

APPENDIX

only and always

We have noted that the universal generic can be paraphrased by only or always, so that the universal reading of (1.3), for instance, can be given by either (1) or (2):

(1) Bill {only drinks
drinks only} beer.

(2) Bill always drinks beer.

However, although (1) and (2) do seem to be identical, and to represent equally well the universal reading of (1.3), we run into problems in a number of generic sentences, where only and always are different. Thus:

(3)a Bill only eats rice for supper.
b Bill eats only rice for supper.

(4) Bill always eats rice for supper.

The question is, first: how are (3) and (4) different, and how is this to be predicted from the meanings of only and always, and why doesn't this difference distinguish (1) and (2) as well?, and second: which of (3) and (4) (if either) accurately represents the universal generic reading of (5)?:

(5) Bill eats rice for supper.

We must first note that, while (3)b seems unambiguous, (3)a, as a result of the position of the only, is multiply ambiguous; it can mean that:

a) Bill eats nothing at any time except some

rice for supper; or

- b) Bill doesn't eat rice at any other time than supper, when he (sometimes) has it; or
- c) Bill doesn't eat anything for supper except rice.

This last reading is the only one possible for (3)b, where only precedes rice immediately. These readings correspond to: (a) reading only as taking as its argument the phrase rice for supper; (b) reading only as taking as its argument the phrase for supper; and (c) reading only as taking as its argument the object rice. It is not difficult to see why reading (c) is the only one possible when only rice is the actual surface form, as in (3)b.

(4), on the other hand, seems to mean that, whatever else Bill may have for supper, rice is one thing that he eats at every supper. It says nothing about what or when he eats the rest of the day, or about the other foods he consumes at suppertime. This does not correspond to any meaning of (3). What is going on?

While Horn's (1969) analysis of only did not deal explicitly with generics of the type we are concerned with here, it is easily extendable to cover these cases. The three readings of (3) can be represented in his system as:

- a) P: $(\exists_g e) (\exists x) (Se + Rx + E(B, x, e))$
 A: $-(\exists_g e) (\exists x) (-Se \vee -Rx + E(B, x, e))$
- b) P: (same as (a))
 A: $-(\exists_g e) (\exists x) (-Se + Rx + E(B, x, e))$
- c) P: (same as (a))
 A: $-(\exists_g e) (\exists x) (Se + -Rx + E(B, x, e))$

That is, each of the three readings have the same presupposition, namely the existential generic "Bill sometimes eats rice for supper", but the assertions ~~state~~, respectively:

(a) there are no occasions of Bill's eating which are not occasions of his eating rice or which are not occasions of his eating at supper--i.e., he eats nothing except rice, and that only at supper; (b) there are no occasions of Bill's eating rice except at supper; and (c) there are no occasions of Bill's eating anything for supper except rice. I have simplified the notation of the generic event variable e rather drastically, to accord with Horn's simplified notation; we will see that this fudge must be abandoned for some cases, but until that time, it saves time and space to consider e as an added argument of the main predicate. Note also that the term ...-Se V -Rx...in (a) is derived from negation of conjunction by De Morgan's law--it is equivalent to...-(Se + Rx)..., which is just what we would expect, since both phrases are arguments, instead of only one, as in (b) and (c). That these are correct, and that they are indeed assertions, instead of presuppositions, can be seen by considering the corresponding three meanings of the negation of (3)a.

(6) Bill doesn't only eat rice for supper.

Possible continuations for (6) are:

- a)..., I've seen him eat a little lettuce for lunch on occasion.
- b)..., he sometimes has a little for lunch.
- c)..., he will occasionally take a little lettuce for supper.

which are precisely negations of the assertions of (94)a as

given by the formulas. (6) does presuppose that Bill eats rice for supper on some occasions, as is shown by the presuppositions given in (a), (b), and (c) of (3)a.

If this is the meaning of only, then what is the meaning of always? The assertion, at least, of (4), seems to be readily statable in Horn's notation as:

$$A: -(\exists_g e) (\forall x) (Se + -Rx + E(B, x, e)),$$

which is superficially similar to the (c) reading of (94)a, at least insofar as the logical structure of the proposition is concerned; however, it is obvious that the two are not logically equivalent, since the formula for always has a universal quantifier over x , the variable representing food, rather than an existential like (c). This difference derives from the necessity of stating that there are no occasions of Bill's eating something for supper where he does not eat rice --the universal covers all the things he eats at a given supper and provides that one of them be rice. This, then, is the reason for the difference between (3) and (4)--the quantifiers differ in one place; and this difference is just what we want, since it accords with our intuitions about the difference in meaning. The existential in the assertion of rice eaten at supper; the universal in the logical form of (4) gives, under negation, a statement that something he eats for supper ^P is rice. This leaves a number of problems unsolved, however: is it the case that the logical form given for (4) is the only one? It seems that always has picked out the direct object as its argument--is there any other possibility to correlate with the (a) or (b) readings of (3)b? And what about the

presupposition(s) of (4)? Are they the same as the presupposition of (3), or does this differ, as well? Finally, if this is the nature of the difference between only and always, why isn't it operative in distinguishing (1) and (2)?

To answer the last question first, the reason why (1) and (2) seem identical is that there is an additional meaning postulate operative in that case, to the effect that one can drink only one thing at a time--stated logically, $(\forall e) (\forall x) (\forall y) (D(a,x,e) + D(a,y,e) \rightarrow x=y)$. In this case, the universal and existential quantifiers in the statements of the only and always sentences collapse, since if it is true for some x, it is automatically true for all x when there is only one, and equivalence is produced between the assertions. The meaning postulate is obviously not operative in the case of (3) and (4), since one can and usually does eat a number of things at supper, which counts for one "event" in the formulation. This explanation hinges on the definition of event in the case of drinking, which is taken to mean that each thing drunk is a separate event of drinking, while it is not the case that each thing eaten at supper is a separate event of the type we are positing; the addition of the time phrase stacks the cards to favor a reading where the "event" is defined by the time phrase.

As for the presuppositions of always: again, the use of the definite expression supper has introduced some complexity. supper is not just a time expression; it refers to a set of circumstances, of which time is one, but it also

presupposes regularity (supper is a daily event, not sporadic, or monthly, or hourly) and is defined by an occasion of eating something. Thus, (4) presupposes that Bill always eats supper; i.e., that every day he eats something in the late afternoon or evening. Note that the quantifier in this presupposition is not over events alone, but over "days" in the sense of 24-hour cycles of activity. In stating this presupposition, one must get a good deal more complicated than we have been up to now; this is left as an exercise for the reader.

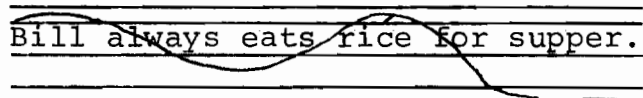
It seems, in addition, that always has a presupposition identical to that of only, to the effect (in this case) that Bill sometimes eats rice for supper. Note that the negation of (4) does not state that he never does so, but rather that it is not universally the case:

(7) Bill doesn't always eat rice for supper.

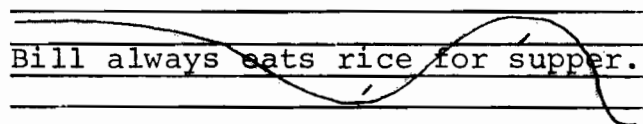
It is certainly possible, and in fact, unavoidable, to infer from (7) that there are occasions where rice is one of the things eaten by Bill for supper, which is the presupposition stated for only in (3).

Finally, there are different meanings of always which correspond to some of the various readings of only in (3)a; usually, stress disambiguates these somewhat more strongly than the only cases, so that the proper stress pattern is necessary to understand the particular meaning indicated. If the reading of (4) that we have been discussing up to now presupposes that Bill eats supper every day, there is also one

which presupposes that Bill eats rice every day. This is indicated by stressing supper (as the non-presupposed element) and de-stressing rice (as the presupposed element). This is accompanied by a tonal contour sloping downward from next-to-highest position on Bill to lowest position on rice (corresponding to minimal stress) and rising to highest position on the first syllable of supper, from where it falls off to normal end-of-sentence low position on the second syllable. This is illustrated by the contours drawn above the two repetitions of (4) below; the first is the "normal" one, presupposing only that Bill eats supper every day--the second is the one just described, with the somewhat more bizarre presupposition that Bill eats rice at some time every day.

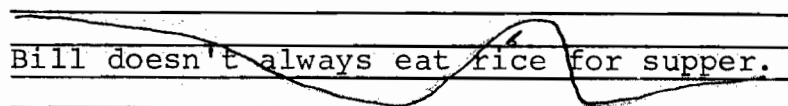


Bill always eats rice for supper.



Bill always eats rice for supper.

Similar differences obtain in the negative sentences, although there are distinctions in some of the tonal contours in negatives, since the end-of-sentence low position in negatives of this type is somewhat higher than the end position of the corresponding affirmative sentence.



Bill doesn't always eat rice for supper.

(sometimes he has potatoes instead, as his starch)

~~Bill doesn't always eat rice for supper.~~

(sometimes he has it for lunch instead)

This end-of-sentence raising is anticipatory in nature, and usually indicates that something is to follow in the way of explanation, to give the precise way in which the sentence is to be understood. It need not, of course, actually follow --its absence merely specifies that there are occasions of indefinite nature when the assertion is not true; the stress and intonation pattern serves to show which of the presuppositions is to be taken.

The presupposition of daily indulgence is somewhat clearer when a definite description is the object, instead of a mass or generic noun. Consider the implications of (8):

(8) Bill always takes his medicine at 3 PM.

The definite description "his medicine" indicates that there is some medicine which is well-understood to be taken habitually by Bill, and the use of a daily time-expression "3 PM" indicates that it is taken daily. Since the direct object is presupposed by virtue of its definiteness, the normal stress is placed on the time expression, with corresponding high tone:

Bill always takes his medicine at 3 PM.

The other possibility, that of stress on the direct object, is somewhat less probably here, and could be used only in a sentence in which the time 3 PM is being discussed, making it the presupposed element. One could expect such an interpretation (and such a stress and tonal contour) in the following exchange:

A: "Will you be there tomorrow afternoon at 3?"

B: "I'm sorry. Bill always takes his medicine at 3 PM, and I have to be there to give it to him."

But this is, of course, somewhat less probable; in contrast to the case of (4), where supper is only defined in terms of the subject's eating, and therefore must be presupposed, 3 PM comes every day without any intervention on the part of human beings, and the performance of some activity at that time cannot be understood as given without contextual information.

There is another interesting difference between only and always which relates to generics; in this case, generic NP's as well as generic verbs. While there is much we do not know about the generic NP (as I showed in Chapter 4), it does show up with great frequency in generic sentences; there is clearly some relationship. In addition, we know that quantifiers are involved in the analysis of the plural generics, for instance:

(9) The Gwamba-Mamba eat salmon.

(10) The Gwamba-Mamba like salmon.

(These facts are presented (sketchily) in (Lawler (1972)).

See the "Special Bibliography" there for some further reading on this topic.)

Note that the direct object in (9) (a plural) means "some salmon", while that in (10) means "all salmon". With always and only, the picture is somewhat complicated. (11) and (12) seem to be identical:

(11) Bill always buys Cadillacs.

(12) Bill only buys Cadillacs.

(Note that, for some reason, the indefinite generic a Cadillac is all right as the object in (11), but not in (12).) However, this is not the case with all verbs; (13) and (14) are not necessarily the same:

(13) Bill only falls for tall blondes.

(14) Bill always falls for tall blondes.

While the quantifier in the direct object of (13) is existential (i.e., some tall blondes), that in (14) may be either; it may mean that whenever Bill falls for a girl, it is a tall blonde (= (13)), or that any tall blonde that Bill meets, he falls for (or is likely to). The latter interpretation has a universal quantifier in the object, although it is, of course, understood that it is impossible to fall in love with a tall blonde who is unknown, so that there is a condition that Bill must meet or otherwise know of the woman in question before he can become infatuated. Some further examples are:

(15) Harry always sings folk songs.

(16) Butch always picks on little kids.

(17) Norbert the narc always reports potheads.

These three sentences differ in what they convey, in terms

of the quantifiers in the object generic NP's. (15) means that if Harry sings it, it's a folk song; i.e., he sings some folk songs, and only those. (16) can mean either that if Butch picks on someone, it's a little kid (Butch picks on some little kids) or that if there is a little kid around, Butch picks on him (Butch picks on all/any little kids). (17) means that if someone is a pothead, Norbert will report him (Norbert reports all/any potheads). We are faced with a situation that by now should be familiar--some sentences contain existential quantifiers, some universals, and some are ambiguous between them; and note that all of these sentences are universal in terms of the quantifier on the generic verb--they all contain always, which should guarantee universality of the verb. Since the existential reading is the one that is equivalent to only, we would expect that (15), which is only existential, would be equivalent to (18) with only, that (17), which is universal, would be different from (19), and that (16), which is ambiguous, would be identical to (18) on one reading, and not on the other. This is indeed the case:

- (18) Harry only sings folk songs. (= (15))
- (19) Butch only picks on little kids. (= one reading of (16))
- (20) Norbert the narc only reports potheads. (= (17))

One extremely interesting and quite puzzling fact about this phenomenon is the possibilities for use of other generics besides the plural as objects with always. We noted that

the indefinite generic is strange in sentences like (12), with only; the same is true with the definite generic, which also is anomalous in (10), with always:

- (21) a Bill always buys a Cadillac. (cf (11))
 b *Bill only buys a Cadillac. (cf (12))
- (22) a *Bill always buys the Cadillac. (cf (11))
 b *Bill only buys the Cadillac. (cf (12))

(There is, of course, a non-generic reading for (22), but we are not concerned with it.) But this does not generalize nicely to the other cases; while it is still the case that the definite generic cannot be used as an object in any of these cases, the acceptability of the indefinite varies:

- (23) a ?*Bill always sings a folk song.
 b *Bill only sings a folk song.
- (24) a *Butch always picks on a little kid .
 (* on universal meaning only)
 b *Butch only picks on a little kid.
- (25) a Norbert the narc always reports a pothead.
 b *Norbert the narc only reports a pothead.

The major problem here is that the acceptable use of the indefinite generic seems to vary according to no obvious criterion. It would be nice indeed if it were restricted to (say) existential generics, since there would be an obvious tie-in with the indefinite article and the existential quantifier; but while this is a beguiling hypothesis, the acceptability of (25)a, a universal, with the indefinite generic object a pothead seems to introduce unpleasant complications. It does seem that (24)a is bad only on the universal reading--that is, (24)a cannot be used to mean

that, if there is a little kid around, Butch will pick on him, but it can be used to mean that if Butch picks on anyone, it's a little kid. This observation is in line with the acceptability of (21)a, an existential. But (23)a, which is also an existential, is quite strange, even though there are no superficial differences between the types of verbs involved (and clearly, it is the verbs which control this phenomenon). buy a Cadillac, pick on a little kid, and sing a folk song all involve activities which can be done to only one thing at a time, they are not either acts of creation or destruction, which might be expected to produce changes in the quantifiers, and, while one cannot buy the same ~~item~~ twice without an intervening loss of ownership which would not normally be inferred, both picking on someone and singing a particular folk song can be done repeatedly to the same object without special circumstances being necessary, so repeatability vis-à-vis the individual object does not seem to be the controlling semantic variable here. Furthermore, only seems to be used only with existentially generic objects, and it cannot take an indefinite generic in any case, so that the nature of the quantifier is not the only controlling variable, if indeed it controls at all. We must regretfully conclude that, while we may understand something about only and always and their relationship to verbal and NP generics, there is still something to be learned.