What Do Place Adverbials Modify?

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Several different theories of the function of the place adverbials of sentences like (1)-(3) can be found in the recent literature.

(1) John was miserable in New York.
(2) John bought a Fiat in Chicago.
(3) John woke up in a saloon.

According to one theory (Fillmore 1968), the place adverbials of (1)-(3) modify the main verbs. According to a second theory (Chomsky 1965, 102ff.), these place adverbials are verb phrase modifiers. According to a third (Lyons 1968, 345 and Lakoff 1970), they are sentence modifiers.

In semantic terms, these three analyses amount to the claim that the function of the place adverbials of sentences like (1)-(3)—henceforth Verb Phrase Place Adverbials (VPPA)—is to locate states of affairs and actions in space. Fillmore writes, for example, that the locative case is "the case which identifies the location or spatial orientation of the state or action identified by the verb" (1968, 35). Thus, according to Fillmore, in Chicago serves to identify the location of an act of buying in (2). On the other hand, advocates of the verb phrase modifier theory of VPPA would, I presume, say that in Chicago locates the buying of a Fiat in space, and advocates of the sentence modifier theory would presumably say that the VPPA in Chicago indicates the location of John's buying a Fiat.

The idea that VPPA serve to locate states of affairs and actions is not, I think, a very plausible one. Imagine how we might go about indicating to someone the location of John's buying a Fiat. We could point at John or at the Fiat as John makes his purchase, or we could point at the cash or check he hands over, but we could not (except in the very loosest sense of the term) point at the act of buying per se. In short, we can point at the participants of some state of affairs or action, but not at the state of affairs or action simpliciter. And, or so it seems to me, what we cannot point at we cannot locate in space.

There is an alternative to the view that VPPA locate states of affairs and actions in space, namely that they serve to locate the participants of states of affairs and actions. In this light observe that (1)-(3) entail (4)-(6) respectively.

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And, in general, any sentence containing a VPPA will entail a proposition predicating a location of one or more of the participants of the state of affairs or action described by that sentence.3

The fact that (1)-(3) entail sentences predicating locations of the subjects of these sentences cannot be accounted for on the verb, verb phrase, and sentence modifier theories of VPPA, for according to none of these theories is there a postulated relationship between the place adverbials of (1)-(3) and the subjects of these sentences. A second difficulty with the view that VPPA serve to locate states of affairs and actions in space is that sentences that do predicate locations of states of affairs and actions are semantically deviant, as is shown by (7)-(9).4

(7) *John's being miserable was in New York.
(8) *John's buying a new car was in Chicago.
(9) *John's waking up was in a saloon.

It is difficult to see why (7)-(9) should be deviant if the function of VPPA actually were to locate states of affairs and actions in space.

A third difficulty with the verb, verb phrase, and sentence modifier theories of VPPA is that none can be extended to account for the existence of data like (4)-(6). The place adverbials of these sentences are clearly not sentence modifiers, nor is it reasonable to say that they modify the semantically empty verb be, as the verb and verb phrase modifier theories would have it.

The fact that (1)-(3) entail (4)-(6) suggests that there is a semantic relationship between the place adverbials of (1)-(3) and their subjects. There is further evidence of this. As (10) and (11) suggest, the verb annoy can occur either with a concrete noun phrase or an action nominalization in subject position.

(10) John annoyed Sue.
(11) John's leaving town annoyed Sue.

However, only in the former case can a place adverbial occur.

(12) John annoyed Sue in the park.
(13) *John's leaving town annoyed Sue in the park.

Given the verb, verb phrase, and sentence modifier theories of VPPA, it is difficult to see why (13) should be unacceptable. The verb phrases are the same in both (12) and (13) and there is nothing inherent in the sentence modifier theory to the effect that variations in the subjects of the sentences containing VPPA should have any bearing on the possible presence or absence of a place adverbial. On the other hand, if we were to say that there is a
semantic relationship between the place adverbials of sentences like (12) and (13) and their subjects, pairs like (12) and (13) would present no mystery, for note that (14), like (12) is acceptable, while (15), like (13), is not.

(14) John was in the park.
(15) *John's leaving town was in the park.

The fact that there is a relationship between VPPA and the subjects of the sentences they occur in is further brought out by data like (16).

(16) John woke up in a match box.

For (16) to be true, John would have to be very small or the match box would have to be unusually large. The same holds, of course, for (17), an entailment of (16).

(17) John was in a match box.

It is difficult to see how the relative size of John and the match box should have any bearing on how we interpret (16) if there were no semantic relationship between the place adverbial and the subject of this sentence.

As we have seen, the verb, verb phrase, and sentence modifier theories of VPPA: (a) cannot provide a univocal analysis to sentences (1)-(3) and (4)-(6), (b) cannot account for the fact that (1)-(3) entail (4)-(6), (c) falsely predict that data like (7)-(9) should be acceptable, and (d) cannot account for the semantic relationships, noted in our discussion of (10)-(15) and (16)-(17), which obtain between VPPA and the subjects of the sentences they occur in. As a result, we must, I think, abandon the verb, verb phrase, and sentence modifier theories of these place adverbials.

In the case of data like (1) and (2), J. Gei's (1970, 91-104) has given an analysis according to which the place adverbials originate in semantic structures like those that underlie (4)-(6). According to her analysis, (1) and (2) are derived from the structures that underlie (18) and (19).

(18) John was miserable while he was in New York.
(19) John bought a Fiat while he was in Chicago.

This analysis is thus consistent with the facts we noted above that establish a relationship between the VPPA of (1) and (2) and the subjects of these sentences. However, this analysis should not, I think, be extended to data like (3), for (3) is more naturally paraphrased by (20) than by (21).

(20) When John woke up, he was in a saloon.
(21) John woke up while he was in a saloon.
An even clearer example is (22).

(22) John woke up in a saloon at noon.

Sentence (22) is manifestly not derived from the structure underlying (23).

(23) John woke up while he was in a saloon at noon.

Sentences like (3) and (22) present considerable analytic difficulties. I cannot myself believe that (20) represents an intermediate stage in the derivation of (3), for there is no natural way to simplify (20) to yield the correct surface structure for (3). Moreover, a paraphrase like (20) does not exist for (22), as is shown by (24).

(24) When John woke up at noon, he was in a saloon.

In my view, propositions (25) and (26), if one ignores tense, represent reasonable analyses of the meanings of (3) and (22) respectively.

(25) \[(3t) \text{At (Woke up (John), t) } \land \text{ At (In (John, saloon), t)}\]

(26) \[(3t) \text{At (Woke up (John, t) } \land \text{ At (In (John, saloon), t)} \land \text{ IS (t, noon)}\]

However, it is by no means clear how to get from (25) and (26) to (3) and (22); the major difficulty is that there are no paraphrases of sentences (3) and (22) which shed light on what these derivations might be like. Although this difficulty clearly presents a problem to the Generative Semanticist, the nature of the mapping between (25) and (3) and (26) and (22) is just as obscure within an Interpretative Semantics approach.

Footnotes

1. Sentence (2) is ambiguous. On one interpretation, in Chicago is a reduced relative modifier of a Fiat; on the other, in Chicago is paraphrasable as 'while in Chicago'. The discussion that follows concerns the latter interpretation.

2. I don't mean to suggest that the advocates of the verb phrase and sentence modifier theories of VPPA must construe these theories as I have. I mean only to suggest that these are the most straightforward interpretations of the analyses.

3. In certain cases, a sentence containing a VPPA will entail a proposition predicing a location of the referent of the object of the main verb. Observe, for instance, that (i) entails (ii)
and that (iii) entails (iv).

(i) John found Mary in his car.
(ii) Mary was in John's car.
(iii) John parked my car in the garage.
(iv) My car was in the garage.

These data are thus consistent with the view that place adverbials locate participants of states of affairs and actions in space. These occurrences of place adverbials receive a different analysis than those in (1)-(3).

4. Data (7)-(9) are constructed with the sentence modifier theory of VPPA in mind. Parallel data for the verb and verb phrase modifier theories are even more strange, as is suggested by (i) and (ii).

(i) *Buying was in Chicago.
(ii) *The buying of a Fiat was in Chicago.

References