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EVEN: THE CONVENTIONAL IMPLICATURE APPROACH RECONSIDERED

Most writers on 'even' agree that the word makes some contribution to the meaning of sentences in which it figures. When we say

(1)   Even Albert failed the exam

it seems that we imply something more than what is implied by

(2)   Albert failed the exam.

Difficulties arise, however, when we try to precisely specify what 'even' adds to the meaning of a sentence.

The standard view is that whatever contribution 'even' makes, it does not affect the *truth-conditions* of a sentence. It is thought that 'even' makes a difference only in *conventional implicature* in much the way that 'but' does over and above 'and'. This standard account, which I shall call the Implicature Account (hereafter, IA), is certainly the most intuitively plausible. Suppose that we are placing bets on whether Albert failed the exam. Feeling confident that he did fail, I utter sentence (1). Suppose, however, that Albert's failing is not at all surprising, and in fact is very likely. In this case, (1) would certainly be inappropriate. However, assuming that Albert did fail, it seems odd to think that (1) is false, and that I should therefore pay up. It seems the most that can be said in such a case is that the bet is off, since my use of 'even' in (1) is misleading to those unaware of Albert's academic limitations.

Despite the plausibility of IA, William Lycan (1991) adopts an entirely different approach. He rejects the Equivalence Thesis (the view that 'Even A is F' is true just in case 'A is F' is true), contending that 'even' plays a genuine truth-functional role in the sentences in which it figures. Lycan claims, in particular, that 'even' acts as a universal quantifier. In this paper, I defend IA by showing that Lycan's analysis and all other quantifier accounts are hopelessly problematic. I also show how the IA approach might be revised so that it avoids the flaws of traditional versions and is able to handle various problem cases found, especially, in recent essays.

Since Jonathan Bennett qualifies as a proponent of IA, I begin with a brief review of his (1982) account of 'even'.

I. BENNETT'S ACCOUNT

According to Bennett, we determine the felicity of an 'even'-sentence in the following manner. If S is a sentence containing the word 'even', then S^* is the sentence we get by eliminating 'even' from S. For instance, if S were

(1)   Even Albert failed the exam,

then S^* would be

(2)   Albert failed the exam.

Next we determine the "neighbor" sentences of S^* which are obtained by deleting from S^* the constituent that is the *focus* of 'even' in S, and then replacing it by some other grammatically appropriate expression. For example, since the focus of 'even' in (1) is 'Albert', the neighbors of (2) will include such sentences as 'Everyone failed the exam', 'No one failed the exam', 'Marie failed the exam', 'Albert's best friend failed the exam', and 'Albert's worst enemy failed the exam'.

According to Bennett, the 'even'-sentence S is *true* just in case S^* is true (as the Equivalence Thesis demands), and S is *felicitous* just in case there is a neighbor sentence Sj such that

(i) Sj is true and mutually believed by the speaker and hearer, and salient for them,
(ii)   the truth of S^* and that of Sj can naturally be seen as parts of a more general truth, and
(iii)   it is more surprising that S^* is true than that Sj is true. (1982, pp. 405–406)

So sentence (1) is true just in case Albert failed the exam. And it is felicitous just in case (i) 'Albert's best friend failed the exam' (or some other neighbor sentence) is true, believed by both speaker and hearer to be true, and salient for them, (ii) the fact that his best friend failed and that Albert failed can be seen as parts of a more general truth (e.g., the truth that the exam was failed), and (iii) it is more surprising that Albert failed than that his best friend failed.

To illustrate further, let us consider a case where the focus of 'even' is something other than a noun phrase. Suppose that Ted's boss disapproves so strongly of drinking on the job that she would automatically fire anyone who drank the slightest amount. In this circumstance, it seems both true and felicitous to say

(3)   Even if Ted drank just a little, she would fire him,

which is just the result that Bennett's analysis yields. First we eliminate 'even' from (3) to get

(4)   If Ted drank just a little, she would fire him.

Then we determine the focus of 'even' in (3) to arrive at the neighbors of (4). The focus of 'even' in (3) is 'just a little', since we might have expressed (3) as 'If Ted drank even just a little, she would fire him'. So the neighbors of (4) will include 'If Ted drank a large amount, she would fire him', 'If Ted drank a fair amount, she would fire him', and 'If Ted drank moderate amounts, she would fire him'. Thus, (3) is true just in case (4) is true, and (3) is felicitous only if (4) is more surprising than at least one of these neighbor sentences.

Although Bennett's account gives the correct result in a wide variety of cases, it suffers a fatal flaw. Bennett requires only that $S*$ be more surprising than *one* neighbor, and this leaves his analysis open to an obvious type of counter-example. Suppose Albert passed the chemistry exam, but this was not at all surprising since Albert is one of the best chemistry students in the history of Madison High. In this case, it would not be felicitous to say

(5)   Even Albert passed the exam.

Now suppose that Albert's classmate, Marie, is even more likely to pass, since she is the *very best* chemistry student in the history of the school. It seems that (5) would remain infelicitous. However, if we chose

(6)   Marie passed the exam

as the relevant neighbor sentence, then Bennett's account would yield the incorrect result that (5) *is* felicitous since 'Albert passed the exam' is more surprising than (6).

One obvious way to avoid this difficulty is to require that $S*$ be more surprising than all of its true neighbors. This is the approach taken by Lauri Karttunen and Stanley Peters (1979) who insist that when we say "Even Bill likes Mary", we implicate, not only that "Other people besides Bill like Mary", but also that "Of the people under consideration, Bill is the least likely to like Mary" (1979, p. 12). Working this insight into Bennett's analysis, we might claim that S is felicitous just in case, for *any* true neighbor sentence Sj,

(i) Sj is mutually believed by both speaker and hearer, and salient for them,

(ii)   the truth of S^* and that of Sj can naturally be seen as parts of a more general truth, and

(iii)   it is more surprising that S^* is true than that Sj is true.[1]

Unfortunately, while Bennett's analysis is too weak, this modified account is much too strong. Suppose that everyone in the class failed the chemistry exam, and this includes Albert, which is very surprising given his academic abilities. It would be felicitous, in this case, to say

(1)   Even Albert failed the exam.

Moreover, (1) would remain felicitous even if there were another person in the class (e.g., Marie) who is less likely than Albert to fail the exam. Paul Kay (1990) provides an example which illustrates this same point. There are contexts in which the sentence

(7)   The administration was so bewildered that they even had lieutenant colonels making policy decisions

might be perfectly felicitous, despite the fact that "having majors, captains, or sergeants making major policy decisions would provide the basis for even more extreme assertions" (p. 90). As these cases show, it is not necessary for the felicity of S that S^* be more surprising than *all* of its true neighbors.

Before considering how IA might be revised, or whether it even warrants revision, we should first see whether there is any advantage to adopting a truth-functional account of the meaning of 'even'.

II. LYCAN'S ACCOUNT

Lycan's account of 'even' is partly motivated by the syntactic similarities that exist between the words 'even' and 'only'. He notes that both are "floaters"; they can occur in almost any grammatical position, and which position they occur in significantly alters the meaning of the containing

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[1]This account is very similar to Gilles Fauconnier's "probability scales" approach. According to Fauconnier (1975, pp. 364–365), for any sentence 'Even $R(a)$', there is a probability-ranking of what would complete the schema '$R(x)$' to yield a true sentence. The felicity of 'Even $R(a)$' is determined by where 'a' lies on this probability scale. The nearer 'a' lies to the low point of the scale, the more surprising it is that 'a' would complete '$R(x)$' to yield a true sentence. So 'Even $R(a)$' is felicitous just in case 'a' lies at the scales' low point. To use Fauconnier's example (p. 364), the use of 'even' in the sentence 'Even Alceste came to the party' ... marks the existence of a pragmatic probability scale, with 'Alceste' as a low point with respect to the propositional schema "x came to the party = $R(x)$" (p. 364).

sentence. To illustrate, he has us make the following comparisons (1991, pp. 133–134):

> (Even, Only) I hit him in the eye yesterday.
> I (even, only) hit him in the eye yesterday.
> I hit (even, only) him in the eye yesterday.
> I hit him (even, only) in the eye yesterday.
> I hit him in the eye (even, only) yesterday.

Given these syntactic similarities, and also given the fact that 'only' is a quantifier (meaning "none, except"), Lycan proposes that 'even' is a quantifier. What sort of quantifier? When we say "Even I hit him in the eye", we come very close to saying something like *"Everyone, including me, hit him in the eye"*. Thus, Lycan concludes that whereas 'only' is a quantifier meaning "none, except", 'even' is a quantifier meaning "every, including".

If Lycan is right about this, then the following truth-functional account of 'even' naturally emerges:

Where S is a sentence containing 'even', C is the constituent of S and of its corresponding S^* that is the focus of 'even' in S, unsaturated dashes "--- ---" indicate the result of subtracting 'even' and C from S, and G is a contextually determined class containing at least one member $\neq C$: S is true iff every member x of G including the referent of C is such that "---x---". (1991, p. 130)

Put simply, a sentence of the form 'Even A is F' is true just in case (i) there is some contextually determined group G that includes A and at least one item other than A, and (ii) everything in G, including A, is F.

To illustrate, recall the case of the puritanical boss. When we say "Even if Ted drank just a little, she would fire him", the focus of 'even' is 'just a little', and so the reference-class G will consist of various amounts of drink. Thus, Lycan's account yields the very plausible paraphrase

(8)   For any amount of drink x, if Ted were to drink x, then she would fire him, and that amount includes just a little.

And assuming that the reference-class G consists of the students in Albert's chemistry class, 'Even Albert passed the exam' would be translated as

(9)   Everyone in the class passed the exam, and that includes Albert.

Since Lycan is concerned only with the truth-conditions of 'even'-sentences, his analysis remains silent as to what 'even' conventionally implicates. The clause 'and that includes . . .', however, allows for the element

of emphasis that accompanies the use of 'even'. So we can add to Lycan's analysis an account of what 'even' conventionally implicates simply by explaining what exactly is being emphasized, and the conditions under which this emphasis is appropriate.

Despite the ingenuity and initial plausibility of Lycan's analysis, there are some fatal difficulties with the idea that 'even' universally quantifies.

III. Problems with the Quantifier Approach

Suppose that Uncle Jed just made his spiciest batch of chili ever. Wishing not to insult him, most of us, including Granny, managed to screw up enough courage to try the chili. Assuming that Granny is much more culinarily reserved than the average person, it would be felicitous in this case to say

(10)   Even Granny tried the chili.

Now, on Lycan's account, we should paraphrase (10) as

(11)   Everyone in the group tried the chili, and that includes Granny.

But the problem is that (10) would still be true if there were one or two people in the group who did not try the chili. When we assert (10), we imply that Granny tried the chili, which is surprising since this behavior is not at all in her character; however, this allows that there might be someone in the group who did not try the chili, perhaps because they were even less adventurous than Granny. Note that this problem is different from that facing the Karttunen-Peters account. The problem there was that 'Even A is F' might be true and felicitous even when some other item is less likely to be F. The problem for Lycan's account is that 'Even A is F' might be true and felicitous even when some of the relevant items are not F.

A. Lycan's Modified Account

Lycan himself notes the flaw in his account when he writes,

I contend that 'even' is a universal quantifier. But universal quantifiers have the habit of being universal. Thus, on my view, within the reference class presupposed by any given use of 'even', there can be no exceptions. Yet 'even' does seem to admit of exceptions. (p. 140)

In an effort to avoid counter-examples of this sort, Lycan suggests the following modification of his initial account (pp. 144–149). In the sentence 'Even A is F', the word 'even' does not quantify over *all* items in the

contextually determined reference-class, but only those that we would *reasonably expect* to be *F*. Having quantified over this more restricted class of items, the word 'even' is then used to imply that in addition to these items, *A* is also *F*. Thus, 'even' is still a quantifier, but a quantifier meaning "everything we would reasonably expect . . . *plus* . . ." rather than "everything . . . , including . . . ". On this modified account, 'Even Granny tried the chili' would be paraphrased

(12)   Everyone in the group whom you would reasonably expect to try the chili did, plus Granny tried the chili.

Unlike (11), (12) does not imply that everyone tried the chili. So the problem case mentioned above is now easily handled.

Unfortunately, the problem cases do not end here. In a recent essay, Paul Berckmans (1993, pp. 598–600) presents the following counter-example. The sentence

(13)   Evans kissed Mary even before he knew her name

implies that of all the events that took place between Evans and Mary before he learned her name, his kissing her is among the most surprising. The relevant events in this case are those involved in establishing a personal and intimate relationship. Thus, on Lycan's modified account, (13) should be paraphrased

(14)   All of the personal-relation-establishing events that you would reasonably expect to be preceeded by Evans' kissing Mary were preceded, plus his learning her name was preceded.

The problem is that (13) does not imply that all of these other events were preceded by the kissed. (13) would be true and felicitous even if Evans proposed and then kissed her.

We can modify our chili scenario to get another instance of the same general problem. Everyone thought that Clint would try the chili, since he prides himself on being very culinarily macho. However, Clint suddenly has a change of heart. Chili-tasting, he now feels, is not to be considered a test of who is the most macho; the purpose is to discern which batch is the most aesthetically pleasing. Thus, Clint, who happens to be the person you would least expect to refuse, actually does refuse. In this case, (10) would still be true and felicitous, even though not everyone you would expect tries the chili. This example and Berckmans' show that 'Even *A* is *F*' might be true and felicitous when some of the relevant items that you would reasonably expect to be *F* are not *F*.

One natural suggestion is to construe 'even' as a *most*-quantifier, in which case (10) would be paraphrased as either

(15)   Most people in the group tried the chili, and that includes Granny,

or

(16)   Most people in the group whom you would reasonably expect to try the chili did try the chili, plus Granny tried the chili.

But why should we require that most try the chili? Suppose that Granny is the only person in the group whom you'd expect not to try the chili, but only half of the group actually tries the chili, because the other half experiences an unexpected aesthetic revelation similar to that of Clint. Although it is false that most tried the chili, (10) is still perfectly acceptable.

As a final resort, one might suggest that 'even' is a quantifier meaning "*Many* . . . , including . . . ". Lycan acknowledges the possibility of this construal, but he rejects it because he thinks it ignores the strong intuition that 'even' universally quantifies (1991, pp. 142–143). This reason is hardly compelling, since the intuitions Lycan mentions are overridden by intuitions much more powerful – namely, those that motivate the Equivalence Thesis. There is, however, a more compelling reason for rejecting the suggestion that 'even' is a *many*-quantifier. Suppose that only three people in the group tried the chili, the rest deciding to protest along with Clint. Assuming that Granny was one of the three, and that this was very surprising, (10) would still be felicitous and true. Since three hardly counts as many, (10) cannot be interpreted as either

(17)   Many people in the group tried the chili, and that includes Granny,

or

(18)   Many people in the group whom you would reasonably expect to try the chili did, plus Granny tried the chili.

It would appear, then, that 'even' is neither a universal quantifier, nor a *most* or *many* quantifier. Before we can conclude that the truth-functional approach is completely futile, we should first consider Berckmans' reasons for developing a quantifier account of his own.

B. Berckmans' Quantifier Approach

Berckmans notes that the uses of 'even' which refute Lycan's modified account do at least imply an *existentially* quantified statement. For instance, while the truth of

(13)   Evans kissed Mary even before he knew her name

does not require the truth of (14), it does require that

(19)   Evans kissed Mary at some surprisingly early time, namely the time before he knew her name. (1993, p. 609)

Berckmans also concedes that, in some cases, the use of 'even' does imply a universal statement. If everyone did fail the exam, then the 'even' in 'Even Albert failed the exam' would act as a universal quantifier. The problem, Berckmans concludes, is one of ambiguity; the use of 'even' is ambiguous between a universal quantifier and an existential quantifier. This ambiguity, however, does not preclude a unified quantifier account, since

[w]hile universal quantification cannot be sustained as a single rule, we can still formulate a general principle for the assertibility of *even* sentences and their truth-conditions: *even* announces an unexpected element in a truth-functional expansion of an existential quantifier or a universal quantifier. (p. 609)

The claim that 'even' has existential implication is hardly surprising. Even the proponent of IA will insist that the truth of (13) requires the truth of (19) – minus the word 'surprisingly'. Likewise, the truth of 'Even Granny tried the chili' requires the truth of 'There is at least one person who tried the chili, namely, Granny' – i.e., 'Granny tried the chili'. What I deny is that *any* use of 'even' implies, either logically or conventionally, a *universally* quantified statement. Consider the situation in which everyone in the class failed the exam, including Albert, which is surprising given Albert's exceptional academic abilities. In this case, it is perfectly felicitous and true to say

(1)   Even Albert failed the exam.

However, the fact that everyone in the class failed is not enough to show that (1) *implies* this fact. It seems that I would mean the very same thing by (1) in those situations where one or two students actually passed. Suppose, for instance, that I had forgotten whether everyone in the class failed; for all I know, one or two students might have passed. Assuming that Albert is one of the least likely to fail, expressing my surprise with (1) would still be perfectly acceptable. If, on the other hand, we accept

Berckmans' view, we are forced to the highly implausible result that whether or not everyone passed actually affects what I mean by uttering (1).

Perhaps Berckmans' point is that (1) has universal implication only when I *realize* that everyone failed. In the situation described above, I do not imply that everyone failed, simply because I do not know whether everyone failed. However, even if I were to utter (1) with the realization that everyone failed, it is hard to see how (1) would imply that everyone failed. The belief that everyone failed cannot be what motivates my using (1), since my reason for using (1) would have been exactly the same had I known that one or two students passed. So it seems that in no situation do I imply, either logically or conventionally, a universally quantified statement with the use of 'even'.

IV. IA REVISITED

A. Bennett's Account Revised

In section I we saw that the felicity of an 'even'-sentence S requires more than that S^* surpass *one* true neighbor in terms of surprise. At the same time, it is far too much to require that S^* be more surprising than *all* true neighbors. The obvious solution is to require that S^* be more surprising than *most* true neighbors. I contend that an 'even'-sentence S is true just in case its corresponding S^* is true, and it is felicitous just in case

(i)   for *any* contextually-determined, true neighbor Sj of S^*, the truth of S^* and that of Sj can naturally be seen as parts of a more general truth, and

(ii) S^* is more surprising than *most* of the Sjs.[2]

My talk of "contextually determined", true neighbors is meant to do the same work as Bennett's "saliency" requirement. Suppose Albert is a first-grader and has just failed his spelling test. If Albert's failing were sufficiently surprising, then 'Even Albert failed' would be perfectly appropriate despite the fact that there are countless people in the world who are far less likely to fail such a test. In fact, when compared with the entire class of English speakers, Albert's abilities rank very low indeed.

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[2]If we prefer, we may express this account in terms of "probability scales", provided that we reject Fauconnier's end-of-scale requirement. The felicity of 'Even Alceste came to the party' requires only that 'Alceste' lie sufficiently near the low end of the scale – that is, nearer than the majority.

Or suppose that I am applying for a bank loan, and I ask the bank clerk for assistance. Impressed by her extreme helpfulness, I say

(20)   She was very attentive to my questions, she told what form I would need to fill out, and she even helped me fill out the form.

Assuming that she did help me complete the form and that this is sufficiently surprising, my use of 'even' in (20) is felicitous. And it would remain felicitous even if the bank clerk has performed many activities that are much more surprising – e.g., running the 40 yard dash in 4.2 seconds, winning a Pulitzer prize, and setting a world record for pizza consumption. In fact, her life might be so intriguing that helping me fill out the form is among her least interesting accomplishments.

These cases are no longer problematic once we consider the context of utterance. While there are countless people less likely than Albert to fail the exam, Albert's performance is obviously being compared to that of his peers – i.e., those in his first grade class. Thus, the salient neighbor sentences will concern the performance of other first-graders. Likewise, while events such as running the 40 yard dash in 4.2 seconds are very surprising, these activities are not relevant to how the bank clerk performs her job; in particular, they are not relevant to how she helped me in her capacity as a bank clerk.

Although the word 'most' adds an element of vagueness, this is actually to our advantage. 'Even'-sentences vary in degrees of felicity in at least two different ways. One 'even'-sentence might be more felicitous than another because the nested sentence surpasses its neighbors in surprise to a greater degree. Suppose that Andre is *by far* the tallest person in the contextually determined reference-class, and he cannot reach the top shelf of the cupboard without standing on a chair. In this case, it would be both true and very felicitous to say

(21)   Even Andre cannot reach the top shelf.

If Andre were the tallest person, but only by a small margin, then the sentence might still be felicitous, but it would not be *as* felicitous. This first degree of felicity is captured by most varieties of IA, since most characterize the meaning of 'even' in terms of either surprise or subjective probability.

However, there is another element of scalarity in the meaning of 'even' which is captured neither by Bennett's analysis nor by any of those which incorporate the end-of-scale requirement. Suppose we have the following reference-class: half of the group is over 6′, 5″, the other half is under 5′,

Andre belongs the larger subclass (but just barely, measuring in at 6', 5" and a quarter), and the average height of the whole group is 5', 7". In this case, (21) would not be particularly felicitous, despite the fact that Andre is significantly taller than average. The reason why this sentence is infelicitous is that Andre is not taller than the *majority* of people in the group. Thus, degree of felicity is not only a function of *how much S** surpasses its neighbors in surprise, but also *how many* neighbors it surpasses. This additional element of scalarity is nicely captured by the vagueness of the word 'most'.

But does using (21) felicitously actually require counting the number of people Andre surpasses in height, and then determining whether this is sufficiently greater than half?[3] In many cases, calculation of this sort is not required. If it is obvious that Andre is significantly taller than average (e.g., if he is 7'), then very little thought would be required to know that we are using (21) felicitously. On the other hand, there are cases where calculation is necessary. Since I uncertain about the average width of the typical, adult garden snake, I cannot feel confident about the use 'even' in 'Even Simon (a 3/4" wide, adult garden snake) can fit through the crack in the wall' without some counting and comparing. Thus, whether calculation is required depends upon how obvious it already is that $S*$ surpasses most of its true neighbors in surprise.[4]

While our revised Bennettian analysis has a great deal of merit, there are some worrisome cases mentioned in the literature that need to be addressed.

B. The Violation of Expectations

Although it is common to analyze the meaning of 'even' in terms of surprise, Kay (1990) claims that we should resist this practice. The view he is especially concerned to refute is that surprise is what 'even' *conventionally* implicates. First, he contends that the surprise which often accompanies the use of 'even' can be explained completely in terms of *conversational* implicature (pp. 82–83). Suppose that we are discussing Susan's knowledge of foreign languages, and I say

(22)   She reads Latin.

According to Kay, (22) conversationally implicates (via Grice's rule of

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[3]Thanks to Laurence Horn for bringing this concern to my attention.
[4]The end-of-scale requirement, on the other hand, yields the implausible result that almost all uses of 'even' involve a great deal of calculation, for no matter how tall Andre is, I might always wonder whether there is someone else in the reference-class who is even taller.

Quantity) that Sue's reading Latin is the strongest argument I have for her linguistic abilities. When I then go on to add

(23)   She even reads Sanskrit,

there will be a violation of expectation, but this is simply because Sue's reading Sanskrit conflicts with the conversational implicature of (22). Thus, according to Kay, the violation of surprise that often accompanies the use of 'even' is not the result of conventional implicature, but rather "is contextually dependent and arises via the well-known process of upper bounding (generalized conversational) quantity implicature" (p. 83).

If Kay's diagnosis of (23) were correct, then we should expect the same result by following (22) with

(24)   And she reads Sanskrit.

With the right type of emphasis, (24) would imply nothing less than what (23) implies. But suppose, instead, I were randomly listing the languages Susan can read without any concern for unlikelihood. I follow (24) with "And she reads French". There is nothing obviously infelicitous about this, but saying "And she even reads French" would be infelicitous, and the reason is that this sentence, unlike the former, indicates surprise. This suggests that the element of surprise here and in (23) is due to more than a violation of the Quantity maxim.

Kay offers a more compelling reason for not analyzing 'even' in terms of surprise. There are certain cases, he claims, where the use of 'even' is not accompanied by any violation of expectation. He has us consider the following exchange.

(25)   A: It looks as if Mary is doing well at Consolidated Wiget.
        George [the second vice president] likes her work.
        B: That's nothing. Even Bill [the president] likes her work.

(25B), it seems, "may be felicitously uttered in a situation in which nothing is assumed or inferred about the relative likelihood of George and Bill liking Mary" (1990, p. 84). Examples involving moral contexts may also be used to illustrate Kay's point. There are situations in which

(26)   Granny was accused of kidnapping, and even murder,

is perfectly felicitous, despite the fact that murder is more common than kidnapping, and therefore less surprising.[5]

These cases suggest that we replace the claim that $S*$ be more surprising

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[5] I owe this example to an anonymous referee.

with the more neutral claim that $S*$ lie further along some contextually determined scale than the majority of its neighbors. This scale may represent degrees of unexpectedness, or it may indicate degrees of moral/legal seriousness (as in (26)), or it may indicate degrees of work quality (as in (25B)). In any case, surprise would be only one of a number of different features that might justify the use of 'even'. If this is correct, then clause (ii) of our analysis should read:

(ii₂) $S*$ lies further along some contextually determined scale (in some contextually determined direction) than most of the Sjs.

Although (ii₂) is plausible, it leaves a fundamental question unanswered: What exactly is it about lying further along one scale and further along another, very different scale that makes the use of 'even' appropriate in both cases? Kay provides the following answer.

> . . . *even* indicates that the sentence . . . in which it occurs expresses, in context, a proposition which is more informative (equivalently 'stronger') than some particular distinct proposition taken to be already present in the context. (p. 66)

He adds that the most common reason we have for indicating that a proposition p is more informative than some contextual proposition q is "when we view p as a *stronger argument* than q for some conclusion we wish to establish" (p. 91; emphasis added). For example, in the case of (25B), the use of 'even' is appropriate since "Bill's liking Mary's work is construable as evidencing a higher level of success at Consolidated Wiget than merely George's liking her work" (p. 84). And (26) is felicitous because committing murder is stronger evidence of being in moral/legal trouble than kidnapping. If this diagnosis is correct, then we may replace (ii₂) with

(ii₃) $S*$ is more informative than most of the Sjs, since it is stronger evidence for the truth of some contextually determined proposition.

It is not clear, however, that (ii₃) runs counter to the idea that 'even' is always an indicator of surprise. It might be that $S*$ is more surprising than most of its true neighbors *precisely because* condition (ii₃) obtains. For instance, it might be that (25B) is felicitous because it is surprising, and it is surprising because Bill's liking Mary's work is stronger evidence of Mary's success than George's liking her work. After all, if Bill's standards are higher than George's standards, then his liking her work would be more surprising.

Recall sentence (26). It is true that murder is less frequent than kidnap-

ping, and if one were aware of this fact, then in the absence of any prior knowledge concerning the criminal propensities of some person P, it seems that one would gauge the probability of P committing murder as being higher than the probability of P kidnapping. However, there is some sense in which committing murder still strikes us as more surprising than kidnapping. We are more surprised to find that one would do what would put one in more serious moral or legal trouble. It is for this reason that we find Granny's committing murder more surprising than her kidnapping.

But if surprise is ultimately what motivates the use of 'even', then shouldn't the fact that kidnapping is less frequent suffice to make

(27)   Granny was accused of murder, and even kidnapping

more felicitous than (26)? It would suffice if Granny's committing murder were not surprising in a more salient way. Granted, kidnapping is less frequent than murder, but in many (if not most) contexts we find the moral and legal implications of murder more salient than its sheer frequency. This is why (26) would, in most contexts, be more felicitous than (27). If, on the other hand, we are ranking the actions of Granny in terms of overall frequency, with no attention at all to their moral or legal implications, then (27) would be felicitous and (26) would not. Or suppose we know that Granny has the propensity, not only for getting in trouble, but also for performing actions that afford her the maximal amount of trouble. In this case, we would not be surprised at all to find that Granny has placed herself in moral and legal jeopardy, and (27) would therefore be more felicitous than (26). As these cases show, the felicity of 'even' depends not only on the unexpectedness of the event, but also on the respect in which the event is unexpected – e.g., whether it is unexpected in terms of its moral and legal implications, or unexpected in terms its overall frequency. Thus, rather than rejecting (ii), we should modify it as follows:

(ii$_4$)   there is some contextually-determined aspect X, such that S^* is more surprising than most of the Sjs with respect to X.

Kay presents another example which might also seem difficult to analyze in terms of surprise.

(28)   Everyone is remarking on Mary's improvement. Last week she beat the number ten player, and this week, just as everyone expected, she even beat the number two player. (p. 84)

According to Kay, what makes (28) felicitous cannot be that Mary's winning was surprising, since everyone expected her to win. However,

there does seem to be some element of surprise involved here, since this is a case where we "expect the unexpected". Given her great improvement, it is not surprising that she would beat the number two player; but what is surprising is that she would have improved to such an extent that she would be in a position to beat the number two player. That there is this element of surprise is shown by the fact that we can paraphrase (28) as

(29)   Everyone is remarking on Mary's improvement. Surprisingly, she improved enough to beat the number ten player – and even enough to beat the number two player (just as everyone expected, given the improvement they had already observed).

This reading is actually preferable, since it makes the expectation that is being violated much more perspicuous.

Again, this is not to reject Kay's analysis. We can still say that (28) and (29) are felicitous because Mary's beating the number two player is stronger evidence that she has improved than her beating the number ten player. I suggest only that this fact is precisely what makes her beating the number two player surprising in an important way. If I am right, then Kay has not shown that surprise is unnecessary for the felicity of an 'even'-sentence. What he has done, instead, is provide a very insightful way of explaining what it is about the use of 'even' that elicits surprise. Thus, we should retain the idea that 'even' serves to indicate surprise, while adding (ii_3) as an explanation of how this is accomplished.

C. Berckmans' Objection

In support of his view that 'even' is ambiguous as between a universal quantifier and an existential quantifier, Berckmans (1993, p. 604) describes a case where the use of 'even' has nothing more than existential implication. He has us imagine an exchange between Mr. Evans and his fifteen-year-old daughter who is about to leave the house wearing a very skimpy outfit. Mr. Evans forbids his daughter to go out dressed that way, adding

(30)   Even Cher wouldn't wear that!

Berckmans insists that it would be entirely appropriate for Mr. Evans to utter (30) even if he had no knowledge of how Cher compares with others who might be likely to wear such outfits; in fact, he need not know who these other people are. It may be that Evans seldom watches television, goes to the theater to watch only old films, and never reads popular magazines. He once saw a clip from a film featuring Cher, and the skimpy

apparel he recalls is what prompts him to utter (30). In a case such as this, "the use of 'even' does allow the speaker to make a relevant comparison with a contrasting individual without implying the ascription of any further properties to that individual and without implying his membership in a comparison class, or any knowledge thereof" (p. 604). If Berckmans' diagnosis is correct, then his example refutes my version of IA. I claim that for an 'even'-sentence S to be felicitous, its corresponding S^* must be more surprising than the majority of its true neighbors. If this is right, then in order to be confident that one is using S felicitously, one must also believe that S^* is more surprising than the majority of its neighbors. But in the case Berckmans describes, there is no comparison class, and therefore no "majority". In fact, if Berckmans' example is coherent, then it refutes most varieties of IA, since most gauge the felicity of S in terms of how S^* compares with other sentences.

However, the most that Berckmans' example shows is that the comparison class which motivates the use of 'even' is not always obvious. Evans does have a comparison class in mind, but it differs from the class that a more knowledgeable person would have in mind. Evans is comparing Cher with the type of person he is used to seeing. He realizes that Cher is far less reserved than these people, and while he may realize his ignorance of recent pop culture, he is fairly confident that whatever Cher's contemporaries might be like, most would dress more conservatively. If Evans didn't have these beliefs, he would not have thought it appropriate to assert (30).

To make this point clearer, let us imagine that his daughter is 21 and has dressed to go dancing at a nightclub. Evans might still utter (30), believing that dressing as Cher would is extreme even for a nightclub. In this case, the daughter might respond, "C'mon dad, get with it! How Cher was dressed in that promo you saw is ultra-conservative for clubbing!" If she were to provide evidence of this, perhaps by showing him a documentary of big-city night life, Evans would no doubt be even more concerned, but he would realize that (30) was not a very effective way to stress his concerns. He would now realize that

(31)   Even Madonna wouldn't wear that!

is much more appropriate. Evans would now chose to assert (31), not because he has finally acquired a comparison class, but because the comparison class that motivates his use of 'even' has changed.

D. *Barker's Objections*

In a recent essay, Stephen Barker (1991, p. 4) presents the following exchanges.

(32)   A: Only three people won a prize out of a hundred this year. Brain and Smart won a prize, of course, but last year's worst student was the other, Smith!
        B: Even Smith won a prize!

(33)   Looking out the window expecting to find only family members in the front yard, I see three figures and remark
        A: There's Pa and Grandma outside and even Ronald Reagan! My audience rejoins
        B: Even Reagan is outside!

According to Barker, these uses of 'even' are infelicitous despite the fact that Smith's winning a prize and Reagan's presence in the yard are more surprising than their respective neighbors. He presents this as a counter-example to Bennett's account, but if it succeeds, it also refutes our modified Bennettian analysis. 'Smith won a prize' and 'Reagan is outside' are more surprising than all of their true neighbors, and therefore more surprising than most of their true neighbors.

In an effort to handle these problem cases, Barker presents his own analysis of 'even'. He claims that "the speech act that *even* implies we are engaging in is stating that S is an instance of an implied or asserted universal quantification" (p. 10). When I say

(1)   Even Albert failed the exam,

I imply that Albert's failing is an instance of the universal claim "Everyone in the class failed the exam". Having implied this, I use the word 'even' to also imply that Albert is an extreme case of this universal claim. Thus, according to Barker (p. 10), an 'even'-sentence S is felicitous just in case

(i) S^* and Sj are asserted as universal instantiation cases of an implied or stated S_u, and

(ii) S^* is an extreme instance of S_u.

In (32) and (33), there appear to be no universal generalizations that either 'Smith won a prize' or 'Reagan is outside' instantiate. Thus, Barker's analysis gives the desired result that the uses of 'even' in (32) and (33) are infelicitous.

It is clear by now that condition (ii) will work only if we do not require that S^* be the most extreme instance; (ii) can require only that S^* be

sufficiently extreme. There is, however, a much larger concern. The arguments used to refute Lycan's quantifier account also apply here. We may express our surprise at the fact that Granny tried the chili by saying

(10)   Even Granny tried the chili.

Since Barker is offering a version of IA, he would reject Lycan's contention that the truth of (10) requires the truth of

(34)   Everyone in the group tried the chili.

But he would insist that the truth of (34) is necessary for the *felicity* of (10), since (34) in this case is the S_u of which S^* is an extreme instance. However, as we have already seen, the truth of (34) is necessary for neither the truth nor felicity of (10). (10) would remain true and felicitous even if one or two people in the group did not try the chili. Thus, (10) neither logically entails nor conversationally implicates (34).

The question remains whether the uses of 'even' in (32) and (33) are a problem for my analysis. Granted, (32B) does seem inappropriate, but its inappropriateness has nothing to do with the use of 'even' per se. First of all, since 'Smith won a prize' has only two true neighbors, it is just barely in the majority. So the use of 'even' would be only marginally felicitous at best. Secondly, and more importantly, the use of 'even' in (32B) seems to miss the speaker's point entirely. (32B) would be appropriate only if the speaker were emphasizing the unexpectedness of Smith's winning relative to that of Brain and Smart. But this is not what is being stressed in (32A). What the speaker is emphasizing is (i) the fact that surprisingly few people won a prize, and (ii) that this fact is even more surprising considering that Smith was able to win a prize. Thus, a more appropriate use of 'even' would be

(35)   You mean even Smith won a prize when so few were able to
         do so!

(35) is felicitous because, unlike (32B), it correctly identifies the speaker's main point.

(33) is more difficult to diagnose, mainly because it is not at all clear what the reference-class is supposed to be. If I am concerned only with the presence of non-family-members, then using 'even' to express my surprise at Reagan's presence would be infelicitous, but that is simply because 'Reagan is outside' would have no true neighbors! However, if there were several other non-family-members in the yard, and Reagan's presence were still the most surprising, then the use of 'even' would be felicitous.

Suppose, on the other hand, I do not expect to see anyone in the yard – not even family members. Being surprised to see two family members there, and *very* surprised to see such a famous non-family-member present, (33) would be felicitous, but only marginally so. It would be marginally felicitous because there are only two true neighbors, and so 'Reagan is outside' would be just barely in the majority. However, if there were several people in the yard, then (33) would be more felicitous.

Thus, whether the use of 'even' in (33) is felicitous depends on the reference-class that the speaker and hearer have in mind, and how felicitous 'even' is depends on how many members are in the reference-class. In any case, my analysis gives the correct result.

V. CONCLUSION

Like Bennett's account of 'even', my analysis incorporates the following plausible and widespread intuitions. (a) The word 'even' does not make a truth-functional difference; it makes a difference only in conventional implicature. In particular, 'even' functions neither as a universal quantifier, nor a *most* or *many* quantifier. The only quantified statement that 'Even A is F' implies is the existential claim 'There is an x (namely, A) that is F', but this implication is nothing more than what the Equivalence Thesis already demands. (b) 'Even' is epistemic in character, implying some type of unexpectedness, surprise, or unlikelihood. Moreover, despite Kay's arguments to the contrary, this implication is part of the meaning of 'even'. (c) 'Even' is a scalar term, since unexpectedness comes in degrees. And, finally, (d) the felicity of an 'even'-sentence S requires that S^* be sufficiently surprising in comparison to its true neighbors. However, *pace* Bennett, being more surprising than just one true neighbor will not suffice. At the same time, being more surprising than all true neighbors is unnecessary. Suffice it that S^* is more surprising than most true neighbors.[6]

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