On a Certain Aspect of the Interpretation of *Almost*

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1. Introduction

According to Dowty (1979:58), the adverb *almost* produces two readings when added to (1a) which represents an accomplishment.

(1) a. John painted a picture.
    b. John almost painted a picture.

The two readings of (1b) are as follows:

(2) a. John had the intention of painting a picture but changed his mind and did nothing at all.
    b. John did begin work on the picture and he almost but not quite finished it.

Dowty takes (1b) to be ambiguous and the ambiguity is considered to follow from the scope ambiguity of the adverb *almost* and be limited to verbs or sentences which are accomplishments.

Following Dowty, Pustejovsky (1991), for example, propose an explicit event-structure-based analysis. His idea is that the adverb *almost* can take its scope over one event or subevent and only accomplishments have a complex event structure consisting of an activity and a state. Since accomplishments have two subevents, the adverb shows ambiguity like (2) depending on which subevent it is associated with.

On the other hand, Tenny (2000) casts doubt on the ambiguity analysis and

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*I would like to express my gratitude to Mr. Kevin Varden for giving me valuable information.*
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claims that it is vagueness that is relevant. Her claim is based on the possible interpretations found in such examples as follows:

(3) a. Bob almost kicked the wall.
   b. Michael almost loves music.

According to Tenny, (3a) has no core event which corresponds to the state subevent of the complex event structure of an accomplishment. Therefore, what (3a) has is a simple event structure. An event-structure-based analysis would predict that (3a) shows no ambiguity. Tenny contends that in fact (3a) permits two readings as in (4) among others.

(4) a. Bob was getting ready to kick the wall, but abandoned the project.
   b. Bob was starting to kick the wall but failed to connect or reach it.

The same is said to be true in the case of (3b), which is a state and has a simple event structure. Tenny (2000:315) states that the sentence (3b) "might be understood to mean" the following:

(5) a. Michael likes music a lot, but doesn't quite love it.
   b. Michael loves some music, but not enough to constitute loving music.
   c. Michael can't quite bring himself to love music, but with a slight push he might.

For Tenny, the ambiguity of (1b) as given in (2) consists only of two salient meanings among the multiple meanings possible with (1b). Based on these observations, Tenny concludes that it is not ambiguity but vagueness that is responsible for the multiple interpretations found in (1b), (3a), and (3b).¹ If Tenny's argument is correct, it would demand reexamination of the possibly widely held view that the interpretation of almost is subject to the event structure of the sentence containing the adverb. Also, Pylkkänen (2000) provides

¹ Ernst (2002:493) gives support to Tenny's idea.
examples which indicate that the traditional event-structure-based analysis\(^2\) fails to deal with. It is the multiple meanings produced by the adverb *almost*, especially the pair of meanings similar to (2), that we are going to be discussing in this paper.

2. The examination of Tenny's observation

In this section, we will take up (3a) and (3b) as representatives of Tenny's examples and try to clarify what effect their multiple meanings have on the traditional event-structure-based ambiguity analysis.

First we deal with (3b). (3b) expresses a state, so the event-structure-based analysis predicts that it is unambiguous. Tenny claims in essence that even (3b) has multiple interpretations and they are a case of vagueness. Vagueness is defined by Chierchia and McConnel-Ginet (1990:30) as "a matter of relative looseness or of the nonspecificity of interpretation." Consider the sentence *Lee kissed Kim*. For example, this sentence does not specify explicitly where Lee kissed Kim, whether on the lips or cheek.

\[6\] Lee kissed Kim.

\[7a\] Lee kissed Kim on the lips.

\[7b\] Lee kissed Kim on the cheek.

(6) is vague and does not specify where the kiss landed.\(^3\)

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\(^2\) We will use the expression "the event-structure-based analysis" or "the event-structure-based theory" as a general term in the following discussion without committing ourselves to a specific theory.

\(^3\) In fact, in terms of the explanation given by Chierchia and McConnel-Ginet (6) does not "mean" either (7a) or (7b). It does not "have" multiple meanings, either. About the verb *kiss*, they say as follows: "Virtually all expressions are general: *kiss* does not specify whether the kiss lands on the lips or cheek, etc., of the one kissed. But...*kiss* would [not] count as having multiple meanings on these grounds (that is, as synonymous...with *kiss on the lips, kiss on the cheek*)." (Chierchia and McConnel-Ginet 1990:33) Therefore, strictly speaking, we cannot say that either (3a) or (3b) "has" the multiple interpretations or meanings given in (4) and (5), respectively, if they are instances of vagueness. However, because Tenny says that as a case of vagueness, a sentence with *almost* offers multiple meanings or it could be understood to mean such and such, we will follow her for discussion's sake and say, for example, that (6) means (7a) and (7b) or it has multiple meanings.
It is possible that the situation described by (6) corresponds to that of either (7a) or (7b) depending on pragmatic context. Comparing (3b) and its interpretations in (5) with (6) and its interpretations in (7), we notice that the former have a characteristic similar to the latter. The interpretations in (5) seem to be just describing various possible specific situations, hinging on pragmatic context, which correspond to a single meaning expressed by (3b), namely the meaning that it is not completely the case that Michael loves music. Therefore, we would like to argue that Tenny is right when she says that the readings in (5) are an instance of vagueness. Thus, they do not conflict with the nonambiguity of (3b). Namely, even those who do not admit ambiguity in a sentence like (3b) are willing to acknowledge that the specific situations described in (5) are parts of the vagueness involved in (3b). So it appears that we do not have to worry about the example (3b) any more and can leave it as it is because it has turned out to have no effect on the event-structure-based analysis.5

Now we turn to (3a).6 To begin with, we look at the aspectual property of the verb *kick*. Rapoport (1993) classifies it as an achievement verb. As we have already said, according to Tenny, the verb does not have a core event, and therefore, it does not have a complex event structure. Consequently, the event-structure-based analysis again predicts the nonambiguity of (3a).

Tenny states that the readings in (4) are only parts of the readings which (3a) may have. The rest of the readings which are supposed to be possible for (3a) probably share the characteristic shown by (5), while it appears that the pair of meanings in (4) which are parallel to (2) have characteristics different from those in (5). It is this kind of pair of meanings that the event-structure-based theory has been concerned with and it is the possibility of these meanings that have a direct effect on the event-structure-based theory. Further, it seems clear that the event-structure-based analysis denies the very existence of the

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4 Green (1989:12) calls vagueness as pragmatic "ambiguity."
5 We believe that what we have said about (3b) (Tenny's (59a)) and its multiple meanings will apply equally to most of Tenny's original examples, namely, (59b-h) on page 314 of her paper.
6 We suppose that what we will say about (3a) will also be applicable to Tenny's example (59j) which involves the verb *hit*. 
reading (4b), permitting only one reading roughly corresponding to (4a). Such an incompatibility has not been found in the case of (3b). Thus, the readings in (4) appear to have a somewhat different status from those in (5). If we choose to accept Tenny's factual observation concerning (3a) as it is as we will for the sake of discussion, it is obvious that (3a) and especially the pair of readings given in (4) do constitute a problem for the event-structure-based theory. We will return to (3a) in Section 7.

In this section we have shown that the two readings in (4) which Tenny claims are offered by (3a) pose a problem for the event-structure-based theory, while those given in (5) are not problematical to it. In the next section, we will add another argument against the event-structure-based theory.

3. Stative causative predicates in Finnish

In this section, we will consider Pylkkänen's (2000) argument about Finnish psych predicates, where she points out that the sentence containing stative psych predicates and the adverb melkein the English counterpart of which is almost, have two readings comparable to (2) and (4). Her argument will turn out to lend support to Tenny's contention that the multiple meanings related to the sentence involving the adverb almost have nothing to do with its event structure.

Pylkkänen, based on Finnish data of psych predicates, investigates the interrelation between causative semantics and aspect or event structure. According to her, in Finnish there are stative causative and non-causative psych predicates. Stative causative psych predicates are of great interest, since they deviate from the standard correspondence between a causative relation and an event type. In general, the causative relation is represented as an accomplishment, but according to Pylkkänen, some psych predicates in Finnish are both stative and causative. The most noteworthy examples of hers concerning the issue under discussion are the following:

8a. Maija melkein inho-a Matti-a.
   Maija-NOM almost findDisgusting-3SG Matti-PAR
   "Maija almost finds Matti disgusting" (The mental state fails to hold)
Matti-NOM almost findDisgusting-CAUS.PAST Maija-PAR
"Matti almost disgusted Maija"
(NOM: Nominative, CAUS: Causative, SG: Singular, PAR: Partitive)

(9) a. Matti almost did something or had some property that would have caused a state of disgust in Maija. (the causing event almost occurred)
   b. Matti did something or had some property that almost caused a state of disgust in Maija. (the mental state almost held)

(8a) is an example of the noncausative psych predicates and (8b) an example of the causative psych predicates. Pylkkänen says that when modified by melkein, (8a) does not show ambiguity, but (8b) does. The ambiguity is shown in (9). Aware of Tenny's argument, she is cautious not to commit herself to the real nature of the readings obtained as (9), though she uses the term ambiguity. She states in her note 5 as follows: "It is, however, controversial whether melkein 'almost' in [(8b)] introduces a true ambiguity or whether it is simply vague with respect to the point of interruption of the causal chain. Tenny (present volume) argues that it has the latter character. Even if this is correct, the contrast between [(8a)] and [(8b)] is still a fact and shows that the meaning of causative is more complex than the meaning of the noncausative. If it wasn't, we would not expect it to have a larger range of interpretations with almost-type adverbs than the noncausatives." (Pylkkänen (2000:431)) Her statement may be somewhat misleading because Tenny in effect seems to regard the complexity of the event structure, or for that matter, the lexical semantic structure of a verb as irrelevant to the multiple meanings offered by the adverb almost. However, Pylkkänen's observations are important, especially when she points out that the complex causal relation is crucial for the appearance of "ambiguity" with the adverb melkein as shown in the contrast between (8a) and (8b), and in the example (8b) with its interpretations (9). The example (8b), just like Tenny's example (3a), also serve to strengthen Tenny's case against the event-structure-based explanation of the "ambiguity." At the same time, we must point out that Pylkkänen's argument conflicts with Tenny's explanation because stative noncausative sentence (8a) is regarded as not having multiple meanings like (9).

To sum up, Pylkkänen makes it clear that the event-structure-based theory of
the interpretation of the adverb *almost* is not defendable. She is suggesting that
certain complexity of the lexical semantic property of a verb may be contributing
to the multiple meanings of the adverb. We believe this line of reasoning is
promising and following her suggestion, we will try to develop an alternative
account of the problem in Section 5. However, before tackling the task, we would
like to present in the next section a factual observation made by Brisson (1994)
on the interpretation of *almost* which, like Pylkkänen's observation about (8a), is
at odds with what Tenny's hypothesis predicts.

4. The *sweep* verbs and *almost*

Brisson (1994) discusses the difference between the *write* verbs and the *sweep*
verbs with regard to their aspectual behavior, where she employs the ambiguity
brought up by the adverb *almost* as a diagnostic of accomplishment. It will be
demonstrated that Brisson's observation is at variance with Tenny's vagueness
hypothesis.

According to Brisson, the two verb groups are similar in that they behave both
as activities and accomplishments. However, they are different in several ways.
The *write* verbs whose members are *knit, bake, paint, drink*, etc., are genuine
accomplishments, whereas the *sweep* verbs, which include *sweep, plow, clean, mow*,
and so on as their members, are essentially activities. Some of the differences
Brisson points out are as follows: First, only the *sweep* verbs allow durative
phrases such as *for ten minutes.*

(10) a. *Mary wrote the letter for ten minutes.*
   b. John swept the floor for ten minutes.

Second, the *sweep* verbs, which appear to pattern as accomplishments in that they
can occur with bounded temporal phrases such as *in ten minutes*, do not imply the
resultant state of the object, as the felicitousness of the discourse (12)
demonstrates.

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7 Of course, the *write* verbs also cooccur with durational adverbs if they take an indefinite plural
noun or an uncountable noun as their object.
(11) John swept the floor in ten minutes.
(12) a. John swept the floor in ten minutes and then took off.
    b. But there's still dirt all over it!

In contrast, the *write* verbs do imply the resultant state as shown by the infelicitousness of (13).

(13) ??Mary wrote the letter in ten minutes, but it didn't get written!

(12) shows clearly that the result of the *sweep* verbs are cancellable. Therefore, Brisson asserts, the result of the *sweep* verbs is "only a pragmatically favored result, not a lexically specified result." (Brisson (1994:94))

Third, the *sweep* verbs do not show the same kind of ambiguity as the *write* verbs when they occur with the adverb *almost*. Note that this point has direct relevance to the present discussion.

(14) John almost swept the floor.
(15) a. John planned to sweep the floor, but he never started.
    b. John was sweeping the floor and nearly finished.

Brisson (1994:95) states that only a few informants accepted the ambiguity and furthermore, the reading (15b) was regarded as "marginal and dispreferred and also clearly less salient." She takes this as a support for assuming the *sweep* verbs to be activities. The statement to the same effect can be found in Rappaport Hovav and Levin (1998:119): "[(14)] can only mean that [John] was going to begin the activity, but it cannot mean that he began the activity but did not carry it out to completion."

Based on the evidence presented above and the further evidence which we have not mentioned here, Brisson concludes that the *write* verbs are true

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8 That the *sweep* verbs do not specify the result of the action they denote is also made clear by Levin and Rappaport Hovav (1991), where *Wipe* verbs are discussed and they contain most of the members of the *sweep* verbs.
accomplishments and the *sweep* verbs are activities with their apparent accomplishment-like behavior attributed to a pragmatic factor.

What Brisson (1993) and Rappaport Hovav and Levin (1998) say about the interpretation of the *sweep* verbs with the adverb *almost* disagrees with what Tenny predicts, because her hypothesis would allow the two readings of (15) to be equally associated with (14). On the other hand, this is in harmony with the event-structure-based theory. The event described by *John swept the floor* is an activity and its event structure is simple and therefore the adverb *almost* has only one scope, leading to the interpretation (15a).

This section has shown that there are some gaps between what Tenny's theory presages and what the event-structure-based analysis does. Recall that the same holds true of the example (8a) in section 3. Although it is true that Tenny's explanation cannot handle these gaps, it must be noted that it will not be a problem for Tenny, since for her the adverb *almost* "seems to quantify freely over almost anything." (Tenny (2000:315)) That is, (14) as well as (8a) can have multiple meanings in the same way as (1b). In this way, it is almost impossible to refute Tenny's idea because it allows many possible readings which are not envisaged by the event-structure-based theory, or in fact, it may be pointless to try to do so. Hereafter, we will keep our distance from Tenny and view the matter in accord with more restrictive speakers such as Brisson and Pylkkänen. What we are left to do now is to propose an alternative structure-based analysis of multiple meanings such as (2) and (9) as we foretold in Section 3, and inspect the effectiveness of this proposal in explaining the cases mentioned thus far. We will turn to this task in the next section.

5. A proposal and its effectiveness

If we pay attention to Pylkkänen's observation about the relation between the possibility of multiple meanings and the (non-)causativity of the Finnish stative psych verbs, one plausible proposal will emerge as a first approximation. Based on Pylkkänen's suggestion that the meanings found in (9) are related with the complex causative meaning of the relevant verbs, we would like to maintain that
it is a verb's lexical semantic representation of some sort\(^9\) that interacts with the adverb *almost* and sometimes yields multiple meanings. More specifically, if this lexical semantic representation has a CAUSE predicate, then it is complex, with the complexity consisting of the causing part and the caused part of a verb's semantics and *almost* affects its subparts, resulting in multiple interpretations. This is our proposal. In the following, let us examine how it can deal with the cases other than (8) mentioned so far.

In the case of (1b), as an accomplishment entails a causative relation,\(^{10}\) its verb has a CAUSE predicate in its semantic representation and as a result (1b) will yield the two meanings in (2).

Now we turn to the *sweep* verbs. As for the *sweep* verbs, Jackendoff (1990:110) represents their conceptual structure as follows:

\[
\text{(16) } \left[ \text{Event GOc } \left[ \_ i, \left[ \text{PATH VIAc } \left[ \text{Place ATc } \left[ \_ ] \right] \right] \right] \right] \right.
\]
\[
\left( \text{GOc: GO+contact, VIAc: VIA+contact, ATc: AT+contact} \right)
\]

For Jackendoff, the *sweep* verbs or *Wipe* verbs belong to the class of contact verbs and they are the verbs of moving contact. Rappaport Hovav and Levin (1998:114) gives the verb *sweep* the following event structure:

\[
\text{(17) } \left[ x \text{ ACT}<\text{Sweep}> \_ y \right]
\]

It is clear from (16) and (17) that these verbs are not regarded as having a causative meaning. Consequently, our proposal enables us to explain the absence of multiple meanings in the *sweep* verbs.

Lastly, we must show how the two readings of (3a) given in (4) will be addressed in our proposal. However, before doing that, we need to introduce the lexical semantic analysis of the verb *kick* by Jackendoff (1990), which will be

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\(^9\) Although we will not make our stand clear as to the exact nature of this semantic representation, it may be taken as equivalent to the so-called conceptual structure.

\(^{10}\) See Alsina (1999) for such a view. It must be noted here that causative relation does not necessarily entail a complex event structure, as Pylkkänen (2000) argues convincingly.
found to be useful for our proposal. The next section will be devoted to these matters.

6. Exploitation of Jackendoff's lexical analysis of the verb *kick*

With respect to the verb *kick*, there are various analyses of its lexical semantic property. Among them are Tenny (2000) and Rapoport (1993), which we have already referred to. They are mainly concerned with the aspectual property of the verb. Here we will take up Jackendoff's (1990) lexical semantic analysis of the verb.

Jackendoff gives the following semantic representation, his conceptual structure, to the verb *kick* when it takes the agent subject.

\[ \text{(18) Sue kicked Fred.} \]

\[
\text{CS}^+ \left[ \left[ \text{SUE}, \text{INCH} \left[ \text{BE}_c \left[ \text{SUE'S FOOT}, \text{AT}_c \left[ \text{FRED} \right] \right] \right] \right] \right]^{11} \\
\text{Event AFF}^- \left[ \left[ \text{SUE}, \text{FRED} \right] \right]
\]

\text{(CS$^+$: Causation with a successful outcome, INCH: Inchoative, BE$_c$: BE+contact, AT$_c$: AT+contact, AFF$: negatively affected)}

The representation (18) means roughly that Sue caused her foot to come to Fred and Fred is adversely affected. For Jackendoff, the impact verb *kick* has a patient object and it entails a resultant state. Patienthood of the object is attributed to the well-formedness of the following formula.

\[ \text{(19) What Sue did to Fred was kick him.} \]

The upper part of the conceptual structure of (18) expresses a causative relation and has a CAUSE predicate (CS) in its representation. This is what is significant about Jackendoff's conceptual structure of the verb *kick*.

Here, we somewhat digress from the main topic and points out a problem with Jackendoff's conceptual structure given to the verb *kick*. Though the problem may be real, it will be shown that it has no influence on our argumentation.

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11 The original representation is for the verb *hit*. Here it is appropriately modified.
What is at issue is the status of formula (19), which is considered as a diagnostic of patienthood. Rappaport Hovav and Levin (2001) argue that the verb which appears in the frame *What X did to Y was V...* is not necessarily a change of state verb. Rather, it involves a transmission of force. Accordingly, the Y in the frame *What X did to Y was V...* does not denote a patient, but a force recipient. It is obvious that their argument will deprive the status of a test for patienthood from the formula (19) and thereby Jackendoff's conceptual structure for the verb *kick* will be in need of a slight modification. However, the part to be modified will be the Action tier only, because the concept of patienthood is represented there. It is important for our discussion that the causal relation of the Thematic tier is not affected by Hovav and Levin's refutation and it can be left untouched.

Now, to return to our subject, let us consider (3a) in terms of Jackendoff's lexical conceptual structure for the verb *kick*. As the reader may already have realized, our proposal can predict the existence of the multiple meanings of (3a) given in (4) because of the CAUSE predicate in the verb's conceptual structure.\(^{12}\)

7. Summary

We have discussed the problem of deciding the source of the multiple interpretations associated with the sentence containing the adverb *almost*,

\(^{12}\) According to our informant, all the sentences in (i) have the multiple meanings parallel to (2) and (4). He also accept the readings in (4) of (3a).

(i)a. John almost swept the floor.
   b. Mary almost pushed the cart.
   c. Bill almost sawed the log.
   d. The doctor almost depressed John.

For example, (ib) can mean that *Mary was ready to push the cart, but she didn't do so* and that *Mary started to push the cart, but it never moved*. This informant seems to be as generous as Tenny as far as a pair of meanings like (2) and (4) are concerned.

Incidentally, it appears that (ib) (see the analysis of *push* by Jackendoff (1990:133)), (ic) (*saw*=cut with a saw (*Cambridge Dictionary of American English*)), and (id) (*depress*=cause (a person) to feel unhappy and without hope (*ibid.*)) contain a causative relation in their meaning. (Note the similarity between (id) and Pyllkännen's (8b).) Although we know that we cannot always utilize dictionary definitions as they are for linguistic analysis (see, for example, the analysis of the verb *saw* by Hovav Rappaport and Levin (1998:109)), it might be the case that their causative meaning has some relation with the multiple meanings accepted by the informant.
especially that of the pair of meanings which are parallel to (2). Through our discussion, it has become clear that the event-structure-based analysis is inadequate if we assume the factual observations made by Tenny and Pylkkänen. As an alternative, based on Pylkkänen's idea, we have advanced the proposal that the origin of the multiple interpretations of (1b) and (8b), those given in (2) and (9) respectively, resides in a certain form of lexical semantic representation. Specifically, the verb with the semantic representation which includes the predicate CAUSE yields the multiple readings when it occurs with *almost*. It has been shown that our proposal allows us to account for the multiple interpretations not expected by the event-structure-based analysis, and it also makes it possible to explain the lack of multiple meanings in the cases of the *sweep* verbs and (8a).

If we are asked about the status of the multiple readings in (2), (4) and (9), we will answer that they are instances of ambiguity in so far as they originate from the interaction between the structural aspect of a verb's lexical meaning and *almost*, just like the ambiguity presumed to arise from the interaction between the event structure and the adverb.

Before ending our discussion, we must admit that our proposal is based only on a handful of data. The paucity of the relevant data makes it far from convincing. It may easily be dismissed. Further, although we have taken for granted the factual observations made by Tenny and Pylkkänen, we are not certain whether they are generally accepted or not. We need more extensive factual observation. Yet we hope that our proposal will provide some hint for further investigation of the problem.
References


