CHAPTER I
INTRODUCTION

There are a number of constructions in English which are commonly described as "generic"; they include sentence types, verbal constructions, noun phrases, and others. The purpose of this work is to study some of these constructions in depth. There are a number of reasons why this is a useful thing to do.

First, the very diversity of the phenomena described as "generic" makes one suspicious. Do these have anything in common besides a name? If so, it should be obvious, but nothing has, to my knowledge, appeared in print or manuscript which has explained just how they are similar. Second, it is not clear just what any of these constructions actually means, although they are extremely common, and have been noted by grammarians many times before; we need to examine this at greater length. Third, there are interesting syntactic differences among generic constructions, and between them and non-generic constructions; little, if anything, has been noted of this before. Linguists, in short, know practically nothing about any of these constructions; the main intent of this work is to contribute to the general stock of facts and hypotheses a number of observations about generics of numerous kinds, in order to raise the general level of linguistic knowledge on this subject, so
that we can say that we know practically something about
these elusive topics.

My method in pursuing this study has been to take
several topics, from among the many that suggest themselves,
and explore each in detail, trying to dredge up as many facts
bearing on them as I can. I focus primarily on the verbal
generic (exemplified by (1)-(4)), with some discussion of
the NP generic (exemplified by (5)-(7)). I have not attempted
(for reasons which will become obvious) to account for all
the phenomena which can be described as "generic".

(1) Bill walks to school.
(2) Harry's dog chases cats.
(3) Bill drinks beer.
(4) George drives a Volkswagen.
(5) Madrigals are polyphonic.
(6) A madrigal is polyphonic.
(7) The madrigal is polyphonic.

Briefly, the remainder of this chapter is a discussion
of the problems and possible analyses of generic verbs;
Chapter II consists of a study of the embedding of generic
verbs in sentences; Chapter III deals with the "occupational"
generic, its social implications and analyses, and the use
of conversational principles to explicate various generic
phenomena; Chapter IV deals with NP generics of various
types, their peculiarities and their meanings; and Chapter
V concludes this study by noting the problems which remain to
be solved (or in some cases, even investigated).

The major problem in accounting for generic verbs
(for this will be the major topic investigated in this work) is resolving the discrepancy between what they apparently mean (which is by no means obvious) and what they ought to mean, if their logical structure had any connection with their surface structure. Most of the generic verbal constructions which we will consider here are characterized by being in the simple present active indicative\(^1\), by using a semantically active verb\(^2\), and by referring somehow to something akin to a state\(^3\), usually characterized by entailment of habitual, frequent, or characteristic performance of a particular action.\(^4\) The first two characteristics of verbal generics are nothing unusual in themselves, nor is the last peculiar, although it may involve some semantic complexity; but the linking of this simple syntactic surface form with this complex and recondite semantic reference is nothing short of incredible. The meaning which we would expect these constructions to have, namely that having reference to present time, is characteristically expressed by the present progressive instead, aside from narrative uses, which we need not concern ourselves with. These generic constructions are, in fact, "timeless", and this is how they have often been described. But this is, of course, not enough to characterize the meanings accurately; if, as seems obvious, the generic verb refers to repeated performance, then timelessness will not give us enough information. How does the notion of repetition get expressed? From what type of logical structure does it proceed? It seems that a
thorough discussion of the meanings of generic verbs (henceforth, in this chapter, simply "generics") is in order.

First, there is the problem of repetition. Since generics convey a meaning of repeated action, the appropriate question to ask is: how often? That is, is there a precise characterization of the number of times (perhaps relative to some standard, rather than a precise number) the action is performed; is there any standard for declaring the sentence false or inappropriate, based on the performance or non-performance of the action a particular number of times? It is clear that this question is not left open with most of the generics in (1)-(4). While it is certainly true that we cannot put an exact number as an answer to the question, it is equally true that an answer is possible—the problem is that the answer varies from sentence to sentence, and we have little or no idea of why this is so.

For example, (1) seems to mean that Bill is "in the habit" of walking to school; that is, whenever he goes to school, he does so by walking. So we would be forced to say something like "almost all the time" in answer to the question above. On the other hand, (2) does not convey the same quantifier, although it can also be paraphrased by "in the habit"; it is simply not necessary for the truth of (2) that every cat that comes within chasing distance of Harry's dog is molested. In fact, this sentence can be said truthfully and appropriately if the speaker has seen the dog chase one or two cats without there having been extenuating circumstances (e.g., the cats didn't bother the dog, he just ran
after them as soon as he saw them). We would then have to answer that the dog chases cats "sometimes" in answer to the question. This is in sharp distinction to the answer for (1). Finally, it is possible to get two answers to the question; (3), for example, can be answered either "all the time" or "sometimes". That is, we can understand (3) to mean either that, on those occasions when one expects Bill to drink something (probably to be understood as an alcoholic beverage), beer is what he will choose to drink--this is equivalent to saying that he "always" drinks beer, or that on those occasions, beer is among the beverages he chooses--this is equivalent to saying that he "sometimes" drinks beer. But either meaning can be conveyed by (3).

Even when we acknowledge the difficulty of determining the frequency, there remains the question of occasion. That is, when (or on what occasions) does the activity take place? It is clear that there are specific occasions (mostly culturally defined) on which it is possible for Bill to walk to school; in fact, every occasion of his going to school is one such, and we know enough about the world to visualize the circumstances and reasons for such travel. On the other hand, there seems to be no such clearly definable "occasion" for a dog to chase cats--such behavior can take place anytime; all that is necessary is that there be a dog and a cat, and that each be aware of the other's presence. That this is a real problem is indicated by the fact that (1) clearly must be read to indicate that Bill's walking takes place on
those occasions when he is going to school under normal circumstances, i.e., as a student or teacher engaged in regular activities which are scheduled. If he frequently (but not according to any schedule) stops by the school on weekends, say, to pick up or drop off something, his mode of transportation is irrelevant to the truth of (1), which refers only to the "normal" occasions of his going to school. Thus we must characterize somehow the notion of "occasion" so that it correctly reflects the cultural assumptions we make about the world. It should go without saying that this is difficult, if not impossible, in most current theories of linguistics.

We have isolated problems dealing with frequency of performance, and with the nature of the occasions and circumstances under which the action is performed. There is a further problem, however, even given a description and explanation of the preceding enigmas. Even though we are restricting our discussion to habitual generics, which refer to, or at least are motivated by past activities, there remains the problem of the time of the action's being performed. That is, even if we had an accurate characterization of the nature of the occasion on which the action can be performed, we need to know also when (in terms of time relative to the present) the actions have been or will be performed. Here the answers again vary. First, it seems to be necessary that, regardless of the circumstances in the past, there must continue to be occasions for the action's being performed in the future. That is, for (1)
to be true and appropriate, it must be the case that we expect Bill to continue to go to school in the future. An examination of the badness of the following sentences will demonstrate the truth of this observation.

(8) *The Super Chief arrives at 8:13, but it's been discontinued.

(9) *Bill walks to school, but he graduated last week.

(10) *Harry's dog chases cats, but he's paralyzed now.

No matter how frequent the activity was in the past, it must at least be possible for it to be performed in the future—otherwise the generic is simply wrong, as well as inappropriate. This brings up the question of conveyed meaning: why is a generic used at all, when a recital of past events is possible? Put another way, how does (1) differ from (11):

(11) Bill has always walked to school.

or (12):

(12) Bill walked to school every day last year.

The answer here is that while (11) at least invites the inference that Bill will continue to go to school, it does not entail that he will continue to walk there; (12) does not even go this far—there is no inference that Bill is going to go to school at all any more, let alone walk there. The inference in (11) is, of course, due to the "present relevance" sense of the perfect, but this is no explanation, since we understand as little of the perfect as we do of generics.
It seems that the reason why a generic would be used instead of a past or a perfect is precisely because these do not have the added implication of continuation into the future. A generic states (somehow) that the action has been and probably will continue to be performed in the appropriate circumstances, and that this is no accident. It gives the impression that the activity is characteristic of the subject in some sense; it is an open question, however, how useful a notion this is in this context, since we are appealing to an ill-understood notion to explain something else we don't understand. We will have more to say about characteristic attributes in Chapter IV.

In the preceding general remarks, we have noted three major problems connected with the semantics and pragmatics of generics: the problem of quantification of performance, of occasion for performance, and of time of performance. It is obvious, of course, that none of these is independent of the others, and that all of them are complex problems, composed of numerous constituent mysteries. However, taken together, they illustrate some of the difficulties of working with generics, and they show some important points which I will henceforth regard as axiomatic: first, that analysis of generics must take into account pragmatic matters—the beliefs and knowledge about the world on the part of the speaker, the cultural and customary assumptions that the speech community holds in common: second, that presuppositions and entailments, as well as other logical and quasilogical
relationships are inextricably mixed up with the phenomenon of English generic use; third, that, at our present state of knowledge of linguistics and of the nature of grammar and speech, there is little hope for a single satisfying solution to the numerous problems that generics raise—the best we can hope for, and the thing I hope to accomplish at least partially in this work, is a compendium of facts and relationships which need to be accounted for, along with a sketch of some possible analyses of them.

Another point to which we will have occasion to refer is the seeming ambiguity present in sentences like (3), corresponding to the "sometimes" reading of (2) and the "always" reading of (1). I believe, and will present evidence in the chapters to follow, that this is due to the presence of quantifiers in the logical structure of the generic. The sense of (1) requires a universal quantifier, while that of (2) needs an existential, while (3) appears to be ambiguous between them. There are problems of analysis which we will discuss below, but the most important thing to establish at the outset is that there is, indeed, an ambiguity involved, and not just vagueness.

We have noted that the sense of the universal in (1) is not the same as that which would be given by a logical quantifier; it is, rather, a hedged universal of some kind. That is, it does not mean "always", but rather "almost always". Note that while (1) is surely false if Bill walks to school (say) half the time, it is just as surely not
false if (say) he walks to school every day, except on those rare occasions when it is sleeting. If this results in his not walking three or four times a year, then (1) is a true and reasonable way of reporting the situation. (13), in the same situation, is false, however:

(13) Bill always walks to school.

because the overt logical quantifier always is falsifiable by a single counterexample, unlike that of the generic. The question arises as to whether we are not dealing with a sliding scale of frequency, perhaps keyed to our expectations in a given situation. That is, it is conceivable that so mundane an activity as walking to school is not worth commenting upon unless it is practically a universal practice for the person named, while something more deserving of attention, because it is unpleasant, dangerous, or otherwise exceptional, can be reported in a generic with somewhat looser constraints on its frequency. We would then have a relationship between the "relevance" of the activity and the degree of frequency with which it must occur. There is something to this notion; we will discuss it in a different context in Chapter III. It will not serve, however, to account for the different readings allowable for generics. There are, in fact, only two readings which can be assigned to a generic, and of course, many generic sentences are not capable of being interpreted in more than one way (which is a different problem). These readings, I claim, correspond to the existential and universal quantifiers I have had
reference to previously. There is not, in fact, any reading intermediate to them, even when "relevance" would seem to demand one.

In order to see this, we must consider the disambiguating contexts of the readings of (3). Note, first, that the intonations of the two readings are different, the existential reading having a characteristic falling intonation, and being concessive in nature. The circumstances in which they would be uttered are also different; for example: (a) the listener has asked the speaker whether to serve beer or wine tonight, when Bill is coming over; he is not sure which Bill would prefer. The speaker replies with (3). (b) the listener is setting the table, and has asked the speaker whether to set a beer glass by Bill's plate; the speaker replies with (3). In situation (a), it is the universal reading which, I believe, is most normal, while in (b) it is the existential. This shows that the relevance of the reading to the situation is important in distinguishing some things, but it is a long step from that to a sliding scale of frequency.

Consider the following sentence:

(14) John smokes cigarettes.

Smoking is a totally optional activity and the "occasions" for smoking are not as hedged about with custom as are those of eating and drinking; hence we will have fewer expectations about occasions. In addition, there are a limited number of things one can smoke habitually (we are referring here to the usual interpretation of smoke as smoke tobacco; other
cultures and subcultures have, no doubt, their own interpretations). In the appropriate contexts, which are not difficult to construct, it is easy to see that (14) can mean either that John smokes only cigarettes, or that John will smoke them, perhaps in addition to other things. If, however, we consider a context where neither of these two readings are relevant to the discussion, we find that (14) is not an appropriate description of the situation which is relevant, showing that these are the only two readings possible.

Suppose a report has just been published, proving conclusively that smokers who use cigarettes in any quantity will develop cancer of the armpit if, and only if, cigarettes make up at least 2/3 of their total tobacco intake. The question arises as to whether John is safe, or whether he ought to cut down on cigarettes in relation to other forms of smoking. In this context, someone uttering (14) is clearly making an inappropriate statement; he would undoubtedly be asked for clarification, since it is not clear from (14), even in this context, just what the proportion of cigarettes is in John's tobacco intake. (14) can apparently have an existential or a universal reading, and only those, even when the context sets up an intermediate reading as appropriate. We conclude, therefore, that a true ambiguity is involved.

There are other tests for ambiguity, as opposed to vagueness, but they are rather difficult to apply in this instance. It must be borne in mind that we are dealing with two readings, one of which entails the other. If it
is true, for example, that John smokes only cigarettes, then it is true that he is not averse to doing so occasionally. With this caveat, the tests can be undertaken: they consist of various conjunction phenomena, like so pronominalization and Gapping. With more normal ambiguities, like the clear-cut difference between the root and epistemic readings of may, for instance, the tests show clearly what is happening. (15) may have two readings: either Max is allowed to take his umbrella because someone has given him permission, or it is possible that he will, because of other factors. A conjunction like (16) is thus four-ways ambiguous, but

(15) Max may take his umbrella today.

(16) Max may take his umbrella today, and Harry may wear his rubbers today.

a conjunction with so pronominalization or Gapping, like (17)-(18), is only two-ways ambiguous; the reductions can only work when the meanings are identical.

(17) Max may take his umbrella today, and so may Harry.

(18) Max may take his umbrella today, and Harry his mackintosh.

The distinction between conjoined sentences that are two-ways, rather than four-ways ambiguous shows that a clear ambiguity is involved.

The application of these tests to generics is tricky. Take a sentence like (14), which we claim to be ambiguous. Then a conjunction like (21)-(22) should give two readings, and not four.
(21) John smokes cigarettes, and so does Mary.
(22) John smokes cigarettes, and Mary cigars.

Since the universal reading entails the existential, if John smokes only cigarettes, while Mary smokes anything she can get, (21) is true---the tricky part is determining whether it actually refers to this situation, or whether something less is indicated. I believe that the possible readings of (21) include one on which neither person is averse to smoking cigarettes, although either may smoke other things, and one on which both people smoke cigarettes exclusively. I do not believe it is appropriate to describe a situation where one is a cigarette smoker and the other doesn't care what he smokes. That is, in the situation described above, the fact that John smokes only cigarettes entails that he smokes them on some occasions, and therefore (21) is true, by implication. But I do not believe that this situation is properly conveyed by (21); an entailed existential is simply not sufficient. Similarly, although the contrast between cigars and cigarettes seems to force a universal reading on both conjuncts of (22), there are contexts in which one can get existential readings on both; there are, however, no contexts in which (22) can refer to the situation rejected for the meaning of (21). We are, thus, faced with a real ambiguity.

Now that we have distinguished the two meanings possible for habitual generics, it may be enlightening to investigate them and their interaction with other grammatical
phenomena. There appear to be a number of grammatical processes and elements which disambiguate generics. First, as noted in (Lawler (1972)), the cleft and pseudo-cleft transformations (if they are indeed transformations) choose universal generics. Thus (23) and (24) are not ambiguous, although they appear to be related, if not derived, from the ambiguous (3):

(23) It's beer that Bill drinks.

(24) What Bill drinks is beer.

(23) and (24) both have universal readings; they state that beer is the only beverage that Bill drinks, in the appropriate range, which would normally include that of all alcoholic beverages—there are circumstances, however, in which they could range over broader sets. For instance, in a Mormon culture, coffee is a prohibited beverage, as are tea and alcoholic drinks (and for some, cola-based soft-drinks); in this culture, (23)-(24) could mean that beer is the only one of the class of prohibited beverages that Bill drinks. Regardless of the range, however, there is no reading of cleft or pseudo-cleft generics related to ambiguous generics which can have an existential reading. Why this should be so is not completely clear, but some notion of the function and use of clefts and pseudo-clefts may give us an inkling. These types of sentences, although mysterious grammatically, do seem to have the semantic force of focusers; that is, they shift elements about in the sentence in order to more accurately pin down the focus
(or topic, or theme). It seems that such a procedure necessarily implies exactness of the meaning of the NP which is marked as the focus by this procedure, and therefore the use of (23)-(24) excludes the possibility that beer is merely one of many things that Bill drinks; there would be no purpose in uttering these sentences if this were the case. A similar case of focusing can be found in ambiguous sentences with quantifiers. Consider:

(25) Every man in the room wants to see some presidential candidate.

It is well-known that sentences with two quantifiers like (25) are ambiguous in many dialects because of the possibility of combining the quantifiers in two ways, namely: (a) "For every man there exists a presidential candidate." and (b) "There is a presidential candidate such that for every man ...". The latter reading refers to a particular candidate, the former does not. The sentence can be disambiguated by the addition of: (a')", namely the favorite son of his home state" and (b')", namely Wallace". (26)-(27), however, with cleft and pseudo-cleft constructions, specify only the (b) reading, because of the necessity for singularity and exactness of the focus:

(26) It's some presidential candidate that every man in the room wants to see.

(27) What every man in the room wants to see is some presidential candidate.

Note that this is not the result of normal Q-crossing constraints; first, no quantifier has been crossed in (27);
second, the interchange of quantifiers in (26) has no effect in the similarly arranged, but differently derived sentence (28), with there-insertion:

(28) There's some presidential candidate that every man in the room wants to see.

We see then, that the behavior of generics vis-à-vis these constructions is not unique, and that clefts and pseudo-clefts have characteristics which require them to pick out definite individual NP's, which can only be done to generics when the universal reading is present. I hypothesize (but cannot prove, and have no intention of attempting to here) that the singular number and definite nature of the it and the definiteness of what are the causative factors in this phenomenon.

A similar phenomenon is encountered in interjections, such as those discussed in (James (1972)). James's researches into the uses of uh and oh have shown that they, too, dis-ambiguate generics. Thus (29) has a universal and (30) an existential reading:

(29) Bill drinks, uh, beer.

(30) Bill drinks, oh, beer.

The reason for this seems to be that, in the first instance, uh in this position in the sentence is a pause indicator, showing that there is some exact word which the speaker momentarily has forgotten. It seems to require that there be some definite concept or thing which has a name, and thus has similar characteristics to the clefts discussed above. In the second instance, the use of oh in this position
indicates specifically that a choice among several alternative terms is possible, each of them as good as any other—this is equivalent to the existential reading, since it means that beer, in this case, is only one of several possible things that Bill drinks. It seems to be the case that the use of oh before a noun phrase denotes a class of nouns, any of which can fill the slot in the sentence as well as the one actually there. It is an interesting problem to find how to define the class denoted in each case, but it is one we will not solve here.

Negatives interact interestingly with the generic ambiguities. The negative version of an ambiguous sentence is unambiguous; (31) negates the existential, rather than the universal:

(31) Bill doesn't drink beer.

(31) means, that is, that beer is never drunk by Bill, not just that it is not the only thing he drinks. Instead of a (theoretically) plausible reading of negation of certainty (the universal) we get only the negation of possibility.

At this stage of the analysis of generics, I am at a loss to account for the unambiguousness of (31). It remains a significant problem for any adequate treatment of generics.

The occurrence of adverbs with habitual generics seemingly changes the meaning of the sentence in unexpected ways. We noted that (2) had the existential reading only; however, the addition of a manner adverb, such as viciously, or ineptly, gives a universal, but of a different sort.
(32) and (33) both have universal readings, but they do not appear to refer to the same set of activities.

(32) Harry's dog chases cats viciously.

(33) Harry's dog chases cats ineptly.

While (2) seemed to mean that, among all the things that Harry's dog did, there were some occasions of his chasing cats, (32)-(33) seem to mean that, of the occasions of his chasing cats, all were done either viciously or ineptly. That is, the generic refers to the adverb, rather than to the activity itself. If there are quantifiers present, then the scope is different in these sentences. The quantifier in (2) binds a variable ranging over the dog's activities, of whatever nature, while that in (32)-(33) binds one ranging over only the occasions of his chasing cats. In generative semantic terms, this indicates that the position of the adverb in relation to the quantifier is significant.

However, while this seems to be the case with adverbs of manner, there is a different situation with other adverbs. Note the meaning of (34):

(34) Delmer walks to school on Tuesday.

While this does have a universal reading, to the effect that, if it is Tuesday, the speaker is certain that Delmer will walk to school, it is not the case that the speaker necessarily means to imply that he will do so only on Tuesday, although this is possible. In other words, whereas the genericity of (32)-(33) seemed to reside in the adverb, that of (34) has two generic quantifiers: the universal derived from (2), which is unchanged, and a different one, focussed on
the time adverb, which is ambiguous—the speaker may mean that Tuesday is the only day on which he walks, or may mean that it is only one of several days. This difference is intriguing; that manner adverbs should behave differently from those of time is not surprising (see Lawler (1971)), but the way in which they interact with generics is highly suggestive. (See Appendix for further discussion of some of these topics).

Despite the difficulties, there is something that can be said about generics from a grammatical point of view. After all, there is a recognizable generic construction; in fact, generics comprise most of the occurrences of the simple present tense with active verbs. Since we will be employing the generative semantic approach to this topic, we might try drawing a few tentative trees for generic sentences; we can avoid grappling with Aspects-type structures that would, in any case, not represent anything we are interested in except present tense. If we follow some current work in generative semantics, one approach to the problems of generics might be to posit a higher predicate GENERIC which commands every generic sentence. This is ad hoc so far, but we might have a chance to determine something real about the nature of such a predicate by examining how generics interact with other grammatical phenomena. Then a possible representation for (1) is (35):
(We fudge here the question of the structure of the locative to school.) However, despite the disclaimer about ad-hocracy, (34) is dissatisfying; at best, it attributes all the mysteries about generics to the totally unexplained predicate GENERIC (which bears a disturbing resemblance to the arbitrary feature +generic); at worst, it makes unsupportable claims about the structure of generics, and is totally unable to predict some aspects of the behavior of generics, e.g., the ability to get differing quantifiers of performance on various generic sentences, such as the two readings for (3), which would have to have two different logical structures if it is truly ambiguous, as we have demonstrated. (34), then, is not a likely candidate for the deep structure of (1).

Let us then try a structure with something in it that we can recognize, say TYPICAL or CHARACTERISTIC:
Aside from the obvious problem of how (36) is different from the logical structure of (37),

(37) It is typical of Bill that he walks to school.

there are a number of problems with this structure. First, TYPICAL will not give us two meanings for ambiguous generics any more than a more abstract predicate will—either we change what we mean by TYPICAL, thus reducing its usage to vacuity, or we need two predicates, one each for the "all the time" and "sometimes" readings, and this is not what we mean by TYPICAL, either. Secondly, this structure says nothing about the occasions involved. Third, it is not clear what the subject of TYPICAL should be—we use Bill here, but it could easily be a S; in fact, it might make more sense if it were. This might give us a better handle on the second objection, since we could then claim that the subject represented the occasion, in this case, going to school. Thus,
This makes a little more sense, although there are still fatal objections to it, namely the first problem, that of accounting for the ambiguities. (38) seemingly would mean something like "it is typical of Bill's going to school that he walks (on those occasions)." (38) is then a somewhat more likely candidate structurally than any of the others, although it looks like TYPICAL is the wrong predicate, and some of the constituent relationships may need revising. If TYPICAL (and by the same argument, CHARACTERISTIC) is not right, then what should we try next? I think that for an approximation, we can try to represent the quantificational nature of generics, with a few caveats. To begin with, we must note that the existential quantifier will not work as a higher predicate in generic sentences as it stands. A typical structure might have something like an existential binding occasions of (say) smoking, and stating that on some of these occasions, John smoked cigarettes. The problem with this is obvious--it is essentially the same structure that we would want to assign to the non-generic (39):

(39) John smoked cigarettes n times.
That is, (39) contains a quantifier, and if \( n = 1 \) (or some small number in relation to the number of times John has smoked anything) it contains an existential. What we need is an existential **generic** quantifier, which will give us not only the proper quantifier relationships, but also the presuppositions and entailments that were noted above. For the present, we will allow the desire for quantification to overbalance our dislike of abstract entities, and posit such a generic quantifier. Similarly, the universal quantifier, as noted above, is in need of revision along similar lines to make sense in a generic. Thus, both existential and universal should be understood in the context of generics to mean not the usual predicate-calculus entities, but rather something different.

Let us represent the "generic quantifiers" as \( \forall_g \) and \( \exists_g \), respectively universal and existential. If we attempt to set up a formula containing these entities, we run into the problem of variables, since quantifiers (in order to have any sense) need to bind something used in the sentence. What does the quantifier in a generic quantify over? It seems to be the case that they refer to "occasions" in a broad sense, events of a given character which are asserted further to have other characteristics. Thus (1) seems to be quantifying over occasions of Bill's going to school, and asserting that they are occasions of his walking (using a universal generic quantifier), while (2) seems to quantify over occasions of the dog's doing anything, and stating that
some of them are events of the dog's chasing cats (existential). We can represent this by using an "event variable" \( e \) which is an argument of a (highly fudgy) predicate EVENT which takes a second, sentential, argument. We will further adopt a notation for constraining the scope of variables which consists of making quantifiers take a second (sentential) argument denoting the nature of the variable, parallel to the such that clause frequently found in logical works. Thus, one representation of (1) is (40):

(40) \((\forall e, \text{EVENT} (e, \text{GO(TO)}(\text{Bill, school})))\)\(\text{EVENT} (e, \text{WALK}(\text{Bill}))\)

on in tree form (using Lakoff's (1971) form, with emendations):

(40)

\[
\begin{array}{c}
\text{S} \\
\text{V} \quad \text{e} \quad \text{S} \\
\text{V} \quad \text{NP} \quad \text{NP} \\
\text{EVENT} \quad e \quad \text{S} \\
\text{V} \quad \text{NP} \quad \text{NP} \\
\text{GO(TO)} \quad \text{Bill} \quad \text{school}
\end{array}
\]

Alternatively, we could recast (40) into a form with implicational structure in the assertion, thus avoiding the necessity of the added clause in the quantifier (it is simply not clear which is preferable—I do not think such considerations affect the discussion):

(41) \((\forall e)(\text{EVENT} (e, \text{GO(TO)}(\text{Bill,school})) \rightarrow (e, \text{WALK}(\text{Bill})))\)
(41) translates roughly as "if any event e is an occasion of Bill's going to school, then it is an occasion of his walking", which is approximately the same as the sense of (40), although there may be semantic reasons for not wanting to say that (1) contains an implication.

There are a number of things one can say about the representation (40) (as well as (41)): first, there is the obvious fudge of the EVENT predicate; second, (40) does not contain a locative—it might be interpreted to mean that Bill walks while on his way to school, as a separate, but coterminous activity. It is an open question whether the meaning of (1) specifically is derived from conversational assumptions (if one mentions a mode of locomotion in connection with a verb of motion, it is to be assumed that the actions are not merely simultaneous, but the same) or from additional structure (such as putting the motion verb GO(TO) . . . SCHOOL in the second clause as well as the first).

Note that nothing about this representational schema gives any hint of why (40) with the existential $\exists g$ is not the appropriate representation of (1), or why (42) must contain $\exists g$ to represent (2):

(42) $(\exists g, \text{EVENT}(e, \text{ACT}(H's \text{ dog}))) (\text{EVENT}(e, \text{CHASE}(H's \text{ dog, cats})))$

(We ignore the generic nature of the NP cats, and use the predicate ACT to indicate that the event variable is one restricted to occasions of Harry's dog doing something.) Note that it would be semantically strange to use the
universal; what could it possibly mean? That the dog does nothing else? The converse, using an existential in (1) and (40), is not strange; it makes sense to say that Bill sometimes walks to school, although we cannot say it with (1). We will argue below that many, if not all, of the restrictions on the use of universals and existentials in generics derive from conversational postulates.

A notation like this does allow us to provide distinct logical structures for the ambiguous generics like (3); the reading on which John drinks nothing but beer would have a universal, and the one on which beer is one of the things he drinks would have an existential. Intonation, as usual, would disambiguate in context.

Rather than consider further a priori analyses (and their shortcomings, which are many) of generics, we will make do with this admittedly cumbersome and problematical notion, in order to have a framework on which to hang some of the many observations which can be made about the interaction of generics and other linguistic phenomena.
FOOTNOTES

1. There are, of course, generics used in all tenses. As we will see in Chapter II, they can be infinitives and gerunds, too. What distinguishes the present active is that its primary (and in many cases its only) use is as a generic; in this it is different from other tenses in English.

2. This restriction is necessary to differentiate the generics from the statives, which are frequently used in the present without generic sense of any kind that I can recognize. Statives, however, are similar to generics in some ways.

3. As mentioned in note 2, there are puzzling similarities between generics and statives, which I have been unable to account for. It was originally intended that this would be one of the major topics investigated in this work; although I have uncovered many relationships, the generalization linking the two escapes me. Material bearing on this relationship will be noted as it occurs in the body of the work.

4. Again, this is an oversimplification. What is meant here is that this is the kind of generic which is to be discussed here. The other kinds have proven not to be particularly amenable to analysis, and are discussed briefly in Chapter III.

5. This may shed some light on the universal reading of (l). Note that walk is, in some sense, a manner verb, and can be paraphrased as "go by walking". In that case, the universal reading would be predicted by the fact that manner adverbials take universals. The reasons for this latter fact remain mysterious, of course, but we have related two facts to the same phenomenon, and that is how progress is achieved in linguistics.

6. In what follows, it is important to bear in mind that all of the possibilities discussed have been proposed, formally or informally, by various linguists, at various times, to handle generics. That they are all wrong in some way is neither surprising nor particularly important, in
our case, since I have no better analysis to offer, and since the purpose of this work is not to discuss competing analyses, but to provide a base of facts and observations for future analyses. We will wind up (weakly) supporting one particular analysis, but it should be clear that this is only for convenience's sake, to allow us something to discuss the data in terms of.