

The Meaning of Utterance-Final *Even*

Min Joo Kim

Nathan Jahnke

Texas Tech University

This article takes up a relatively understudied phenomenon in English wherein the additive scalar focus particle *even* occurs following its focus, typically in utterance-final (UF) position. We show that this UF incarnation of EVEN is not a simple variant of its pre-focal (PF) counterpart. Four distinct functions of UF-EVEN are identified: (i) the mirative, (ii) the elaborative, (iii) the simple additive, and (iv) the simple corrective. Building on Traugott's theory of semantic change (e.g., Traugott & Dasher 2002; Traugott 2006), we present an analysis that outlines the developmental path of UF-EVEN: all its functions are claimed to originate from PF-EVEN's meaning although some are less directly related to it. In addition, we demonstrate that UF-EVEN shares some of its developmental paths with discourse markers like *actually* and *in fact*, suggesting that it has taken on the function of a sentential adverb. The article ends with discussing repercussions for the theory of meaning change and its conventionalization.

Keywords: *even; additive scalar focus particle; mirative; elaborative; corrective; meaning change; implicature; syntactic position*

Introduction

The additive scalar focus particle *even* in English usually occurs preceding its focus. The particle is believed to involve a scale and contribute non-truth-conditional meaning to the sentence hosting it, more specifically, the noteworthiness of the state of affairs under description (Fillmore 1965; Horn 1969, 1971; Karttunen & Peters 1979; Bennett 1982; Kay 1990; Francescotti 1995; Rullmann 2003). To illustrate, consider (1). Here, *even* focuses *John*. Truth-conditionally, the sentence simply means that John came to the party. But due to the presence of

even, it also implicates that (i) somebody other than John came to the party, and (ii) it is noteworthy that John came to the party, in addition to this other person.

- (1) Even John came to the party.

The implicatures triggered by *even*, such as (i) and (ii), are often referred to as the “existential implicature or presupposition” and the “scalar implicature or presupposition,” respectively (Horn 1971; Rooth 1985, 1992; Giannakidou 2007; cf. Horn 1992 for a different view).¹ Here and below, we call them the *additive meaning* and the *scalar meaning*. We do this mainly to be more consistent with the fact that *even* is called an “additive,” rather than an “existential,” scalar modifier in the literature (Rooth 1985, 1992; Traugott 2006; Giannakidou 2007; Beaver & Clark 2008).

The meaning of *even* and its licensing conditions have drawn a great deal of attention (Horn 1969; Rooth 1985; Kay 1990; Francescotti 1995; Wilkinson 1996; Schwarz 2005; Giannakidou 2007; for additional references, see Beaver & Clark 2008:70). Yet the extant literature is overwhelmingly concerned with the pre-focal use of *even* such as (1); it glosses over the fact that *even* may sometimes occur following its focus, typically in utterance-final position, as illustrated by (2). For ease of reference, we call the first type of *even* pre-focal (PF) EVEN and the second type utterance-final (UF) EVEN, although the latter does not always occur utterance-finally, as will be shown below.

- (2) John came to the party even!

Among the few authors who note UF-EVEN, Huddleston and Pullum (2002:595) state that “*even* usually precedes the head it modifies but in informal speech it occasionally follows.” They add that the scope of what we call UF-EVEN may be far-reaching; that is, anything to its left can be its focus. But they say no more than this and offer only the following example:

- (3) You would have enjoyed dancing tonight, even.

Similarly, Quirk et al. (1985:609) briefly mention that in speech, especially informally, the

additive *even* can occur at the end of a sentence and from that position, it can still be associated with the sentential subject. The authors use the following data to illustrate the points but do not offer any further observations (in the data below, the bracketed parts seem to indicate focus) (see also Karttunen & Peters 1979;² Kay 1995:95).³

(4) John has seen it <near his back DÒOR> even.

(5) <JÒHN> has seen it even.

The existing works emphasize the informality of the use of UF-EVEN and suggest that its distribution is fairly confined. Moreover, they tacitly assume that UF-EVEN is merely a stylistic variant of PF-EVEN. The present paper shows, however, that UF-EVEN is more widespread than has hitherto been acknowledged and thus merits more serious attention than it has received. It will be further demonstrated that UF-EVEN has different meaning from its PF counterpart, *contra* the prevailing view.⁴

In what follows, we first aim to establish that UF-EVEN is commonly observed, at least in American English. Next, we turn to showing that UF-EVEN differs from its PF-counterpart on both semantic and pragmatic grounds. Four distinct functions are identified, which are called the (i) mirative, (ii) elaborative, (iii) simple additive, and (iv) simple corrective.⁵ The subsequent section outlines a possible developmental trajectory of UF-EVEN and its relation to the meaning of PF-EVEN. We argue that the way in which its various functions have derived parallels the developmental path of discourse markers like *actually* and *in fact*. This section also addresses repercussions for the theory of meaning change and its conventionalization. The last section summarizes and concludes the paper.

UF-EVEN as a Common Phenomenon

At first glance, utterances containing UF-EVEN such as (2) may appear rather odd, and this has been confirmed by several native speakers we have consulted.⁶ It looks especially strange in print. Therefore, some readers may suspect that UF-EVEN is just an idiosyncratic phenomenon, lacking any unique meaning of its own.

However, UF-EVEN has been around for at least 150 years. The earliest occurrences we have traced by conducting a Google search come from the 19th century. Some illustrative cases are given below.⁷ Note that for better readability, here and below, we highlight *even*, but this is not to indicate phonological stress.

- (6) ... they could not be prolonged for five years *even* ...
 (1858, Thomas Hart Benton, *Thirty years' view: or, A history of the working of the American Government, Business & Economics*, 204)
- (7) ... At that date it was imagined that no change whatever occurred, during thousands of years *even* ...
 (1891, William White, *Notes and queries*, 13)

Furthermore, UF-EVEN appeared frequently in the Hanna-Barbera *Snagglepuss* cartoons, aired from 1960 to 1961 in the United States. In this cartoon series, the titular character is well known for his repeated use of UF-EVEN, as illustrated below (the headings are the episode titles and the numbers indicate the time of airing).

- (8) *Major Operation* (1960-1961):
 The mere thought of freedom gives me goosebumps - all over *even*.
- (9) *Feud for Thought* (1960-1961):
 Heavens to Betsy! I'm in a cul-de-sac! Trapped *even*!
- (10) *Live and Lion* (1960-1961):
 An onion! A carrot! Some collard greens! And some greens without collars *even*!

UF-EVEN has also appeared in film scripts such as *Hannah and Her Sisters* (1986), *Manhattan Murder Mystery* (1995), and *Hackers* (1995). The following excerpt is taken from

Hannah and her Sisters. The utterance is made by Holly, one of the leading characters of the film.

- (11) I've got...an idea for a story. More than one. And I just need a few months, you know, or, uh, A YEAR *even*.

In order to see how widespread UF-EVEN is, in the past four years or so, we have been examining oral conversations, monologues, and written dialogues appearing in online forums or chat rooms in the United States, and have thus far encountered over 2000 tokens of UF-EVEN.⁸ Our research suggests that in more recent discourse, UF-EVEN is commonly found, not just in speech but also in writing. Some of the data we have obtained by simply observing discourses happening around us are given in (12-18). Note that we have not edited the data except for italicizing each occurrence of UF-EVEN and sometimes adding stress-indicating capitalization on its intended associate. Hence the data collected from online sources⁹ (16-18) may contain typographical errors.

- (12) Acrobat makes sharing documents easy, fun *even*.
(written advertisement by *Adobe*)
- (13) The ways in which our students communicate have changed ... in the last five years *even*
(public speech: male, 60).
- (14) I think I want to change the topic of my paper *even*.
(oral conversation: male, 24)
- (15) ... and people would say to me – in Germany *even* – like, “your major is GERMAN?!”
(oral speech: male, 23)

- (16) A: watashi in a japanese classroom is neutral, but on the streets it's feminine
 B: i don't like using it in the classroom *even*.
 (online chat-room: male, 23)
- (17) (Context: speaking of a video game technique)
 A: it's easy to use.
 B: It's faster *even*.
 (online chat-room: male, 24)
- (18) it might sound goo
 Good *even*
 (online chat-room: male, 16)

Having observed that UF-EVEN is more common than one would at first think, we turned to various corpora to collect more substantive data. A non-exhaustive search of the Second Release of the American National Corpus (ANC) revealed at least 11 instances of UF-EVEN, some of which are given in (19)-(21). We obtained these data by doing a search using the regular expression $\wedge beven \backslash b/i$ (i.e., the string *even*, case-insensitive, with word boundaries on either side of it) for the spoken data, and using the regular expression $\wedge beven[.?! ,]/i$ (i.e., the string *even*, case-insensitive, with a word boundary before it and the punctuation character ., ?, ! or , after it) for the written data.

- (19) I'm just wondering out loud if some of our colleagues--us *even?*--miss great stories in order to continue to pump out the continual steam of game stories and side bars and advances and follows that have inspired millions of readers to put down their newspapers and run to the Internet.
 (written_1/journal/slate/21/Article247_4481:16)
- (20) well our grass like i said is just grass we really didn't plant anything it's just so i suppose maybe you call it crabgrass *even*
 (sw2237:488)

- (21) we charge you know we go to places where they don't charge extra some of them charge five cents a gallon *even* like the gas stations more
(sw3332:155)

There are likely many more than 11 instances of UF-EVEN in the ANC, but establishing the exact number in the corpus would be exceedingly difficult primarily because the largest portion of the ANC that does represent transcribed speech lacks the kind of annotations that are helpful for distinguishing UF-EVEN from the many other *evens*, namely, accurate or reliable punctuation or stress-marking use of capitals. Example (21) above from the Switchboard (sw) portion of the corpus displays this problem: in this data, it is far from clear whether *even* is associated with *five cents a gallon*, *the gas stations*, or *more*. That is, we simply cannot determine whether *even*'s focus comes before or after it without hearing the utterance as it was originally spoken or, alternatively, taking clues from punctuation.

To obtain more data, we also searched the Corpus of Contemporary American English (COCA). Yet we faced the same kind of difficulty as with the ANC search, due to the impossibility of using punctuation as a way to differentiate UF-EVEN from other instances of *even* including PF-EVEN and its adjectival usage. Consequently, we could obtain only eight occurrences of UF-EVEN, some of which are given below.

- (22) Though he was tempted to leave the sublet altogether, he was afraid that he might just lead whoever was out there back to his own place, and then it could go on for months, years *even* (Ghosting, 1996)
- (23) The doctor recommended retirement. A few years ago, last year *even*, this would have been unthinkable, but now it sounded tempting (The Beach Club, 2001).
- (24) In Tolkien, I think it's partly the landscaping and weather which seduce me. They are as exactly and sensuously observed as in Pavese or Colette. I can believe in the weather, *even* (Dawn of a Literary Friendship, 2009)

The aforementioned difficulties with searching such corpora necessitated that we search a large informal English corpus using punctuation, as we did the written portion of the ANC. To meet this need, we downloaded the entire Penny Arcade (PA) forum, a large Web forum for English speakers with 5,651,536 posts in 46,701 threads dating back to around February of 2003; this forum's online search tool, much like Google, did not accept punctuation, thus necessitating we procure a local copy for searching.

Looking at the PA forum has proved to be effective in a number of ways. First, there is a significantly greater amount of data, and these data can actually be located by automated searches. Second, we can observe more "live" and informal use of language than we could in the written portions of the ANC. Third, we can even participate in the forum and ask for clarification on problematic data if need be (e.g., asking "what did you mean when you said ... ?"). Finally, the PA forum is publicly accessible and thus the source of the data can be ethically disclosed, unlike the cases with the data drawn from private online forums or chatrooms (see note 9).

Our search of the PA forum, again using the regular expression $\wedge beven[.?! ,]/i$, pulled out 3126 posts. We analyzed a random sample of 412 of these and determined that about 66.4 percent (confidence interval 4.55, 95 percent confidence) represent *bona fide* UF-EVEN. Of course, we still could not find every token of UF-EVEN in this Web forum corpus, because people often eschew punctuation entirely while online, effectively hiding many tokens from our search. For this reason, we conjecture that the true total number of tokens in the PA forum corpus must be greater than 1933 (or 61.85 percent of the original 3126 hit count and the low end of our estimated total based on a random sample of data). The following data are some illustrative cases taken from the corpus.

- (25) Source please? Could you pm it to me *even*?
(PA 782598)¹⁰
- (26) I'd be surprised if many, if any *even*, were sold.
(PA 119840)
- (27) I could totally take the extras off your hands. Free of charge *even*.
(PA 1060558)

- (28) A: CT needs a dog.
 B: He's got one.
 C: Two, *even*, I think. With more possibly on the way.
 (PA 434430)

Having shown that UF-EVEN is more commonly found than one would at first think, we would like to turn now to examining its meaning. More specifically, we aim to find out (i) whether UF-EVEN carries the same meaning as PF-EVEN and if not, how do the two types of *even* differ from other; (ii) whether each occurrence of UF-EVEN means the same and if not, what is the possible gamut of meaning that can be expressed by it.

The Meaning of UF-EVEN

Our analysis of the data suggests that UF-EVEN has at least four distinct uses or functions, which we call the (i) mirative, (ii) elaborative, (iii) simple additive, and (iv) simple corrective for convenience. Of these, only the mirative use will be shown to be shared by PF-EVEN, albeit partly. Below we elaborate on each use one by one. We should note that UF-EVEN's semantic or pragmatic contribution is not always cut-and-dried, and polysemy is commonly detected; that is, a single occurrence of UF-EVEN can receive more than one interpretation depending on the discourse context or the speaker's intention (for further discussion on polysemy, see, among others, Traugott & Dasher 2002; Traugott 2004, 2006). Thus, in illustrating the phenomenon, we will focus on the most prominent meaning of an example without excluding the possibility of other interpretations.

Mirative Use

According to our observations, by far the most common use of UF-EVEN is to signal mirativity. Mirativity refers to a grammatical category firmly established in linguistic typological

literature since DeLancey (1997). It marks the speaker’s “unprepare mind”, “unexpected new information and concomitant surprise”, or “deferred realization of facts” (for an extensive survey on mirativity, see Aikhenvald 2004, pp. 106-151). Mirative meaning is typically expressed by evidential markers across languages. The data below exemplify that three unrelated languages recruit a non-first-hand or a reported speech evidential marker to encode the subject’s surprise at, or post-factum realization of, some relevant state of affairs.

Turkish:

- (29) uyu-*muş*-um!
 sleep-NONFIRSTH-1sg
 ‘I must have fallen asleep!’
 (Aksu-Koç and Slobin 1986:160)

Jarawara:

- (30) Okomobi faha hi-fa-*hani*
 Okomobi water Oc-drink-IMM.P.NONFIRSTHAND.f
 ama-ke.
 EXT-DECL.f
 ‘Okomobi (to his surprise) drank water’.
 (Aikhenvald 2004:197, ex. 6.6)

Western Apache:

- (31) Yáhawhyú nashāā
 Store+at isg.IMPF.ASP.be.around
lék’eh
 REP/DEFERRED.REALIZATION
 ‘I was at the store (but was not aware of it at the time)’.
 (de Reuse 2003:86)

Interestingly, English marks mirativity with the focus particle *even*, in particular by having it occur following its associate. Some occurrences of UF-EVEN can be called mirative

because the presence of UF-EVEN conveys the relevant individual's surprise at some relevant state of affairs.¹¹ To illustrate, consider first the recent Adobe advertisement given in (32).

(32) Acrobat makes sharing documents easy, fun *even*.

In this example, the presence of UF-EVEN indicates the speaker's pleasant surprise at discovering how fun the software is to use. This is evidenced by the fact that replacing the UF-EVEN with a PF-EVEN eliminates the utterance's spontaneity or feel of excitement, though it does not alter the truth-conditional meaning, as shown in (33); the closest we can get with PF-EVEN is to add a discourse marker *actually* at the end of the sentence, as given in (33').

(33) Acrobat makes sharing documents easy, *even* fun.

(33') Acrobat makes sharing documents easy, *even* fun, *actually*.

Additional data illustrating the mirative use of UF-EVEN are provided in (34)-(36), some of which are repeated from above. (In the interest of space, hereafter, we do not repeat the source of the data; the source is given in their first appearance only. Again, the data are not edited.) In all cases, UF-EVEN can be paraphrased as PF-EVEN plus a commentary note like 'actually,' 'in fact,' 'come to think of it,' 'surprisingly enough,' 'to one's surprise,' or 'believe it or not,' and some of these expressions can be collocated, as comparing the (a) and the (b) sentences shows.

(34) a. The ways in which our students communicate have changed ... in the
LAST FIVE YEARS *even*.

b. The ways in which our students communicate have changed ... *actually*,
even in the LAST FIVE YEARS.

(35) a. ... and people would say to me – in GERMANY *even* – like, “your major
is GERMAN?!”

b. ... and people would say to me – *even* in GERMANY *in fact* – like, “your
major is GERMAN!?”

- (36) a. My parents lived in one when I was created via sexual reproduction so MY FETAL ORIGINS lie in a duplex *even*. (online chat-room: male, 21)
- b. My parents lived in one when I was created via sexual reproduction so, *come to think of it, even* MY FETAL ORIGINS lie in a duplex.

The above data show that UF-EVEN means something more than PF-EVEN despite the fact that the latter is also well-known for indicating surprise or unexpectedness (Francescotti 1995 and references therein). This further suggests that, when used miratively, UF-EVEN encodes PF-EVEN's meaning plus the speaker's evaluation of or attitude toward the content of the utterance in which it occurs (more on this below).

The use of UF-EVEN as an indicator of a sudden, online realization has an interesting extension to it: it can permit the speaker to broaden the domain of discourse topic. This is exemplified by discourse (37), drawn from a university workshop for linguistics graduate students on abstract writing.

- (37) Professor: So what would you like to change in your abstract?
 Student: I think I want to change THE TOPIC OF MY PAPER *even*.

Given the discourse context, the student was expected to enumerate things that needed to be changed within his abstract (such as its organization, style, or clarity of writing). Therefore, suddenly bringing up a possible topic change for the whole paper might at first seem infelicitous. Notably, however, the student's actual utterance given in (37) sounds fine and this, we believe, is due to UF-EVEN. The particle's presence implicates that the speaker just realized, much to his own surprise perhaps, that, in order to write a good abstract, he must change the topic of his entire paper, rather than just making surface changes to the existing abstract. Notice that replacing UF-EVEN with PF-EVEN causes the utterance to sound abrupt or even odd, as can be seen in (37'); it improves only with the help of other discourse markers like *actually* which indicate sudden, unexpected realization, or unprepared mind, as given in (37'').

- (37') Professor: So what would you like to change in your abstract?

Student: #I think I *even* want to change THE TOPIC OF MY PAPER.

(37'') Professor: So what would you like to change in your abstract?

Student: *Actually*, I think I *even* want to change THE TOPIC OF MY PAPER.

The foregoing discussion has shown that UF-EVEN can express mirativity; it allows the discourse participants to talk about things that may seem rather unexpected or slightly orthogonal in the discourse context in a way that PF-EVEN does not. We believe that the topic-broadening function of UF-EVEN¹² is more productive and systematic than it appears to be. We suggest a possible source of this use in the section “Developmental Path of UF-EVEN’s Meaning”. In the next section, we turn to a slightly different use of the particle.

Elaborative Use

UF-EVEN is also commonly found in environments where the speaker intends to elaborate on the preceding utterance or to clarify it by adding some new, more specific information. For this reason, this use has a narrowing function, as opposed to the widening function displayed by the mirative UF-EVEN.¹³ For expository convenience, we call this use the *elaborative*, though it may be called something else, such as the *specificational*, for example.

To illustrate the elaborative UF-EVEN, consider first (38), which is taken directly from the 1995 movie *Hackers*. Nikon and Cereal are fellow hackers congratulating Dade Murphy on a feat of hacking, in which he made a computer system “believe” that a secret service agent named Richard Gill is deceased.

(38) Nikon: Very impressive.

Cereal: SUPER HERO LIKE *even*.

In this exchange, both Nikon and Cereal are positive about the quality of the hacking job that Dade Murphy has performed. But Cereal is more positive about it than Nikon is, since ‘superhero-like’ stands higher on a scale than ‘very impressive’ does. In order to convey his

enthusiasm, Cereal uses UF-EVEN and in so doing indicates that ‘to be more accurate’ or ‘to be more precise,’ Dade Murphy’s job was more superhero-like than merely impressive.

Additional data illustrating a similar contribution of UF-EVEN are given in (39) through (45). In all these instances, the particle introduces an elaboration or clarification on what has just been said. This intuition is confirmed by the fact that every occurrence of UF-EVEN may be replaced by *actually* or *in fact*, although they are not entirely interchangeable, as will be shown below.

Take (39) for example. Here, UF-EVEN seems to mark surprise but, in a way, it clarifies the hearer’s over-expectation about the speaker’s ability to play the video game *Ouendan* (it is spelled incorrectly below).

- (39) A: The game says To be Continued at the end, so it has to get a sequel
right?... right?
B: You must not have completed all difficulties.
A: Not yet. I still haven’t beaten the last level in hard mode of Oendan *even*. Not
to mention Very hard.
(PA 736002)

Next, in (40), by saying “buckets even,” the speaker tells the hearer how much she (in fact) cried. Utterance (41) exemplifies a similar use.

- (40) Oh i have cried. Buckets *even*
(PA 134683)
- (41) I’m not as cool as Clam. He once wrestled a Walrus to the ground. Barehanded,
even.
(PA 142200)

In the case of (42), UF-EVEN’s presence helps to convey the message that ‘To be more specific, my offer will be X, which probably totally exceeds your expectations.’ So here again, the most salient contribution of the particle is that of elaboration.

(42) I could totally take the extras off your hands. Free of charge *even*.

Significantly, in some cases, UF-EVEN seems to invite the hearer to do the elaboration. This is illustrated by (43). Here, it appears that by using UF-EVEN, the speaker is requesting that the hearer supply some specific information that can answer the question she just asked:

(43) How far is the boat from the train station? Same city *even*?

Consider now (44). Here, UF-EVEN occurs in the last utterance. At first glance, this use may appear to mark mirativity, since the utterance can be paraphrased as something like, ‘Much to your surprise, I’ll even give your number a special ringtone.’ Yet by using UF-EVEN, the speaker elaborates on the immediately preceding utterance and thereby implicitly invites the hearer to perform the action she wants. In other words, in this particular instance, UF-EVEN’s mirative and elaborative uses co-occur, performing a kind of indirect speech act, namely, that of request.

(44) Bad Karma, is there knowledge as to what the next series of New Frontier figures will be? If not, will you please call me immediately when it is announced? I’ll give your number a special ringtone *even*
(PA 358340)

Relatedly, UF-EVEN can occur in question contexts as a politeness hedge. Consider (45a). In this discourse, by using UF-EVEN, the speaker makes her request more explicit. Furthermore, with this use, she mitigates her possibly imposing tone of voice. Once again, *actually* or *in fact* may substitute for *even*, more or less keeping the intended meaning. Notice that without UF-EVEN, the utterance sounds rather abrupt, as shown in (45b); by contrast, the second utterance of (45a) can be construed as meaning something like ‘Could you even go so far as to pm (short for ‘private message’) it to me please?’

(45) a. Source please? Could you pm it to me *even*?

- b. Source please? Could you pm it to me?

Notice that substituting PF-EVEN for UF-EVEN with an elaborative function may result in infelicity or even (outright) ungrammaticality sometimes, more than merely indicating abruptness in tone of voice. Consider the illustrations in (46)-(48).

- (46) a. Oh i have cried. Buckets *even*.
 b. Oh i have cried. #/?/?*even* Buckets.
- (47) a. How far is the boat from the train station? Same city *even*?
 b. How far is the boat from the train station? #/?/?*Even* same city?
- (48) a. I'd be surprised if many, if any *even*, were sold.
 b. *I'd be surprised if many, if *even* any, were sold.

Notably, the elaborative use of UF-EVEN may have a corrective strengthening effect. That is, its occurrence can enhance the rhetorical, argumentative, or informative strength of the immediately preceding utterance by replacing it with a lexical expression that stands higher on the relevant scale. This use is illustrated by the following data. Here, the utterance hosting UF-EVEN invariably contains a lexical item which is rhetorically or informatively stronger than the corresponding expression in the preceding utterance.

- (49) It puzzled Tommy. Worried him *even*.
 (PA 102960)
- (50) Yeah, I have no idea what you're talking about. And I hate threaded forums.
 Abhor them, *even*.
 (PA 47463)

As a corrective strengthener, UF-EVEN signals an asymmetrical relation between two utterances (or parts thereof). This property is further evidenced by the fact that when the two

expressions at issue occur in a reversed order, infelicity arises, as exemplified by the (a) examples below. Notice that other corrective discourse markers like *actually* and *in fact* are not sensitive to the asymmetrical relation between the correctee and the corrector, as shown in the (b) examples. Given this difference, we cannot equate elaborative uses of UF-EVEN with other corrective markers, despite their similarities.¹⁴

- (51) a. #It worried Tommy. Puzzled him *even*.
 b. It worried Tommy. Puzzled him *actually/in fact*.
- (52) a. #Yeah, I have no idea what you're talking about. And I abhor threaded forums. Hate them, *even*.
 b. Yeah, I have no idea what you're talking about. And I abhor threaded forums. Hate them, *actually/in fact*.

Another important point to be made is that the corrective strengthening use of UF-EVEN does not always target the speaker's utterance; it can sometimes target the interlocutor's utterance and corrects or takes issue with it instead. We have already seen such a case in (38). Here are some additional data.

- (53) A: CT needs a dog.
 B: He's got one.
 C: Two, *even*, I think. With more possibly on the way.
- (54) A: I'm feeling fat and sassy!
 B: So its just a regular Sunday, then?
 A: A regular day, *even*.
 (PA 492141)

To summarize this subsection, some occurrences of UF-EVEN may asymmetrically elaborate on the preceding utterance, often strengthening the argumentative, rhetorical, and

informational force of the utterance as a whole. In this use, it can be either speaker- or hearer-oriented and may even serve as a politeness hedge.

Simple Additive Use

As demonstrated in the previous section, UF-EVEN can provide more specific information on what was just said. But UF-EVEN's presence does not necessarily involve scalarity. It can simply add pertinent information to the discourse at hand. For ease of reference, we call this use of UF-EVEN the *simple additive*.

To illustrate simple additive use of UF-EVEN, consider (55), which occurred in an Internet chat-room. In this discourse, three speakers, A, B and C, are trying to help a fourth speaker, a Windows user, to open a Macintosh text document on his/her computer. And UF-EVEN, which occurs in the last utterance, can be paraphrased as 'also' or 'too,' as shown in (55B').

- (55) B: Its in mactext =P
 C: can you not read it?
 A: View in Word.
 A: Or IE.
 B: or WORDPAD works *even*
 B': or WORDPAD works *also/too*

The UF-EVEN that occurs in the above discourse does not carry a mirative meaning: it does not signal the speaker's sudden realization of something, and it is not necessarily scalar. WordPad is one of the most commonly found bits of Windows software. Hence it is not necessarily surprising or noteworthy that WordPad can open a Mac file just like any other comparable program. This non-scalar (or extremely weak scalar) meaning of UF-EVEN is confirmed by the following exchange, which also occurred in an Internet chat-room. Here, one speaker explicitly asks the other what he meant by the UF-EVEN he just used. And he says equally explicitly that it only means 'too,' which is a purely additive adverb with no scalar meaning.

- (56) A: i didnt hit the second bomb?
 A: oh good lord
 A: 2bsj is impossible dude.
 A: as i said yesterday? or something, i dont know why everyone doesnt just use
 springbomb
 A: its FASTER *even*
 A: but this is in the interest of thoroughness
 A: some ppl do seem to prefer 2bsj
 B: hey sorry
 B: would you mind telling me
 B: when you said “its faster even”
 B: did you mean faster “too”
 B: or “even faster”
 A: too
 B: ok thanks
 A: spring bsj is instant.. spring bomb is less waiting
 A: than a 2bsj

We hypothesize that the pragmatic value of using UF-EVEN in contexts such as the above is to draw the hearer’s attention to some piece of information that is deemed relevant for the discourse purpose. This information can be considered common knowledge among the discourse participants, but it may be something that the hearer seems unable to retrieve immediately and thus needs to be reminded of. The basis for this analysis comes from our intuition that the second utterance made by B in (55) can be paraphrased as something like, ‘or WORDPAD works too, you know,’ and the utterance made by A in (56) that contains UF-EVEN can be paraphrased as ‘it’s also FASTER, you know.’ Under this analysis, then, the UF-EVEN in the above two discourses can be viewed as a politeness hedge; it softens the discourse when the speaker wishes to remind the hearer of something.

Note, however, that not every instance of additive use of UF-EVEN functions as a politeness hedge. An illustrative case is found in (57). In this discourse, the speaker is listing

things the hearer could do or have done, and *even* can be paraphrased as ‘also,’ because the utterance hosting it more or less completes the list of questions the speaker wishes to raise. But clearly, the presence of the particle does not make the utterance sound any softer than it would be otherwise. It may sound rather harsh, in fact, since it seems to accuse the hearer of not doing something requiring minimal competence like using a password.

- (57) If you don’t want people using the server, why even have it running? Why not just exit the dedicated server app while your friends/team aren’t using it? Why not apply a damn password *even*?
(PA 473066)

In sum, we have seen that UF-EVEN may function as a simple additive modifier like *also* and *too*¹⁶ and, when it does, it reminds the hearer of something that he or she might (or, according to the speaker, should) already be aware of. In such usage, the particle can soften the discourse and can be interpreted as a post-sentential ‘you know.’ But not every instance of UF-EVEN with an additive meaning behaves this way.

Simple Corrective Use

The last use of UF-EVEN to be introduced is concerned only with correcting the immediately preceding utterance (which is made by the speaker him- or herself).¹⁷ Hence we call this function the *simple corrective*.

Unlike the elaborative use, this use of UF-EVEN is devoid of scalarity and therefore additive meaning, as shown in (58)-(60); in this use, UF-EVEN can be readily replaced by *I mean*,¹⁸ suggesting that it conveys that ‘I said X but meant Y.’ The corrective UF-EVEN also does not function as a politeness hedge. Rather, it simply comments on the preceding utterance without necessarily down-toning the discourse, as shown below.

- (58) a. Please say hi to your FIANCÉE, your girlfriend *even*.
b. Please say hi to your FIANCÉE, your girlfriend, *I mean*.

- (59) a. I've lost my pen, my PENCIL *even*.
 b. I've lost my pen, my PENCIL, *I mean*.
- (60) a. it might sound goo
 GOOD *even*
 b. it might sound goo
I mean GOOD.

Our claim that simple corrective UF-EVEN lacks additive meaning is supported by the fact that the particle cannot be replaced by *also* or *too*, in contrast with what we saw in the previous section.

- (61) Please say hi to your FIANCÉE, your girlfriend *even*.
 ≠ Please say hi to your FIANCÉE, your girlfriend *also/too*.
- (62) I've lost my pen, my PENCIL *even*.
 ≠ I've lost my pen, my PENCIL *also/too*.
- (63) it might sound goo
 GOOD *even*
 ≠ it might sound goo
 GOOD *also*.

These facts lead us to conclude that of the four uses of UF-EVEN identified thus far, the corrective use contrasts most sharply with PF-EVEN. Significantly, the difference between corrective UF-EVEN and PF-EVEN resides in truth-conditional semantics. For example, unlike (58a), (64) will be true if the speaker assumes that the hearer has not only a fiancée but also a girlfriend, and she asks him to say 'hi' to both females, and it is more notable to say 'hi' to the girlfriend (for whatever reason). Similarly, (65) will be verified only if the speaker asserts that she has a pencil, in addition to a pen and it is noteworthy that she lost a pencil.

(64) Please say hi to your FIANCÉE, *even* your girlfriend.

(65) I've lost my pen, *even* my PENCIL.

These observations unequivocally show that UF-EVEN differs from its PF counterpart not just in the realm of pragmatics but also in semantics.

Summary

The preceding four subsections have shown that UF-EVEN has at least four uses which make it distinct from PF-EVEN, either in the pragmatic or in the semantic domain. The main findings are summarized in Table 1.

TABLE 1

Various Functions of UF-EVEN

Function	Contribution	Paraphrases	Notable features
Mirative	signals the speaker's surprise at the content of the accompanying utterance	'actually,' 'in fact,' 'to one's surprise,' 'come to think of it'	Scalar and additive; spontaneous, exclamatory; can broaden the discourse topic; mostly speaker-oriented
Elaborative	Asymmetrically elaborates on or corrects the preceding utterance	'to be more specific or more exact or accurate'	Scalar and additive; can serve as a corrective strengthener; can be hearer-oriented; can soften the discourse
Simple additive	provides additional information relevant to the discourse topic	'also' or 'too' + 'you know'	Can soften the discourse; non-scalar; mostly hearer-oriented
Simple corrective	Simply corrects the preceding utterance	'I mean'; 'that is'	Non-scalar, non-additive; speaker-oriented (hearer-orientation, not attested as yet)

From this classification, several important patterns or generalizations emerge. First, of the four uses of UF-EVEN, the mirative is the most speaker-oriented; the others are increasingly more hearer-oriented.

Second, the mirative function is reminiscent of emotive or evaluative sentential modifiers like *surprisingly* and thus is more expressive and attitudinal than the other uses.

Third, while the mirative occurrence of UF-EVEN acts like a sentential adverb (more on the section “The Rise of the Mirative Use”), the other uses bridge between two adjacent utterances or discourses and hence behave more like discourse markers such as *actually* and *in fact* (for a definition of discourse markers, see Traugott & Dasher 2002, pp.152-189). We can therefore say that the mirative is inter-sentential/textual and the other uses are intra-sentential/textual.

Fourth, as we move from one use to another, either the scalar or additive meaning usually associated with PF-EVEN may no longer be detectable: the scalar meaning is almost gone from the simple additive use and the additive meaning is entirely bleached in the simple corrective use.

Finally, despite their differences, all four uses of UF-EVEN are similar in that they generate ‘invited inferences’ in the sense of Traugott and Dasher (2002), which refer to implicatures that the speaker invites the hearer to infer from what she just said.

With this initial classification and analysis of UF-EVEN’s various uses put in place, we turn now to addressing how the uses have arisen and how they might be related to one another and to PF-EVEN’s meaning.

Developmental Path of UF-EVEN

We claim that all uses of UF-EVEN originate from PF-EVEN’s, although some have taken a bit of a detour to arrive at their current use. Below we outline how each use might have come about, beginning with the mirative use. As a preliminary, however, we first give a brief introduction to the developmental history of PF-EVEN by summarizing Traugott (2006).

The Rise of the Present Day English PF-EVEN

In present day English, PF-EVEN functions as an additive scalar focus modifier. That is, its meaning has two components to it, namely, scalarity and additivity (but see Note 1). According to Traugott (2006), *even* went through three stages to acquire these two components: in the Old and Middle English periods, *even* displayed polysemy, ranging from manner adverbial meanings like ‘evenly,’ ‘smoothly,’ and ‘similarly’ to particularizing meanings like ‘precisely’ and ‘exactly.’ By the beginning of the 16th century, it began to function as a particularizing focus modifier. That is, *even* now evoked a scale and picked out a particular individual from the set of alternatives. The scale was not ordered as yet, though. Only by the end of the 17th century did the particle absorb additive meaning. Consequently, its scale got ordered. Furthermore, it lost the particularizing meaning and expressed ‘counter-expectation’ instead, implicating that what it focuses is “unexpected or increasingly improbable on some scale values projected by the speaker” (Traugott 2006:350). This third stage of *even* is closest to what we call PF-EVEN.

The Rise of the Mirative Use

We believe that the mirative use of UF-EVEN originates most crucially from the scalarity of PF-EVEN, namely, its property to put multiple individuals or propositions on an ordered scale and to pick out one of them, whereby focusing it. As mentioned above, the focus of PF-EVEN usually stands on a relatively low point on some contextually derived scale and thus it can be noteworthy that the property at hand holds true of that entity (as well as some others) (Kay 1990; Horn 1992; Rooth 1992; Francescotti 1995; Schwenter & Vasishth 2001; Rullmann 2003; Giannakidou 2007). For example, sentence (1), repeated below, implicates that John’s coming to the party was surprising.

- (1) Even John came to the party.

According to Traugott (2006:350), actualization of the eventuality described by a sentence hosting *even* such as (1) contradicts the discourse participants’ expectations, giving rise to a

concessive meaning. If Traugott is correct, we can say that a mirative or counter-expectational component of UF-EVEN was already inherent in PF-EVEN's meaning.

It should be emphasized, however, that the mirative meaning expressed by PF-EVEN differs from what is expressed by UF-EVEN. The standard view is that PF-EVEN comments on expectations the hearer has relative to a salient ordering of propositions (see Beaver & Clark 2008:70). As we have shown above, the mirativity of UF-EVEN tends to comment on the speaker's expectations rather than the hearer's and hence expresses his or her surprise. In short, UF-EVEN is more speaker-oriented than PF-EVEN is.

Although we believe that scalarity is crucial to the rise of the mirativity meaning UF-EVEN displays, we suspect that its syntactic position also plays an important role. Lexical items occurring in utterance-final position tend to be part of afterthoughts. Since afterthoughts encompass sudden realizations of facts, putting *even* at the end of an utterance as some sort of afterthought can effectively mark surprise and other expressive meanings that are subsumed under the rubric of mirativity such as 'unprepared mind' or 'deferred or post-factum realization' as introduced above. In other words, by occurring after its associate, in particular utterance-finally, a scalar focus modifier assumes the meaning of a speaker-oriented emotive or evaluative adverb which comments on the content of the accompanying utterance such as *surprisingly*, *much to my surprise*, and *come to think of it*.¹⁹

We now wish to take up the fact that mirative UF-EVEN can sometimes broaden the domain of discourse topic, as exemplified in (37). We submit that this property comes from the upward-orientedness of PF-EVEN that figures in Beaver and Clark's (2008) analysis.²⁰ Beaver and Clark claim that, unlike *only*, which is inherently antagonistic, *even* monotonically adds to what is already assumed; that is, it is upward monotonic. They note, however, that a sentence containing *even* conflicts with expectations, or more concretely, a false belief about a putative upper bound to the Current Question, i.e., the question that is currently at issue. They further maintain that this conflictive or counter-expectational meaning arises because *even*'s upward orientation removes upper bounds (to the Current Question) (Beaver & Clark 2008:71-72). If we adopt Beaver and Clark's analysis of *even*, UF-EVEN's ability to widen the domain of the discourse topic can be recaptured as a manifestation of its inherent tendency to remove upper bounds to the Current Question. We can therefore conclude that the mirative UF-EVEN is, in

every way, intimately related to PF-EVEN, despite their subtle meaning differences identified above.

The Rise of the Elaborative Use

We claim that the elaborative use of UF-EVEN also comes from PF-EVEN's meaning but, unlike the mirative use, it is more closely tied to the particularizing meaning that *even* carried at some point in its development. As mentioned above, before the end of the 17th century, *even* behaved like a particularizer comparable to the present day English *exactly* or *precisely* (see Traugott 2006 and references there, in particular Nevalaninen 1991). For instance, there was a strong sense of particularizing harmony between *even*, *very*, and *first*, as can be seen in the following datum, taken from Traugott (2006:348 ex. (17)), with emphases added.

- (66) ...*even* att my *very* first cominge into his noble service
 ‘from my very first coming into his noble service...’

Recall that elaborative uses of UF-EVEN may be paraphrased as ‘to be exact/precise’ or ‘to be more accurate’ (modulo the fact that the latter uses lack the corrective strengthening function). Since such paraphrases are unquestionably linked to ‘exactly’ and ‘precisely,’ it stands to reason that what we call the elaborative meaning of *even* has derived from the particularizer meaning it once had. If correct, then, our analysis suggests that UF-EVEN has “resurrected” one of the apparently (or allegedly) lost meanings of PF-EVEN.²¹

This kind of semantic change, wherein an adverb gradually absorbs an elaborative or clarificational meaning, is not unique to *even*. It has been observed for instance that in their most recent development, English modifiers like *in fact* and *actually* function as discourse markers which elaborate on or self-correct what has just been said (Traugott & Dasher 2002:168-171; see also Traugott 2006:341). Here are some illustrative cases.

- (67) I think John is nice, superb, *in fact*.
- (68) I liked the show, loved it, *actually*.

As far as we are aware, such type of semantic change has been noted only of sentential epistemic modifiers like *actually* (see, for example, Traugott & Dasher 2002, pp.152-189). Hence, our finding that *even*, a non-epistemic modifier, has acquired an elaborative function (though a slightly different one, as noted above) makes a non-trivial contribution to the existing body of knowledge.

The Rise of the Simple Additive Use

Concerning the rise of the simple additive use, we hypothesize that it has derived from the elaborative use just discussed. In making this claim, we draw on what are called *subjectification* and *intersubjectification* in historical semantics literature (see Traugott & Dasher 2002; Traugott 2004 and references therein, in particular Stoffel 1901; Benveniste 1958). According to Traugott (2004:550), subjectification refers to a mechanism or process whereby meanings increasingly “encode the speaker or writer’s subjective belief state or attitude toward what is being said and how it is said.” In brief, it is concerned with “expressing self.”²² Intersubjectification, on the other hand, has to do with encoding “awareness of each participant by the other” (Traugott 2004:550, citing Benveniste 1958). A lexical item that is subjectified may undergo intersubjectification over time and thereby “encode or externalize implicatures regarding the speaker or writer’s attention to the ‘self’ of the hearer or addressee” (Traugott 2004:551).

Obviously, subjectification and intersubjectification are complex notions. But what is clear is that the former concerns the speaker, whereas the latter concerns both the speaker and the hearer. To apply these aspects of the two notions to the phenomenon at hand, the mirative use of UF-EVEN can be analyzed as instantiating subjectification which is slightly more developed than what PF-EVEN instantiates, and the elaborative use can be treated as instantiating incipient intersubjectification. The reasoning here is that the mirative use primarily expresses the speaker’s surprise, whereas the elaborative use often targets the hearer (as well as the speaker). If this is a viable line of analysis, then we can further claim that the simple additive use of UF-EVEN is more intersubjectified than the elaborative use since it is more hearer-oriented. It is well-documented that semantic change is unidirectional and intersubjectification is typically

preceded by subjectification (Bybee et al. 1994; Traugott & Dasher 2002; Traugott 2004). Therefore, we are led to conclude that the simple additive meaning of UF-EVEN has developed from the elaborative meaning. Notably, this may very well account for why UF-EVEN still retains its scalar meaning in its elaborative use but not necessarily in the simple additive use. The latter is more objectified and thus it lacks scalarity, which is arguably a type of subjective meaning.

The Rise of the Simple Corrective Use

We propose that the elaborative use also gave rise to the simple corrective use. This idea hinges on the following reasoning.

First, an elaboration can become a clarification and a strong clarification can become a correction, but not the other way around.

Next, while the elaborative use of UF-EVEN is largely pragmatic, enhancing the argumentative, rhetorical, or informative strength of the utterance at hand, the corrective use concerns logical, truth-conditional meaning, which is undeniably more conventionalized.

Relatedly, the corrective use has little to do with subjectivity in meaning. It expresses more objective meaning than the elaborative use in that it simply corrects the preceding utterance, rather than supplying what is deemed more relevant information to the discourse at hand.

Additional support for our proposal is found in the behavior of other adverbs like *actually* and *in fact*. As mentioned above, when functioning as discourse markers, such adverbs typically introduce an elaboration on the preceding utterance, but they can sometimes introduce self-correction as well (Traugott & Dasher 2002:168-171; Traugott 2006:341). The latter use is exemplified below.

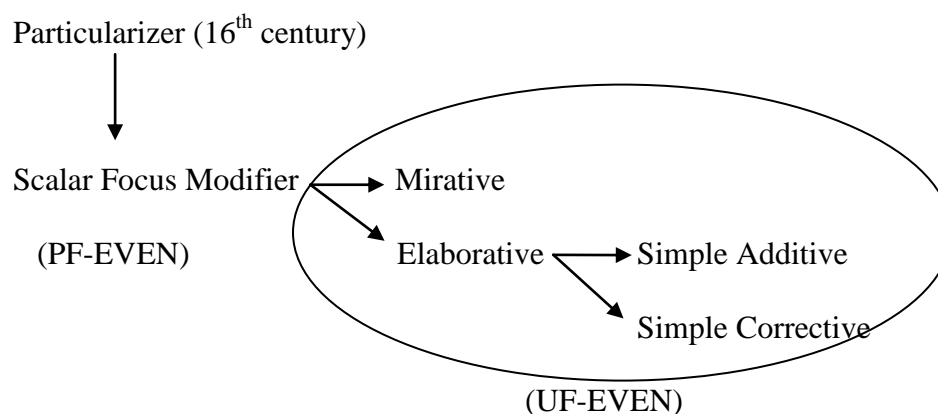
- (69) a. Melissa came to see me that afternoon, in the evening, *actually*.
 b. Brian is not stupid; he is pretty smart, *actually*.
- (70) a. Stephanie told me a lie, several times, *in fact*.
 b. Maria dated Josh for a while; she was in a relationship with him *in fact*.

The semantic shift exemplified by *actually* and *in fact* suggests that there is a profound connection between elaborative and corrective meanings. Hence there is good reason to hypothesize that the simple corrective use of UF-EVEN has derived from its elaborative use.

Repercussions of the Present Analysis

We have claimed that the various meanings or uses of UF-EVEN identified above originate from PF-EVEN's meanings although some bear a less direct relationship to it. Our claim is diagrammatically represented in Figure 1.

Figure 1: Developmental Path of UF-EVEN's Functions:



In accounting for the rise of various functions of UF-EVEN, semasiological notions like subjectification, intersubjection, and objectification were utilized. In its mirative use, UF-EVEN expresses subjectified meaning analogously to emotive or evaluative adverbs like *surprisingly*. In the elaborative and the simple additive uses, it expresses more intersubjectified meaning which is both speaker- and hearer-oriented. In the corrective use, it encodes more objectified meaning which lacks subjectivity. It has also been shown that UF-EVEN's development partly parallels that of discourse markers like *actually* and *in fact*. In both cases, what used to be a manner adverbial has come to express the discourse relationship intended by the speaker. This parallel lets us make sense of why almost all instances of UF-EVEN (i.e., except for simple additive

uses) may be replaced by *actually* and *in fact*, as we saw above (although the asymmetrical relation conveyed by UF-EVEN cannot be conveyed by them).

The proposed developmental trajectory of *even*'s meaning has some important bearing on what has been said about meaning change and the form-meaning correspondence in the literature.

First, it has been observed that syntactic distributional difference correlates with meaning difference and this is especially true of adverbs (Greenbaum 1969; Jackendoff 1972; McConnell-Ginet 1982; Cinque 1999). The behavior of various occurrences of *even* reported here instantiate the same phenomenon. The particle takes on a different function by occurring in a different position, namely, following its associate, most often utterance-finally.

Second, it is widely held that, in meaning change, subjectification always precedes intersubjectification (Traugott 2004). What is presented here, if correct, supports such a view.

Third, in the existing literature, different types of Gricean or Neo-Gricean conversational maxims are believed to drive different types of meaning change. Traugott (2004: 560), for example, claims that the R-principle in the sense of Horn (1984) accounts for most regularly attested semantic change, and Horn's Q-principle (or the Q and M heuristics in the sense of Levinson 2000) accounts for constraints on word formation and realignments of meanings among lexical items. The UF-EVEN phenomenon provides an interesting testing ground for such a claim:

Horn's R-principle basically states, "make your contribution relevant and necessary in view of the discourse purpose," and it incorporates Grice's (1975) Relation, the second part of Quantity, and the Manner sub-maxims "Be orderly" and "Be brief." Given this, all else being equal, the speaker is likely to use lexemes that will effectively express him- or herself. This gives a plausible account of the rise of speaker-oriented emotive or evaluative adverbs like *surprisingly* and *probably*. The same principle also guides the speaker to use expressions that will seamlessly link adjacent discourses, and this may explain the rise of discourse markers such as *actually* and *in fact*. Historically and cross-linguistically, it is commonly found that speakers take an extant expression and start using it in a formally distinct way, placing it in an "unusual" position or stressing it only weakly, for instance. In so doing, they invite hearers to make inferences, and presumably hearers can make the inferences expected of them. Such initially particularized invited inferences become generalized as they get more accepted into the linguistic

community, and they may even become conventionalized and semanticized in due course of time (Traugott & Dasher 2002; Traugott 2004).

Given this reasoning, we can readily see that the mirative use of *even* manifests the workings of the R-based principle, for it is concerned with encoding the speaker's attitude toward the state of affairs described by the utterance. We also suspect that the same principle has been the driving force of the rise of the elaborative and the simple additive uses as well. We believe, however, that Horn's (1984) Q-based principle is also responsible for the rise of some of UF-EVEN's uses: the simple corrective use is evidently driven by the Q-based principle, since it has to do with the accuracy of information. Undoubtedly, the elaborative and the simple additive functions also concern informativity. Hence we can state that they were driven in part by the Q-principle as well. To the extent that this analysis is correct, it can be concluded that the UF-EVEN phenomenon instantiates a case in which both R- and Q-principles in the sense of Horn (1984) motivate semantic change, potentially challenging the view held by Traugott (2004).

Before closing, we want to point out that our analysis provides answers to some of the questions Traugott (2006) addresses in her investigation of the development of focus modifiers in English.

First, by citing Brinton (1998), Traugott notes that in Early Modern English, the focus modifier *only* developed into a clause-initial adversative conjunction, as exemplified below:

(71) I am able to walk a staff reasonable well, *only* my knee is not yet recovered.

(citing 1629 John Barrington, Letters 97, cited in Brinton 1998:24; our emphasis)

She further adds that in this regard, *only* parallels *indeed* and *actually* in that it also displays a pattern in which an adverb has become a clausal modifier which comments on the speaker's evaluation relation between the preceding and the following discourses. In this context, she asks to what extent similar development has occurred with other degree and focus modifiers. Our paper has shown that a similar developmental path has been taken by *even*, particularly in its utterance-final mirative use.

Secondly, at the end of the paper, Traugott (2006) remarks on some of the claims that have been made about the non-scalarity of some focus modifiers. In response to Beaver and

Clark (2003), who maintain that some focus expressions are non-scalar (e.g., *rarely*, *almost*), and to Taglicht (1984), who suggests that *only* has non-scalar uses, she hypothesizes that the apparently non-scalar meanings of relevant focus modifiers are later developments. She also suspects, however, that non-scalar uses may just be “a function of constructed data than of natural language.” The present paper lends support to Traugott's hypothesis since it has shown that *even* can carry non-scalar meanings when occurring after its focus and, furthermore, such uses have derived from its earlier scalar meanings. But our UF-EVEN data refute Traugott's suspicion since some naturally occurring data do involve non-scalar meanings, as shown in (58) through (60).

Conclusion

This article has taken up a relatively understudied phenomenon in English wherein the additive scalar particle *even* occurs following its focus, typically in utterance-final position. This UF incarnation of EVEN has been shown to display a different semantics and pragmatics from its PF counterpart. Four distinctive functions have been identified, namely, the mirative, the elaborative, the simple additive, and the simple corrective. We have proposed a developmental trajectory of these uses by building on the existing literature in meaning change. The main thesis has been that every one of UF-EVEN's meanings originates from PF-EVEN's in one way or another.

If proven valid, the present analysis will have several repercussions for linguistic theorizing.

First, the rise of various meanings of *even* and their derivational history proposed here suggest that both the R- and the Q-based principles drive semantic change.

Second, our finding that an additive scalar focus marker can take on a mirative overtone may be a notable, though not surprising, discovery for typological research since, to our knowledge, mirativity is currently reported to be marked only by evidential expressions.

Third, our analysis suggests that any lexical item with scalar meaning has the potential to undergo further semantic change. It will be interesting to see whether scalar particles like *still* and *already* take a similar path to *even*.

Fourth, it can be said that some of UF-EVEN's uses identified here instantiate conventional implicature in that they are lexically triggered and cannot be cancelled (Karttunen & Peters 1979); furthermore, they are by and large speakers' comments on the at-issue contents (Grice 1975; Potts 2005). According to Potts (2005), conventional implicatures are typically triggered by lexical items or intonational breaks; obviously, the meanings conveyed by UF-EVEN are signaled primarily by its syntactic position though aided by lexical semantics and possibly by prosody as well.²³ Given this, it remains to be seen how UF-EVEN's behavior can be successfully captured within a formal compositional framework, especially along the lines suggested by Potts (2005) and much subsequent work.

Acknowledgments

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Notes

1. Not every author treats the existential meaning of *even* independently of its scalar meaning. Horn (1992:183), for example, notes that the former can be inferred from the latter. He further points out that the former can even be cancelled sometimes. For instance, a father can felicitously say (i) below to his son even if no one other than Billy is implicated to have finished any cereal.

- (i) Come on, Chris, eat up—even little Billy finished his cereal.
(Horn 1992:fn 12, ex. (iv))

We thank an anonymous reviewer for the *Journal of English Linguistics* for bringing this divergent view to our attention.

2. Karttunen and Peters (1979) note that *even* can occur following its associate and cite the example below but hold a similar position to Huddleston and Pullum (2002).

- (i) BILL, even, likes Mary.
(Karttunen & Peters 1979, ex. (36a))

Similarly, Kay (1990:95, note 39) notes, citing an anonymous referee, that some speakers accept UF-EVEN, as illustrated by (ii), but says no more.

- (ii) Mr. Katz slugged Mr. Manx, even.

3. We thank Elizabeth Closs Traugott for bringing Huddleston and Pullum's (2002) and Quirk et al.'s (1985) works to our attention.

4. In this article, we do not differentiate between semantic meaning and pragmatic meaning except for cases in which differentiation between them is deemed necessary. Hence, unless noted explicitly, *meaning* will be used as an umbrella term for both types of meaning. For this reason, the term may sometimes be interchangeable with *pragmatic use* as well.

5. An anonymous referee raises the possibility that not every ostensibly PF-occurrence of *even* may be the same. For example, in the locution "What does that even mean?" *even* does not involve a scalar ranking of the verb *mean* with respect to other predicates; that is, the sentence does not mean "What does that even MEAN, let alone ____?" Instead, it is construed as meaning "I don't even know [what that means], let alone [know what to do with/about it]. A similar case is: "How is that even POSSIBLE?"

The referee suggests that such uses of *even* have to do with sentence focus. We agree with this intuition. Currently, we do not have much insight to offer about the phenomenon except to note that sentence-focusing *even* tends to occur adjacent to an epistemic predicate and accordingly functions as an epistemic commentator on some state of affairs at issue. That said, here and below, we do not discuss such sentence-focusing uses of *even*. This means that by PF-EVEN, we refer to cases similar to (1).

6. For judgments, we thank Brady Clark, Peter Sells, Elizabeth Closs Traugott, Jared Hoover, Kristen Jones, and Matt Pawlowic, among others.

7. The data on UF-EVEN from the 19th century are due to an anonymous reviewer.

8. We also consulted some native speakers in Great Britain and Australia, and searched in the British National Corpus (BNC). We obtained some data containing UF-EVEN (e.g., (i) below). But currently we only have limited access to the BNC. Hence we remain agnostic about the prevalence of the phenomenon in other English-speaking countries.

- (i) No --; the government will find it hard to sustain that again, when there has been no army in the field against them --; no pitched battles --; no weapons, *even*.
(BNC; A0N 1399)

9. These data are taken from private chats and therefore no URLs can be given.

10. Here, ‘PA 782598’ means that the datum is found at ‘<http://forums.penny-arcade.com/showthread.php?p=782598#post782598>’. We use this shorthand method in providing the sources for the data taken from the PA corpus.

11. We thank Elena Bashir for pointing out a possible connection between mirativity and UF-EVEN’s meaning.

12. This topic broadening function of UF-EVEN is reminiscent of the ‘domain widening’ effect of the polarity item *any* observed by Kadmon and Landman (1993): in a sentence like *You can talk about anything you want*, the presence of *any* broadens the relevant quantification to the point where even marginal individuals can be considered. Clearly, UF-EVEN in (37) brings about a similar effect although it may not be identical. We defer fuller investigation of this similarity to future research.

13. We thank an anonymous referee for pointing out this contrast between the mirative use and the elaborative use of UF-EVEN.

14. An anonymous reviewer has pointed out this important difference between UF-EVEN and discourse markers like *actually* and *in fact*, for which we are grateful.

15. In the case of (56), the hearer actually acknowledged to us that he already knew that the technique *springbomb* was faster as well. So it was probably appropriate for the speaker to remind him of that information.

16. Even though additive UF-EVEN is comparable to additive particles like *also* and *too*, they are not identical to each other, in particular in terms of phonology. UF-EVEN does not seem to force contrastive stress on itself while *also* and *too* do. Furthermore, UF-EVEN does not require an intonational break immediately before it when occurring in utterance-final position, whereas the other additive particles often do. For a comparison between *even* and additive particles *too/either* with respect to semantics/pragmatics (as well as phonology), see Rullmann (2003), among others.

17. We have not as yet obtained data illustrating this use where the correction targets the hearer's utterance. Hence it appears as though this use is mostly self-corrective.

18. As Gregory Ward pointed out to us, the simple corrective use of UF-EVEN is reminiscent of the post-sentential *that is* illustrated in a sentence like: Please say hi to your fiancée, your girlfriend, *that is*. Such a parallel is not surprising since *that is* can be used to revise or clarify the preceding remark (for details on *that is*, see Ward 1988).

19. For a recent formal treatment of the meaning of emotive or evaluative adverbs, see Ernst (2009).

20. We thank Brady Clark for suggesting a possible connection between the mirativity of *even* and its upper monotonicity.

21. If future diachronic research discovers that UF-EVEN was in fact observed at the same time that PF-EVEN began functioning as an additive scalar focus modifier around the 17th century, then the elaborative use should be treated as a direct derivative of the particularizer. This remark also applies to Figure 1: on this alternative scenario, the elaborative use would branch from the particularizer *even*, rather than from PF-EVEN.

22. Traugott (2004:550) also offers other definitions of *subjectification*, such as that of Benveniste's (1958), which essentially has to do with distinguishing "syntactic subject" and "speaking subject." Yet we believe that her definition incorporates much of the key insight provided by other definitions and hence have adopted it here.

23. UF-EVEN appears to have at least two notable phonological properties although they may not be obvious in written texts. First, the particle does not receive prosodic prominence

though its associate often does. Second, its pitch accent seems to be a High + Low tone whereas its PF counterpart bears a High + High tone. We hope future research sheds more light on these properties if our observations prove to be valid.

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Min-Joo Kim is an Assistant Professor of Linguistics in the Department of English at Texas Tech University. She received her PhD in linguistics from the University of Massachusetts-Amherst and has published on Internally-Headed Relatives, E-type Anaphora, Adjectives, Case, Complementation vs. Modification, and Free Choice in venues including *Natural Language Semantics*, *Natural Language and Linguistic Theory*, *Language Research*, and the *Journal of Cognitive Science*.

Nathan Jahnke is a second-year Ph.D. student in Technical Communication and Rhetoric in the Department of English at Texas Tech University. His research interests include human language as a complex system in the context of usability engineering.

E-mail addresses:

min-joo.kim@ttu.edu

njahnke@gmail.com