

The Two-dimensional Scale of the Concessive Conditional Construction: The Case of English *Even if* Construction

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Abstract

This paper considers the two-dimensional scale in the English *Even if* construction. It is generally accepted that in the antecedent clause of the construction, there is a scale of “unlikeliness of bringing about the content of the consequence clause”. However, little attention has been given to the case in which there is also a scale in the antecedent clause. The following four points are argued: (i) There are cases in which there exist correlative scales in the *Even If* construction. (ii) Scalar entailment and scalar implicature of each scale must be captured by a two-dimensional scalar model. (iii) When two scales are assumed in the construction, there are three ways to cancel the scalar implicatures. (iv) Although there are cases which lack scalarity in the consequent clause, the scale becomes correlative if additional information is added.

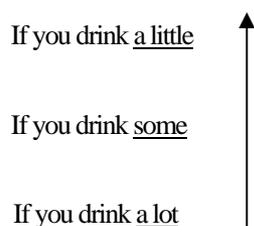
0. Purpose

It is a well-known fact that there is a scale in the antecedent clause of the *Even If* construction (König 1986; Sweetser 1990; Dancygier 1988, 1998; Declerck and Reed 2001 a, b; Fujii 1989). Observe the following example:

(1) Even if you drink (only) a little, your boss will fire you. (König 1986:231)

The antecedent clause (=p) of (1) contains the scale of the unlikeliness of bringing about the content of the consequent clause (=q): “drinking a little” is located on an extreme position on the scale of the unlikeliness of “your boss’s firing you”. By scalar entailment, the consequence of “your boss will fire you” is naturally obtained if we assume weaker (or more likely) conditions, such as “if you drink some” or “if you drink a lot.” This is shown by the following scalar model:

(2) Scale of “unlikeliness of bringing about the content of the q clause”



Notice that the scale in (2) is a one-dimensional scale.

However, little attention has been paid to the case in which there is also a scale in the consequent clause, as in the following example:

(3) Even if Tom competes, he will be able to win the third round.

This paper proposes the “two-dimensional scale” of the *Even If* construction to argue for the following four points:

- (4)
- (i) There are cases in which there exist correlative scales in the *Even If* construction.
 - (ii) Scalar entailment and scalar implicature of each scale must be captured by a two-dimensional scalar model.
 - (iii) When two scales are assumed in the construction, there are three ways to cancel the scalar implicatures.
 - (iv) Although there are cases which lack scalarity in the consequent clause, the scale becomes correlative if additional information is added.

1. Two Important Characteristics of the *Even If* Construction

Before embarking on the topic of a two-dimensional scale in the *Even If* conditional sentences, let us discuss two important characteristics of the *Even If* construction, i.e. the scalarity of the antecedent clause and an already established causal assumption.

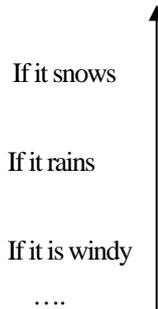
1.1 Scalarity of the antecedent clause: ‘continuous scale’ and ‘polar scale’

It is important to note that there are two kinds of scales, continuous scale and polar scale in the antecedent clause. Compare the following sentences (CA stands for the contrastive accent):

- (5) a. Even if it [snows]_{CA}, the match will not be cancelled.
b. Even if it snows, the match will not be cancelled.

As Declerck and Reed (2001b: 226) mention, if a contrastive accent is put on “rains” as in (5a), we can readily assume a number of alternative conditions (‘if it rains’, ‘if it is windy’, ‘if it is not sunny’, etc.) that might be considered less likely to bring about the cancellation of the match than “if it snows,” as shown by the following figure.

(6) “unlikeliness of bringing about the q clause”



However, if there is no contrastive accent, we only assume a polar contrast between ‘if it snows’ and ‘if it doesn’t snow.’ That is to say, (5b) is interpreted as ‘Even if it DOES snow, the match will not be cancelled..’

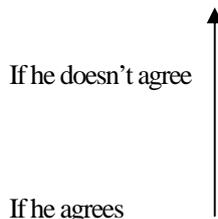
There are cases in which we can only assume a polar scale. Observe the following example:

(7) I hope John will agree. But even if he doesn’t, we will carry out this decision.

(Declerck and Reed 2001b: 226)

In the antecedent clause of (7), only two polar propositions ‘he agrees’ and ‘he doesn’t agree’ are assumed. It is open to debate whether we can still speak of a polar case as a SCALE (Declerck and Reed 2001b: 227). But as Declerck and Reed argue, there are some arguments that plead in favor of assigning a scalar analysis even to polar *even if* conditionals. Here we will consider that polar cases also belong to a scale by the following two reasons. (i) Even though there are only two polar propositions, the propositions are still the members of a plural set. (ii) Both propositions are measured on the same scale, i.e. on the scale of ‘the unlikeliness of bringing about the q clause.’ The scalar model of (7) can be will be as follows:

(8) “unlikeliness of bringing about the q clause”



1.2. An Already Established Causal Assumption

It is widely known that there is always an “already established causal assumption (i.e. expectation understanding)” behind the interpretation of *Even if* sentences but contrary to that assumption the even if sentences deny it. For example, as Declerck and Reed (2001a: 462) mention, *Even if it doesn’t rain we will stay inside* is interpreted as ‘You might expect that if it doesn’t rain we won’t stay inside, but that expectation is wrong: we will stay inside, even if it doesn’t rain’ (=You might expect P to entail ‘not Q’, but in fact Q, even if P’). That is to say, ‘even if P, Q’ denies the validity

of the evoked expectation ‘if P, not Q’.

That the *even if* construction always have an already established causal assumption is confirmed by the fact that *even if* conditionals are unacceptable if their established assumption themselves are not natural (Declerck and Reed 2001b: 216). In the following examples, (9a) contains an already established causal assumption such as (9b).

- (9) a. Even if it rains, the match will not be canceled. (Dancygier 1998:162)
b. If it rains, the match will be canceled.

However, contrary to (9a), (10a) is unacceptable because the expectation understanding (=10b) is pragmatically unnatural:

- (10) a. ??Even if it rains, the match will be canceled.
b. ??If it rains, the match will not be canceled.

(10b) is unnatural because very few games take place only when it rains.

2. Two-dimensional Scales

This section will discuss the two dimensional scale of the ‘*Even if*’ construction. As I have discussed in the introduction, little is discussed about the mechanism of the two dimensional cases of the construction. We will divide the two-dimensional scale construction into two types. One is the case of a positive consequent clause and the other is the case of a negative consequent clause.

2.1 The Case of a Positive Consequent Clause

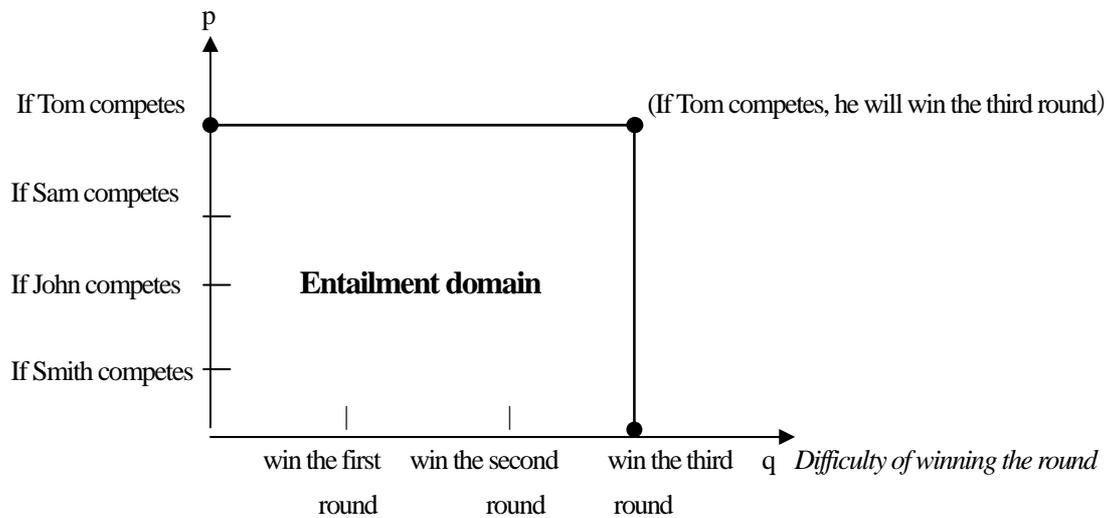
Observe the following example:

- (11) Even if Tom competes, he will be able to win the third round. (=3)

In (11) there are two kinds of scale. One is the scale of an antecedent clause (=p scale) and the other is the scale of a consequent clause (=q scale). P scale is the scale of the unlikeliness of bringing about the content of the consequent clause: the scale of the weakness of players. Q scale is the scale of the difficulty of the game. In these scales, ‘Tom’ is located on the extreme point of the p scale and ‘the third round’ is not located on so high a level. The following diagram shows the two-dimensional scale of (11). Y-axis indicates a p scale and X-axis indicates a q scale. The square indicates the entailment domain of (11).

(12)

unlikelihood of bringing about the consequent clause



Our assumption that there are two kinds of scale predicts that there are two kinds of entailment. One is a p scalar entailment and the other is a q -scalar entailment. The p -scalar entailment in (11) is that “All persons who are stronger than Tom (in this context, Sam, John and Smith) can naturally win the third round.” On the other hand, the q scalar entailment in (11) is that “Tom can naturally win the lower rounds than the third round,” as in:

(13) Scalar entailment of p clause: If Tom can get to the third round, all players who are stronger than Tom can naturally win the third round.

(14) Scalar entailment of q clause: If Tom can get to the third round, Tom can get all rounds which are easier than the third round.

Then, what about an implicature?

As Grice (1989) argues, we normally assume (following the co-operative principle) that, where speakers have a scale of values at their disposal, they will choose the one that is optimally informative. This is one of the four maxims: maxim of quantity as in (15):

(15) Maxim of quantity:

- (i) Make your contribution as informative as is required. for the current purposes of the exchange.
- (ii) Do not make your contribution more informative than is required.

(Grice 1989:26)

From the first maxim in (15), an utterance carries the implicature that ‘values which are higher than the one referred to on the scale is not the case.’ Because there are two kinds of scales in example (11), we can assume the following two kinds of scalar implicature:

- (16) Scalar implicature of the *p* clause: All players who are weaker than Tom will not be able to win the third round.
- (17) Scalar implicature of the *q* clause: Tom will not be able to win the round which is higher than the third round.

It is very important to note that one of the characteristics of the conversational implicature is the possibility of being canceled (Grice 1989: 44; Levinson 1983: 114-116). The typical grammatical elements which cancel scalar implicature are *in fact* and *if not*. Observe the following ways of canceling:

- (18) Cancellation of the *p*-scalar implicature: Even if Tom competes, he will be able to win the third round. In fact, even John will be able to win the third round.
- (19) Cancellation of the *q*-scalar implicature: Even if Tom competes, he will be able to win to the third round. In fact, he will be able to win even the fourth round.
- (20) Cancellation of both the *p* and the *q* scalar implicatures: Even if Tom competes, he will be able to win the third round. In fact, even if Jim competes, he will be able to win the fourth round.

The above discussion has clarified that there are three ways to cancel the scalar implicatures: the cancellation of the *p*-scalar implicature, the cancellation of *q*-scalar implicature, and the cancellation of both *p* scalar and *q* scalar implicatures.

2.2 The Case of Negative Consequent Clause

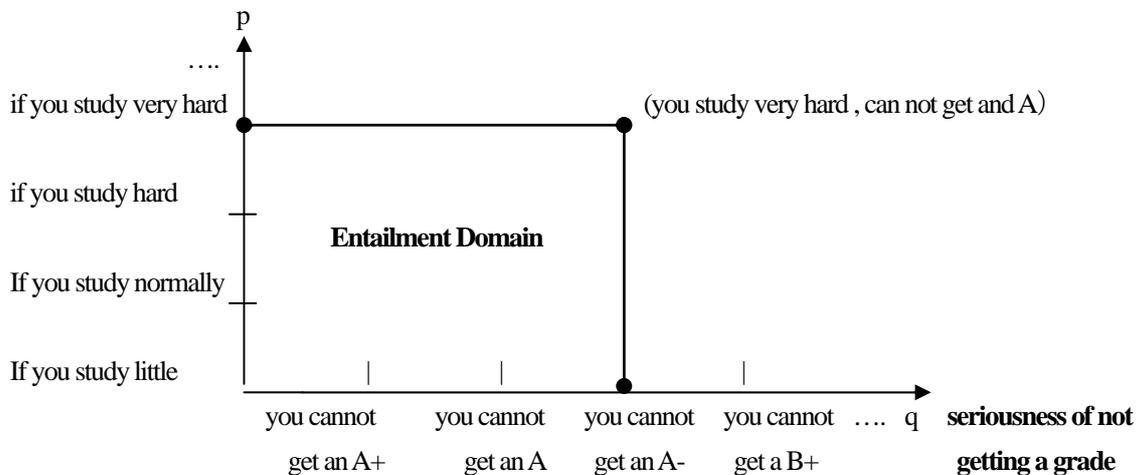
The previous section has focussed on the case of a positive consequent clause. Let us now turn to the case of a negative consequent clause. Observe the following example:

- (21) Even if you study very hard, you won't be able to get an A in that class.

In (21), the consequent clause is negative. Thus, we automatically assume the following two-dimensional scale. Note that in the case of a negative consequent clause, there are negative elements in each scalar value:

(22)

unlikeliness of bringing about the consequent clause



Then, what kinds of scale are there in (21)? In p scale, there is the scale of the unlikeliness of bringing about the content of the consequent clause (=q), i.e. the scale of “unlikeliness of not getting an A in that class” and ‘studying very hard’ is located on an extreme position on the scale. On q scale, there is the scale of “seriousness of not getting a grade”, and ‘not being able to get an A’ is higher than ‘not being able to get an A+’ but lower than ‘not being able to get an A- .’ We should note that q scale is not the scale of the evaluation on the test itself ($C^+ \rightarrow B^- \rightarrow B \rightarrow B^+ \rightarrow A^- \rightarrow A \rightarrow A^+$) although it functions as an ancillary scale of q (Declerck and Reed 2001b: 219-220). Again, the square indicates the entailment domain of (21).

The above discussion can clarify scalar entailments and scalar implicatures of (21) as follows:

- (23) Scalar entailment of p clause: If you cannot get an A in spite of studying very hard, you cannot normally get an A with less effort (e.g. “studying hard”, “study normally”, “study little”)
- (24) Scalar entailment of q clause: If you cannot get an A, you cannot naturally get an A+ in that class.
- (25) Scalar implicature of p clause: If you study much harder than “very hard” (e.g. Study very hard without sleep, study at the risk of one’s life) you can get an A. in that class.
- (26) Scalar implicature of q clause: If you study very hard, you will be able to get lower grades than an A in that class.

As we have discussed in the previous section, there are three ways to cancel the scalar implicatures of (21):

- (27) Cancellation of the p-scalar implicature: Even if you study very hard, you won’t be able to get an A in that class. In fact you cannot get one even if you study extremely hard without sleep.

- (28) Cancellation of the q-scalar implicature: Even if you study very hard, you won't be able to get an A in that class. In fact, you cannot even get an B.
- (29) Cancellation of both the p and the q scalar implicatures: Even if you study very hard, you won't be able to get an A in that class. In fact, you cannot get an B even if you study extremely hard without sleep.

3. Building a Two-dimensional Scale by Scalar Operators

The previous section has discussed the cases of *Even If* constructions that has a two-dimensional scale. However, there are cases that lack a scale in consequent clause. Observe the following examples:

- (30) I'll get there, even if I have to walk. (Oxford Advanced Learner's Dictionary)
- (31) People can sit in meetings, even if it's not really in their subject area. (Cobuild)
- (32) Even if you are on a fairly strict diet you can still go out for a good meal. (Cobuild)

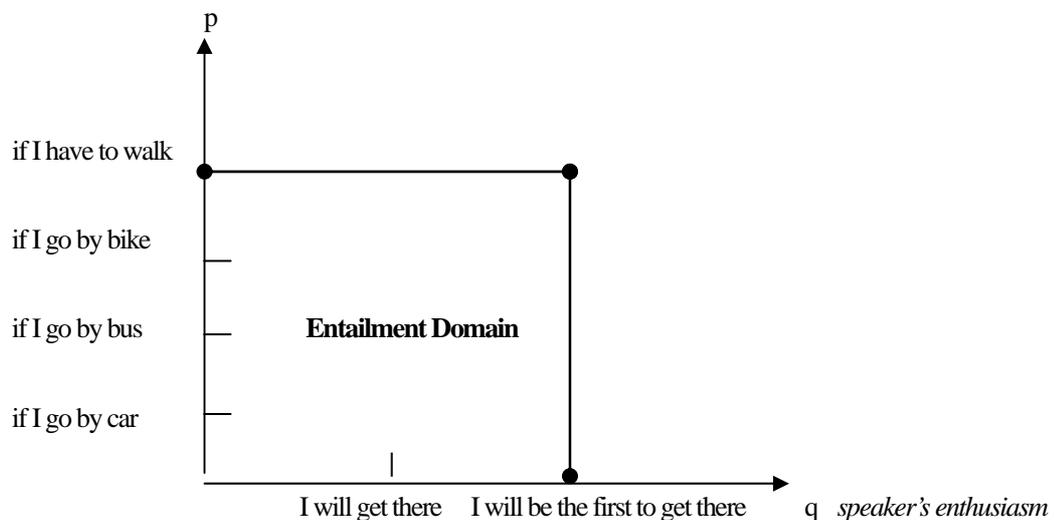
(30)—(32) apparently lack a scale in the consequent clause, for there is no variable place in the consequent clause. However, if we consider the consequent clause inter-sententially, but not intra-sententially, by adding a scalar operator, such as *in fact* or *in not*, we can assume the scale in the consequent clause, as in the following examples:

- (33) I'll get there, even if I have to walk. In fact, I'll be the first to get there.
- (34) People can sit in meetings, even if it's not really in their subject area. In fact, they can ask questions.
- (35) Even if you are on a fairly strict diet you can still go out for a meal. In fact, you can drink as much as you want.

From the above discussion, we can safely conclude that although a two-dimensional scale is not an obligatory characteristic of the *Even if* construction, it is possible to assume one by comparing the consequent clause with the independent sentence preceded by a scalar operator, such as *in fact*, or *if not*. The two-dimensional scale of (33) is shown by the following figure (36):

(36)

unlikeliness of bringing about the consequent clause



4. Conclusion

In this paper, we have considered the two-dimensional scale of the Concessive Conditional Construction, i.e. English *Even if* construction. I have argued for the following four points.

(37)

- (i) There are cases in which there exist correlative scales in the concessive conditional construction.
- (ii) Scalar entailment and scalar implicature of each scale must be captured by a two-dimensional scalar model.
- (iii) When two scales are assumed in the construction, there are three ways to cancel the scalar implicatures.
- (iv) Although there are cases which lack scalarity in the consequent clause, the scale becomes correlative if additional information is added.

Since Grice, many researchers have discussed the phenomenon of the scalar implicature (Grice 1975, 1989; Horn 1972, 1989; Fauconnier 1975; Levinson 1983, 2000; Hirschberg 1991; Rohrbough 1997 etc.) . However, almost all the studies have dealt with the one-dimensional scalar implicature. The original point in this study is that it has clarified the existence of the two-dimensional scalar implicature. By expanding the analysis to the two-dimensional scale, it has become clear that the relationship between the number of scalar implicature and the number of canceling of the implicature is not even: in the two-dimensional scale, there are two kinds of scalar implicatures, i.e. p-scalar implicature and q-scale implicature, but the number of the way of canceling the implicature are three.

I hope that this work will become a meaningful stepping-stone toward a principled explanation of the nature of scalar implicature on the multi-dimensional scales.

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