

The Pragmatics of Obligatory Adjuncts
Adele E. Goldberg and Farrell Ackerman.

2001.

***Language.* 77 4. 798-814.**

In this paper, it is argued that the existence of ‘obligatory adjuncts’ in both predication and modification constructions is best understood as following from general conversational pragmatics, rather than from grammatical factors. In the case of clausal predication, adjuncts are used to satisfy the often-cited requirement that every utterance have a focus that serves to convey new information in the discourse; adjuncts are just one of several ways in which the focal requirement can be satisfied. It is argued that as a pragmatic constraint, the focal requirement is derivative from Grice's maxim of Quantity or Horn's R-Principle. This allows us to account for the fact that while utterances do normally require a successful focus, there can be certain principled exceptions. The appeal to conversational maxims also allows us to account for the appearance of obligatory adjuncts within nominal modification structures, in which focus is not the relevant notion. *

Introduction. Consider the contrasting clauses with short passives in 1 and nominal modification structures in 2, presented by Grimshaw and Vikner (1993). When uttered in a ‘neutral’ context, adjuncts are required in order to avoid a sense of anomaly: impressionistically, 1a and 2a seem to demand that something more be said, while 1b and 2b somehow seem to satisfy this demand:

- (1) a. #This house was built.
b. This house was built *last year*.
- (2) a. # a built house
b. a *recently* built house

We will examine the distribution and motivation for the presence of adjuncts such as last year and recently which appear to license examples 1b and 2b. We begin with a critical examination of an event-based account of obligatory adjuncts proposed by Grimshaw and Vikner (1993) and then we develop an alternative pragmatic account. We argue that the existence of ‘obligatory adjuncts’ in both predication and modification is best understood as following from general conversational pragmatics; no grammatical stipulation is necessary.

In the case of clausal predication, adjuncts can be used to satisfy the often-cited requirement that every utterance have a focus that serves to convey new information in the discourse; adjuncts are just one of several ways in which the focal requirement can be satisfied. It is argued that, as a pragmatic constraint, the focal requirement is derivative from Grice's maxim of Quantity or Horn's R-Principle. This allows us to account both for the fact that utterances do normally require a successful information focus, and for the fact that there are certain principled exceptions. The conversational maxims also allow us to account for the appearance of obligatory adjuncts with nominal modification structures, in which focus is not a relevant notion. The basic insight informing the pragmatic account is that predication or modification of an argument is only licensed when it is informative in the discourse context.

Our account aims to provide a unified explanation of the apparent necessity of adjuncts in a variety of constructions including middles and cognate objects as in 3 and 4, as well as short passives and the adjectival past participle construction in 1 and 2 above.

- (3) a. #This book reads.
b. This book reads easily.
- (4) a. #Pat laughed a laugh.
b. Pat laughed a hearty/quiet laugh.

A single utterance may be judged acceptable or unacceptable depending on the context evoked. As is clarified below, we use the ‘#’ mark to indicate that an utterance is only acceptable in certain contexts which may not come immediately to mind. Since every acceptable sentence evokes a certain context of use, what distinguishes sentences marked by ‘#’ from those that are fully acceptable is therefore a matter of degree. The only real difference is that some contexts are more general or easily accessible than others. In the text below, we refer to contexts that are very general and easily evoked as ‘neutral contexts,’ but it should be born in mind that the idea of a ‘neutral context’ is only an idealization (Dinsmore 1981; Langacker 1987; Lambrecht 1994).

1. **An Event Structure Account.** Grimshaw & Vikner (1993) represents a surprisingly rare effort to account for the contrasts in examples 1a-b and 2a-b. Their proposal relies upon a particular interpretation of accomplishment predicates of the type found in the Vendler/Dowty taxonomy of verbs. They hypothesize that accomplishment predicates are associated with complex event structures constrained by quite specific licensing conditions. We will accordingly refer to this as the **EVENT STRUCTURE ACCOUNT**. G&V observe that only a subset of accomplishment predicates actually display obligatory adjuncts, as in 5a-b; these involve verbs of creation, or what they refer to as **CONSTRUCTIVE ACCOMPLISHMENTS**.

- (5) a. #This house was built/created/made.
b. This house was built/created/made by a 16th century architect.

In contrast, adjuncts are not needed with other types of accomplishment verbs such as verbs of destruction, as in 6, nor with verbs in which a performance object is created such as record in 7.

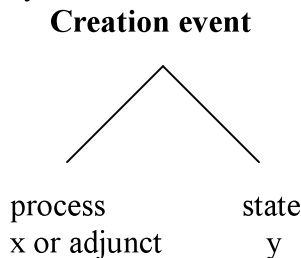
- (6) This house was destroyed.
(7) Your conversation was recorded.

Accomplishments as a class are standardly interpreted as consisting of two subevents, a process and a resulting state. G&V propose that each subevent must be ‘identified’ by some element in the sentence. In the case of accomplishments this has the following interpretation: there must be some element in the clause that is associated with the process, and some element (not necessarily distinct from the first) that is associated with the resulting state. Given that all of the predicates in 5-7 are accomplishments, and therefore consist of two subevents, the complex nature of the event structure itself cannot be sufficient to explain the different behaviors of the various verbs.

In recognition of this, G&V hypothesize that for verbs of constructive accomplishment, the theme argument (y in the examples in 8 and in Figure 1) can only identify the state, since the theme does not exist until the process is complete. The process component remains unidentified in examples such as 5a or 8b, rendering the construction somewhat anomalous. Since, by hypothesis both subevents must be identified, elements that appropriately modify or belong in some fashion to the process component can serve to identify this subevent. Such elements are exemplified by the causer argument in an active sentence (x in 8a), or by an adjunct in a passive sentence (in the 20th century in 8c).

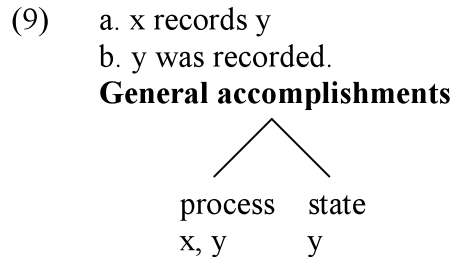
Figure 1:

- (8) a. x builds y
b. *y was built.
c. y was built in the 20th century.



In the case of other accomplishment verbs, e.g., destroy, record, G&V suggest that the theme argument (corresponding to the y variable in example 9a,b and in Figure 2) simultaneously identifies both subevents, since, for example, the sound exists antecedent to its being recorded. Because both subevents are identified, no adjunct is required (9b).

Figure 2:



In sum, G&V identify two classes of accomplishment predicates and account for their different behaviors with respect to obligatory adjuncts by hypothesizing that their subevent identification requirements are either 1) satisfied by their lexical representation alone (relevant for most accomplishment verbs including, e.g., verbs of destruction) or 2) in need of supplemental support (e.g., verbs of constructive accomplishments).

2. Problems for an Event Structure Account. The claim that each subevent must be ‘identified’ by some element in the sentence has been adopted by a number of theorists (e.g., van Hout 1996; Rappaport Hovav & Levin 1998¹, Wright and Levin 2000); however, there are certain empirical problems that have not been addressed. There are two basic questions that we will focus on here:

1. Is the class of predicates that may require adjuncts in short passives really only accomplishment predicates?
2. What is the nature of the split behavior within the class of accomplishments?

2.1 Statives and activities as well as accomplishments can require adjuncts. The event structure account depends crucially on the complex nature of the event structure of verbs of creation. This is evident from the central role given to argument identification of each subevent. As the account is intended to account for obligatory adjuncts generally, it predicts the absence of obligatory adjunct effects for predicates associated with simple events since the subject argument would identify the single event. This prediction is false, however, since we find that predicates with simple event structures, both statives (as in 10) and activities (as in 11-12), also often require some type of adjunct when they appear in short passives.

- (10) a. # The claim was believed.
b. The claim was believed by many/in the seventh century/in the South.
- (11) a. # The book was read.
b. The book was read by many/yesterday/over the airwaves/in the shower.

- (12) a. #The television program was watched.
b. The television program was watched all over the country/by millions/with anticipation.

Given these distributions it appears that a complex event structure cannot be regarded as a necessary condition for the licensing of obligatory adjuncts. Nor is it sufficient, as is described below.

2.2. Constructive accomplishments do not uniformly require adjuncts. We have already seen from the contrasts between verbs of creation and other accomplishment verbs, that a complex event structure does not necessarily lead to obligatory adjunct effects. It turns out that the situation is even more complicated when one looks closely within the class of verbs of creation itself. Certain changes in tense or aspect as in 13, as noted by Grimshaw and Vikner, can obviate the need for an adjunct. Additionally, variations in modality 14, polarity 15, and emphatic uses of auxiliaries as in 16 can eliminate the need for an adjunct as well.

- (13) a. The house will be built.
b. The house has been built.

- (14) a. The house might be built.
b. The house should be built.

(15) The house wasn't built.

(16) The house WAS built.

One might be led from the data in 13-16 to claim that all expressions with future tense, perfect aspect, modals, negative polarity or emphatic auxiliaries are associated with a single simple event rather than a complex event as expected for accomplishment predicates. This would allow for the event structure proposal to account for the data in 13-16, but in order to avoid circularity, it also clearly requires that independent evidence be offered to demonstrate that these factors lead to event restructuring. However, it is not obvious that a compelling case can be made that these factors yield the appropriate alterations of the event structures for all of the predicate constructions involved. In the case of the perfect (e.g., 13b), it has been argued that the perfect aspect serves to turn an eventive predicate into a stative one (Langacker 1991; Michaelis 1994; De Swart 1998). Stative verbs can appear with durative phrases such as for a year but not with bounded temporal phrases such as in a year (Dowty 1979), and 13c does pattern as a stative:

- (13) c. The house has been built for a year/?in a year.²

However, standard tests for aspectual status do not indicate any change in event structure for any of the other examples cited in 13-16. In particular, we find that examples 13a, 14a, 14b, 15 and 16 all pattern like standard accomplishments, as demonstrated in 17-21:

- (17) The house will be built in a year/*for a year.
(18) The house might be built in a year/*for a year.

expected pragmatic consequences of such a focus are not fulfilled. Therefore the utterance illustrates a case of FOCUS FAILURE in that it fails to convey any new information. No set of propositions which potentially contrasts with the asserted proposition is easily constructed, to use the definition of focus in Roots (1992).

Consider, for example the utterance, #The house was built. The definite subject presupposes the existence of the subject referent (Strawson 1964); in this case the fact that the house exists is presupposed. Moreover, knowing that a house denotes an artifact is to know that it is created and therefore it is possible to infer that at some point in the past, the house was created.⁴ In other words, nothing informative is being said in such an utterance that can't be calculated by knowing the lexical meanings of house and build together with knowing how presupposition works for definite NP subjects. The fact that adjuncts are so often required for passive verbs of creation is expected, since we assume that artifacts are created, and that particular artifacts are created in default ways. Thus an utterance asserting that a house was built simply states what is already known to competent participants in a conversation.

As a heuristic for isolating the pragmatic information focus, we can rely on Erteschik-Shir and Lappin's (1979) 'lie' test. The pragmatic focus of an utterance (the 'dominant' part of an utterance in their terminology) is that part of an utterance which is denied by the assertion 'That's a lie.' Consider how the lie test operates on short passives involving verbs of creation:

- (24) A: This house was built in 1992.
 B: That's a lie! It was built in 1972! Focus = 'in 1992'
 B': That's a lie! # It was not built.

Without a contrastive context, it is more natural for B to deny the date in which the building was erected than to deny that the house was built at all. This is because, in a non-contrastive context, the mere fact that the house was built is not what is asserted by A's utterance. It is instead presupposed, and therefore, like presuppositions generally, cannot be easily negated.

The idea that asserting something that is already presupposed is infelicitous conforms to Stalnaker's essential conditions on the rational employment of assertion in communication. He writes (1978:325): ``... to assert something which is already presupposed is to attempt to do something that is already done.'

We argue below that the idea that every utterance requires a successful assertion (or successful focus) should be understood in terms of the second half of Grice's (1975) maxim of Quantity or Horn's (1984) R-Principle, 'make your contribution necessary; say no more than you must.' Since it is not normally necessary to utter a sentence that contains only redundant or recoverable information, uttering a sentence without a successful focus typically violates the maxim of Quantity. The hedges ('normally,' 'typically') are due to certain contexts in which the content of an utterance is fully redundant or recoverable and yet Quantity is not violated and the utterance is acceptable. These cases are discussed in section 5. Following previous work by Ackerman and Goldberg (1996), we will see that this conversational principle also accounts for the appearance of obligatory adjuncts within nominal modification structures as in 2a,b.⁵

Recall the fundamental assumption of the pragmatic proposal as formulated above: an utterance must be informative. Let us assume that in the case of clausal predications, utterances normally require a successful focus that conveys something asserted and non-presupposed. By hypothesis, adjuncts are just one way of satisfying this requirement. Note that when a contrastive context is

invoked, as in 25a where there is exaggerated pitch accent on was, we assume that what is asserted is that the house was in fact actually built and no adjunct is required:

(25) a. This house WAS built.

In this case, there is an implicit contrast with a negative proposition, and the positive polarity of the copula verb provides a contrastive focus for the clause. Contrastive focal stress on the subject argument or on the verb can also, as expected, render bare passives felicitous since a successful focus is provided:

(25)b. The HOUSE was built (not the garage).
c. The house was BUILT (not just designed).

There are various other ways of providing a successful focus in simple sentences as well. In fact, and quite unexpectedly on the event structure account, if the method of creation is somehow unusual, then a verb of constructive accomplishment can itself provide a meaningful assertion (i.e., play the role of focus), without emphatic stress or an obligatory adjunct as in 26 and 27:

(26) This cake was microwaved.
(27) These diamonds were synthesized.

Various tenses and aspects other than the simple past serve to inform the listener that the creation took place before, after or during a particular reference time:

(28) a. The house will be built.
b. The house has been built.
c. The house had been built.
d. The house is being built.

A pragmatic account keyed to the nature of the informativeness of utterances is clearly not restricted to the event structure of a participating predicate. The examples in 10a, 11a and 12a repeated below in 29a-c each lack a successful focus. We assume claims are believed, books are read and television programs are watched by someone or other; in a 'neutral context', these examples simply do not convey anything informative, i.e., anything that couldn't be calculated by knowing the meaning of the predicate and the NP Argument.

(29) a. #The claim was believed.
b. #The book was read.
c. #The television program was watched.

Since only a definite subject presupposes the existence of its referent, and therefore presupposes that the referent was created, it is to be expected on a pragmatic account that an indefinite subject can render the short passive acceptable:

(30) a. A MANSION was built.
b. MANSIONS were built.

These sentences can be used to introduce one or more mansions into the discourse, as in the following context:

(31) The city expanded. *MANSIONS were built*. Roads were paved.

In this case, the subject argument must receive the sentence accent, indicating that the subject is, or is part of, the focus domain. It is expected on this account that the active counterpart of 1a should be acceptable without an adverb, and this prediction is in fact borne out:

(1a') Someone built the house.

This sentence can be used naturally to convey the idea that the house exists, since direct objects, unlike subjects do not necessarily presuppose the existence of their referent.

To summarize, there are many ways of making a clause informative (i.e., providing a successful focus). An adjunct is just one way. Without any focal information, clausal predication is generally infelicitous (see section 5 for principled exceptions to this generalization). Crucially, this infelicity is quite independent of assumptions about event structure and argument identification for constructive predicates. On the other hand, it is not accidental on the present account that verbs of constructive accomplishment require adjuncts precisely when they co-occur with artifacts for which they can be assumed to be the default manner of creation. In contrast, e.g., verbs of destruction do not require adjuncts because to know that something is an artifact is to know that it is created in some fashion, not to know that it is destroyed. Thus, the co-occurrence of an NP denoting an artifact and a verb of destruction counts as information in the relevant sense. In sum, the specific subtypes and behaviors within the class of accomplishment predicates follows predictably from the pragmatic proposal developed here.

4. Middles. It turns out, in fact, that it is the pragmatic explanation and not the event structure one that extends naturally to the English middle construction as well. By ‘middles’ or ‘mediopassives’ we intend a construction with an implicit actor argument that prototypically appears in the simple present tense with a generic interpretation (Roberts 1985; Hale and Keyser 1987; Iwata 1999). As has frequently been observed, English middles often require some type of adjunct (e.g., Jackendoff 1972; Ernst 1984; Fellbaum 1986; van Oosten 1986):

(32) #The car drives.

(33) The car drives like a boat/easily /365 days a year/only in the summertime.

As is evident from 33, a wide variety of adjuncts can be used to rescue middles from infelicity.

Several researchers have observed that negated middles or middles that are overtly emphasized often attenuate the need for an adjunct (Keyser and Roeper 1984: 385; Fellbaum 1985: 9; Dixon 1991: 326):

(34) That car doesn't drive.

(35) These red sports cars DO drive, don't they? (Dixon 1991:326).

Fellbaum (1985) notes that the negation serves to supply ‘non-given’ information, while the emphasized verb serves to indicate non-expectedness (see also Iwata 1999). In the present terms, the change in polarity or emphasis provides a successful focus for the clause, making the expression informative and therefore acceptable. Our default assumption is that cars can be driven so asserting that they cannot be as in 34 is informative; in 35, the emphasized auxiliary is used to convey the idea that the cars drive really well or fast or easily. In accord with this explanation, Rosta (1995: 132) notes that “the more ‘newsworthy’ adjunctless mediopassives are, the less odd they are.” He cites the following examples in this context:

- (36) a. The car will steer, after all.
 b. These bureaucrats bribe.
 c. Boy did that mountain climb!
 d. She sure did interview. (1995:132)

Positing a pragmatic explanation for obligatory adjuncts allows us to explain why certain middles, like certain short passives with constructive predicates, do not require an adjunct. For example,

- (37) <How do you close this purse?> It snaps/ It zips/ It buttons.
 (38) <Where do we enter the secret passageway?> The bookshelf opens.

In a context in which it is informative to assert that people should be able to perform a given action on the subject argument as in 37 and 38, no adjunct is required.

5. A Gricean explanation. We have seen so far that sometimes what would otherwise be a fully acceptable sentence, is unacceptable because it doesn’t count as saying enough to be licensed conversationally: it doesn’t contribute more than could be calculated by knowing the word meanings and presupposition structure of the sentence. The conversational context and background assumptions are critical, so that predications that appear odd in a ‘neutral’ context can often be rescued by simply finding the right context.

We have relied on the idea that every utterance must contain a focus. As was alluded to in the introduction, we believe that, as a pragmatic constraint, this is ultimately better understood in terms of Grice’s maxim of Quantity, or Horn’s R-Principle. It is not normally necessary to utter sentences without a focus, since all information would be redundant or recoverable; thus such sentences are typically infelicitous.

By viewing the focal requirement as arising from Grice’s maxim, we can account for certain contexts in which the focal requirement is violated and yet the example is nonetheless fully acceptable. For example, it is possible to utter 39 when an addressee walks into a room, and without pitch accent on any constituent (except perhaps Oh); no new information is presented to the addressee, but the utterance can still be informative because the fact that the speaker uttered it informs the listener that the speaker is aware of his presence. This type of utterance enlarges the shared COMMON GROUND in the sense of Stalnaker (1974; see also Lambrecht 1994:59) or MUTUAL BELIEF in the sense of Green (1989).

- (39) Oh, it’s you. <uttered upon recognizing a person>
 (40) It’s raining. <uttered as both speaker and addressee witness a downfall>

Similarly, it is possible to walk outside with a friend and utter 40, with or without pitch accent on raining, if by doing so the speaker wishes to either assert his own awareness of the fact that it is raining or possibly introduce the weather as a topic of conversation. In these cases there is no focus as traditionally understood, and yet the utterances are still informative in the Gricean sense. Notice that the lie test confirms that there is no focus as traditionally understood:

- (41) A. Oh, it's you. <uttered upon recognizing a person>
 B. #That's a lie!
 (42) A. It's raining. <uttered as both speaker and addressee witness a downfall>
 B: #That's a lie!

It is not the content of the utterances per se that is informative, but the fact that the speaker bothered to utter them; in effect, it is the illocutionary or perlocutionary act of producing the utterance that is informative. Therefore while there is no focus in the sentence, the fact that the sentence was uttered is still informative in the discourse; thus the Gricean maxim is not violated and the utterance is acceptable.

As expected, what counts as informative is context dependent. While wholly redundant information is not typically informative, it can be if the listener can infer something informative from it. Example 43 can be uttered if by doing so, the speaker wishes to classify the speaker's mother as a human or female in order to evoke certain inferences. For example, the speaker may wish to evoke an inference that her mother is fallible, has a certain genetic makeup, or is willing to ask directions.

- (43) My mother is human/female.

It is difficult to come up with readily available inferences from knowing something was built, and this what makes the predication in 1a (#The house was built) sound odd without a special context. However, such contexts can be created; for example, if some treasure were buried in a certain spot, and a house was later erected on top of it, the owner of the lost treasure could concede his loss by felicitously uttering:

- (44) <shrug of shoulders> The house was built. (There's nothing I can do about it now).

No new information is conveyed by the content of 44, but in uttering it the speaker acknowledges an acceptance of the fact that the house was built. That is, our account predicts that you can felicitously say, The house was built, in a non-contrastive context, if the fact that the speaker bothers to say it is informative within the discourse.

Viewing the often-cited pragmatic requirement of a focus in Gricean terms allows us to motivate the fact that it is normally observed, while at the same time allowing us to make sense of it when it appears to be violated. Moreover, viewing the focal requirement in Gricean terms allows us to extend the present account to instances of obligatory adjuncts in modification structures, including those that occur with cognate objects and with other modification constructions more generally. Clearly there is no general requirement that every NP must contain a focus; pronominal NPs would clearly provide ample counterexamples. Yet, the use of modification must also be informative within the discourse context.

6. **Cognate Objects.** The present account extends straightforwardly to instances of obligatory modification of cognate objects. As Opdycke (1941) writes in Harper's English Grammar, 'the repeated idea in the object should usually be intensified by a modifier; otherwise there is no purpose in repeating it.' Without the modification, the nominal element is wholly redundant with the verbal predication and thus not informative (Massam 1990):

- (45) a. #I dreamed a dream.
b. I dreamed a scary dream.

As Massam (1990) further notes, information can be added by quantifiers as well as by modification:

- (46) a. Let him smile his little smiles.
b. He has smiled all his smiles. (Massam 1990: 182, citing Hutchison 1989)

Thus the pragmatic explanation motivating the appearance of modifiers with cognate objects appears quite similar to that which accounts for modification in middles and short passives.

7. **General Modification.** Obligatory adjuncts within NP modification structures appear strikingly similar to what has been discussed for the case of clausal predication. In fact, in Ackerman & Goldberg (1996), we demonstrated how Grice's maxim of Quantity accounts for obligatory adjuncts in nominal modificational structures. It was argued, for example, that simply modifying house with built as in 2a, repeated in 47a is not felicitous because it is not informative; we assume houses are built.⁶

- (47) a. #a built house
b. a recently built house

It is intriguing to note that it is generally more difficult to rescue nominal modifications than clausal predications. Thus many native speakers find the following (b) examples to be even harder to find a context for than the (a) examples cited earlier (relative acceptability is indicated by the '>' sign):

- (48) a. #This house was built. >
b. # a built house
- (49) a. #That book was read. >
b. #The read book
- (50) a. #The television program was watched. >
b. #The watched program

This asymmetric behavior follows from the richer information resources associated with verbs as compared to adjectives. Specifically, verbs, but not adjectives can always be construed to assert either tense or polarity and, as we have seen in examples 13 and 15, either type of assertion can provide the necessary information.

As expected, the felicitousness of a modification structure is dependent on the combination of a particular property and a particular head noun, not on the event structure of the deverbal adjective. Notice that the same modifier, paid, is odd in 51a but fine in 51b. This is because we readily assume that physicians but not escorts, are paid:

- (51) a. #Pat found a paid physician.
b. Pat found a paid escort.

Notice also that, as we saw in the case of clausal predication, the modifiers can be rescued by a contrastive context; in this case the modification serves the function of differentiating the state of affairs from other states of affairs relevant to the discourse (parallel to the assertion of polarity in the case of clausal predications). Therefore the modification is informative, and as expected, acceptability results:

- (52) That particular physician was unpaid, but these are all paid physicians.

The idea that modification must be informative extends beyond instances of adjectival past participles to modification more generally. Underived adjectives also have to be informative (as can be seen in 53a-c):

- (53) a. # Pat saw a dead corpse.
b. # Pat found some liquid water.
c. # The freezer contained some cold ice.

As we saw was the case with clausal predication, context can rescue instances of redundant modification. For example, while cold ice seems odd in 53c since ice is always cold, the example in 54 is nonetheless fully acceptable:

- (54) The cold ice felt good on the swelling.

In this context, mentioning the fact that the ice was cold is informative since it tells the addressee precisely what property of the ice is relevant in the given context. The fact that this coldness is normally associated with ice is incidental. In this respect the role of cold in 54 is parallel to its role in 55:

- (55) The cold metal felt good on the swelling.

This sort of adjectival use seems quite general as illustrated in 56 where context once again motivates the acceptability of the phrase solid rock, which would seem strikingly uninformative in a more neutral context.

- (56) After climbing out of the quicksand, Chris was grateful to sit on the solid rock.

Again the modification serves to inform the listener which aspect of the rock made Chris grateful.

8. **Possible challenges.** McConnell-Ginet (1994) anticipates the prospect of a pragmatic explanation for some of the same data we have addressed and argues explicitly against such an account.⁷ She

observes that example 57a is acceptable, despite the fact that it does not obviously contribute any more information than the short passive in 57b:

- (57) a. That house was built by someone or other (or by some mechanical device).
b. #That house was built.

We would like to suggest, however, that the difference between 57a and 57b results from how readily an appropriate context can be supplied. The explicit mention of a potential builder in 57a can lead one to infer that the house was built-to-order by the owner of the house, or by someone else with some special status although the particular identity of the person may be unknown or cannot be remembered. Another possibility is that the phrase ‘someone or other’ is used to informatively convey an inference that the owner is not relevant.⁸ Both 57a and 57b are fully felicitous in a context like that suggested for example 53 above: namely a context in which the utterance is used to acknowledge shared common ground, as in a concession.

McConnell-Ginet further suggests that the anomaly in 58a cannot be attributed to a claim that the predication does not distinguish the position in question from a candidate set of other possible positions, given that 58b is fully acceptable.⁹ That is, 58a can in fact be used to distinguish the position in question from others, since not all positions are held by anyone.¹⁰

- (58) a. #This position was held.¹¹
b. This position was held by no one.

The force of her argument rests on the idea that a pragmatic account would require that only tautologies are infelicitous. Therefore, since 58a is not necessarily true (witness the fact that example 58b may be true), it is suggested that a pragmatic account of 58a is invalid. However, the present account does not invoke the notion of logical necessity. Rather, it is argued here that if the truth of the predication is generally inferable or recoverable, then the predication does not provide a focus. For example, while it is logically possible that a particular TV program be unwatched, or a particular book be unread, we normally assume that TV programs are watched and books are read. Therefore the predications in 10a-12a seen earlier do not provide a focus without a special context in which whether or not they are watched or read is at issue in the discourse. The oddness of example 58a is accounted for on the present account since we ordinarily assume that someone or other holds a given position; therefore the utterance does not contain a focus. Example 58b is expected to be acceptable (and may be true) because it is clearly informative given that we typically assume that positions are held by someone.

Finally, McConnell-Ginet offers the contrasts in 59:

- (59) a. That theory is supported. (acceptability judgments from McConnell-Ginet)
b. # a supported theory.

As noted above, it is generally easier to rescue clausal predications than nominal modifications. This is because the verb can be construed to assert either tense or polarity, and either type of assertion can provide the necessary information, as we saw in examples 13-15. We suggest that 59a does require a special context, namely one in which whether or when the theory was supported,

is at issue; 59b, as a nominal modification, is relatively more marked than its clausal counterpart, because there is no verbal predicate that could convey information about tense or polarity.

In conclusion, though McConnell-Ginet argues against a prospective pragmatic proposal with specific properties, her arguments do not appear to be directed at the type of pragmatic account proposed here.

9. Grammaticalization of the pragmatic constraint. There exists much research that points to the role of pragmatic factors on the diachronic development of grammatical phenomena (e.g., Traugott 1988; Bybee, Perkins and Pagliuca 1994; Sadock 1998). Thus it is expected that the sorts of factors which we have argued to operate across disparate phenomena in synchronic English grammar might find reflexes in certain more grammaticalized constructions. In this connection, consider the following contrasts with the syllabic form of the -ed denominal adjective suffix as in the following:

(60) ? headed boy; but red-headed boy

Hirtle (1969) observed, ‘The very notion underlying boy brings in the notion of head with no outside help.’ Clearly, this observation is very much in the spirit of the present analysis, since it implies that modification with -ed alone is not informative and that this is why it is unacceptable in its bare form. However, Larry Horn (personal communication, 2000) points out that, unlike other cases discussed above, it is difficult to rescue headed with contextual changes; e.g., even in a contrastive context in which one were comparing dolls with heads and those without, it is still not fully felicitous to say:

(61) ?Put the headed dolls in one box and the dolls without heads in the other.

It seems that the syllabic -ed denominal adjective suffix is not fully productive (Emmon Bach, Charles Fillmore, personal communication 2000). Notice that in the right context it is possible to get /legd/ men, but not /leged/ men:

(62) <In a veteran’s hospital> The /legd/ (*/leged/) men will have to walk to the cafeteria since we don’t have enough wheelchairs.

The lexicalized form is ___ + headed with a slot for some type of modification that cannot be null¹²: yellow-headed, four-headed, big-headed, etc. are all acceptable. Likewise, /leged/ can appear in bow-legged, <n>-legged (e.g., 1-legged, 2-legged, etc.), long-legged, but not simply legged. It seems plausible that this lexicalization pattern may well have developed historically as a result of the pragmatic constraint under discussion. When headed and legged were introduced, they were typically used with some kind of modification (OED online); as a consequence, the modification became grammaticalized as a necessary part of the lexical entries.

10. Subcategorized Adjuncts. The discussion above raises the question of how to treat cases of ‘subcategorized’ adverbs (Jackendoff 1972; McConnell-Ginet 1982). Consider the following examples (judgments of ‘#’ and ‘*’ are clarified below):

- (63) a. #Pat dresses.
b. Pat dresses stylishly.
- (64) a. *Pat behaved to Chris.
b. Pat behaved badly to Chris.

Several researchers have suggested that the adjuncts only appear to be required because the verbs themselves do not normally convey enough information (Dinsmore 1981; Ernst 1984; Iwata 1999). However, only certain of these verbs display the sort of contextual variability we saw was the hallmark of ‘obligatory’ adjuncts, required because of conversational principles. As Ernst (1984: 332) points out, dress is clearly such a case. Example 63a is acceptable if Pat lives on a remote island where only some people wear clothing. One can also felicitously:

- (65) a. Pat DRESSES! (to mean Pat dresses well)
b. Pat doesn’t dress.
c. Pat dresses first thing in the morning/in the middle of the night/only on Tuesdays.

That is, as long as the utterance is made informative, via contrastive context, emphasis (65a), negation (65b) or any type of adjunct (65c), dress can appear without a modifying adverb. The case of behave to is quite different. Notice that none of the following contexts rescues 64a:

- (66) a. *Pat behaved to Chris, but not to Sam. (contrastive)
b. *Pat BEHAVED TO Chris. (emphasis)
c. *Pat doesn’t behave to Chris. (negation)
d. *Pat behaves to Chris first thing in the morning/in the middle of the night/only on Tuesdays.
(other adjuncts)

Thus in the case of behave to (also treat with a meaning like that of behave to), a manner adverb is indeed subcategorized for by the verb (McConnell-Ginet 1982).¹³ It is in this way quite different from the other instances of ‘obligatory’ adjuncts discussed in this paper, in that it is required by more than conversational pragmatics.

11. **Conclusion.** To conclude, with the few lexical exceptions discussed in sections 10 and 11 (headed; behave to), we have seen that the distribution of ‘obligatory adjuncts’ in short passives, middles, cognate object expressions and modificational structures, follows simply and directly from conversational pragmatics. Predication or modification of an argument is only licensed when it is informative in the discourse context. This general requirement follows from general conversational principles and thus requires no grammatical stipulation. Even if grammar-based accounts such as the event-structure proposal were less problematic than argued here, they would only account for a small subset of similar effects. Our proposal permits a unified explanation for an otherwise disparate array of data; it explains why changes in tense and polarity as well as changes in context and background assumptions can all attenuate the need for an adjunct since each of these factors can affect the informativeness status of predication or modification constructions.

Obligatory adjuncts are accounted for by bearing in mind language’s function as a means of communication. As Hermann Paul (1889:351) observed to be generally the case more than a century

ago, "The more economical or more abundant use of linguistic means for expressing a thought is determined by need...The amount of linguistic material employed varies in each case with the situation, with the previous conversation, and with the relative approximation of the speakers to a common state of mind."

Endnotes

*We would like to thank two anonymous reviewers for Language, Stephen Marlett and Mark Aronoff for comments on a previous draft. We also thank Emmon Bach, Chris Barker, Charles Fillmore, Svetlana Godjevac, Georgia Green, Larry Horn, Knud Lambrecht, Jaume Mateu, Laura Michaelis, Masha Polinsky, David Perlmutter, Jerry Sadock, the audience at the Finnish Symposium on the Relationship between Syntax and Semantics, held in Helsinki, September 1999, and the audience at the annual LSA meeting in Chicago 2000 for very helpful discussion. After this paper was resubmitted for publication we became aware of independent work by Jung (1997) and Szymańska and Śpiewak (2000). Jung raises additional problems for Grimshaw and Vikner (1993) and offers a pragmatic account, similar in spirit to Ackerman and Goldberg (1996) and to the present account. Focusing primarily on passive sentences that require adjuncts, Jung proposes a Say Something Condition, namely that ‘‘the predicate must assert more than what is presupposed by the subject’’ (1997:166). Szymańska and Śpiewak (2000) likewise suggest a pragmatic account for Polish short and impersonal passives, emphasizing that the instances in which adjuncts appear to be obligatory do not constitute a unified phenomenon from a grammatical perspective. They observe that the expressions that seem to require adjuncts have a potential ‘‘informational deficit’’ (pg 329), although the nature of the deficit is argued to be somewhat different than that proposed here. Neither Jung nor Szymańska and Śpiewak couch their analysis in terms of Gricean maxims and neither applies their generalizations to the full range of data considered here.

¹ Contrary to Grimshaw and Vikner, Rappaport Hovav and Levin (1998) and Wright and Levin (2000) assume that only arguments can identify a subevent. This even stronger claim is also counterexemplified by the data presented here since many examples are provided in which no adjunct or argument is required to identify a second subevent (see section 3).

² However, as Mittwoch (1988) points out, perfect predicates do not change the inherent aspect of their participial complements, as can be seen from the fact that adverbs may take scope over the accomplishment predicate *built* as in 13d.

(13) d. The house has (already) been built (twice) *for a year/in a year.

The phrases in parentheses in 13d are optional and are only provided to indicate the accomplishment reading available for *built*. Therefore we see that *built* in 13d still represents a complex event and yet no adjunct is necessary.

³ Pitch accent can also always be interpreted as narrow focus on the accented constituent alone.

⁴ It is important to note that we are not claiming that English or natural language more generally has no tolerance for redundancy. This important point is clarified in section 5.

⁵ Grimshaw and Vikner cite David Pesetsky (personal communication) as suggesting that the adjuncts are required because one must ‘say something’ (see also Jung 1997). The following discussion can be viewed as an attempt to take up Grimshaw and Vikner’s challenge to ‘characterize the notion of ‘say something’ in a revealing way.’ (1993:154).

⁶ ‘‘Strictly speaking, only predication is informative since only predications make assertions, via their foci. NPs simply denote referents. Nonetheless, irrelevant modification can be viewed as uninformative insofar as it does not serve to aid the listener in accessing the intended object in the discourse context.

⁷ McConnell-Ginet (1994) leaves the examples cited in this section unaccounted for and focuses on required adverbs in the middle construction. She argues that the adverb is required to provide the asserted scope of the generic quantifier. Insofar as the scope provides ‘the major content of what is asserted,’ we believe her account of middles ultimately relies on the sort of pragmatic factors outlined here.

⁸ Note this implication can readily be negated as in the following:

(57c) The house wasn’t built by someone or other, it was built by my brother!

⁹ This example is typical of a more general class of examples including:

(58c) #This position/opinion/view was held/assumed/taken.

¹⁰ The examples marked by ‘#’ in this section receive *’s in McConnell-Ginet’s treatment. We use the # mark to indicate contextual variability in acceptability to be consistent with the rest of the paper.

¹¹ Note, the oddness of this example is also unexpected on the event structure account since held, as a stative verb, has a simple event structure (Grimshaw and Vikner 1993:153).

¹² Of course a different lexicalized sense of headed as used in linguistics can appear in bare form as in 61b. This is as expected since whether all constructions can be assumed to have heads or not is a matter of some debate.

(61b) VP is a headed construction.

¹³ Word appears to be an intermediate case. It is not generally possible to use word without an adverb (67a-b), although speakers we have queried vary in their judgments of 67c (indicated by us with “%”):

(67) a. #She didn’t WORD the letter!

b. #She finally worded the speech.

c. % We’ve figured out the content of the exam questions, but we haven’t worded them yet. (Ernst 1984).

Word used to appear readily without an adverb meaning simply, “to express in or put into words” (OED online) as in Burton's Diary (1828) IV. 225, I would have the question worded, before you rise... However today it appears almost exclusively with an adverb. It thus appears that word has evolved through a process of grammaticalization, just as was suggested for headed in section 9.

References

- Ackerman, Farrell and Adele E. Goldberg. 1996. Constraints on Adjectival Past Participles. *Conceptual Structure, Discourse and Language*, ed. by A. E. Goldberg. Stanford, CA: CSLI Publications.
- Bolinger, Dwight. 1965. *Forms of English*. Cambridge: Harvard.
- Bybee, Joan, Revere Perkins and William Pagliuca. 1994. *The evolution of grammar: tense, aspect and modality in the language of the world*. Chicago: University of Chicago Press.
- DeSwart, Henriette. 1998. *Aspect Shift and Coercion*. *Natural Language and Linguistic Theory*.
- Dinsmore, J. 1981. *Pragmatics, formal theory and the analysis of presupposition*. Bloomington: Indiana University Linguistics Club.
- Dixon, R. M.W. 1991. *A New Approach to English Grammar, based on semantic principles*. Oxford University Press.
- Erteschik-Shir, N. and Shalom Lappin. 1979. Dominance and the functional explanation of island phenomena. *Theoretical Linguistics* 6.41-85.
- Ernst, Thomas. 1984. *Towards an integrated theory of adverb position in English*. Bloomington: Indiana University Linguistics Club.
- Fellbaum, Christiane. 1985. *On the Middle Construction in English*. Bloomington: Indiana University Linguistics Club.
- Green, Georgia M. 1995. *Pragmatics and Natural Language Understanding*, 2nd edition. Hillsdale, NJ: Lawrence Erlbaum.
- Grice, Paul H. 1975. *Logic and Conversation*. In Cole and Morgan (eds). *Syntax and Semantics volume III: Speech Acts*. NY: Academic Press. 41-58.
- Grimshaw, Jane and Sten Vikner. 1993. *Obligatory Adjuncts and the Structure of Events*. In *Knowledge and Language*. Eric Reuland and Werner Abraham (eds). Kluwer Academic Publishers.
- Hale, Ken and Jay Keyser 1987. *A view from the middle*. *Lexicon Project Working Papers* 10. Cambridge Mass.: Center for Cognitive Science MIT.
- Halliday A. K. 1967. Notes on Transitivity and theme in English. Part II. *Journal of Linguistics* 3. 199-244.
- Hirtle, W. H. 1969. -Ed Adjectives like Verandahed and Blue-Eyed. *Journal of Language* 6:19-36.

Horn, Lawrence. 1984. Toward a New Taxonomy for Pragmatic Inference: Q-Based and R-Based Implicature. In D. Schiffrin, ed., GURT '84: Meaning, Form and Use in Context. Washington: Georgetown University Press. 11-42.

Hutchison, John. 1989. Predicate Emphasis and Copying in Haitian. Paper given at the MIT Niger-Congo Workshop on Serial Constructions and Transitivity Alternations.

Iwata, Seizi. 1999. On the status of implicit arguments in middles. In *Journal of Linguistics* 35: 527-553.

Jackendoff, Ray. 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.

Jung, Yunsun. 1997. Obligatory Adjuncts. *Texas Linguistic Forum* 38: 161-171.

Keyser, S.J. and T.Roeper. 1984. On the middle and ergative constructions in English. *Linguistic Inquiry* 15:3. 381-416.

Kiss, Katalin É. 1998. Identificational focus versus information focus. *Language* 74:2. 245-273.

Lambrecht, Knud. 1994. *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.

Langacker, Ronald. 1987. *Foundations of Cognitive Grammar. Volume 1: Theoretical Prerequisites*. Stanford, Ca.: Stanford University Press.

Langacker, Ronald. 1991. *Foundations of Cognitive Grammar. Volume 2*. Stanford, Ca.: Stanford University Press.

Massam, D. 1990. Cognate Objects as Thematic Objects. *Canadian Journal of Linguistics* 35 2. 161-190.

McConnell-Ginet, S. (1982). Adverbs and logical form: A linguistically realistic theory. *Language*, 58.144-184.

McConnell-Ginet, S. (1994). On the Non-Optionality of Certain Modifiers. Mandy Harvey and Lynn Santelmann (eds.) *SALT IV* 230-250. Ithaca, NY: Cornell University.

Michaelis, Laura A. 1994. The ambiguity of the English Present Perfect. *Journal of Linguistics* 30. 111-157.

Mittwoch, Anita. 1988. *Aspects of English Aspect: on the Interaction of Perfect, Progressive and Durational Phrases*.

Paul, Hermann. 1889. *Principles of the History of Language*. Translated by H.A. Strong. New York: MacMillan & Company.

- Polinsky, Maria. 1999. Lambrecht: information structure and sentence form: Topic, focus, and the mental representation of discourse referents. *Language* 75 3: 567-582.
- Rappaport Hovav, Malka and Beth Levin. 1998. Building Verb Meanings. In M. Butt and W. Geuder (eds.) *The Projection of Arguments: Lexical and Compositional Factors*. Stanford: CSLI Publications.
- Roberts, I. 1985. The representation of implicit and dethematized subjects. PhD dissertation, University of Southern California, Los Angeles.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1: 75-116.
- Rosta, A. 1995. How does this sentence interpret? The semantics of English mediopassives. In Aarts, B. and Meyer, C.F. (eds.) *The verb in contemporary English: theory and description*. Cambridge: Cambridge University Press. 123-144.
- Sadock, J. (1998). *Grammatical Tension*. Ms. University of Chicago.
- Stalnaker, Robert. 1978. Assertion. In P. Cole (ed.) *Pragmatics. Syntax and Semantics*, volume ix. New York: Academic Press. 315-332.
- Strawson, P. 1964. Identifying reference and truth values. *Theoria* 30. 96-118. Also in D. Steinberg and L. Jakobovits (eds.) 1971. *Semantics*. Cambridge University Press.
- Szymańska and Śpiewak. 2000. Deconstructing the So-called Obligatory Adverbial Modification—an Exercise in Data Interpretation. In Rozwadowska, Bożena (ed.) *PASE Papers in Language Studies. Proceedings of the 8th Annual Conference of the Polish Association for the Study of English*. Wrocław, Poland.
- Traugott, Elizabeth C. 1988. Pragmatic Strengthening and Grammaticalization. *Berkeley Linguistic Society* 14. 406-416.
- van Hout, Angeliek. 1996. Event Semantics of Verb Frame Alternations: A Case Study of Dutch and its Acquisition. Doctoral dissertation, Katholieke Universiteit Brabant, Tilburg.
- Vallduví, E. 1992. *The Information Component*. New York: Garland.
- Van Oosten (1986). The nature of subjects, topics and agents: a cognitive explanation. Bloomington: Indiana University Linguistics Club.
- Wright, Sandra and Beth Levin. 2000. Unspecified Object Contexts with Activity and Change of State Verbs. Paper presented at the LSA Annual Meeting, Chicago. January 6, 2000.

1).
2.

(.
3.
4.
5).

6.
7.

8.
9 n.

10.
11).
12 n.

13 n