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## ARE INDEFINITE DESCRIPTIONS AMBIGUOUS?\*

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Perhaps most philosophers would agree that 'a(n)' and 'some' at least sometimes function as existential quantifiers. This position entails that at least some occurrences of sentences such as:

A man is in the next room.

or

Some man is in the next room.

are true just in case at least one thing is a man and is in the next room. What is not as widely agreed upon is whether 'a(n)' and 'some' *always* serve to assert existential generalization. Let us call the view that 'a(n)' and 'some' are univocal and do always have this semantic function *the univocality thesis* (UT).<sup>1</sup>

In recent years, UT has come under attack. The dissenters have generally held that in addition to asserting existential generalization, 'a(n)' and 'some' exhibit some other semantic function. Though not always agreeing on what the other semantic function is, these opponents of UT hold that 'a(n)' and 'some' are ambiguous between an existential quantifier reading and this other reading. Let us call the view that 'a(n)' and 'some' are ambiguous in this way *the ambiguity thesis* (AT), while bearing in mind that those who hold the theory may differ on the analysis of the non-quantifier reading they attribute to 'a(n)' and 'some'.<sup>2</sup>

The purpose of the present essay is to critically examine some of the arguments that have appeared in the literature for AT over UT. I intend to argue that the proponents of UT can meet the objections raised by those endorsing AT.<sup>3</sup> I shall discuss only the indefinite article 'a(n)', though the remarks I shall make apply equally well to 'some', (henceforth phrases of the form 'a(n) F' shall be called *indefinites*).

Philosophical Studies **53** (1988) 417–440. © 1988 by Kluwer Academic Publishers. In defending UT, several considerations having implications beyond the semantics of indefinites shall be raised. First, because pronouns and definite descriptions are sometimes intimately connected with indefinites and because arguments against UT sometimes involve the possibility of such connections, I shall have something to say about the semantics of pronouns and definite descriptions. Consider, for example, the underlined pronouns/descriptions in the following sentences:

- (1) A man came to see me today. *He* was a salesman.
- (1a) A man came to see me today. *The man* was a salesman.

In the absence of any demonstrative gesture accompanying the utterance of 'He' in (1) and 'The man' in (1a), these terms would be taken to, in some way, "look back" to 'A man' in the previous sentences. Pronouns and descriptions which look back to other expressions in their linguistic environments in this way are called *anaphoric pronouns/ descriptions*; the expression such a pronoun/description looks back to is called *the antecedent* of the pronoun/description in question.<sup>4</sup> In the sequel, I shall sketch a novel account of the semantics of pronouns/ descriptions anaphoric to indefinite antecedents. Second, and connected to this, I shall argue that some of the linguistic phenomena which have been taken to support the claim that psychological notions (e.g. having someone in mind) need to be invoked to explain the semantic behavior of certain expressions do not support this contention at all. This, in turn, considerably weakens the case for the claim that such notions are needed in semantics.

The first argument against UT I intend to consider was formulated by Keith Donnellan.<sup>5</sup> Donnellan imagines Woodward and Bernstein writing or saying the following while describing their investigation of the Watergate break in:

(2) We now had a telephone call from a man high in the inner circle. *He* asked us to meet *him* at a certain suburban garage where *he* would give us confirmation of some of our conjectures. We later decided to give *the man* the code name "Deep Throat."<sup>6</sup>

The underlined pronouns and descriptions are anaphoric to 'a man high in the inner circle' in the first sentence. Donnellan claims that the truth values of the sentences of (2) depend upon the properties of the man Woodward and Bernstein had in mind when producing these sentences. If the man they had in mind, Donnellan says, did not ask them to meet him at a garage, the second sentence in (2) is false. And if they did not decide to give him the code name 'Deep Throat', the third sentence in (2) is false. Finally, Donnellan adds, if the man they had in mind did not call them, sentence one is false.

Donnellan's argument can be summarized as follows: the truth values of the second and third sentences of (2) depend upon the properties of the person Woodward and Bernstein had in mind. Similarly the truth value of sentence one depends upon the properties of the individual Woodward and Bernstein had in mind. Thus 'a man high in the inner circle' in that sentence cannot function, as UT requires, as an existential quantifier.<sup>7</sup>

Since Donnellan's argument here is basically an appeal to truth conditions, let's ask whether he is right about that. Do the truth values of sentences one through three in (2) depend upon the properties of the person Woodward and Bernstein had in mind? Suppose that the truth of the sentences in (2) were to come under attack. Imagine, for example, that Woodward and Bernstein's editors had expressed some doubt as to the truth of the sentences. To show that they were true, it would be sufficient for Woodward and Bernstein to prove that at least one man in the high inner circle did call them, asked them to meet him in a garage where he would confirm some of their conjectures, and was dubbed 'Deep Throat' by them. This would satisfy even the most scrupulous editor. In addition to proving these things, would they have to prove that at least one man did all this and was the man they had in mind in writing or utterring the passage to show the truth of the sentences in (2)? Of course not. Yet this is precisely what Donnellan's account seems to require.8

To consider another example, suppose I am making up an examination for my anthropology class. I write down the following true/false question

(3) An anthropologist discovered the partial skeleton later named 'Lucy' in Africa. He named the skeleton after a Beatles' song.

with Louis Leakey in mind, momentarily forgetting that it was Don

Johanson who made this important find (suppose that the students are to write 'true' just in case both sentences are true, 'false' otherwise). I take the answer to be 'true', because I take Leakey to possess the appropriate properties. Having realized that Leakey did not make this discovery, but that Johanson made the discovery in Africa and did name the skeleton after a Beatles' song, would I now regard the sentences penned earlier as false?<sup>9</sup> Donnellan apparently thinks so, since the truth values of these sentences are to depend upon the properties of the individual I had in mind in producing them. It seems to me, however, that I would still regard the sentences as true, perhaps feeling a bit foolish for having thought that *Leakey* possessed the requisite properties. If the sentences are left in the exam, I shall certainly count the answer 'false' as incorrect!

Note too that had I uttered (3) in the classroom under similar circumstances (i.e. with Leakey in mind), I would not feel obliged to withdraw my remarks upon recalling the facts about Lucy's discovery, (and the same holds *mutatis mutandis* for Donnellan's Woodward and Bernstein case). On Donnellan's view, it isn't clear how this is to be explained, since the remarks were false.

If these observations are correct, Donnellan's argument against UT (and for AT) fails. For Donnellan's premise that the truth values of the sentences (in particular the first sentence) in our example (and his) depend upon properties of particular persons or things which the speakers "have in mind" is false.

Some will be dissatisfied with this response to Donnellan. Some will think that I have simply asserted what Donnellan would deny: that to prove the sentences of (2) true, it would suffice to show that at least one man possesses the properties mentioned; and that the sentences of (3) are true even if written with Leakey in mind. For those who have this reaction, I shall recast my response in a form that I hope they find more palatable. We would be justified in positing an ambiguity in indefinite descriptions on the basis of our intuitions about the truth conditions of sentences of discourses such as (2) and (3) when produced with certain individuals in mind, if our intuitions were sufficiently strong, clear and incompatible with the predictions made by UT. Many philosophers' intuitions about such cases do conflict with UT's predictions. But I and many other philosophers find that our intuitions concerning the truth conditions of the sentences in discourses like (2) and (3), even when they are produced with particular individuals in mind, are compatible with UT. This clash of intuitions shows that the intuitions of native speakers taken together are not sufficiently strong and clear to support the claim of ambiguity. An argument for ambiguity which hinges on claims about truth conditions that a significant number of native speakers dissent from is a weak argument.

Of course my view about the truth conditions of the sentences of (2) and (3) entails that the pronouns/descriptions anaphoric to indefinites in those examples are not referring terms, as Donnellan claims. Thus I owe an alternative account of the semantic function of these anaphoric pronouns/descriptions. Fortunately, there is an alternative account, motivated by considerations other than the semantics of indefinites, already in place. My remarks concerning (2) and (3) suggest that when a speaker utters a discourse of the form:

(4) A(n) B is C. He/she/it (The B) is D. He/she/it (The B) is E. etc.

(whether with someone/thing in mind or not) he/she has spoken truly just in case at least one object is B, C, D and E. As to the truth conditions of the individual sentences of such a discourse, sentence one is true just in case at least one object is B and C; sentence two is true just in case at least one object is B, C and D; and sentence three is true just in case at least one object is B, C and D; and sentence three is true just in case at least one object is B, C, D and E. The requirement that at least one thing be B, C, and D for sentence two of (4) to be true, and that at least one thing be B, C, D, and E for sentence three of (4) to be true is designed to prevent a sentence such as sentence two in a discourse such as:

(5) A man climbed Mt. Everest in 1955. He was tall.

from being true if (e.g.) at least one thing is a man and climbed Mount Everest in 1955, and at least one thing is tall, but nothing is tall, a man *and* climbed Mount Everest in 1955. Sentence one of (5) would be true and sentence two would be false in such a case.

Merely citing what I take to be the truth conditions of the sentences

of such discourses, of course, is not to give a theory of the behavior of the pronouns/descriptions occurring in the sentences of the discourses. My view is that the anaphoric pronouns/descriptions in (4) are contextually sensitive expressions of generality quite like certain pronouns/ descriptions which occur in universal generalization and existential instantiation in English arguments:

premise (1): Some man loves every woman.

premise (2): Every woman loves every man who loves her.

- (3) Take the man who loves every woman, by (1).
- (4) Take any woman.
- (5) By (3), the man loves the woman.
- (6) By (2), the woman loves the man.
- (7) So some man is loved by every woman.

The underlined descriptions in this argument have the force of universal and existential quantifiers, and do so in virtue of features of the discourse in which they are embedded, (note that the descriptions are not bound variables — on that view the entire argument would be a large quantified sentence). Such expressions, that is to say, are expressions of generality such that various features of their semantic significance are determined by features of their linguistic context. Similarly for the anaphoric pronouns/descriptions in (4). On this view, the anaphoric pronoun in

(6) Every player is dealt eight cards. He/she must then pass one card to his/her right.

is an example of the same sort of phenomenon we have been discussing, the only difference between it and the anaphoric pronouns in (2) being that the pronoun in (2) has an *existential*, instead of a *universal*, quantifier antecedent.<sup>10</sup>

As we have seen, Donnellan's view, according to which the anaphoric pronouns/descriptions in discourses such as (2) are terms which refer to individuals the speaker has in mind, assigns truth conditions to the pronoun/description-containing sentences of those discourses which are different from those assigned by the view I favor. Above I suggested that intuitions concerning truth conditions may not be decisive in choosing between UT and AT because of conflicting intuitions. For similar reasons, I doubt whether such intuitions will be of help in choosing between these different views of the semantic significance of pronouns/descriptions anaphoric to indefinites. This issue aside, I believe that there are several methodological considerations which support my view of these anaphoric phenomena.

First, Donnellan's account simply does not apply to the anaphoric pronouns/descriptions in some discourses of the form of (4). Suppose that hiking through a meadow one day, I come across a large matted portion of grass, with a smaller matted portion leading away from it to the west. Surely I can say:

(7) A backpacker camped here recently. *He* left heading west.

even though I have no one in mind, (and there could have been several backpackers camped together). But then the pronoun in sentence two can hardly refer to someone I have in mind. Or suppose that I know on *general* grounds that at least one (perhaps more) student scored over ninety per cent on a certain exam and I say:

(8) A student scored over ninety per cent on the exam. He obviously did his homework.

Since I have no student "in mind" and am not "talking about" any particular student, again the anaphoric pronoun cannot refer to someone I "have in mind" or "am talking about." The view I favor, by contrast, does handle (7) and (8). It claims that sentence two of (7) is true just in case at least one backpacker camped at the spot in question recently and left heading west, and that sentence two of (8) is true just in case at least one student scored over ninety per cent on the exam and did his homework. So even if we were to adopt Donnellan's account for cases in which a speaker does have something or someone in mind in utterring a discourse of the form of (4), we would need the account I favor for cases such as (7) and (8). But since we need this account anyway, and since it handles *all* discourses of the form of (4) (whether the speaker has someone/something in mind or not), what do we need Donnellan's account for?

Second, consider the underlined descriptions in the following discourse:

- (9) Every doctor employs a receptionist. The receptionist has many responsibilities.
- (10) Every player on every football team has a trainer. *The trainer* is not allowed to prescribe medication.

(I intend the first sentences in these examples to be understood in such a way that the indefinites have the semantic significance of existential quantifiers taking narrow scope with respect to all universal quantifiers in the sentences.) Though the descriptions in the second sentences are anaphoric to indefinites in the first sentences, Donnellan's account clearly won't apply here. These anaphoric descriptions are obviously not referring terms. The view I endorse, on the other hand, applies to the anaphoric descriptions of (9) and (10), (on this view, the second sentence of (9) is true just in case each doctor employs a receptionist with many responsibilities). Indeed from the standpoint of the account I favor, our earlier examples are not very different from (9) and (10). In all these discourses the indefinites are existential quantifiers and the anaphoric pronouns/descriptions are contextually sensitive expressions of generality. (9) and (10) differ only in that the existential quantifier antecedents take narrow scope with respect to one or more universal quantifiers.

So the view I endorse applies to all pronouns/descriptions anaphoric to indefinites (whether the speaker has someone/thing in mind or not and whether the indefinite is in the scope of quantifiers or not) whereas Donnellan's account applies to *at most* a small subset of these. Surely the fact that this view, in contrast to Donnellan's, is able to give a unified theory of such a broad range of data should weigh heavily in its favor.

To summarize the discussion to this point, I have argued that Donnellan has not supplied sound reasons for abandoning UT, nor for believing that anaphoric pronouns/descriptions in discourses of the form of (4) are referring terms. Further, I have tried to show that there

is an account of pronouns/descriptions anaphoric to indefinites which is compatible with UT, and which is preferable on methodological grounds to the view that pronouns/descriptions anaphoric to indefinites (not in the scope of other quantifiers) refer. Having done this, we are in a position to challenge one of Donnellan's main arguments for the claim that we need to appeal to speaker reference to explain the semantics of certain expressions. For on the basis of the claim that the anaphoric pronouns/descriptions in discourses such as (2) and (3) refer to the individual the speaker has in mind, Donnellan concludes that "... we have a series of instances in which speaker reference appears necessary to provide semantic reference."<sup>11</sup> But since we have just seen that the anaphoric pronouns/descriptions in such discourses are not referring terms at all, speaker reference ipso facto can play no role in the determination of their semantic reference. The account we have sketched of pronouns/descriptions anaphoric to indefinites, therefore, seriously weakens Donnellan's case for the claim that speaker reference has a place in semantics.

The next argument against UT that I intend to consider has not appeared in the literature to my knowledge. But the argument raises issues which are relevant to my responses to other arguments to be considered. Consider any conditional statement containing an indefinite in its antecedent such as

(13) If a friend of mine comes through that door, I'll be surprised.

Such sentences seem to have two readings. On one reading, (13) says that if any friend of mine comes through that door, I'll be surprised. This reading can be captured by supposing that the indefinite is an existential quantifier whose scope is confined to the antecedent of the conditional:

(13a) (some friend of mine x) x comes through that door  $\rightarrow$  I'll be surprised.

But (13) also seems to have a reading on which it is in some sense about a particular friend. AT has a ready explanation of the "particular" reading of (13): it arises from the non-quantifier reading which AT claims indefinites have. On this reading, the indefinite refers to, or at least serves to introduce, some individual. It is initially tempting to

suppose that UT can account for this "particular" reading by claiming that it is produced by the indefinite/existential quantifier taking wide scope over the conditional:

(13b) (some friend of mine x) (x comes through that door  $\rightarrow$  I'll be surprised)

The problem is that the reading represented by (13b) is apparently too weak: it is true if some friend of mine doesn't come through the door. And obviously this is not enough to make the reading we are trying to capture true. Thus it is unclear how UT can account for the "particular" reading of (13) at all.

(13b)'s weak truth conditions make it unsuitable to capture the "particular" reading of (13). And (13b) has these weak truth conditions because we are understanding ' $\rightarrow$ ' as the material conditional. Yet there are notorious difficulties with construing even indicative 'if, then' statements as material conditionals.<sup>12</sup> So perhaps seeing how philosophers have met these difficulties will help us provide UT with an explanation of the "particular" reading of (13).

The main difficulty confronting the material conditional analysis of indicative conditionals is that the falsity of the antecedent of a conditional like 'If I jump out this window, I won't fall to the ground.' does not seem sufficient for its truth. Correlatively, arguments such as 'I won't jump out the window. Therefore if I jump out the window, I won't fall to the ground.' seem invalid. Broadly speaking, philosophers have tried two different approaches to the problems with a material conditional analysis of indicative conditionals. One strategy has been to apply the semantic account required for subjunctive conditionals (with some modifications) to indicative conditionals, thus abandoning the material conditional analysis of indicative conditionals. The other strategy has been to maintain the material conditional analysis while supplementing that account with principles governing assertability to explain why the falsity of a conditional's antecedent does not seem sufficient for its being assertable. For definiteness, I intend to briefly sketch the position of a representative of each of these strategies. I shall show how, given either strategy, UT is able to explain the "particular" reading of (13) above.

Robert Stalnaker has developed an account of indicative and sub-

junctive conditionals within the framework of possible worlds semantics.<sup>13</sup> Very roughly, Stalnaker's view is that a conditional asserts that its consequent is true in the possible world w which is most like the real world except that the antecedent of the conditional is true in w, (of course if the antecedent is true in the actual world, the possible world w in which the antecedent is true which is most like the actual world *is* the actual world). Stalnaker captures this idea formally by introducing a function f which takes a statement (intuitively, the antecedent of a conditional) and a world (intuitively, the world where the conditional is being evaluated) as arguments, and gives a world as its value (intuitively, the world most like the world which is an argument of the function except that the antecedent is true there). Given this function f, the evaluation clause for conditionals reads: 'If A, then B' is true at world w iff B is true in f(A, w).

Of course subjunctive and indicative conditionals sometimes behave differently. Stalnaker tries to capture this difference by appealling to the body of information that is taken for granted or presupposed by the speaker and his/her audience in communicating. This body of information can be represented as a set of possible worlds: the set of worlds consistent with the body of information in question. The difference in behavior between indicative and subjunctive conditionals results, on Stalnaker's view, from the different conditions they put on the selection function f. An indicative conditional 'If A, then B' signals that the selection function f should choose, for the arguments A, w, that A-world within the set of worlds representing the presupposed body of information most like w in relevant respects. By contrast, the subjunctive mood in a conditional signals that the selection function may choose a world outside of the set of worlds representing the information presupposed by speaker and audience in that context.

We can now see why the falsity of the antecedent of 'If I jump out of this window, I won't fall to the ground.' is insufficient for its truth (in the actual world) on Stalnaker's view. For this conditional to be true, 'I won't fall to the ground' would have to be true in the world in which I jump out the window but which is most like the actual world in other respects. We can also see how UT can explain the "particular" reading of (13) above, given Stalnaker's analysis of indicative conditionals. Let '>' be a sentential connective that is governed by Stalnaker's evaluation clause: A > B is true at w iff B is true at f(A, w). Then using '>' to represent English 'if, then', the "particular" reading of (13) is represented as follows:

(13c) (some friend of mine x) (x comes through that door > I'll be surprised)

with the indefinite/existential quantifier taking wide scope over 'if, then' / '>', (the other reading of (13), of course, results from a narrow scope reading of the quantifier with respect to '>'). (13c) is true iff some friend of mine is such that in the world most like the actual world in which he/she comes through that door, I am surprised.

In contrast to Stalnaker, Frank Jackson has sought to uphold the material conditional analysis of indicative conditionals.<sup>14</sup> Simply put, Jackson's view is that though indicative conditionals have the truth conditions of material conditionals, it is proper to assert 'If P, then Q' iff the probability of  $(P \rightarrow Q)$  (where ' $\rightarrow$ ' is the material conditional) is high and the conditional probability  $Pr(P \rightarrow Q/P)$  is high. This explains why we do not assert indicative conditionals merely because their antecedents are false (though they are true!): the falsity of the conditional's antecedent is no guarantee that  $Pr(P \rightarrow Q/P)$  is high. It is quite natural to extend Jackson's account of the assertability conditions of indicative conditionals to an account of the assertability conditions of quantified indicative conditionals. Such an extension would run as follows:  $(Ex)(Fx \rightarrow P)$  is (highly) assertable iff (assuming each thing has a name) for some b,  $Pr(Fb \rightarrow P)$  and  $Pr(Fb \rightarrow P/Fb)$  are both high;  $(x)(Fx \rightarrow P)$  is (highly) assertable iff for each b,  $\Pr(Fb \rightarrow P)$  and  $\Pr(Fb$  $\rightarrow P/Fb$ ) are both high. (It is easy to see how this extension would generalize to multiply quantified conditionals.) This extension would enable defenders of the material conditional analysis of 'if, then' to explain our reluctance to utter quantified conditionals such as 'If anyone jumps out of the window, the building will collapse' merely because no one jumps out of the window. The extension also allows UT an explanation of the "particular" reading of sentences like (13) above. (13b) turns out to represent the "particular" reading after all, even though it has the weak truth conditions noted above. For it will not be highly assertable unless some friend of mine x is such that Pr(x comes)through that door  $\rightarrow$  I'll be surprised) and Pr(x comes through that

door  $\rightarrow$  I'll be surprised/x comes through that door) are both high. It is clear that a sentence with such assertability conditions would have the feeling of being about an individual. Thus, (13b) would suffice to capture the "particular" reading of (13), even though (13b)'s "particular" feel arises not from its truth conditions, but from its assertability conditions.

Thus, given either strategy for resolving the difficulties confronting the material conditional analysis of conditionals, UT can explain the "particular" reading of sentences such as (13). It is worth stressing that these strategies for amending/replacing the material conditional analysis of indicative conditionals are not *ad hoc* devices designed to save UT. These strategies are motivated by difficulties that are completely independent of the semantics of indefinites, and would be required even if AT were adopted.

The final arguments for AT and against UT that I intend to examine come from a paper by Janet Dean Fodor and Ivan Sag.<sup>15</sup> On the version of AT that Fodor and Sag endorse, 'a(n)' has one semantic interpretation on which it is a quantifier and another semantic interpretation on which it is a referring term (recall that Donnellan did not go so far as to say that 'a(n)' refers — see note 7). Though Fodor and Sag adduce a great number of considerations, they make clear that they regard two types of phenomena as decisive. I shall, therefore, confine my attention to these phenomena.

In the first place, Fodor and Sag consider the behavior of 'a(n)' with respect to so-called *scope islands*. A scope island is a syntactic constituent which confines the scopes of quantifiers to that constituent. Since which syntactic constituents *really are* scope islands is controversial, I shall illustrate with a constituent which Fodor and Sag take to be scope island. In sentences such as

(14) If each student fails the exam, I shall be sorry.

and

(15) If every student fails the exam, I shall be sorry.

the quantifiers 'each' and 'every' take narrow scope with respect to 'if, then'. Neither sentence, that is to say, has a reading on which it asserts that every student is such that if s/he fails the exam, I shall be sorry.

Since the scopes of quantifiers, when they occur in initial 'if' clauses, apparently are confined to the 'if' clauses, such clauses are said to be *scope islands*.

There are two features of the behavior of 'a(n)' with respect to these 'if' clauses which lead Fodor and Sag to claim that AT is correct and that 'a(n)' refers. First, consider again our sentence (13)

If a friend of mine comes through that door, I'll be surprised.

As we have seen, (13) apparently has a reading on which it is in some sense "about" a particular friend. Those who suppose that indefinites are univocally existential quantifiers must explain this reading by supposing that 'a friend' can take wide scope with respect to 'if, then', thus "escaping" the 'if' clause scope island, (this is so whether we adopt Stalnaker's or Jackson's account of indicative conditionals). Thus, say Fodor and Sag, UT is forced to attribute exceptional scope island escaping abilities to indefinites. And this, they claim, undercuts the reasons which prima facie recommend UT. Economy, after all, is the main reason for favoring UT over AT. The latter must posit an ambiguity and the former need not. But, say Fodor and Sag, UT is now seen to be no more economical than the competition. For UT, though it can hold that indefinites are unambiguous, must complicate the principles governing quantifier scope to accomodate the island escaping capacity it is forced to attribute to indefinites; AT must posit an ambiguity in indefinites but need not complicate island constraints on quantifiers. Such constraints say nothing about referring terms. And according to AT, the reading of (13) on which it is about a particular friend results from 'a friend' being a referring term. So no island escaping capacities need be attributed to any quantifier by AT. When 'a friend' really is a quantifier in (13), it doesn't escape the scope island at all! Thus AT turns out to be as economical as UT, and we seem to have a standoff between the two theories.

But there is a second feature of the behavior of indefinites with respect to 'if' clause scope islands which Fodor and Sag take to be decisive in favor of AT. Consider the following conditional:

(16) If a student in the syntax class cheats on the exam, every professor will be fired.

Like (13), this conditional has a "particular" reading on which it is in some sense "about" a particular student. Of course UT and AT will provide different explanations of this fact. According to UT, this reading results from 'a student in the syntax class' being an existential quantifier which takes wide scope over the conditional. (As we have seen, exactly how UT will explain the "particular" reading will depend on which of the two strategies for dealing with the problems surrounding the material conditional analysis of indicative conditionals discussed above is adopted. But on each strategy, this reading requires the quantifier to take wide scope over the conditional.) Fodor and Sag's AT, by contrast, explains this reading as resulting from the indefinite being a referring term. (16) also has a reading on which it is equivalent to

(16a) (A student: y) y cheats on the exam  $\rightarrow$  (every professor: x) x will be fired.

(i.e. on this reading (16) claims that if there is at least one student who cheats on the exam, every professor will be fired). UT and AT agree that this reading results from the indefinite functioning as an existential quantifier whose scope is confined to the initial 'if' clause. But (16) does not have a reading on which it is equivalent to

(16b) (Every professor: x)(A student: y)(y cheats on the exam  $\rightarrow$  x will be fired)

(i.e. on this reading (16) would assert that for each professor there is some student — possibly different students for different professors — such that if the student cheats on the exam, the professor will be fired). With regard to the fact that (16) does not have this reading, Fodor and Sag remark:

It seems to me that there are difficulties with the arguments offered

This missing reading observation is a clear indication that the 'island escaping' interpretation of an indefinite is not in fact an instance of a quantifier that manages to escape the island, but is an instance of something very like a proper name or demonstrative which *does not participate in the network of scope relations* between true quantifiers, negation, higher predicates and the like. . . . [UT], even if it assumes that there can be island escaping quantifiers, offers no explanation at all for the absence of the intermediate scope readings in such examples.<sup>16</sup>

by Fodor and Sag to this point. First, let us consider their claim that because UT must complicate the principles governing quantifier scope to accomodate the island escaping capacity it must attribute to 'a(n)', it is no more economical than AT, which, though it must posit an ambiguity, can have completely general principles governing quantifier scope. This claim gains whatever force it has by overestimating the simplicity and generality of the principles governing quantifier scope to which AT, as opposed to UT, is committed. No theory which holds that 'each', 'every', and 'any' are all "true" universal quantifiers can have a completely general and exceptionless principle governing the scope of quantifiers with respect to initial 'if' clauses.<sup>17</sup> This is because while 'each' and 'every' take narrow scope with respect to initial 'if' clauses, (i.e. the latter are scope islands for the former), 'any' does not.

Consider, for example, the following three sentences:

- (17) If every student in the class comes through that door, I'll be surprised.
- (18) If each student in the class comes through that door. I'll be surprised.
- (19) If any student in the class comes through that door, I'll be surprised.

(17) and (18) can only be read in such a way that they are equivalent to:

(Every student in the class: x) x comes through that door  $\rightarrow$  I'll be surprised.

So 'each' and 'every' take narrow scope with respect to 'if, then'. But the natural, and I believe only, reading of (19) is equivalent to

(Some student in the class: x) x comes through that door  $\rightarrow$  I'll be surprised.

The simplest explanation of this fact is that 'any' is a universal quantifier which takes wide scope over conditionals. The equivalence of  $(x)(Fx \rightarrow P)$  and  $(Ex)Fx \rightarrow P$  then explains why (19) is read as above.

Further, the explanation of certain anaphoric phenomena seems also to require that we say that 'any', but not 'each' and 'every', can take wide scope over conditionals. While (20) is clearly acceptable, (21) and (22) are not:

- (20) If any woman leaves work early, she will be fired.
- \*(21) If every woman leaves work early, she will be fired.
- \*(22) If each woman leaves work early, she will be fired.

The natural explanation of these facts is that since 'any' takes wide scope over the 'if' clause, it is able to bind variables ('she') in the consequent of the conditional. 'each' and 'every', since they cannot escape the 'if' clause scope island, are unable to bind 'she' in the consequent.

Simply accounting for the behavior of 'each', 'every' and 'any' in the antecedents of conditionals, then, apparently requires a principle governing quantifier scope with respect to initial 'if' clauses which admits exceptions. This, so far, is independent of the choice between UT and AT. But then it seems as though considerations of economy once again favor UT. For AT and UT must both allow that at least one quantifier ('any') can escape 'if' clause scope islands. So neither has an exceptionless principle governing quantifier scope with respect to initial 'if' clauses. Where UT simply classes 'a(n)' with 'any' as a quantifier which takes wide scope over initial 'if', AT must posit an ambiguity.<sup>18, 19</sup>

Let us now turn to Fodor's and Sag's claim that the fact that (16) lacks a reading corresponding to (16b) shows AT to be correct at the expense of UT. UT, they claimed, cannot explain the absence of such a reading for (16), whereas AT can. But it seems to me that UT *is* able to explain the "missing reading" in question. For (16) to admit the reading (16b), 'every professor' in the consequent of (16) would have to take wide scope over the conditional. The reason that (16) cannot be read in this way is simply that when 'every' occurs in the consequent of a conditional, it cannot take wide scope over the conditional. Note that on the two readings (16) *does* allow, the scope of 'every' is confined to the consequent. Further when we substitute other phrases for 'a student' in (16), the same thing happens:

(23) If many students in the syntax class cheat on the exam, every professor will be fired.

(24) If at least one student in the syntax class cheats on the exam, every professor will be fired.

(23) does not have a reading corresponding to

(23a) (every professor: x)(many students: y)(y cheat on the exam  $\rightarrow$  x will be fired)

and (24) does not have a reading corresponding to

(24a) (every professor: x)(at least one student: y)(y cheats on the exam  $\rightarrow$  x will be fired)

This is what we would expect if the scope of 'every' is confined to the consequent of a conditional when it occurs there.<sup>20</sup>

Not only can UT explain the missing reading of (16) as I just suggested, but it can be shown that the general principles underlying Fodor and Sag's explanation of this missing reading are mistaken. On Fodor and Sag's view, indefinites, when they are read/interpreted as quantifiers, cannot escape 'if' clause scope islands. What appears to be a reading of (16) on which the indefinite is a quantifier taking wide scope over the conditional is really a reading of the sentence on which the indefinite is a referring term. According to Fodor and Sag, then, (16) cannot have a reading corresponding to (16b) (the "missing reading") because this would require the indefinite to be a quantifier which escapes the 'if' clause scope island. The general claim underlying this account is: whenever an indefinite appears to be a quantifier which escapes a scope island, it is actually a referring term. But consider the following sentences

- (25) Each professor had a dream that a famous football player ran for President.
- (26) Each author in this room despises every publisher who wouldn't publish a book that was deemed pornographic.

Fodor and Sag take complements to nouns (e.g. 'that a famous football player ran for President' in (25)) and relative clauses to be scope islands.<sup>21</sup> Yet (25) clearly has a reading which can be represented as follows

(25a) (Each professor: x)(some famous football player: y)(x had a dream that y ran for President)

(i.e. for each professor there is a football player — possibly different players for different professors — such that the professor dreamed the player ran for President; to get this reading, imagine someone utterring (25) and then saying: 'Professor Jones had a dream that Dan Marino ran for President, Professor Smith had a dream that Walter Payton ran for President, etc.') On this reading, 'a famous football player' has escaped the scope island created by the complement to the noun 'dream'. So Fodor and Sag are committed to saying that the indefinite is a referring term on this reading. But, of course, the indefinite cannot be a referring term on the reading represented by (25a), since the indefinite has the semantic significance of an existential quantifier in the scope of a universal quantifier. Similarly, (26) has a reading which is equivalent to

(26a) (Each author in this room: x)(some book that was deemed pornographic: y)(each publisher who wouldn't publish y: z)(x despises z)

(i.e. for each author in this room there is a book that was deemed pornographic — possibly different books for different authors — such that the author despises every publisher who wouldn't publish the book).<sup>22</sup> Again here the indefinite has escaped the scope island (that is, the scope of the indefinite extends beyond the relative clause), but is not a referring term. These facts show that the general claim implicit in Fodor and Sag's explanation of the missing reading of (16) is incorrect.

The second consideration Fodor and Sag take to be decisive in favor of AT concerns a condition on Verb Phrase Deletion formulated by Sag. The details of this condition are not important for our purposes. The crucial point is that Sag's condition entails that "a verb phrase cannot be deleted if its antecedent contains a quantified phrase whose scope is wider than the verb phrase."<sup>23</sup> Let us call this *the narrow scope condition* (NSC). To illustrate, NSC claims that (27) is unacceptable if 'everyone' is interpreted as having wide scope over 'someone' in the first sentence:

(27) Someone loves everyone. Chris knows that someone does.<sup>24</sup>

For 'loves everyone' is the antecedent of the deleted verb phrase, and if 'everyone' has wide scope over 'someone', its scope is wider than the verb phrase. So NSC would not allow Verb Phrase Deletion here. Of course NSC would allow deletion (and thus (27) would be acceptable) if 'someone' were interpreted as taking wide scope over 'everyone'. In this case, the antecedent of the deleted verb phrase ('loves everyone') does not contain a quantifier whose scope extends beyond the verb phrase.

Fodor and Sag now call our attention to the following example:

(28) Sandy thinks that every student in our class plays chess better than a guy I beat this morning. Chris



Both continuations are acceptable even if we understand the first sentence to be attributing a belief about a particular person to Sandy. UT explains this reading of the first sentence of (28) as resulting from the quantifier 'a guy I beat this morning' taking wide scope over 'Sandy thinks that ....'. But if the quantifier takes wide scope over the matrix in this way, NSC predicts that deletion cannot take place and thus that neither continuation is possible. So to explain the acceptability of (28) when the first sentence is understood as attributing a belief about a particular person to Sandy, UT must complicate the conditions on Verb Phrase Deletion. Fodor and Sag's AT, by contrast, has no difficulty in accounting for the acceptability of (28) in a manner consistent with NSC when the first sentence is so understood. According to AT, this reading of the sentence results from 'a guy I beat this morning' referring to a particular individual. On this view, the antecedent of the deleted verb phrase ('plays chess better than a guy I beat this morning') does not contain a quantifier, much less a quantifier whose scope extends beyond the verb phrase. Hence, NSC allows deletion.

Fodor and Sag are correct in claiming that UT must deny NSC to explain the acceptability of (28) when the first sentence is understood in the way described above. However, I believe that the acceptability of other examples shows that NSC is incorrect. If this is so, the fact that UT forces us to deny NSC obviously cannot provide an argument against UT.

Consider the following example:

(29) Someone in Debbie's division gets promoted to management every month. Someone in Sharon's division does too.

On the reading of the first sentence of (29) resulting from 'every month' taking wide scope over 'someone in . . .' (the most natural reading of the sentence), this sentence asserts that each month someone in Debbie's division gets promoted (possibly different people in different months). When the first sentence is read in this way, the continuation is clearly acceptable. But on this reading of the first sentence, the antecedent of the deleted verb phrase ('gets promoted to management every month') contains a quantifier ('every month') whose scope extends beyond the verb phrase. Thus NSC predicts that deletion is not possible and that the continuation is unacceptable. Further, consider (30):

(30) John thinks that every witness was pressured by a person high up in the administration. Sue thinks that every witness was too. Unfortunately, neither John nor Sue has any idea who the administrative official could be.

It seems to me that (30) is quite acceptable when the first sentence is interpreted in such a way that the indefinite is a quantifier which takes narrow scope with respect to the matrix 'John thinks', but wide scope with respect to 'every witness' (on this reading the sentence asserts that John thinks: 'there is some high up administrative official such that he/she pressured each witness').<sup>25</sup> NSC, of course, denies that (30) is acceptable when the existential quantifier takes this intermediate reading. For on this reading, the antecedent of the deleted verb phrase ('pressured by a person high up in the administration') contains a quantifier ('a person high up in the administration') whose scope is wider than the verb phrase. Finally, consider (31):

(31) Brad thinks that someone becomes a millionaire every day. Bill thinks that someone does too.

(31) strikes me as acceptable when 'every day' in the initial sentence is

interpreted as taking wide scope with respect to 'someone' and narrow scope with respect to 'Brad thinks'. That is, if one reads the initial sentence, as one would naturally read it, as asserting that Brad thinks that every day some person (possibly different persons on different days) becomes a millionaire, the continuation seems fine. Once again, NSC does not allow the continuation when the initial sentence is read in this way. So, if *any* of (29), (30) and (31) is acceptable under the conditions described above, NSC is incorrect and thus the fact that UT must deny NSC does not provide an argument against UT.

In conclusion, it seems to me that no one has succeeded in showing that indefinites are ambiguous in the way required by AT. Some, I am sure, will still have a feeling that indefinites must sometimes refer to particular individuals (or do something like referring). I suspect that this feeling stems not so much from the arguments that have been offered for AT as from the undeniable fact that we often use indefinites when we are thinking of particular individuals. Thinking of an old college friend, I say, for example, 'I have a friend who lives in Denver.' In such instances we are apt to say that we were "talking about" the old friend, and the step from "talking about" to "referring to" comes all too quickly. Such cases need not bother the proponent of UT. He/she simply describes this as a case in which one believes Fa and asserts (Ex)Fx. He/she can even agree that a was being talked about, though he/she will understand this to mean simply that (Ex)Fx was asserted because of or on the basis of a belief that Fa.

## NOTES

\* I have benefited greatly from discussing the issues addressed in this paper with Michael Liston, John Vickers and Mark Wilson.

<sup>1</sup> Of course it is widely recognized that 'a(n)' has so-called generic uses ('A rat is a rodent') on which the indefinite article does not have the force of an existential quantifier. Further, some philosophers hold that the indefinite article does not signal existential quantification in what are sometimes called *predicative uses* ('John is a man'). Russell, incidentally, held that indefinite descriptions do function as existential quantifiers in predicative uses, and that the 'is' in such uses expresses identity, (see *Introduction to Mathematical Philosophy* (George Allen and Unwin LTD, London), 1919 p. 172). Finally, there is considerable controversy over the semantic function of 'a(n)' and 'some' when they occur in "donkey sentences" ('If John owns a donkey, he beats it'). In the present essay we shall understand UT as the claim that, donkey sentences, generic and predicative uses aside, 'a(n)' and 'some' assert existential generalization.

<sup>2</sup> Some philosophers and linguists have developed views which are incompatible with

both UT and AT. See, for example, George Wilson's 'On Definite and Indefinite Descriptions' (*The Philosophical Review*, LXXXVII, No. 1, January 1978 pp. 48–76), Irene Heim's 'The Semantics of Definite and Indefinite Noun Phrases' (Ph.D Dissertation 1982 University of Massachusetts), and Hans Kamp's 'A Theory of Truth and Semantic Representation' (in *Formal Methods in the Study of Language*, J. Groenendijk, T. Janssen and M. Stockhof (eds.), (Mathematisch Centrum, Amsterdam) 1981 pp. 277–322). I do not discuss such views in the present essay.

<sup>3</sup> Still, I am not *absolutely* convinced of the correctness of UT. My reluctance is traceable in part to the uses of 'a(n)' (and 'some') mentioned in note 1. It seems likely that the advocate of UT must himself invoke an ambiguity in 'a(n)' to explain such uses. An account of 'a(n)' according to which it is univocal *and* which succeeds in explaining these various uses would be preferable to UT, all other things being equal. There have been several attempts to construct such an account (e.g. the works by Wilson and Heim mentioned in note 2), and though I don't think that any of the attempts I am aware of are fully satisfactory, such an account does not seem impossible.

<sup>4</sup> On my use of the term, saying that a pronoun/description is anaphoric to another expression does not commit one to any view about the semantic significance of the pronoun/description (e.g. that it is coreferential with its antecedent, etc.). It simply means that the proper interpretation of the pronoun/description requires one to take note of the antecedent.

<sup>5</sup> 'Speaker Reference, Descriptions and Anaphora' which can be found in *Contemporary Perspectives in The Philosophy of Language*, French, Uehling and Wettstein (eds.), (University of Minnesota), 1979, pp. 28–44. Subsequent page references to Donnellan's paper will use the pagination of this volume.

<sup>6</sup> *Ibid* p. 38, my emphasis; the example has been renumbered to fit in with the numbering of examples in the present paper.

 $^{7}$  Donnellan cautiously refrains from saying that the indefinite itself refers, (see *ibid* note 13).

<sup>8</sup> I assume that for the first sentence in a discourse such as 'A(n) F is G. He/she/it/the F is H. etc.' to be true on Donnellan's view, the object the speaker has in mind must be an F. Donnellan never says that this is so, and, by analogy to his position on *definite descriptions*, one might suppose that he would count such sentences as true when the object the speaker has in mind is merely a G (and not an F). But such a position leads to very implausible truth values in some cases. For example, we are in your front yard at night and a lighted object descends out of the sky. With this object in mind, I say 'A spaceship from outer space is hovering over your yard. It is going to land.' It seems quite clear that the first sentence utterred is false if the object is a police helicopter. Yet the position outlined above would have the sentence come out true in this situation! Hence, I assume that the object must satisfy the predicate 'is a spaceship from outer space' for the first sentence to be true on Donnellan's view. The criticisms I make of Donnellan hold on either version of the view.

<sup>9</sup> Origins, by Richard Leakey and Roger Lewin, (E. P. Dutton, New York) 1977 p. 91.

<sup>10</sup> This account has been worked out in some detail in my paper Pronouns, Descriptions and the Semantics of Discourse' (forthcoming in *Philosophical Studies*) and in George Wilson's 'Pronouns and Pronomial Descriptions: A New Semantical Category' in *Philosophical Studies* **45** (1984) pp. 1–30.

<sup>11</sup> Op cit, p. 38.

<sup>12</sup> Henceforth I shall use the term 'conditional' to refer to English 'if, then' statements (if the antecedent or consequent of such a conditional is in the subjunctive mood, the conditional will be called 'subjunctive'; if both antecedent and consequent are in the indicative mood, the conditional will be called 'indicative'). 'material conditional' will refer to the truth function usually associated with ' $\rightarrow$ ' in propositional logic.

<sup>13</sup> See 'A Theory of Conditionals', in N. Rescher (ed.), Studies in Logical Theory (Basil

Blackwell, Oxford), 1968, pp. 98–112; and 'Indicative Conditionals', in A. Kasher (ed.), *Language in Focus*, (D. Reidel, Dordrecht-Holland), 1976, pp. 179–196.

<sup>14</sup> See 'On Assertion and Indicative Conditionals' in *The Philosophical Review*, **LXXXVIII**, No. 4 (October 1979), pp. 565–589.

<sup>15</sup> Referential and Quantificational Indefinites', *Linguistics and Philosophy* **5** (1982) pp. 355–398.

<sup>16</sup> *Ibid* p. 375, their emphasis.

<sup>17</sup> And AT as espoused by Fodor and Sag apparently is such a theory - see *ibid* note 10.

<sup>18</sup> Actually indefinites are not exactly classed with 'any' since indefinites can also be read as taking narrow scope with respect to conditionals, whereas 'any' apparently cannot. The main point here, however, is that the island escaping capacity of indefinites is not exceptional on UT.

<sup>19</sup> In fairness to Fodor and Sag, they do consider syntactic constituents other than initial 'if' which, they claim (like initial 'if') can be held to be scope islands for all quantifiers by AT, whereas UT must allow an exception for 'a(n)'. But I have just shown that this is false for initial 'if', and sentences (25) and (26) in the sequel provide examples of cases in which AT must admit that quantifiers have escaped what Fodor and Sag take to be scope islands other than initial 'if'.

<sup>20</sup> That (23) lacks the reading (23a) is unlikely to impress Fodor and Sag, since they hold that 'many' is also ambiguous between a quantificational and a referential reading. So far as I can see, they have nothing to say about 'at least n'.

<sup>21</sup> Fodor and Sag, *op cit* p. 369. They consider an example containing a complement to a noun themselves, but, because I believe that extraneous factors affect their example, I have chosen a different one.

<sup>22</sup> This reading of (26) can be made more salient by imagining someone utterring (26) and then turning to the various authors in the room and saying 'John, you despise every publisher who wouldn't publish *The Story of O*; Susan, you despise every publisher who wouldn't publish *The Tropic of Cancer*; etc'

<sup>23</sup> Fodor and Sag, op. cit. pp. 375-376.

<sup>24</sup> (27) and (28) both come from Fodor and Sag's paper. I have given the examples different numbers so that they fit in with the numbering of examples in this paper.

 $^{25}$  Fodor and Sag mention examples of this general sort, (see note 12 *op. cit.*), but deny that the relevant continuations are possible when the initial sentence is interpreted in the manner suggested.

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