

GENERIC TO A FAULT*

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Sentences (1)-(3) are examples of the present tense construction known variously as "gnomic", "timeless", "habitual", or "generic". While it has been known for a long time that this construc-

- (1) Delmer walks to school.
- (2) Nephi's dog chases cars.
- (3) &Garth drinks coffee.

tion must be differentiated from all other tense usages, satisfying proposals for analysis of such generic sentences are in very short supply. It is the purpose of this paper to investigate the syntactic and semantic properties of generics¹ with a view to showing why they are so difficult to analyze .

Generics such as (1)-(3) have traditionally been analyzed as describing habitual or repeated activity; and while this seems to accord with our feelings about the meanings of generics, it is far too loose to be useful. For one thing, it does not tell enough about even the generics it attempts to handle, and we will see that there are other types of generic that do not even come under the rubric of "habit".

Consider, for example, the meanings of (1)-(3), which all can be loosely termed "habitual". If we wish to say that these sentences assert repeated activity (however much else they may say), then the most reasonable question to ask is: how often? The answer, surprisingly enough, is that it varies, and not for any easily discernible reason. (1) means that Delmer walks to school all the time, or most of the time. (2), on the other hand, simply means that Nephi's dog has been known to chase cars on occasion, and does not mean that every car that comes within chasing distance is molested. (1) is false if Delmer walks to school one day out of five, but (2) is certainly true if Nephi's dog chases one out of every five cars that come his way, or if he only chases cars when supper is late, or if the cat next door gives him a hard time, etc. This type of disparity is strongly suggestive of the distinction between existential and universal quantifiers; reasonable paraphrases of (1) and (2) would be (respectively): "on all occasions when Delmer goes to school, he walks" and "there have existed occasions of Nephi's dog chasing cars." The problem lies in explaining why (1) is universal, while (2) is existential; it is compounded by the observation that (3) is ambiguous between a universal reading (Garth drinks nothing but coffee) and an existential one (Garth is not averse to drinking coffee). There is no a priori reason for the distribution of quantifiers in generics of habit, nor is there anything in the observation that quantifiers² are at work that helps us determine their range or arguments---(1) seems to be quantifying over occasions of Delmer's going to school, while (2) does not seem to have such a clear-cut variable to quantify over.³ Any attempt to state the difference between (1) and (2) in terms of the

formal differences between quantifiers runs into formidable difficulties, yet there is ample evidence that such a distinction exists. Cleft and pseudo-cleft sentences, for instance, disambiguate (3), choosing the universal reading:

- (4) It's coffee that Garth drinks.
- (5) What Garth drinks is coffee.

An extremely interesting point should be mentioned here: even the universal reading of (3)-(5) do not always exclude the possibility that Garth drinks (say) water. This is attributable in these sentences to the same fact: there are contexts in which drink is the appropriate verb where it does not simply mean to ingest liquids by swallowing. This is evident when we consider the meaning of the unambiguously universal (6):

- (6) It's beer that Garth drinks.

The most common interpretation of (6) is that on which the only alcoholic beverage (not the only liquid) Garth drinks is beer. What is interesting about all this is that a natural class defined by contextual usage of the verb is appealed to not only in (6), but also in (3)-(5)---but only in the appropriate circumstances. In a Mormon culture, (4) and (5) can mean that Garth does not drink tea or alcoholic beverages, but does drink coffee; that is the prohibited beverage in which he indulges. (3), in this social group, is a condemnation.

Negation also disambiguates existential and universal generics; but here a distinction must be made between internal and external negation:

- (7) &DeVar eats vegetables. (\exists or \forall)
- (8) DeVar doesn't eat vegetables. ($\neg\exists$ only)
- (9) &It isn't true that DeVar eats vegetables. ($\neg\exists$ or $\neg\forall$)

(7) can mean either that DeVar is a vegetarian, or that he will eat vegetables if you give them to him. (8), however, can mean only that he eats no vegetables (negation of existential), rather than that he isn't a vegetarian (negation of universal). I have no explanation for this, nor for the rather startling fact that (9), with external negation, is ambiguous between these two readings---one might hypothesize that quantifier-crossing constraints are involved, but without a reasonable framework for stating the quantifiers in (7), there seems little hope for explaining (8) in this way.

Deborah James (1972) has recently shown that the interjections uh and oh have interesting properties; one of the most interesting for our purposes is that they, too, disambiguate existential from universal. (10) means that Heber reads only Ramparts, while (11) means that this is only one of several things he may read.

- (10) Heber reads, uh, Ramparts.
- (11) Heber reads, oh, Ramparts.⁴

Finally, although the ambiguity between existential and universal generics is not the clear-cut kind we are accustomed to testing, since the universal generic entails the existential, the phenomena of Gapping and so-Pronominalization with conjunction (among other tests) show that there is indeed an ambiguity involved, and not just vagueness. (12) is ambiguous like (7), but the conjunction of these two with Gapping in (13) is only two-ways ambiguous, instead of four. Similarly, (14) with so:

- (12) &Dueard eats meat.
 (13) &DeVar eats vegetables, and Dueard meat. ($\forall+\forall$ or $\exists+\exists$ only)
 (14) &Dueard eats meat, and so does Gaylard. ("")

that is, (13) cannot assert that DeVar is a vegetarian, while Dueard will eat many things, among them meat, or that DeVar will eat vegetables, while Dueard must stick to meat. These may, in fact, be the situations, but that is not what (13) and (14) mean---any existential must be asserted, and not just entailed, in order to make the sentence good. (14), similarly, must conjoin either two asserted existentials or two asserted universals.

Another mystery about generics is their relation to modals; we will discuss this at greater length below, but it is instructive to note that the existential generics we have considered so far are paraphrasable with root will; thus (15) is a paraphrase of (12) in the existential reading only. That this is the case can be seen by com-

- (15) Dueard will eat meat.
 (16) Nephi's dog will chase cars. (= (2))
 (17) Delmer will walk to school. (\neq (1))

paring the synonymy of (16) with (2), which is existential, and the non-synonymy of (17) with (1), which is universal. In fact it is rare to get a root use of will in a non-negative, non-conditional sentence; the only way (17) can make any sense is to interpret it as a prediction, using the epistemic future will; (15) and (16) can, however, be interpreted either way, and the root use is equivalent to the existential generic. There should be some reason for this correspondence, but what it might be is not readily apparent, although Robin Lakoff has recently made some generalizations about modals (1972) which might be of help in this area.

A special type of generic, seemingly derived from the habitual form, is the "occupational" generic. These sentences have readings which are interpreted as statements about occupations or professions; they are illustrated by (18)-(22):

- (18) &Ken drives a truck. (occ or hab)
 (19) George drives a VW. (hab only)
 (20) Frampton runs a gas station. (occ only)
 (21) &Theron paints landscapes. (occ or hab)
 (22) &Veldon reads manuscripts. (occ or hab)

A number of observations may be made about these generics: first, with the exception of certain idioms like (20), which are

unambiguously occupational, most occupational generics are ambiguous, and may also be interpreted as habitual generics, referring to the activity involved, without inviting the inference (or presupposing) that the activity is the source of income of the subject. This might lead one to believe that this is not, in fact, a syntactically distinguished type of generic, but is rather a product of conversational or contextual principles. While this may be the ultimate origin of the occupational, however, it is also that it acts in different ways syntactically from the habitual generic, and therefore must be accounted for in syntactic terms, or in terms that include syntax. Second, it seems that the possibility of getting on occupational reading for a generic sentence depends crucially on extra-linguistic factors, such as the common knowledge that many people typically earn money by driving trucks, while comparatively few do so by driving VWs. If it is the case (as we will argue below) that syntax must distinguish between occupational and habitual generics, then syntax must make use of non-linguistic knowledge.

The syntactic peculiarities of occupational generics are many, and they are extremely puzzling. To begin with, the Gapping and so tests give results that show a true ambiguity. Assume that Ken owns a pickup truck, and drives it to his job, which is teaching linguistics; George is another linguistics professor, who drives a VW as his transportation; and Mac is a teamster. Then we get the following:

- (23) Ken drives a truck and George a VW.
 (24) *Mac drives a truck and George a VW. (in intended reading)
 (25) *Mac drives a truck, and so does Ken. (")

These sentences show that occupationals and habituais may not be substituted or deleted under identity, and that thus the two readings of (18) do indeed represent an ambiguity, and not vagueness. (25) can be good only if it means that both are teamsters, or that both drive trucks instead of cars. An interesting point in this regard is that the nominalizations of (18) and (19) show a very strange pattern:

- (26) Ken is a truck driver. (occ only, not habitual)
 (27) George is a VW driver. (hab only, not occupational)

The nominalization truck driver is unambiguously occupational, although it must come from (18), which is ambiguous; (19), on the other hand, nominalizes normally as (27), with no change of meaning. This may be due to the almost-idiomatic force of truck driver, since this is not true of many ambiguous sentences:

- (28) *Theron is a landscape painter. (occ or hab)
 (29) *Veldon is a manuscript reader. (occ or possibly hab)

Another case of occupationals behaving differently from habituais in their syntactic usage is provided by the various possibilities for embedding generic sentences under other predicates. In (30)-(43), all of the sentences can have habitual readings, but only those marked "0" can have occupational readings as well. The distinction is clearly determined by the commanding predicate (and the complementizer choice),

but there is, as far as I know, no reason why a given predicate or complementizer should have anything to do with the occupational nature of the sentences in its complement.

- (30) 0 Bill wants to drive a truck.
- (31) Ø Bill tried to drive a truck.⁵
- (32) 0 Parley likes driving a truck.
- (33) Ø Urven likes to drive a truck.
- (34) 0 It seems that Philroy drives a truck.
- (35) Ø Philroy seems to drive a truck.⁶
- (36) 0 It happens that Arbon drives a truck.
- (37) 0 Arbon happens to drive a truck.
- (38) Ø Clayne taught Ottis to drive a truck.
- (39) 0 Clayne trained Ottis to drive a truck.
- (40) 0 LaMoyne stopped driving a truck.
- (41) Ø LaMoyne finished driving a truck.
- (42) Ø?LaMoyne ceased driving a truck.⁷
- (43) 0 LaMoyne ceased to drive a truck.

Examination of the above sentences reveals that there is no correlation with any of the variables we might expect. (30) and (31) are both examples of Equi; (32) and (33) seem to depend on complementizer choice, although (40)-(43) show that the gerund complement, while freer in permitting occupationals, does not always allow them. (34)-(37) are examples of Raising---in (34) and (36), the unraised forms permit occupational readings, and in (37), application of Raising does not seem to change anything, but in (35) the occupational reading is blocked by Raising. Attention should also be paid to the near-synonymy of (38) and (39), and of stop, finish, and cease in (40)-(43), as well as the utter irrelevance of these facts to the occupational generic. To say that this is a baffling phenomenon is to understate the case severely; however, there must be an explanation, and it may be that tests of this type can be used as tools for investigating the meanings of individual predicates---that is, if we can find out just what they test for.

So far, all the generics we have considered could have been loosely described as "habitual action" of some sort, or could have conceivably come from such a generic. There are, however, other types which lack even this comforting feature. Consider, for example:

- (44) &Tab "A" fits in slot "B".
- (45) The Vice-President succeeds the President, and the Speaker of the House succeeds the Vice-President.
- (46) Chlodene's new Maserati cruises at 150 mph.
- (47) This tire lasts an average of 40,000 miles.⁸
- (48) &The new monorail goes 110 mph.
- (49) &Nason speaks German.
- (50) &The President appoints Cabinet members with the advice and consent of the Senate.
- (51) Doing syntax rots your brain.⁸

This is a very mixed bag of examples, and illustrates a number of problems. To begin with, although (44) is ambiguous between an

existential and a universal reading, in neither of them does it make sense to speak of "habit" or "repeated action". There is simply no quantification over past activity involved, as there is in habitual generics like (1)-(3). The two readings can be paraphrased as:

- (52)a Tab "A" is to be fitted (only) into slot "B". (∀)
 b Tab "A" will fit in slot "B" (perhaps among others). (∃)

In either interpretation, there cannot be any appeal to past experience; (52)a describes a function (for lack of a better name, I will call it a "functional" generic), while (52)b describes a possibility (similarly, I call this type a "potential" generic)---neither makes any claim that anything has ever happened. We will see below that functionals are always universal, while potentials are existential.⁹

(45) and (50) are examples of functional generics, similar to the universal reading of (44). These are frequently used to express directions or prohibitions, under the assumption that, in the appropriate conversational conditions, to state what must be done is to order that it be done. (see Gordon & Lakoff (1971)) The interesting part is trying to find out where the must comes from. The problem is considerably complicated by the introduction of modal paraphrases:

- (53)a The President can appoint Cabinet members with the advice and consent of the Senate. (= (50))
 b The President must appoint... (= (50))
 c The President may appoint.... (= (50))
 d The President will appoint... (≠ (50))

(53)d, with will, the modal that paraphrases existentials, predictably does not paraphrase the universal (50); however, all the other modals do seem to paraphrase (50) fairly well. This is disturbing, since the root can, must, and may do not mean the same thing, and they ought not to be equally good paraphrases (or even paraphrases at all) of a sentence without modals. There may be some explanatory value in the observation that (50) and its paraphrases all seem to have a suppressed only in the prepositional phrase---must and can/may only seem to be equivalent. However, while this correctly derives the only from the universal nature of (50), it does not account for the possibility of modal paraphrases in the first place. Even if we say that this is simply a property of functional generics (as differentiated from habituals---note the unacceptability of (54)-(56) as paraphrases of (1)-(3):

- (54) Delmer can/may/must walk to school. (≠ (1))
 (55) Nephi's dog can/may/must chase cars. (≠ (2))
 (56) Garth can/may/must drink coffee. (≠ (3)) ,

we still have difficulty in dealing with (45), which is also functional, but which is not adequately paraphrasable with any modal. (45) seems not to quantify over actual events so much as possible events, and appears to mean that in a given situation the VP will succeed the President, and then in an extension of that situation (if the new President is incapacitated) the Speaker will succeed the VP as President.¹⁰

How this is to be represented in anything approaching an adequate semantic theory is a question which beggars the imagination.

We noted above that the existential reading of (44) was potential in some sense; a similar reading is present in (46) and (47), and modals (again) complicate the problem severely. Note that (46) is paraphrasable by both (57)a and b, while (47) is paraphrasable by (58)a, but (58)b is unacceptable grammatically:

- (57)a Chlodene's new Maserati can cruise at 150 mph.
 b Chlodene's new Maserati will cruise at 150 mph.
 (58)a This tire will last an average of 40,000 miles.
 b?*This tire can last an average of 40,000 miles.

First, note that the modals in (57)-(58) are epistemic, while those that clouded the picture in (53)-(56) were root---apparently the existential potentials are a different kettle of fish. Second, even in epistemic use, can and will do not mean the same thing, and it is strange to find them equally good in (57) as paraphrases. Third, there is the (by now) usual problem of explaining the origin of the modals in the semantics. The fact that (58)b is bad seemingly follows from the fact that average quantifies over the same range as epistemic can (see, e.g. Lakoff (1972)), thereby making the modal superfluous. Note that (58)c and d are both good, and equivalent, without the average:

- (58)c This tire will last 40,000 miles.¹¹
 d This tire can last 40,000 miles.

Again, the most serious problem is to distinguish in a principled manner those sentences which require a potential, or a functional, or an occupational, or a habitual reading. I cannot escape the feeling that the principles which will allow us to do this lie several turtles below our present capabilities.

(48) appears to be ambiguous between a universal habitual (110 miles is the only or the usual speed at which it travels) and an existential potential similar to (46). The fact that (46) is usually not interpreted as a universal is due, I think, to facts we know about the world: automobiles are not always operated at their highest (or even optimum) speed, while railed vehicles are more regulated, and can do so more of the time.

(49) is an interesting sentence in a number of ways. While it is ambiguous, like (48), between a universal habitual and an existential potential, it is not paraphrasable by will, although it is by can, in the existential reading, while the existential (48) is good with either:

- (59)a The new monorail can go 110 mph.
 b The new monorail will go 110 mph.
 (60)a Nason can speak German. (= existential reading of (49))
 b Nason will speak German. (≠ either reading of (49))

This is rather troubling, since the only thing we have been able to

count on is the observation that will paraphrases existential generics (although it is the root will for habituals, and the epistemic will for potentials). (49), however, spoils all this, all the more so when we realize that the can in (60)a which paraphrases (49) is root, and not epistemic. There appears to be something about the construction speak + language name which allows ability to suggest performance, something which is unusual in most situations.¹²

In connection with (51) (about whose truth there can certainly be no question), I would like to discuss a verb which crops up in discussions of generics rather frequently, tend. It might be suggested that tend or a predicate similar to it might appear as the higher verb in generic sentences, thus allowing us to derive at least some of the peculiar properties of generics with reference to it. While it is true that tend is a generic of some sort, it does not appear to be a generic of any sort which we have discussed here. (51) is not only paraphrasable with epistemic modals ((61)a-c), but with tend as well ((61)d):

- (61)a Doing syntax can rot your brain.
- b Doing syntax may rot your brain.
- c Doing syntax will rot your brain.
- d Doing syntax tends to rot your brain.

It seems obvious that (61)a-d do not mean the same things, and are thus not really paraphrases of (51) in the strict sense---what they in fact do is convey the same illocutionary force of warning as (51), thus becoming acceptable as paraphrases in a different sense. While the modals all paraphrase either an existential (can and may, in different senses, as noted by Lakoff (1972)) or universal (will), tend does not seem to be tied up with either of these quantifiers, but rather to mediate between them. It seems to be the function of tend to review past experience and abstract the characteristics which are (in some sense) typical---tend makes no claims that something always occurs, even in the weaker universal sense of the generic quantifier; on the other hand, it is not so weak as to merely claim that something has happened on occasion; it seems instead to assert that something about the situation is natural, and that the generic statement follows as a consequence. Thus a sentence with tend is neither existential nor universal, as can be seen by the fact that (62), (63), and (64) have about the same truth conditions; (64) is not ambiguous like (3), and the situations described in (62) and (63) would have to occur

- (62) Delmer tends to walk to school.
- (63) Nephi's dog tends to chase cars.
- (64) Garth tends to drink coffee.

with about the same degree of frequency (less than all the time, but more often than only occasionally) in order for (62) and (63) to be true. It seems, then, that tend defines a different kind of generic altogether, similar to habituals, but different in quantifiers. It can be seen by comparison of (65) and (66) to (44) and (45) that the tend generic is not to be identified with either functional or potential generics, since they do not make reference to past events:

- (65) Tab "A" tends to fit in slot "B". (≠ either reading of (44))
 (66) The Vice-President tends to succeed the President. (≠ (45))

The final problem I wish to consider here has to do with implications and quantifiers.¹³ Consider the following sentences:

- (67) The Gwamba-Mamba eat salmon.
 (68) The Gwamba-Mamba like salmon.

Assume that both (67) and (68) are true. Now consider that salmon are fish (or a type of fish, or fishes, or a fish, or just fishy). Then why is it that (69) follows from (67), while (70) does not follow from (68)?

- (69) The Gwamba-Mamba eat fish.
 (70) The Gwamba-Mamba like fish.

While (70) may, in fact, be true, it does not follow from the information given in (68); we need to know more in order to conclude (70). (69), on the other hand, can be confidently asserted by anyone who only knows that (67) is true. It seems to be the case that fish in (69) means only some fish (or some kind of fish, etc.), while in (70) fish means all fish (or all kinds of fish). Quantifiers have once more complicated the situation.

I believe that this is a case of referential opacity, of a strange sort, since it is the choice of verb (eat vs. like) which produces the distinction, and in general it is just the verbs which can give opaque readings which work like like in producing the universal, instead of the existential, which occurs with transparent verbs. I have no explanation for this phenomenon, and I know of no proposal to handle opacity in either a linguistic or philosophical framework which accounts in any way for the quantifier distinction noted here. This is, however, one more fact which an adequate treatment of generics must come to grips with.

It is not a very satisfactory experience to write an entire paper without being able to offer any decent analyses or explanations for the phenomena I have discovered. It is, however, an enlightening and, I believe, a necessary one. We have seen that there is no single description (let alone explanation) of the phenomenon of generic use of verbs; that there are several different types of generics; that they interact in different ways with a number of other poorly-understood phenomena like modals; and that they make critical use of non-linguistic material. It is no longer possible, I hope, for an analysis of English verbs to state that the present tense has a generic use, and then to proceed to the more interesting tenses.

NOTES

*As usual, I am embarrassed to acknowledge just how many of the observations and suggestions I have incorporated in this paper are the result of other people's intuitions. Among many others, I am deeply indebted to George Lakoff, Paul Neubauer, and Mike Stewart, and most especially to Robin Lakoff. Lest they be similarly embarrassed to acknowledge their assistance, however, I hereby absolve them from any responsibility for what I have done with their suggestions.

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¹By "generic" in this paper I mean the generic verb usages of the present tense, and not (necessarily) the type of noun phrase found in sentences (71)-(73); while these are interesting and equally

- (71) The madrigal is polyphonic/popular.
- (72) Madrigals are polyphonic/popular.
- (73) A madrigal is polyphonic/*popular.

mysterious, there is enough hair to raise about verbal generics to satisfy us here.

²It is important to note that the universal quantifier discussed in the body of the paper is not the familiar one of predicate calculus. Note that the universal (1), while falsifiable as noted, is not false if only one out of a great number of occasions is an instance of Delmer's riding to school. (1) is still true and appropriate if Delmer rode to school once last year, but walked every other day. This "generic quantifier" is thus distinct from the logical universal; for convenience, however, I will use the logical symbol " \forall " for it.

³It may be that the habitual generic does not quantify over occasions at all, but rather over a predicate. Note that the predicate GO will probably appear in the logical structure of (1), and the quantifier appears to bind this; similarly, it seems to be the case that the predicate CHASE is what is bound by the existential in (2). Since this analysis requires a quantified 2nd-order predicate calculus, and since virtually nothing is known about such logics, I feel qualified to ignore this possibility here.

⁴Sentences (10) and (11) are not so compelling on paper as they are when pronounced. The interjections uh and oh are each associated with a characteristic intonation; that for oh, in particular, is different from the normal, having a sharp drop from high to low tone at the end of the sentence, and seeming to be concessive in nature.

⁵It is plausible to suppose that the non-occupational nature of (31) can be explained by the fact that try requires an active in its complement, and that the occupational is not active enough. This is not able to account for the goodness of (74), however (nor am I):

- (74) O Bill tried to run a gas station.

I may be mistaken in taking (20) as an occupational generic, but in that case, I have no idea what it could be.

⁶It is interesting to note that the putative rule named Richard (by Andy Rogers (1971, 1972)) does not work like seem. Note:

- (75) O It looks like Philroy drives a truck.
- (76) O Philroy looks like he drives a truck.

While it is problematical just what the relationship between (75) and (76) in fact is, it does appear to have similarities to Raising, and the fact that look is a Flip verb like seem simply makes one more possible correlation bite the dust.

⁷Sentence (42) may be out for syntactic reasons, since I find the gerund somewhat strange with cease; however, the occupational reading seems to be out completely, even in the formal style which would allow the gerund.

⁸I note in passing the genericity (cf. note 1) of the demonstrative in (47) and the second person possessive in (51). These are types of generics not usually discussed as such, although they abound in conversation.

⁹A serious problem exists here in determining not only whether a given generic sentence has quantifier ambiguities, but also in determining whether the existential is habitual or potential, and the universal habitual or functional. (44) has a universal functional and an existential potential; (49) has a universal habitual and an existential potential; (3) has both universal and existential habituals. I know of no sentence which has a universal functional and an existential habitual---this may be a generalization of sorts, but it does not seem to explain much.

¹⁰There is, of course, a different reading for (50), on which the Speaker becomes the new VP. Since, however, (50) is appropriate to describe the actual situation, which is as outlined in the text, the possibility of this reading is the relevant fact here. I pass over in silence the problem of the coreference relationships among the generic NP's President, Vice-President, and Speaker.

¹¹Note that (58)c is not an adequate paraphrase of (47) unless the demonstrative this tire is interpreted generically (cf. note 8).

¹²This may or may not be related to the well-known fact that the cognitive sense verbs (see Rogers (1971, 1972) for terminology) also have this property. That is, (77) and (78) appear to be synonymous:

- (77) Denzel sees Utahna.
 (78) Denzel can see Utahna.

It is, of course, true that there is a reading of (78) which refers only to ability, but it is also true that there is a reading which is identical to (77). I can conceive of no generalization which would link these verbs together with the speak+language name construction.

¹³My knowledge of this phenomenon is due to Herb Clark, who was also good enough to supply me with a bibliography of previous psychological work in this field, which was noted by psychologists as long ago as 1963. I reproduce the bibliography below. It is instructive to me that this phenomenon, which by now has an impressive list of publications about it, has been treated exclusively by psychologists---no syntactician that I know of (with the exception of Lloyd Anderson) has even heard of it, much less worked on it, although it clearly has important implications for both linguists and philosophers. The observation that referential opacity is at work is due to Paul Neubauer.

REFERENCES

- Gordon, D. & G. Lakoff. 1971. "Conversational Postulates". In CLS 7.
 Lakoff, R. 1972. "The Pragmatics of Modality". In this volume.