THE SEMANTICS OF POSITIVE *ANY*

JOHN GOLDSMITH
Indiana University
ERICH WOISETSCHLAEGER
Princeton University

We suggest that the notions of universal and existential quantification, even in conjunction with considerations of scope, are inadequate for the treatment of the English word *any*, and propose an analysis in which the crucial property of *any* is the law-like and principled character of the generalizations it expresses.

The literature on quantifiers has curiously tended to overlook the perfectly ordinary positive *any*, as in 1:

(1) a. Any even number is expressible as the sum of two primes.
   b. Charlie takes orders from anybody.
   c. Any system of defense has cracks in it somewhere.
   d. Deliveries are free to any point within 10 miles of our store.
   e. Any gambler knows that a lucky streak doesn't last forever.
   f. Any beaver knows how to build a dam.

The proverbial dictionary——here, the American Heritage dictionary——is quite perplexed on the score of *any*. It defines *any* as:

1. One, no matter which, from three or more; a, an, or some.
2. Some, regardless of quantity or number.
3. The smallest quantity or number of; even one.
4. Every.

That is astonishing! This word can mean one (1), or a real small amount (3), or any amount (2), or all of it (4). It is a wonder that our listeners know which of these meanings we are using in, say, the sentences of 1. We hope to cast some light on this problem in this paper.

Let us first observe that the logic of *any* is strikingly different from that of such universal quantifiers as *all*, or *every*. Note, for example, the contrasts in 2:

(2) a. Any friend of yours is a friend of mine.
   b. All friends of yours are friends of mine.
   c. Every (or: each) friend of yours is a friend of mine.

The *all* and *every* sentences are neutral descriptions of pure coincidences, while the *any* sentence says something quite a bit stronger: it is a declaration of solidarity. It says that the connection between 'your' friends and 'mine' is a principled one, independent of who those friends happen to be at a given time. By contrast, sentences

2b and 2c describe the overlap as fortuitous.

We propose that the salient property of positive *any* sentences (i.e. those without a negative or interrogative or other affective trigger)[1] is just this: they express PRINCIPLED generalizations. *All* and *every*, on the other hand, just express universal quantification in the usual sense. To expand on what we mean by a principled generalization, let us consider the sentences in 3:

(3) a. Any professor in this room speaks at least three languages.
     b. Any professor in this department speaks at least three languages.

Imagine a dinner party at a professor's house where somebody makes the observation that each of the professors gathered there speaks at least two foreign languages. Although one might say *All of the professors in this room speak at least three languages*, or that each of them does, to say 3a would be quite inappropriate. The point is that in a situation like this dinner party, the command of three languages on the part of the participants is presumably simply a coincidence, and is surely not inferred from any principle of admission to the party. By contrast, consider the case of the faculty in a Classics Department, where we may assume that a command of Greek and Latin is a prerequisite for work in the discipline; in other words, for a Classics professor it is by no means accidental that he speaks at least three languages. While in such a situation a sentence like *All* (or: *each*) *of the professors in this department speak(s) at least three languages* would still be true, only 3b focuses on the fact that there is a principle behind that truth. Finally, we should not be taken to be saying that 3a is nowhere appropriate: a campus tour guide might point through an open door at a meeting of the Classics faculty and utter 3a: but again, we have provided a context here where it makes sense to state 3a as deriving from some principle.

It has often been observed that positive *any* sentences are frequently acceptable only when a restrictive modifier occurs on the *any* phrase. Jean LeGrand, for example, says that "it is the presence of the relative clause dependent on *any* in sentences like 'She bought anything she needed at Carlson's' that triggers the *any*". She contrasts her good sentence with the ungrammatical "She bought anything at Carlson's". These *any*s, she continues, are triggered by the presence of a subordinate clause, though in her final analysis the "triggering relative clause" is itself derived from a preceding if-clause in a familiar, generative semantics sort of analysis. We will return to LeGrand's analysis below.

---

[1] Contrary to what might appear to be the case, we do not take a position here on whether there are two *any*s in English or just one. The logic of the situation is clear enough, however: if there are two *any*s, we will take ourselves to have made a specific claim about the one that needs no negative-polarity trigger, and if there is just one *any*, we have established an adequacy criterion for any analysis of single *any*, for only if such an analysis entails our position for the range of cases we discuss can it be considered descriptively adequate (assuming, of course, that our position itself is not in error).

The observation, then, that restrictive modifiers, in Haj Ross' apt phrasing, "lubricate" the possibility of having the word *any* finds a natural explanation from the point of view of our proposal. Recall the discussion of 3, and remember that what makes the sentences work, in the various scenarios, is success in referring to *Classics professors*: they were the set of people for which the principle at issue worked, and as long as, by whatever description, they could be picked out, an *any* sentence was acceptable. Now it is only to be expected that any *any* sentence would be most readily accepted when the concept for which a principle holds is addressed directly, since in such cases no contextual facilitation is necessary. And here is where the apparent need for restrictive modifiers comes in: they are simply the standard way of zeroing in on a concept that has no one-word expression in the language, and they will increase acceptability of *any* sentences just to the degree that they enable the speaker to address the concept at issue more directly.[2]

Consider 4, for example.

(4) a. Anybody wears long underwear.
    b. Anybody who goes hiking in winter wears long underwear.
    c. Anybody can wear long underwear.

4a is unacceptable in any context, because it makes little sense. Whether or not it is true, 4a could hardly be true in a PRINCIPLED way that we could justify, as required. In this respect, the unacceptable 4a contrasts with the much better 4c, which could be explained by someone who said, "There's no law prohibiting the use of long underwear, so that's why anybody can." On the other hand, 4b is natural (whether or not it is true) because one can understand it as expressing a principled connection between the class of winter-hikers and that of long-underwear-wearers.

---

[2] There exists an interesting variation on this theme. The ordinary understanding of an *any* sentence involves selecting a reference class by virtue of the lexical and deictic information given in the *any* phrase, and then taking the rest of the sentence to be making a principled claim about the members of that reference class. The image here is of a progression from identifying a reference set to describing what properties it has. Now, this can be turned around in an interesting way: equipped with knowledge of what properties a reference class has AS A MATTER OF PRINCIPLE, we can use this knowledge as a criterion for admitting individuals to the reference class. This will make our pronouncements pretty much true by definition. Compare the ordinary, and empirically assailable, sentence in i with its not-so-easily-refuted counterpart in ii:
   (i) Any student studies at least three hours a night.
   (ii) Any real student studies at least three hours a night.
The obvious point is that the force of ii is such as to make it an unprofitable enterprise for the skeptical listener to set out in search of "real" students hoping to find one that studies less than three hours a night. English provides a fair plethora of expressions that signal this "discriminatory" use of *any* sentences. Among them are *true, genuine, honest-to-goodness, worth X's salt, worth X's right mind, self-respecting,* etc.; sometimes emphatic stress alone does the job. What makes this type of *any* sentence so interesting is that using a generalization about a reference class as a diagnostic for membership in that class makes sense only if that generalization is non-accidental, principled.

The next pair of examples, 5a and 5b, shows a similar effect, but also illustrates an interestingly different range of cases.

(5) a. We cash checks issued by any bank within 50 miles.
     b. We cash any checks.

As before, the example that lacks a restrictive modifier on the *any* phrase, 5b, sounds rather odd, in contrast with 5a, which includes the restrictive modifier *within 50 miles* on its *any* phrase. Still, 5b does not appear to be quite as unredeemable as does 4a, and thereby hangs a tale.

Notice that 5 a, b make policy statements, while 4 a, b refer to general structural truths about the world. Now why should pronouncements on policy be within the range of *any* sentences? The answer is that it is because they do in fact express non-accidental, principled generalizations that policies will quite generally be open to formulation as *any* statements. The only difference relevant here is that for policy statements, the principle involved is *stipulated*, while for empirical generalizations the principle is *discovered*. This will ultimately account for the subtle contrast between 5b and 4a: it is more plausible that a truly sweeping generalization (expressed with unmodified *any* phrases) should have been stipulated rather than discovered. Stipulation has more power to remove uncertainty.

Observe now that this also makes sense of the interpretation of sentences like 2a, *Any friend of yours is a friend of mine*, as a "declaration of solidarity", since the latter in effect amounts to the expression of a kind of policy (in a broad sense).

Let us consider another family of examples that illustrates the way in which *any* sentences express principled generalizations, not universal statements inductively inferred. Consider the difference between 6a and 6b.

(6) a. If Bill can play the guitar, everybody can play the guitar.
     b. If Bill can play the guitar, anybody can play the guitar.

6 is one of the few cases where an *any* phrase is far more natural than an *every* phrase. 6a seems like particularly bad reasoning, inferring a generalization from a single case. It's not completely senseless; one could imagine a parallel to 6a, as in 7:

(7) My roommate can play the guitar; the guy across the hall can play the guitar; his roommate can play the guitar; the guy next door can play the guitar; well! Everybody can play the guitar, it seems.

But 6a remains odd, simply because one observed case is such an extremely slender basis for a universal generalization.

On the other hand, 6b is fine. There is obviously a bit of thinking going on in the speaker's mind: Bill is perhaps not gifted with much coordination, has a tin ear, and no sense of rhythm. Hence one could conclude 6b on principled grounds.

The same sort of example can illustrate a related point. While 6b was good even

with minimal empirical support, we may further observe that it remains appropriate even when confronted with overwhelming empirical counterevidence. Consider two signs, with slogans as in 8 a, b.

(8) a. Everybody can play the guitar!
     b. Anybody can play the guitar!

Clearly, only 8b would be appropriate as an advertisement for a music school. If 8a is true, then there is no need for the music school. However, even if 8a is in fact false—as it is—we can still quite reasonably say 8b, because we seem to be making a principled inference based on our knowledge of how easy guitar-playing is, and so forth.

The contrast between *every* and *any* is so strong, in fact, that in certain situations an *any* sentence will be more natural than its counterpart with *every* even if the latter were reasonably to be considered literally true (reversing the situation of 6 and 8). Consider the following example:

(9) Sam can make mistakes, sure; Bill can make mistakes; Sally can make mistakes; well, I suppose
     a. anybody can make mistakes.
     b. everybody can make mistakes.

Here the *any* sentence is by far the more appropriate conclusion to draw, no matter how many examples we give. Why? Well, mistake-making isn't a very desirable sort of thing to be doing; and one way of reducing the negative impact of having erred is to point out that in this one does not stand alone. In fact, the less one stands alone, the more forgivable what one has done. And this is the pivotal point: statements with *any*, by virtue of their built-in appeal to a principle, cast their net wider than do *every* sentences, and thus serve the specific purpose here better, even if the actual truth of the *every* version were not in doubt.

There seem, then, to be some quite striking and interesting differences between the universal quantifier, which shows up in English in some cases as *all*, in others as *every*, etc., and this positive *any* that we have been looking at. An account that would analyze *any* as the universal quantifier—not an uncommon approach, of which we take LeGrand's (1975) dissertation, from the University of Chicago, to be representative—is in a difficult position at this point. In fact, LeGrand says, in one connection,

> Suppose that *any* is derived from neither *all* nor *some*, but rather that *any* is a primitive. (As far as I know this is not an impossible theory; however, it is inefficient. The meaning and modificational possibilities of *any* can more efficiently be explained by deriving *any* from *all*. Moreover, if *any* is a primitive, a new semantics for *any* must be invented.)

But what kind of an argument is this! Simplicity can play no role, at least not directly; the search is minimally for descriptive adequacy. If a new semantics must

be invented—and the facts do seem to point clearly in that direction—then that is what we must do. In a different connection, LeGrand draws the same conclusion, unmindful of her earlier remarks:

> The phonetic form "any" is polysemous between the true *any* (though why there should be any such thing as the "true" *any* is left unclear—JG/EW) we have examined previously, and another quantifier, *just any*. Optionally, the *just* part of the *just any* quantifier may be deleted ... (p. 30).

Let us—not unfairly, we think—assume that LeGrand's idea for *just any*, which she never spells out, is the concept of positive *any* that we are dealing with here. Is there any reason to think that there is an analysis for *any* needed in terms of the universal quantifier, once we have admitted the *just any* sense? LeGrand says there are such reasons. Let us consider them, and try to show that they do not hold up.

The area she considers is the range of what she calls "sub-trigged" *any*s, that is, where there is no negation or interrogative element which, roughly, c-commands the *any* in surface structure, as in 10, LeGrand's examples. [3]

(10) a. She bought anything she needed at Carson's.
      b. Any trespassing would be illegal.

LeGrand ultimately analyzes these *any*s as originating in a conditional *if*-clause, as in 11:

(11) a. If she needed anything, then she bought it at Carson's.
      b. If any (act) was (an act of) trespassing, it would be illegal.

To repeat our question: is there any reason to distinguish these "sub-trigged" *any*s from the principled-generalization *any*, presumably the same as what LeGrand calls "*just any*"? LeGrand gives four reasons in favor of an affirmative answer:

First, some "sub-trigged" sentences permit *just any*, but some do not. 12b is bad with *just any*.

(12) a. Anyone who studies syntax is crazy.
      b. ?Just anyone who studies syntax is crazy.

This, presumably, is in contrast with pairs like 13 a, b:

(13) a. Albert eats anything.
      b. Albert eats just anything. (Examples from LeGrand)

Accepting these facts for the moment, the argument nonetheless shows nothing. The situation we find ourselves in is comparable to the situation of 14 and 15 below, where observing the contrast in 14 and the absence of a like contrast in 15 likewise shows nothing—at least not without further argument.

---

[3] Now, just why LeGrand separates out these *any*s from the other *any*s, calling these subtrigged *any*s, is still not clear to us. On her analysis, these *any*s are still derived from a universal quantifier.

(14) a. Bill is crazy.
      b. ?Just Bill is crazy.
(15) a. That was Bill.
      b. That was just Bill.

LeGrand's argument, applied to 14 and 15, would run as follows: the fact that *Bill* and *just Bill* can both occur in 15, but only *Bill* can occur in 14,[4] suggests that there are actually two basic forms, *just Bill*, optionally reduced to *Bill*, and simply *Bill*, of which only the former occurs in 15 a, b, and only the latter in 14. We see no argument here.

The second argument designed to preserve *any* from being analyzed as *just any* is that *just any* must always be stressed, unlike the plain *any*. What seems to be true is that an element "focused" by *just* is, fairly generally, likely to receive accent, as in 16:

(16) a. He spends just hóurs talking on the telephone.
      b. There soon were just míllions of locusts everywhere.
      c. We ended up having just tóns of stuff to wade through.

But the accented *hours*, *millions*, and *tons* of 16 a, b, c remain hours, millions, and tons. And if we, say, removed the *just* from 16b, and shifted the accent from *millions* to *locusts*, the *millions* of 16b would still be millions. Again, we fail to see where the argument for distinguishing between two cases lies.

The third argument to separate *just any* from "sub-trigged" *any* is that without such a separation, "we would have no explanation for the fact that sub-trigged *anys* may introduce counterfactual clauses." This argument is based on the observation that relative clauses headed by *anyone* may have a contrary-to-fact interpretation with a past or past perfect tense marking. LeGrand's examples are these:

(17) a. If anyone had thrown a rope, they would have saved him. =
          Anyone who had thrown a rope would have saved him.
      b. If I knew anyone, I'd introduce them to you. =
          I'd introduce anyone I knew to you.

LeGrand suggests that these counter-to-fact relative clauses are restricted to these two constructions, thus supporting an analysis of *any* as arising from an *if*-clause. But this is simply untrue, as we see in 18:

(18) a. What would you do with a $100 bill you found just lying on the street?
      b. A more experienced man who had known a few tricks of the trade could have pulled it off.
      c. I would do a thing like that not even for the last man that lived on earth.

---

[4] It is irrelevant to point out that 14b is acceptable when *just* is paraphrasable as "only"; in that sense, 12b is acceptable, too, as in reply to the statement "Anybody who studies linguistics is crazy."

The use of the "remote" tense (in the sense of Joos 1964) after *if* is linked to counterfactuality not in a purely mechanical way, as LeGrand apparently suggests, but more generally, and can thus again show nothing about the source of this *any*.

Finally, LeGrand observes that *"just any* occurs only in habituals or in sentences with verbs of willingness or liking."* "Subtrigged *any,"* she says, "occurs in a wider range of environments," as shown in 19:

(19) a.   I saw anyone who crossed the street.
      b. *I saw just anyone who crossed the street.

To this we can only say: an observation does not make an argument. In other words, what follows here from what?[5]

In short, there is an almost inescapable sloppiness in LeGrand's analysis due directly to the fact that she attempts to put English on the procrustean bed of the logic invented 100 years ago by philosophers interested in other problems. As Benjamin Lee Whorf wrote, 40 years ago,

> Previously when ideas have been distributed among a set of categories, these categories have been the result of some philosopher's introspection, but not so this idea-map of a language—we come upon it as we do upon the facts of nature, and its as yet dimly seen configuration challenges us to investigate it by experimental and inductive methods.

In a similar connection, Whorf wrote,

> The very essense of linguistics is the quest of meaning, and, as the science refines its procedures, it inevitably becomes, as a matter of this quest, more psychological and cultural, while retaining that almost mathematical precision of statement which it gets from the highly systematic nature of the linguistic

---

[5] The discussion in the text confines itself to an assessment of how compelling LeGrand's arguments are as they stand. What we end up doing is simply neutralizing them; in particular, it is clearly not incumbent on us to improve on LeGrand's analysis of the data she presents. Which, in its turn, however, does not mean that we haven't given the attempt to do so some thought. What seems to be behind the fact that *just* cannot happily modify just any *any* phrase is its semantico-pragmatic function, which is to imply (or, perhaps, implicate) that some unspecified quantity is excessive, either excessively large, or excessively small. So *to do something in just seconds,* or *to be just inches away from victory,* involves miniscule amounts of time and space, while *to stagnate for just years and years,* or *to spend just oodles of money,* involves time and money beyond ordinary reckoning. The case of positive *any* sentences aligns itself naturally with the case of very, very large quantities: adding *just* adds extra emphasis to the point about the generalization being sweeping and open-ended. Now what seems to happen is that this emphatic quality of *just*, focusing on the unrestrictedness of a generalization, is pragmatically in conflict, in many cases, with the function of restrictive relative clauses, which explicitly limit the scope of a generalization. In any event, what LeGrand seems to turn her back on prematurely is what ought to have been the null hypothesis: the reasons for *just any* differing from plain *any* are straightforwardly compositional.

realm of fact.

Needless to say, we like to think of our own study of *any*, presented here, as Whorfian in the sense of passages such as the ones cited above.

REFERENCES

Joos, Martin. 1964. The English verb: Form and meaning. Madison: University of Wisconsin Press.

LeGrand, J. 1975. *Or* and *any*: The semantics and syntax of two logical operators. Unpublished Ph. D. dissertation, University of Chicago.

[Received in March, 1980.]