii) cannot be said to be accessing the presupposition that someone in fact wants a cookie; the question in some sense simply induces the hearer or hearers to behave 'as if' this

As predicted, neither construction type readily accepts the RPC, as shown in (56) and (57):

(56) Don't thank ME. #It's HARRY who's selected the wine.

(57) #Where have you found my watch?

With specific classes of predicates, nominal definiteness and pronominal anaphora will evoke a pragmatically presupposed event; the RPC will accordingly be proscribed. As Dinsmore points out (1981) one such class of predicates are verbs of creation. When the direct object denotes a unique created item, a PrP denoting an event of creation has a resultative rather than existential interpretation, since a given act of creation is not replicable. An NP invoking an existential presupposition will, when serving as the object of a verb of creation, require pragmatic presupposition of the creation event. Notice the contrast between (58) and (59):

(58) Look! Myron's painted a little picture.

(59) #Myron's painted the little picture/it.

In (58), the existence of the picture is not presupposed, and therefore the painting event is not presupposed. The PrP can therefore be used to denote the creation event. In (59), by contrast, the occurrence of the painting event is established as known to the interlocutors via the existential presupposition linked to the definite or pronominal NP. Sentence (59) has the effect of providing further information about a pragmatically presupposed event; the sentence tells us the identity of the painter. The PrP is thereby unavailable in (59).

Similar effects are observable among verbs of transfer, where a linguistically uninstantiated recipient role is filled by the speaker. When the theme argument of such a verb is coded by a definite or pronominal NP, this signals that the coded entity is IDENTIFIABLE. Recall that an identifiable entity is 'one for which a shared representation already exists in the speaker's and hearer's mind at the time of the utterance' (Lambrecht, 1994). With respect to an item transferred toward the interlocutors, identifiability stems from the availability of that item to the recipients, i.e. its placement at the deictic center. Availability in turn entails that the occurrence of the transfer event is pragmatically presupposed. Use of the PrP is accordingly ruled out in such contexts.. Consider (60) and (61):

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proposition were shared knowledge. Similarly, in the case of (i), the knowledge that someone made this particular terrible mess (and that there is in fact such a mess) cannot be said to be shared by speaker and addressee. The utterer of (i) is in fact directing the attention of the addressee to a mess that has not previously come under discussion. In cases in which the event proposition is necessarily shared knowledge, questions about agent identity cannot be expressed by means of the RPC:

(iii) #Who has done your hair?

(60) How touching. The Millers have sent a fruitcake.

(61) #The Millers have sent the fruitcake/it.

In (61), as against (60), the identifiable nature of the theme argument (the fruitcake) evokes a mutual understanding that a transfer event – one responsible for the accessibility of the theme – has occurred.<sup>10</sup> The PrP is ruled out, owing to the fact that (61) provides additional information about a pragmatically presupposed transfer event: it identifies the senders.

The restriction given in (53) does not rule out sentences like (62). This sentence is contrasted with sentence (57), repeated here as (63):

(62) Where have you hidden my watch?

(63) #Where have you found my watch? (= (57))

As we saw, (63) is anomalous because it requests additional information about a pragmatically presupposed finding event. Why is the PrP acceptable in (62)? In uttering (62), the speaker is seeking further information about the resultant state of the hiding event, i.e., where the hidden entity resides. In (63), by contrast, the location query concerns the past event alone: the discovery site is not construed as the location where the found entity resides at present. *Wh*-questions like (62) are acceptable because they are construed as requests for information about circumstances surrounding the resultant state rather than the prior event.

Example (64) demonstrates that the constraint given in (53) does not characterize the existential PrP:

(64) Where have the police arrested the suspect?

Sentence (64) is ruled out on a resultative reading; the sentence cannot be used to inquire about the place of arrest of a suspect now in custody. This sentence is, however, rendered acceptable when an existential reading is invoked: the speaker seeks to locate an array of events in which a particular suspect was arrested. Under this reading, an appropriate response to (64) might be: *He has been arrested in Berkeley, in Walnut Creek, etc.* Given that (64) is nonanomalous when construed existentially, we are led to conclude that the constraint stated in (53) is associated exclusively with the resultative PrP.

This constraint does not appear to be an arbitrary one when we assume that the RPC cannot express anaphoric temporal reference. The non-anaphoric nature of the resultative PrP is shown by the fact that it cannot be used to invoke an extralinguistic temporal antecedent. In section 2, we

[10] The reader is asked to ignore a reading of (61) in which the NP *the fruitcake* has a type reading. Since the article in this case would be a generic article, rather than one indicating a uniquely identifiable referent, (61) would not presuppose the transfer of the theme to the deictic center. Instead, given a type reading of the NP *the fruitcake*, we would be inclined to see (61) as an event-reporting sentence.

noticed that the preterite – when operating in an anaphoric capacity – may evoke an extralinguistic temporal antecedent. For example, the preterite-form assertion in (65) evokes the time of the discourse contribution immediately prior:

(65) I didn't hear. I had the water running.

The extralinguistic antecedent may be the time of an event whose occurrence in the text-external world is thought to be salient:

(66) Did you see that huge wasp fly by?

In (66), the time evoked by the preterite-form question is not that of a recent discourse contribution, but rather the time of an event which is presumed salient within the shared past experience of the interlocutors. Notice that the RPC is unavailable in the contexts described:

(67) (a) #I haven't heard. I had the water running.

(b) #Have you seen that huge wasp fly by?

Both (67a) and (67b) have potential nonresultative interpretations. In (67a), the PrP-form assertion is likely to be interpreted as a continuative PrP: the addressee's last discourse contribution is framed as a state phase whose duration is included within the period during which the water was running. In this case, the PrP-form assertion can be paraphrased in the following way: *I haven't heard what you've been saying for the past few minutes*. That is, all times at which the addressee was speaking are times at which the water was running. This interpretation is unavailable in a context in which the addressee's inaudible contribution was, say, a monosyllabic response to a yes-no question previously posed by the speaker.

In (67b), the PrP-form assertion has a possible existential reading, in which the speaker presupposes that the wasp is a regular visitor, and that one or more sightings have already occurred. In this case, the relevant reading is evoked by the presence of *yet* or *before*. These examples, along with example (64), demonstrate that (53) does not characterize the PrP per se. This constraint is a parochial restriction associated with the RPC.

Although (53) has a discourse-pragmatic motivation, viz. the anaphoricity contrast between the RPC and preterite, (53) would not be predictable solely from knowledge of this contrast. Sentences like (62) show that reference to a pragmatically presupposed event is in fact permitted in content questions which seek further information about present resultant states. Furthermore, knowledge of the anaphoricity contrast would not enable the learner to infer apparently inexplicable exceptions to constraint (53). One exception involves *why*-questions. Consider the contrast between (68) and (69) (noticed by C. Fillmore, p.c.):

(68) Why have you signed your name in red ink?

(69) ?What have you signed your name in red ink for?

It is difficult to understand, a priori, why the question in (68) should welcome the RPC, while the apparently synonymous question (69) does not. constraint (53) has exceptions which must be learned; the particulars of (53) cannot therefore be predicted from the anaphoricity restriction upon the RPC exemplified in (67). Nevertheless, the fact that the RPC is marked as [–anaphoric] provides a reasonable ‘after the fact’ explanation for the existence of (53): although not all anaphoric past-time reference involves event elaboration, all instances of ‘event elaboration’ involve anaphoric past-time reference.

## 5.2. *Time adverbs*

While sentences like (70a) are unacceptable, sentences like (70b) are possible:

- (70) (a) \*Harry has visited Rome in 1970.  
 (b) Harry has arrived on Tuesday (before).

Heny (1982) argues that the type of adverb exemplified in (70b) ‘has instead of a specific referential significance, which picks out some definite time in the past, a quantificational interpretation’ (p. 151). Heny’s analysis of (70b) is somewhat elliptical, but we can presume that by ‘quantificational interpretation’ he means an interpretation that is coherent with the semantics of the existential PrP – existential quantification over events and associated times within a present-inclusive time span. As Klein points out (1992: 549), adverbs having this interpretation do not ‘fix a single time span’ in sentences like (70b). Called ‘indefinite time adverbials’<sup>11</sup> by Heny, these adverbs denote a calendrical time that is not unique, but recurs at regular intervals: *June, three o’clock, Winter*. The adverbial refers not to a token of the calendar time but to the type. Thus, the adverbials of (70b) might be realized as nonspecific indefinite NPs – *on a Tuesday*, etc.

‘Cyclic’ time adverbials contribute to the characterization of an event type that can recur at present. For example, presuming that Harry is still alive, etc., the event of Harry’s arriving on Tuesday can be duplicated on the specified day of the week in which (70b) is uttered. Since speech time is the time for which one presumes that replication of the event is possible, speech time must be an interval that is large enough to accommodate any token of the cyclic time specified. In (70b), for example, this interval is equated with the current week; the time at which Harry’s arrival can be repeated is the

[11] The term ‘indefinite time adverbial’ is somewhat misleading, in that the adverbial class discussed here does not include a number of other adverbs commonly regarded as ‘indefinite’: *recently, before, in the past year*. These adverbs, as McCawley (1971) argues, serve to restrict the range of the existentially bound time variable in the case of the existential perfect. Further restriction may be provided by a cyclic adverb. Hence, in *Your TV show has gone on on Tuesday for the past year*, the latter adverb confines times within the range to those within the present year; the cyclic adverb further restricts the airing times to those belonging to the set of ‘Tuesdays’.

Tuesday of this week. Following Parsons (1990), we may represent cyclic adverbs within the logical representation (40) by including a clause specifying that all times bound by the existential quantifier belong to a set of ‘Tuesdays’, ‘Noons’, etc.

Adverbials like *on Tuesday*, which necessarily have a cyclic or indefinite reading when combined with the PrP,<sup>12</sup> are ambiguous in other contexts. In (71), for example, the adverb may be interpreted as coding a definite or indefinite time:

(71) The health inspector comes in on Tuesday.

The present-tense predication in (71) is ambiguous between a futurate-present interpretation and a habitual interpretation. On the futurate-present reading, the adverbial *on Tuesday* refers to a definite interval located in the future. On the habitual reading, *on Tuesday* refers to a cyclic time, tokens of which recur regularly. In sentences like (70b), *on Tuesday* is unambiguous – only the cyclic interpretation coheres with the semantics of the existential PrP. Therefore, the mere presence of a past-time adverb like *on Tuesday* cannot be regarded as inducing or creating an existential reading of an otherwise vague PrP construct. Such adverbs merely have the potential for an indefinite reading – a potential exploited by the interpreter in reconciling the semantic contributions of PrP construction and time adverb. In the case of the RPC, no such reconciliation is possible – a time adverb like *at noon* can have neither a definite nor an indefinite interpretation. An indefinite reading is not possible because the resultative denotes a unique, nonreplicable past event. A definite reading is proscribed, owing to a constraint which we saw earlier to be idiosyncratic: the time of the event in question cannot be specified. Thus, sentence (72) has an existential reading, but not a resultative reading:

(72) Harry has walked the dog at noon.

Sentence (72) can be used to assert that there have been one or more noontime dog-walking events by Harry within some undefined interval contiguous with the present. On this reading, the sentence conventionally

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[12] Klein (1992: 549), points out an instance in which an adverbial having the potential for a cyclic interpretation fails to have this interpretation when combined with the perfect. Consider (i) and (ii):

- (i) Chris has been in New York at Christmas (before).
- (ii) \*At Christmas, Chris has been in New York.

(Klein incorrectly stars (i), taking *at Christmas* as necessarily definite.) The anomaly of (ii) can be attributed to the wide scope of the time adverbial signaled by its preposed position. The scope in question can be represented in the following fashion: *at Christmas (Pres(Perf(Chris be in New York)))*. The operator *Perf* derives a state proposition, which, as shown, must be evaluated for the present moment. This present evaluation time clashes, however, with the past time reference coded by *at Christmas*. Since this adverbial is necessarily within the scope of *Perf* in (i), that sentence is readily interpretable as an existential perfect containing a cyclic past-time adverb.

implicates that this event can still occur. Sentence (72) cannot, however, be used at two or three in the afternoon to assert the present existence of a walked dog, panting or enervated as a result of having been exercised by Harry at noon that day.

The RPC-based constraint against specification of event time is amenable to a post hoc semantico-pragmatic explanation. Since the RPC is [–anaphoric] it cannot be used to ‘corefer’ with an adverbial antecedent’; the RPC cannot usurp the anaphoric function of the preterite. However, the constraint barring a resultative reading of (72) appears to be an idiosyncratic one. As noticed by Binnick (1991) and Comrie (1976), among others, this constraint is unique to the English RPC. Comrie observes (p. 54):

It is not clear that the mutual exclusiveness of the perfect and specification of the time of a situation is a necessary state of affairs in a language. In Spanish, for instance, where the Perfect does have specifically perfect [sc. resultative] meaning, it is still possible to specify exactly the time of the past situation, as in *me ha levantado a las cinco* ‘I have gotten up at five o’clock’ (in reply to a question why I am looking so tired).

While learners might deduce a discourse-functional foundation for the time-specification constraint, that constraint is not a necessary or predictable concomitant of resultative-PrP semantics.

### 5.3. *Event serialization*

The RPC cannot be used to assert the occurrence of an event sequence. Consider sentences (73a, b):

- (73) (a) I have cleaned the house and fed the dog.  
 (b) I have (??now) cleaned the house and then fed the dog.  
 (c) *Have* ([I clean the house] and then [I feed the dog])  
 (d) [*Have* (I clean the house)] and [*have* (I feed the dog)]

Sentence (73a) is ambiguous between existential and resultative readings. The former reading is brought out by the presence of *before*; the latter reading is evoked by the presence of *now*.<sup>13</sup> Owing to the presence of the conjunction *and then*, sentence (73b) has only the existential reading, which is incompatible with *now* in this context. The conjunction *and then* must be interpreted as conjoining the predications denoted by the participial complements: *I clean- the house* and *I feed- the dog*. The interpretation in question is represented in (73c). Here, the past event denoted by the conjoined participles represents an event sequence. Accordingly, sentence

[13] The use of *now* as a method of imposing a resultative interpretation of the PrP is somewhat questionable, as *now* is also compatible with an existential interpretation of the PrP: *Now I've been to Paris twice*. The reading of *now* intended in (72b) is that in which *now* indicates that the consequences of event sequence denoted obtain at speech time.



(73b) cannot be used to assert the presence of a clean house and fed dog at speech time. By contrast, (73a) can have a resultative interpretation of this sort. This interpretation requires coordination of the type represented in (73d). Under a resultative interpretation, (73a) codes two distinct assertions about present states of affairs.

One may attempt to account for the constraint observable in (73b) by arguing that the reference time of the PrP is the present, and that therefore the PrP is incompatible with the advancement of the reference time required in the description of an event sequence (Partee 1984; Dowty 1986). The validity of this type of account is undermined by the fact that, as shown in (74) and (75), and PrP under an existential reading can be used to refer to an event sequence:

(74) Have you ever washed your car and then had it rain?

(75) Harry has often had a few too many and then regretted it in the morning.

Sentences (74) and (75) are interpreted as asserting (or questioning) the existence of one or more instances of an event complex within a given time span. Thus, the existential perfect can be used to assert the past occurrence of an event complex. The resultative interpretation is compatible only with the assertion of a simplex past event. This constraint is difficult to justify in terms of the resultative semantics represented in (47); there is no compelling reason to assume that an event complex cannot yield the requisite resultant state. The constraint barring participial complements representing event complexes therefore appears to be an idiosyncratic feature of the RPC.

#### 5.4. *Manner adverbs*

Following Ernst (1987: 79), I will describe manner adverbs by means of a predicate-modification rule, described in (76):

(76) For any adverb modifying a predicate  $x$ , there is an entity  $g$  which is a property of/aspect of/'something about' the eventuality of  $x$ -ing (by the subject) such that ADV ( $g$ ).

Ernst points out that a number of adverbs, like *appropriately*, may function as either sentence or predicate modifiers: we find both *Appropriately, Carol handled Jay's lawsuit* and *Carol handled Jay's lawsuit appropriately*. In the former case, a contextual norm is computed for possible eventualities. In the latter case, a contextual norm is computed for possible manners of performing the action in question.

Certain manner adverbs encoding rapidity, like *quickly*, present an apparent problem for this scheme. While *quickly* can refer to the manner in which the agent executed an action (as in *She spoke very quickly*), it can also refer to the speed with which an event culminated following another event.

In the latter case, VP-initial position is preferred: *When Marge's unexpected guests arrived, Irving quickly made a quiche* (versus *?made a quiche quickly*). Here, we need not infer that making of the quiche involved rapid movements on Irving's part, etc.; we simply adduce that there was a shorter-than-average time lag between the event of the guests' arrival and the point at which the making of the quiche culminated. In such cases, *quickly* appears synonymous with *immediately*.

Therefore, adverbs like *quickly* do not yield unequivocal results with respect to the interaction of RPC and manner modification. Notice that resultative sentences like the following are ruled out:

(77) \*The committee has quickly rejected my proposal.

If, however, *quickly* in (77) is taken to be synonymous with *immediately*, then the anomaly of (77) can be attributed to the fact that evocation of an anterior reference-point (i.e. an event prior to the rejection event) is incompatible with the resultative reading of the PrP. As we saw in section 5.2, the occurrence time of the complement-verb denotatum cannot be specified. This means that this event cannot be temporally located by means of a past-time adverb like *at noon* or by means of 'indirect' temporal specification: vis-à-vis an anterior past reference point. The adverb *quickly*, on the *immediately* reading, necessarily evokes a point with respect to which the encoded action represents a rapid subsequent development. This point is 'virtually' a reference time for the subsequent event. Accordingly, sentences like the following are anomalous:

(78) \*I sent in an excellent proposal and those cretins have quickly rejected it.

Here, the time of bringing in the proposal is the anterior reference point with respect to which rejection represents a rapid eventuality. The anterior event represents a temporal anchor for the event denoted by the PrP. Notice that in the absence of the adverb *quickly*, which establishes a temporal link between the sending and rejection events, the sentence is acceptable. Existential PrPs, which are not constrained by the time-specification constraint, accept manner modification of the *immediately* type:

(79) Whenever he has brought in something unusual, the committee has quickly rejected his proposal.

In (79), the reference point is the event of bringing in something unusual. The reference-point event may be contextually evoked, in sentences like the following: *Harvard has typically rejected me immediately*. This sentence may be uttered in a situation in which the hearer is aware of a set of time points at which the speaker submitted an application to Harvard; the speaker asserts the rejection occurs immediately after each of the contextually evoked submission events.

It is not clear, however, that *quickly* (on the *immediately* reading) is necessarily incompatible with the RPC. The anterior reference point (with respect to which rapidity of an eventuation is computed) may not explicitly evoke a past time. In such cases, *quickly* is welcomed by the RPC. Consider the following example:

- (80) The king of pop has quickly become the king of psychobabble.  
(Austin, *American Statesman*, 25 February 1993)

This sentence is a reference to Michael Jackson's recent televised revelations of childhood emotional abuse. It evokes an anterior reference point with respect to which the eventuation of Jackson's current glossolalic state is a rapid development. This anterior reference point is the time at which Jackson was declared 'king of pop' (at an MTV awards banquet). However, this past reference point is not invoked by a preterite-form predication, as in (78). Instead, the interpreter must reconstruct the past reference point on the basis of extralinguistic knowledge or pragmatic accommodation: there was a certain time at which Michael Jackson became the king of pop. That is, the interpreter must evoke a coronation event on the basis of the use of the title *the king of pop* to describe the subject denotatum. That such an inferencing strategy exists is shown by the relative anomaly of sentences like the following:

- (81) ?The Duchess of York has quickly become a figure of ridicule.

Here, the NP *The Duchess of York* does not evoke a salient past reference point with respect to which the Duchess' present fallen condition represents a rapid development.

Given the possibility that an adverb of the *quickly* class may, when receiving a reading akin to that of *immediately*, welcome the RPC, we have reason to disregard such adverbs when we examine the interaction of the RPC with adverbial manner-modification. Therefore, we will confine ourselves to data like the following:

- (82) The president has (??angrily) called a halt to the press conference.  
(83) Judge Wapner has (??loudly) overruled the defense's objection.

As shown in (82) and (83), the RPC does not accept the manner adverbs *angrily* and *loudly*. Notice, however, that (84) and (85) are acceptable:

- (84) Whenever Mr Hume has questioned him, the president has angrily called a halt to the press conference.  
(85) Whenever the defense has made that objection, Judge Wapner has loudly overruled it.

Sentences (84) and (85) are interpretable only as existential PrPs. That is, the sentences assert that there are a number of eventualites of a given type

within a present-contiguous time span, and that these eventualities can be characterized as actions having a particular property.

Adverbs consistently rejected by the RPC are those which Ernst calls 'pure' manner adverbs: a lexicosemantic class comprising adverbs which 'represent a quality specifically linked to a certain type of predicate (e.g. those involving sound, movement, etc.)' (Ernst 1987: 78). These adverbs, e.g. *loudly*, are predicate modifiers alone. Other classes of adverbs (e.g. evaluative and agent-oriented adverbs) can serve as both predicate and sentence modifiers. Such adverbs co-occur felicitously with the RPC only when serving as sentence modifiers, as shown in (86) and (87):

(86) Stupidly, Bill has responded to some hecklers.

(87) Bill has responded to some hecklers (??stupidly).

In (86), the evaluation of stupidity attaches to the event of Bill's responding rather than to some property of his response, as in (87). Presumably, acceptance of sentence-adverb modification by the RPC can be attributed to the following fact: in cases like (86), the event-descriptor *stupidly* evokes the present consequences of the event denoted. In (86), one understands that Bill's responding to the hecklers can be characterized as stupid only insofar as there are undesirable consequences of that event (Bill sacrifices his dignity, etc.). As a predicate modifier, *stupidly* does not facilitate inference related to the present result: one cannot judge a priori whether the consequences of Bill's having responded in an obtuse manner are desirable or undesirable. Because predicate modifiers describe the event per se, they appear at odds with the communicative purpose of the RPC: to depict the present consequences of a past event. Manner adverbs are, however, readily accommodated by the existential PrP, which simply asserts the existence of one or more events of a given type; a manner adverb will contribute to the identification of this type.

The constraint barring manner adverbs has some semantico-pragmatic basis: the RPC focuses upon the consequences of an action, rather than the manner in which an action was performed. However, the constraint barring manner modification represents an idiosyncratic characteristic of the RPC, since it does not follow directly from the relevant semantics. There is no reason in principle, it seems that one cannot report upon both the manner of an action and the currently accessible consequences of that action. The constraint barring manner adverbs attaches via convention to the RPC; it is not otherwise inferrable.

## 6. CONCLUSION

The English PrP does not represent a unitary aspectual construction, but a complex of such constructions. While the PrP encodes what has been termed the 'current relevance' of a past event, current relevance must be subdivided

into continuative, resultative and existential varieties: in the case of the continuative PrP, the culmination of a state phase immediately prior to the current moment; in the case of the RPC, the current presence of a resultant state; in the case of the existential PrP, the current replicability of an event. These three varieties of current relevance are regarded as distinct perfect readings, described by the logical representations (36), (39) and (46).

In this paper, I have proposed that these readings are manifested as distinct grammatical constructions. Evidence for this proposal is provided by grammatical restrictions unique to expressions encoding the resultative reading (39). The RPC, as envisioned, will serve as the locus of all idiosyncratic restrictions discussed here: those pertaining to pragmatic presupposition of E, temporal specification of E, 'pluralization' of E and manner modification of E. I have suggested that constraints related to temporal-adverb modification and pragmatic presupposition can be attributed to the discourse-pragmatic opposition between RPC and preterite – an opposition which involves the feature [ $\pm$ anaphoric]. I have also argued that all constraints described here can be regarded as instances of a general restriction whereby the RPC fails to unify with constructions which imbue the event denoted by the VP complement with an undue degree of salience vis-à-vis its currently accessible consequences.

The availability of discourse-pragmatic and semantic modes of explanation for the observed constraints should not, however, be taken as evidence that these constraints are predictable or 'follow from' the semantics a priori. There is no necessary incompatibility between asserting the current existence of a resultant state and elaborating upon circumstances surrounding the causal event. Furthermore, as we saw in section 5.1, the RPC does not necessarily bar anaphoric past-time reference; there are exceptions to constraint (53). I presume therefore that the constraints discussed in section 5 must simply be learned along with the RPC. This is not to say that the speaker fails to recognize that these constraints have a semantic and discourse-pragmatic basis. In all likelihood, however, this recognition represents after-the-fact inferencing, in the sense of Goldberg (1992b): abductive reasoning applied by speakers attempting to 'make sense' of the input forms. The availability of a semantic motivation, as well as knowledge of a system of discourse-functional oppositions, will serve as a mnemonic aid for the learner attempting to master those constraints upon grammar and usage associated with the RPC.

This case study suggests that there is no necessary distinction between the so-called literal meaning of a construct and the conditions governing the felicitous use of that form in discourse. Here, we have examined two such conditions associated with the RPC. First, the RPC evokes a form of past-time reference that is nonanaphoric. One manifestation of this restriction is the constraint stated in (53): the RPC cannot be used to 'elaborate upon' a pragmatically presupposed event proposition. Second, the RPC is typically

used only in those contexts in which the resultant state denoted is relevant for the joint determination of immediate goals. An appropriate accounting of these and other use conditions associated with the RPC requires an approach in which, as Heny puts it (1982: 154), 'pragmatic considerations can interact freely with the semantics' – that is, a conception of grammar in which a grammatical construction is a complex of syntactic, semantic and pragmatic features.

The general theoretical framework which I have invoked here is in certain respects comparable to that described by Hornstein (1990). Like Hornstein, I have presumed that the interpretation of some set of temporal expressions is mediated by grammar, where the autonomous nature of that grammatical component arises from the fact that 'its... principles of organization are not definable in terms of semantic notions relating to the temporal interpretation of a sentence' (Hornstein 1990: 5).<sup>14</sup>

I differ from Hornstein, however, not only in invoking a broader conception of this grammar, in which semantic and discourse-pragmatic constraints are 'grammatical' features on a par with formal constraints, but also in invoking a nonuniversal incarnation of that grammar, whose minimal symbolic units are language-specific temporal-aspectual constructions (Michaelis 1993). With respect to the PrP in particular, my pursuit of the constructional approach does not represent a significant departure from Hornstein's view, since he himself admits (p. 114) that 'not every idiosyncrasy of the present perfect should follow from universal grammar' and that '[p]eculiarities that can be determined from the behavior of the present perfect in well-formed simple sentences need not be accounted for by principles of UG'. In the present study, this constellation of idiosyncratic features attaches to a pragmatically specialized unit of meaning and form, the RPC. I see such language-particular constructions not as mere 'taxonomic artifacts' – without relevance for the description of linguistic competence (see Chomsky 1992) – but as grammatical units whose acquisition is intrinsic to the learner's mastery of a system of temporal reference.

The present approach, which targets both (a) construction-specific constraints on grammar, interpretation and use and (b) 'ecologically based' use conditions, provides for both broad-based and fine-grained aspectual analysis. This approach enables the analyst to acknowledge that aspectual meaning is expressed by means of highly idiosyncratic forms, while not neglecting a 'macrocosmic' approach, in which the meanings and functions

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[14] The formal system which Hornstein describes as the 'syntax of tense' does not represent the formal realization of the tense operators themselves. The primitives at issue are the R-, E- and S-points of Reichenbach's system of tense representation, and the 'syntactic constraints' advanced pertain to restrictions upon the linear ordering of these points, e.g. the manner in which the linear representations of main and subordinate clauses 'line up'.

of aspectual construction are determined within a system of universal semantic contrasts and language-particular discourse-functional oppositions.

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