

Further Remarks on Adverbial Complement Clauses*

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Abstract

This article reconsiders the structure of adverbial subordinate *as if* clauses, and argues that they should be classed into three distinct groups on the basis of syntactic differences. It also recognizes the gradient nature of the complement-adjunct distinction, and argues that “adverbial complement” *as if* clauses are constructions that fall in the borderline area between complement and adjunct. English *as if* clauses are considered to have different degrees of subordination to the main clause. The categorial status of subordinating conjunctions as *if*, *as though*, and *like* is also examined, and diachronic evidence for the Preposition analysis is added to the discussion in Inoue (2002a).

0. Introduction

Clauses headed by *as if*, *as though*, or *like* are considered to function prototypically as adverbial adjuncts, which qualify the content of the host clause by adding information about how an event took place (predication adjunct proper).¹ Since these *as if* clauses function as modifiers, they are relatively unselective and appear with a variety of verbs, as shown below:

- 1) a. If you talk too loud, she **turns** away as **if** you were not anyone she wants to listen to. (TB: 77) ²
- b. They **withdraw** from any human contact **as if** it were painful. (TB: 286)
- c. Mitch **nodded as if** he believed this tale. (JG: 24)
- d. She **spoke as though** her heart were fluttering. (GO: 89)
- e. He **paused as though** he expected Winston to speak. (GO: 220)
- f. When a baby is first born, he often **cries as if** he is in distress. (MM: 217)
- g. Horowitz **plays** it as **if** Mozart wrote it for him. (AR: 170)

On the other hand, it has been noticed that *as if* clauses function as complements when they are introduced by a certain limited set of verbs:

- 2) a. It **appears** now **as though** Jesse Jackson will be part of the American political scene for years to come and we might as well get his title right. (AR: 126)
- b. It **seems as though** light with a lot of blue—light from a clear sky outside a northern window—should look brighter to a newborn and a young baby than it looks to an adult. (MM: 124)
- c. It certainly **looks as though** when an expectant mother gets drunk, the baby she is carrying gets drunk too. (MM: 22)
- d. He **sounded as though** he were making sense but you realized that, like those double-talk night club comedians, it was an illusion of sense. (AR: 110)

- e. He **acts as though** he were disconcerted, like an adult talking through the delayed sounds of a transatlantic telephone call. (MM: 152)
- f. They will not have heard Thomas Mann's counsel—if they ever found the time to read it—that they must **behave as though** the world was created for human beings. (JL: 266)

Previous studies have largely focused on the complement use (i.e. *as if* clauses introduced by perception verbs, as shown in (2a) to (2d), and have explored the thematic relation between the subject of a matrix verb and the (coreferenced) subject of the subordinate clause. This article examines the complement-adjunct distinction again, and points out that examples such as (2d) to (2f) show the need for an approach that allows for the gradient nature of the distinction. In this regard, the present study aims to propose that *as if* sentences differ in the degree of independence from the main clause. Another point to be made is concerned with the syntactic categories of subordinating conjunctions *as if*, *as though*, and *like*. This has been the debate about whether adverbial subordinators are prepositions or complementizers. Since some adverbial subordinate clauses signaled by these subordinators exhibit complementhood, it is evident that *as if*, *as though*, and *like* function as complementizers in certain limited environments. In the current literature, these subordinators, like temporal prepositions (i.e. *after*, *before*, *while*), are hypothesized to have undergone the category change from prepositions to complementizers before the 17th century. This article nevertheless presents diachronic evidence indicating that the subordinating conjunctions are prepositions, and argues that these adverbial

subordinators are subsumed under the category of Preposition.

1. Layers of *as if* clauses

This section demonstrates that it is necessary to distinguish at least three groups of *as if* clauses and that each group belongs to a different layer from the X-bar theoretical point of view. Furthermore, it is shown that syntactic analyses proposed so far fail to capture a subset of *as if* clauses whose syntactic behavior overlaps between complement clauses and adjunct clauses. Finally, I will consider the issue on the degree of subordination between *as if* clauses and the content of the main clause.

1. 1. Types of *as if* clauses

In comparison with other English adverbial clauses, subordinate clauses marked by *as if*, *as though*, or *like* have hitherto received little attention in the current literature. Not surprisingly, most of the previous researches on *as if* clauses, dealing only with the complement use, have been conducted on a rigid theoretical basis rather than on a descriptive basis. For this reason, I think it extremely important to cover a wide range of empirical data to explain why adverbial subordinate *as if* clauses are as they are.

As they are usually called adverbial subordinate clauses, *as if* clauses are most typically realized as adverbial adjuncts. Among the studies that correctly point out the adjunct use and/or explicitly discuss the syntactic behavior are Inada (1984), Bender and Flickinger (1999), and Inoue (2002a). Let us first observe the following examples:

- 3) a. He shook his head in disgust as if he couldn't believe
greedy lawyers actually lived and breathed in this city.
(JG: 143)
- b. As he approached he was struck by her listless attitude:
she sat there as if she had nothing else to do. (EW: 230)
- c. His eyes are moving as if he were blind. (MM: 107)

In order to examine whether an *as if* clause in question serves as adjunct or complement, I shall make use of some standard diagnostic clues.

First of all, if an *as if* clause is semantically selected by a verb, it has to fill one particular argument position (complement proper). An adjunct, on the other hand, selects what it will modify. Accordingly, the position in which it can appear in a sentence is less restricted. As a matter of fact, the *as if* clauses in (3) can be preposed to the top of the sentence. This is indicated below.

- 4) a. As if he couldn't believe greedy lawyers actually lived
and breathed in this city, he shook his head in disgust.
- b. As if she had nothing else to do, she sat there.
- c. As if he were blind, his eyes are moving.

It should be added here that adverbial adjunct *as if* clauses can occur with a variety of matrix predicates, since such *as if* clauses are not selected by the predicates. It is difficult, though not impossible, to find a natural class of predicates in the host clause, as shown in (1) and (3).

The second piece of evidence of adjuncthood involves

obligatoriness. While the complement is obligatory, the adjunct is optional. That is, the sentence stands on its own even if the adverbial adjunct *as if* clause is omitted:

- 5) a. He shook his head in disgust.
- b. She sat there.
- c. His eyes are moving.

Next, for complements, the head fixes the number of arguments it takes, whereas for adjuncts, the head does not specify the maximum number. Look at the following sentence:

- 6) But it seems to me Chomsky is now still defending his position as if it were threatened when in fact it is overwhelmingly accepted. (HG: 141)

In this example, the head (*seem*) determines the maximum number and the minimum number of complements, and thus it takes only one complement, namely, (*that*) *Chomsky is now still defending his position*. The *as if* clause followed by the complement clause functions as a modifier. The next example, in which one *as if* clause occurs after another, indicates that there is no maximum number for adjuncts.

- 7) The hallway scuttlebutt about him, at least in some hallways, is that “he’s not even doing linguistics any more,” as if linguistics was the only way to look at language or for that matter, as if there was only one way to do linguistics. (RH: 246)

The fourth distinction between complements and adjuncts is concerned with the possibility of extraction. If *as if* clauses function as adjuncts, a constituent cannot be extracted from inside the clauses. In other words, adverbial adjunct *as if* clauses show island effect, as shown in the b sentences below.

- 8) a. '... But you speak as if you were really planning something! ...' (IM: 127)
b. *What_i do you speak as if you were really planning t_i ?
- 9) a. She stopped talking as though she had said all she had to say. (MD: 161)
b. *What_i did she stop talking as though she had said t_i ?

One last comment about adjuncthood involves a missing subject in *as if* clauses. As is often the case with adverbial clauses, the embedded subject sometimes does not appear in the surface structure when it is construed as coreferential with some NPs in the matrix clause.

- 10) a. He smiled as if awarding me a prize. (DL2: 12)
b. Mitch frowned intelligently as if making a mental note of this helpful advice. (JG: 299)
c. Clad always in white, studded and gauded[*sic*] with flashing jewels and metals, he gleamed as if lit from within by some preternatural radiance. (AG: 3)

With respect to missing subjects in adverbial clauses, a cautionary remark is in order: Strictly speaking, whether or not a missing

subject is permitted cannot be a diagnostic for the distinction between adjuncts and complements, since a complement CP *does* permit an omission of the embedded subject, too. It should be noted, however, that finite adverbial clauses can take a wide range of elliptical forms by deleting the embedded subject (and auxiliary):

11) a. *as if to*-infinitive

He shook his head **as if to clear** it of such nonsense, and picked up the receiver. (DL1: 112)

b. *as if*-(present) participial

Some of them looked accusingly at Bernard and his father **as if suspecting** them of being responsible. (DL: 17)

c. *as if*-(past) participial

And **as though awakened** by her cry he caught her by the shoulders and shook her. (AH: 198)

d. *as if*-AP

A new mother will clutch her baby tightly, **as if afraid** to trip or drop her precious bundle. (TB: 53)

e. *as if*-PP

With a human face, his mouth and his own upper face will wrinkle and move slowly, **as if in imitation**. (TB: 32)

f. *as if*-ADV

He knew it **as though instinctively** that they now took almost no interest in this doings. (GO: 239)

Along with the non-restrictive use, free structural positions and occurrence in comparative *as ... as if/though* constructions, a variety of elliptical forms indicate that an *as if* clause serves as a typical

adverbial adjunct clause. These properties are never observed in complement *that* clauses that introduce nominal clauses. It is thus concluded that the above five pieces of evidence lend support for the claim that *as if* clauses function as adverbial adjuncts.

I will now turn to evidence indicating that some *as if* clauses serve as complements. Let us consider the following examples:

- 12) a. It sounds to me as if we're not really your cup of tea.
(DLE: 185)
- b. "... Most generative semantic invocations of globality were hand-waving affairs: "here are some phenomena, and it looks like we're going to need a global rules to handle them;" (RH: 183)
- c. So I arranged a meeting between hospital executives and the advisers, and it kind of fell apart for two reasons. One was that the private practitioners were afraid of it, probably because it looked as though it was going to be too successful. (JL: 161)

Unlike adjunct *as if* clauses, complement *as if* clauses are selected by the head, and complements are supposed to appear in the argument position. Put differently, *as if* clauses cannot be transposed to the positions in which adverbial modifiers appear (e.g. the sentence initial position):

- 13) a. *As if we're not really your cup of tea, it sounds to me.
- b. *Like we're going to need a global rule to handle them, it looks.

- c. *As though it was going to be too successful, it looked.

The ungrammaticality in (13) indicates that these *as if* clauses are tightly integrated to their matrix verb. The strictly subcategorized elements are unlikely to be placed at the beginning of the sentence. It is also clear that if the *as if* clauses are dropped, the remaining sentence cannot stand on its own:

- 14) a. *It sounds to me.
b. *It looks.
c. *It looked.

As noted above, complements are obligatory. Further remarks on the complementhood involves predicates. The class of verbs that can take *as if* clauses as complements is a closed one with a very limited set of members: perception verbs (e.g. *seem*, *appear*, *look*, *sound*) and verbs that must take an adverb obligatorily and take a predicative complement predicated of their subject (e.g. *act*, *behave*, *treat*).

Another useful test for the complement-adjunct distinction is extraction. As mentioned above, the extraction of an element from an *as if* clause is generally permitted if it functions as a complement.

- 15) a. It seems as if Pat is defending his position again.
b. What_i does it seem as if Pat is defending *t_i* again?

The following examples I collected also lend support for our claim that an element can be extracted from inside an *as if* complement

clause.

- 16) I mean that's another kind of specification_i that it sounds like our language is suggesting you're going to need to do *t_i*, because otherwise it's too big. (*CSPAЕ: COMM797*)³
- 17) a. This is the notebook_i it seems like you lost *t_i*.
 b. This is the notebook_i it seems as if you lost *t_i*.
 (Browning 1996: 238)

Finally, it should be noted that missing subjects are not permitted in subcategorized *as if* complement clauses, simply because they lack a coreferential subject.

1. 2. Non-restrictive *as if* clauses

Up until now we have re-confirmed a general observation that there are two kinds of *as if* clauses: One is *as if* adjunct clauses, the other being *as if* complement clauses. Our first approximation for grasping the observation is as follows. When the verb in the main clause is dynamic, *as if* clauses function as adjunct. On the other hand, they tend to function as complement when the matrix verb is stative. In particular, *as if* clauses introduced by perception verbs (e.g. *seem, look, sound*) serve as complement clauses. The correlation between the matrix verbs and *as if* clauses may be summarized in the following manner:

18)

function	adjunct	←————→	complement
verb type	dynamic verbs	←————→	stative verbs

The table in (18) points to an aspect of the characteristics of *as if* clauses. However, I find (18) inaccurate because some *as if* clauses serve as optional predication adjuncts if matrix verbs are typical stative verbs such as *be* and *know*.

- 19) a. He **knew** it as though instinctively that they now took almost no interest in this doing. (=11f)
b. I tried to say something but my mouth **was** completely dry as if it had been suddenly sandblasted. (RB: 117)
c. He just **lies** there as if she had never touched him.
(AG: 50)
d. Hopalong **looked** tired as if he had spent the previous night chasing starlets all over Hollywood and barely had enough strength to get back in the saddle. (RB: 23)

It is safe to say that, as Quirk et al. (1985) state, *as if* clauses of comparison express a manner meaning when the verb is dynamic. To put it another way, similarity is taken to be combined with manner when the matrix verb is used dynamically. However, looking into the type of a matrix verb (namely, dynamic or stative) is not sufficient enough to tell whether an *as if* clause functions as adjunct or not.

Furthermore, simply to point out the adjunct-complement dichotomy is insufficient to capture the syntactic nature of *as if* clauses. Once we take a closer look at a wide variety of *as if* clauses, we realize that there are other types of *as if* adjunct clauses, one of which is “non-restrictive” *as if* clauses. The non-restrictive *as if* clauses are usually set off by a comma intonation:

- 20) a. His parents' voices sound weaker, and thinner, as though he were hearing them through a telephone. (MM: 145)
- b. He adjusted the reading light above them, as if he was indeed a real passenger on a real journey. (JG: 280)
- c. She stood before him very upright, with a smile on her face that looked faintly ironical, as though she were wondering why he was so slow to act. (GO: 100)

These *as if* clauses and the host clauses form two distinct tone groups. They cannot be the focus of a cleft sentence. Clefting of *as if* clauses is allowed only in the restrictive counterparts. Furthermore, non-restrictive *as if* clauses are sentence adjuncts that are not dependent on the assertion expressed in a matrix clause, and they may be placed not only at sentence final position as presented in (20) but also at sentence initial or medial position as in (21). In other words, they are syntactically more mobile than predication adjunct *as if* clauses and semantically provide additional information to main clauses.

- 21) a. As if all this were not enough, he also renovated the dilapidated animal shelter and established the city's first cemetery. (AG: 145)
- b. Suddenly, as though he were listening to somebody else, Winston heard himself demanding in a loud booming voice that he should be given the whole piece. (GO: 134)
- c. And the thing I remember, as though he's talking to me right now, is this guy saying, 'That stuff right there destroys dreams.' (RT: 278)

As if clauses as predication adjuncts restrict the situation in the matrix VP to the circumstances described by the *as if* clauses. Therefore, they are in the domain of the scope of negation. As a result, they may not be preposed to the sentence initial position.

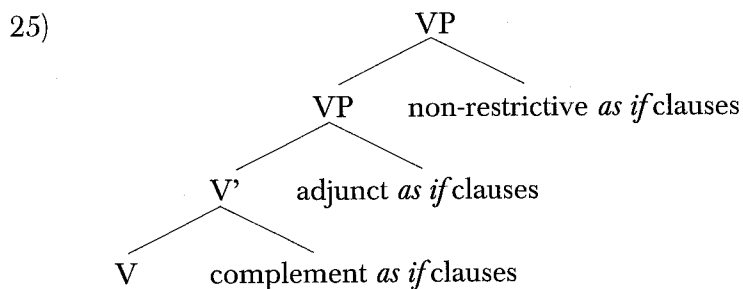
- 22) a. "It doesn't [_{VP} sound as if you two get along too well],"
Yolande said. (DL: 224)
b. *As if you two get along too well, it doesn't sound.⁴
(where the intended meaning is the same as (22a))
- 23) a. But he didn't [_{VP} look at me as though he wanted to kill
me]. (EH: 201)
b. *As though he wanted to kill me, he didn't look at me.
(where the intended meaning is the same as (22b))

Here let us consider (23a). This example means that "he looked at me, not as though he wanted to kill me." In other words, it shows that when a main clause is negated, the entire VP modified by an *as if* clause is also negated. On the contrary, as the next example suggests, the non-restrictive *as though* clause is outside of the scope of negation.

- 24) He didn't [_{VP} talk to me], as though he had a grudge against me.

(24) implies that 'he didn't talk to me, and the way in which he didn't suggests that he had a grudge against me.' In other words, the negation is not focused in the appended *as though* clause. It follows from this 'scope' reason that non-restrictive *as if* clauses are

independent of the host clause. They are thus considered to be attached to a higher layer than the *as if* clauses in (12), that is “restrictive” adverbial *as if* clauses. Together with the complement use as shown in (15), (16), and (17), we now realize that *as if* clauses belong to three different layers.



1. 3. Adverbial complement clauses

In this section I introduce a term “adverbial complement” clauses to capture some cases where an *as if* clause does not hold a clear-cut distinction between adjunct and complement. To be specific, I will examine two cases in detail: One is cases in which *as if* clauses are subcategorized for by certain matrix predicates but behave like manner adjuncts, the other being *seem as if* clauses with a matrix referential NP subject.

1. 3. 1. *treat as if, behave as if*

In the preceding section, we have seen a general tendency in (18): An *as if* clause functions as complement when it is introduced by stative verbs like *seem* and *look*. In contrast, an *as if* clause serves as adjunct when a matrix verb is used dynamically. There are non-

stative verbs that subcategorize *as if* clauses as their complement (e.g. *treat, behave, act, regard*):⁵

26) behave as if

- a. They will not have heard Thomas Mann's counsel—if they ever found the time to read it—that they must **behave as though** the world was created for human beings. (JL: 266)
- b. In some respects, "Raised" subjects **behave as if** they are matrix direct objects, and in others they **behave as if** they are still embedded subjects and there is enough conflicting evidence to give encouragement on both sides. (HG: 76)

27) act as if

- a. Long before World War II started, the German people were called upon to **act as if** a war were already in progress. (SIH: 118)
- d. You know darn well she hates you but she tries to **act as if** she's helping. (AR: 65)

28) treat as if

- a. Her tendency will be either to **treat them as if** they were babies who were the same age, or to press the slightly older Toddler to grow up too quickly. (TB: 392)
- b. But then, you're **treating it as if** it were a single discussion. (CSPAЕ, COMR6B97)⁶

Notice that in (28b) the verb is in the progressive form and it shows non-stativity. The *as if* clauses introduced by these verbs must be

complement clauses since they take part in the subcategorization of the verbs. In fact, the sentences become incomplete without the *as if* clauses.

- 29) a. *They must behave.
b. *She tries to act.
c. *You're treating it. (with the same sense of *treat* as in (28))

And the *as if* clauses cannot be preposed to the top of the sentence with comma intonation.

- 30) a. *As though the world was created for human beings,
they must behave.
b. *As if she's helping, she tries to act.
c. *As if it were a single discussion, you're treating it.

The tests of omission and fronting indicate that these *as if* clauses are subcategorized by the verbs and stay in the smallest V'. And this syntactic behavior looks exactly the same as *as if* clauses followed by perception verbs. However, the *as if* clauses also show some aspects of adjuncts. As shown below, *as if* clauses introduced by the verbs such as *treat* and *behave* show the island effect.

- 31) a. She behaves as if she owns the place.
b. *What_i does she behave as if she owns *t_i* ?
- 32) a. Chris is behaving as if he owns a huge house.
b. ??What_i is Chris behaving as he owns *t_i* ?
c. ??Which house_i is Chris behaving as if he owns *t_i* ?

- 33) a. Chris behaves as if owned a huge house.
b. ?What_i does Chris behave as if he owned t_i ?
c. ?Which house_i does Chris behave as if he owned t_i ?

It should be noted that the test of extraction deserves careful examination. It is believed that extraction of an element from a complement clause is possible, but the extraction from an *as if* clause makes the sentence in question very awkward, as illustrated in (31). I then made the original sentence more natural, as in (32a) and (33a), and I consulted my informants again. The acceptability then increased, as shown in (32b)-(32c) and (33b)-(33c), but it is important to recognize that the sentences still sound somewhat marginal. I further made the following (a) sentence, just to make sure if argument extraction from *as if* clauses is possible, and consulted my informants with (b) sentence. I found (34b) completely acceptable.

- 34) a. Chris acted as if she didn't know Pat.
b. Who_i did Chris act as if she didn't know t_i ?

Presumably, the acceptability may vary according to the logical relationship between what is described in the *as if* clause and the meaning of the matrix verb.

In sum, the *as if* clauses taking part in the subcategorization of verbs like *behave*, *act*, and *treat* should be complement clauses by definition, but they behave like adjunct clauses. In other words, it looks as if they belong to two different layers at the same time. Henceforth, I refer to such *as if* clauses as “adverbial complement”

as if clauses.⁷

Concerning the ambiguity between complement and adjunct, it is worth mentioning the following example:

35) She behaved as though she expected to get a cookie.

According to Bender and Flickinger (1999: 8), this sentence is ambiguous in two ways. On the first reading, it could mean 'she behaved well, as she would if she thought she would get a cookie by doing so.' On another reading, it could mean 'her behavior was such that one observing her would think she expected to get a cookie.' The former is the modifier reading and the latter the complement reading. If the *as if* clause is moved to the top of the sentence, the complement reading disappears and only the modifier (adjunct) reading remains:

36) As though she expected to get a cookie, she behaved.

This suggests that *as if/though* clause can be topicalized if the entire sentence conveys the adjunct reading. They also check a *behave as if* sentence with only the complement reading, stating that the topicalized complement *as if* clause makes the sentence infelicitous:

- 37) a. He behaved as if he'd never been taught any manners.
b. #As if he'd never been taught any manners, he behaved.

1. 3. 2. *Seem as if* clauses with a non-expletive subject

There is another construction which could be classified into the

adverbial complement *as if* clauses, that is a (referring) NP *seem as if* clauses with a coreferential pronoun in the lower clause.⁸ The *seem as if* sentence with a non-expletive subject must be a predicative complement because the sentence becomes ungrammatical if *as if* clause is dropped.

- 38) a. Most of the food_i looked as if it_i was cooked in microwaves rather than the fire pit, and was not noticeably exotic in character, but you could eat as much as you liked. (DL1: 110)
- b. She_i seemed as if she_i might try admonitions or advice, but went out, switching off the light. (DL: 55)
- 39) a. *Most of the food looked.
- b. *She seemed.

Nor can we topicalize the *as if* clauses:

- 40) a. *As if it_i was cooked in microwaves rather than the fire pit, most of the food_i looked.
- b. *As if she_i might try admonitions or advice, she_i seemed.

However, *seem as if* sentences containing a referring NP subject differ from the *seem as if* sentences with an expletive subject. First, as mentioned earlier, an element can be extracted from *it seems as if* sentences. By contrast, the extraction of a constituent out of a (non-expletive) *NP seems as if* sentence is generally blocked, as shown in (41c)

- 41) a. What_i does it seem that he owns *t_i* ?

- b. What_i does it seem as if he owns t_i ?⁹
- c. *What_i does he seem as if he owns t_i ? (Kumagai 1985: 174)

To put it another way, we can say that the *seem as if* clauses with a non-expletive subject behave like adjunct clauses.

Thus, the above evidence indicates that the *seem as if* clauses with a referring NP subject may function as adjuncts. For this matter, Inada (1984: 35) gives the following two intriguing examples:

- 42) a. ... the things she said were nothing to the things_i she
looked as if she was going to say t_i
- b. Who_i did he sound like he was talking to t_i ?

(42a) is originally cited from Jespersen (*MEG IV*: 138). In both sentences, the argument extraction is permitted, although (42a) is taken to be very awkward by most of my informants. (42b) is acceptable, but the judgment deteriorates if *like* is replaced by *as if* or *as though*. If the sentences in (42) are acceptable, the subordinate clauses are considered to be complement clauses.

As mentioned above, it is a general observation that the deletion of the embedded subject is disallowed when *as if* clauses function as complement.

- 43) a. *John seemed as if [_{PP} from some strange country].
 - b. *The music sounded like [_{IP} to make me mad].
- (Inada 1984: 34)

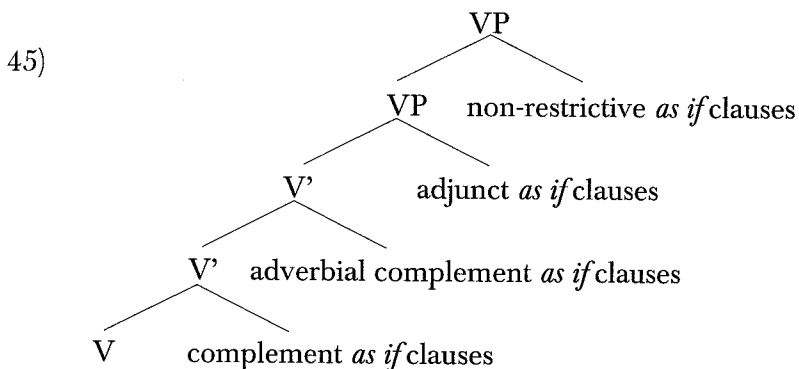
On closer inspection, however, missing subjects are not always

prohibited in the *seem as if* clauses containing a non-expletive subject. Consider the following examples:

- 44) a. He was as though [_{VP}suddenly and joyfully awakened from a dark annihilating stupor]. (AH: 59)
 b. Then there was a fine old cheese, in which you could almost discern the mites; and some sardines, on a small plate, very richly done, and looking as if [_{AP}oozy with the oil in which they had been smothered]. (NH: 176)

It follows that only limited set of reduced forms (VP, AP, *PP, *IP) are possible in the *as if* clauses after perception verbs (and the verb *be*). Presumably, both (43) and (44) show the indeterminate status of *as if* clauses.

The discussion above shows that, unlike the *seem as if* clauses containing expletive *it* in the matrix subject position, the *seem as if* clauses containing a non-expletive NP subject may preserve the double status. I am thus led to assume another layer to adverbial complement *as if* clauses.



The question of how adverbial complement *as if* clauses can be represented in sentence structures deserves careful examination. It is important to recognize that adverbial complement *as if* clauses have unique characteristics regardless of whether or not they belong to a different layer from the *as if* clauses taking part in the subcategorization of verbs and *as if* clauses of manner adjunct.

The point I have made in this section is that there are three (possibly, four) layers of *as if* clauses, depending upon how tightly *as if* clauses are syntactically and semantically integrated to the main clauses. I presented that the syntactic nature of *as if* clauses was not fully investigated in previous studies, and argued that there are certain groups of *as if* clauses whose syntactic behavior stretches over complement and adjunct clauses. Hence, the correlation between *as if* clauses and the matrix verbs shown in (18) is reformulated in the following manner:

46)

(sentence/predication) adjunct	↔	adverbial complement	↔	complement
with a variety of verbs	↔	<i>act, behave, treat, etc.</i>	and	perception verbs

1. 3. 3. Degrees of subordination

The preceding section has been devoted to discuss that there are different groups of *as if* clauses and that there are borderline constructions which are partially complement-like and partially adjunct-like. This section is an attempt to answer the question of why each *as if* clause behaves differently in syntax. I shall argue that *as if* clauses, like other adverbial subordinate clauses, have different degrees of subordination to the main clauses.

Let us take as a starting point the complement-adjunct distinction.

It is commonly accepted that “adjuncts” refer to optional elements in a sentence without affecting grammaticality of the rest of the sentence, while “complements” refer to obligatory elements of a given verb to complete its meaning.¹⁰ The distinction may also be captured by saying that complements (e.g. objects of verbs and prepositions) are regarded as receiving a thematic role from the verb or the element they are selected by, whereas adjuncts do not (seem to) enter into selectional restrictions. I thus understand that the binary distinction between them is based on whether an element is obligatory or optional and whether it is subcategorized or not. It is sure that the binary distinction marks off the syntactic behavior of complements and adjuncts, particularly when we contrast the opposite end-points of complements (e.g. objects of verbs) and adjuncts (e.g. adverbials of reason). As shown in the previous section, however, there are marginal points between two categories in a structural continuum. *As if* clauses serving as adverbial complements are one of the examples. In what follows, by using the *wh*-extraction test I examine how tightly adverbial subordinate clauses are related to, or affected by, the main clauses.

Extraction of a constituent from inside adjunct clauses is generally prohibited since adjuncts are considered to be islands together with complex noun phrases. In fact, a number of adjuncts exhibit islandhood for movement.

- 47) a. *Which_i newspaper did John disappear without reading t_i ?
b. *Who_i did you leave without buying pictures of t_i ?
c. *Who_i did they leave before speaking to t_i ?
d. *Who_i did John come back before I had a chance to talk to t_i ?

Not surprisingly, *as if* clauses obey the Adjunct condition:

- 48) a. *What_i do you speak as if you were really planning *t_i* ?
b. *What_i did she stop talking as though she had said *t_i* ?

On the other hand, it has been reported that there is a contrast concerning extraction from adjunct clauses: Some adjunct clauses are less resistant to the Adjunct condition, and other adjunct clauses allow *wh*-extraction. Consider the following sentences:

- 49) a. ?*Which bottle of wine_i was Mick annoyed because Keith drank *t_i* ?
b. ?*Which dignitary_i did the band leave the stage without bowing to *t_i* ? (Roberts 1997)
- 50) a. ??Which letter_i did John call you after she worded *t_i* carefully? (Culicover 1997)
b. ??Here is the man_i, who I talked to Bill before Mary could criticize *t_i*. (Grosu 1981)

The grammaticality judgments are the authors'. As a matter of fact, Roberts (1997: 217-8) states that "many speakers find Adjunct condition violations slightly[*sic*] less bad than Subject condition violation or other island violations", although the judgment varies from person to person. According to Grosu, the non-tensed adjunct in (49b) is taken to be better by some native speakers than the corresponding tensed variant in (49a). For some speakers, (51) is not so awkward as (49) and (50).

- 51) a. Here is a report_i which the boss got upset after he read t_i .
 b. Here is a report_i which the boss got upset after reading t_i .
 (Grosu 1981)

Furthermore, acceptability becomes higher in the case of (52) and (53). In particular, extraction from purpose clauses seems to be relatively acceptable though they are regarded as adjuncts.

- 52) a. There are a number of important people_i who Mary died before she could meet t_i .
 b. There are a number of important people_i who Mary died after she (had) met t_i .¹¹ (Grosu 1981)
- 53) a. Which man_i did Bill go to Rome to visit t_i ?
 b. Which car_i did John buy those tires_j to put t_j on t_i ?
 c. Who_i did Pat get it_j out to show t_j to t_i ?

Also, as presented earlier, some adverbial complement *as if* and *like* clauses do not show island effects.

- 54) a. Who_i did Chris act as if she didn't know t_i ? (= (34b))
 b. Who_i did he sound like he was talking to t_i ? (= (42b))

What would the above observation in (49) to (54) indicate? Why is the extraction not so bad? Technically speaking, (49) to (53) are all supposed to show a weak subjacency violation because the *wh*-movement crosses a barrier while the trace is lexically governed by the embedded verb or preposition. (cf. Lasnik and Saito 1992) The issue, however, seems to be more than a subjacency violation.

Why do the supposed adjunct clauses behave differently in syntax?

It is said that the form and function of complements are determined by their heads while those of adjuncts are fixed by themselves. I think that the function of adjunct clauses is affected by the proposition denoted in the main clause because extraction from some adjunct clauses is, if not perfect, somehow permitted. In other words, the scope of a *wh*-word ranges from the main clause to the subordinate clause. I would like to propose from the above observations that there are structurally indeterminate points among what appears to be adjunct clauses. Some adjunct clauses show the syntactic property that is partially complement-like and partially adjunct-like. It seems that the fact that extraction from adjuncts is allowed according to degree indicates that some subordinate clauses are more strongly “expected” and affected by the proposition of main clauses than other subordinate clauses. Presumably, some subordinate clauses indirectly take part in the complementation of the main verb rather than simply qualify the main clause. The extraction facts may also prove that some adjunct clauses like purpose clauses and some *as if* clauses are tightly linked to the event or situation expressed in the main clauses. The degrees of subordination to the main clause is determined by the meaning of the matrix verb or the proposition described in the main clause.

One last thing to be added here is that the (conceptual) meaning subordinate clauses convey cannot predict how tightly or loosely an adverbial clause is connected to the main clauses. As shown above, extraction from temporal adverbials like *before*- and *after* clauses is not always ruled out. *As if* clauses do not always show island effect, either. The identical form of adverbial clauses can

differ in varying degrees according to the situation.

To summarize this section, I argued that as a result of the extraction test, subordinate clauses including *as if* clauses are different from one another in the degrees of subordination to the main clause. I also emphasized that the logical relationship between an adverbial clause and the main clause cannot be captured by the binary distinction of complements and adjuncts. It is hoped that further investigation will support my suggestion.¹²

2. Further evidence for the Preposition analysis

This section reconsiders the categorial status of the subordinating conjunctions, *as if*, *as though*, and *like*. I will provide further evidence that these subordinators belong to a class of P(reposition)s although they are often taken to be complementizers in the literature.

2. 1. Previous studies on the categorial status

For the past three decades there has been a debate over the P(reposition) analysis and the C(omplementizer) analysis. Haegeman (1985) states that no final decision has been made yet. Kortmann (1997) says that very few linguists support the C-analysis. The reason Kortmann considers the P-analysis dominant over the C-analysis is because Jespersen (1924) and Emonds (1976) are well aware of the parallelism between one group (subordinating conjunctions, prepositions and transitive verbs) and the other (adverb and intransitive verbs). Emonds (1976: 172-6) shows the reasoning behind the claim that subordinating conjunctions are subsumed under prepositions as follows:

“Among the traditional “parts of speech”, only verbs and prepositions generally take no object, others take only sentence or infinitive (S) complements, and others take various combinations of \emptyset , NP, and S. If we extend these properties of verbs to prepositions, the traditional “prepositions” are TRANSITIVE prepositions, the heads of prepositional PHRASES; certain traditional “subordinating conjunctions” are prepositions with sentence complements, the heads of prepositional CLAUSES; ...”

As shown below, some subordinating conjunctions take various complements (\emptyset , NP, IP for *since*), and other subordinating conjunctions take only one kind of complement (*while*, for instance, takes only IP complement).

- 55) a. I haven't seen Chris [since the semester]. (as Preposition)
b. I haven't seen Chris [since the semester finished]. (as Conjunction)
c. I haven't seen Chris [since]. (as Particle)
- 56) a. *Don't be afraid [while the speech]. (as Preposition)
b. Don't be afraid [while you speak English]. (as Conjunction)
c. *Don't be afraid [while]. (as Particle)

This P-analysis is confirmed by the fact that prepositions permit exactly the same range of premodifiers.

- 57) a. Her sister has been nasty *ever* since the quarrel.
b. Her sister has been nasty *ever* since the quarrel began.
c. Her sister has been nasty *ever* since.

Therefore, Kortmann thinks a majority of linguists support Emonds's argument that the idiosyncratic restrictions with respect to the range of complements which a Preposition may or may not take are in a parallel fashion to restrictions which hold in the case of verbs.¹³

In current theoretical linguistics, however, it seems that the Complementizer position has gained more and more support. For instance, Lasnik and Saito (1992), with the underlying assumption that COMP is obligatory deleted in modern English, reanalyzes temporal prepositions like *after* or *before* as complementizers. Dubinsky and Williams (1995) also deal with temporals, hypothesizing on the basis of diachronic and dialectal evidence that the subordinators underwent a category change from prepositions to complementizers. In contrast, the categorial status of non-temporals has hardly been discussed. Not unexpectedly, there has been considerable confusion about the categorial status of *as if*, *as though*, and *like*. Burton-Roberts (1997), for example, gives only adjunct *as if* sentence *The sedan chair was moving as if it was propelled by rockets*, and takes *as if* to be a phrasal complementizer without any analysis. For those who analyze *seem as if* sentences, *as if* clauses are tacitly assumed to be complement clauses, so that *as if* is undoubtedly a complementizer. (e.g. Rogers 1974, Lappin 1983) Bender and Flickinger (1999), paying attention to the first appearance of *itt looks as if* sentence in the history of English, hypothesizes that *as if* underwent a category change in the 17th century and was reanalyzed

as a complementizer. Inoue (2002a) offers an extensive discussion about the categorial status of subordinators for historical and theoretical points of view, and argues that *as if*, *as though*, and *like* are bi-categorial: Preposition and complementizer. As is obvious from the discussion in 1. 1, some *as if* clauses are selected by verbs, and others are not. Therefore, there should be no doubt about the dual status of the subordinator.

2. 2. Historical evidence against the Complementizer analysis

Here let us take a brief look at some historical facts regarding the conjunctions *like* and *as if* so that I may support my view for the issue. As has been tacitly assumed so far, *like* is sometimes used as a conjunction when a comparison or hypothetical resemblance between two things is made. Contrary to the general viewpoint that *like* as a conjunction is non-standard, it has been reported that it has a long history as a conjunction.¹⁴ What is of great interest here is that *like* used to appear with *as*. As a matter of fact, we recognize the usage in the literary work by Shakespeare or Keats. The following is an example taken from *Hamlet*, in which *as* is preceded by *like*.

58) My lord, I did,
But answer made it none. Yet once methought
It lifted up its head and did address
Itself to motion **like as** it would speak. ...
(Shakespeare, *Hamlet* I, 2, 217.)

Also, we find the next example in the Bible.

- 59) **Like as** a father pitieth his children, so the Lord pitieth them
fear him. (Psalms 103: 13)

My data does not include an example in which *like as* is introduced by a raising verb or a perception verb. Suppose, however, that there existed examples in which *like as* appears occur with such a verb. In such cases, it seems highly unlikely that *like* is a complementizer. For it does not take a prepositional *as* clause as its complement. By contrast, prepositions may (or may not) take a PP complement:

- 60) a. Bob was absent from school [_{PP} because [_{PP} of illness]].
b. A lot of people came [_{PP} from [_{PP} inside the church]].
c. You may choose [_{PP} from [_{PP} among these books]].

It would thus be plausible to take them as compound prepositions.

Furthermore, my argument for *as if*, *as though*, and *like* being (compound) prepositions is strengthened by the existence of the concatenated morpheme *like as if*, which is rarely used in Present-day English. The *O. E. D.* Second edition (1989) exemplifies this historical fact with the following two examples:

- 61) a. Hee came to Augustundunum aforesaid; **like as if** he had
been a leader of long continuance.
b. I held the letter in my hand **like as if** I was stupid.

(61a) is cited from a literary work published in 1609, while (61b), from Coleridge's *Letters* (1799). Poutsma (1929: 733) cites the next examples of the compound preposition *like as if*, who remarks

that "Especially in vulgar English *as if* is sometimes preceded by *like*."

- 62) a. My husband's tongue's been runnin' on you, **like as if** he was light-headed, iver[*sic*] since first he come a-courtin' on me.
- b. When gentlemen of his age fall in love with girls, they are often **like as if** they were bewitched.
- c. She was **like as if** she knew somehow how matters had gone on.
- d. He put down his feet so still and careful **like as if** he was afraid of offending God at every step.

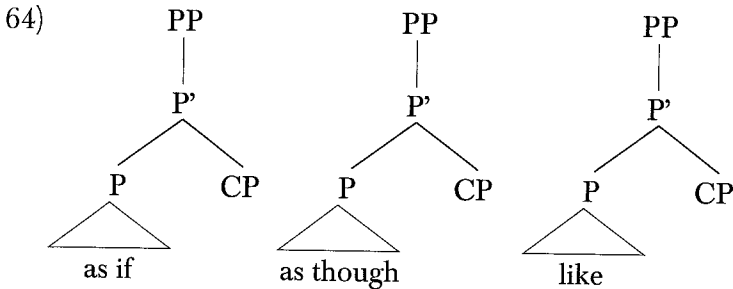
(62a) is an example of the non-restrictive use of *like as if* clause. In (62d) the adverbial clause signaled by *like as if* functions as predicative adjunct (=VP adjunct). (62b) and (62c) are intriguing because *like as if* clauses serve as predicative complement. This is obvious in that the clauses appear after the verb *be*. Assume here that CP is not recursive. If, in (62b) and (62c), *like* and *as if* are both complementizers, they cannot appear in the same Comp position simultaneously. The existence of *like as if* itself may indicate that neither *as if* nor *like* is a complementizer. Furthermore, there are intriguing examples supporting my argument. Let us look at the following:

- 63) a. When I appear upon the scene, the female (sapsucker) scurries away in alarm, calling as she retreats, **as if for** the male to follow. (Curme 1931: 283)

- b. [I] Went counting all my chains, **as if that** so They [sic] never could fall off
- c. It was just as though, after all, he had not brought them up and replaced them together, **as though that**, secretly, they knew better and could smile at him.

(Jespersen 1949: 386)

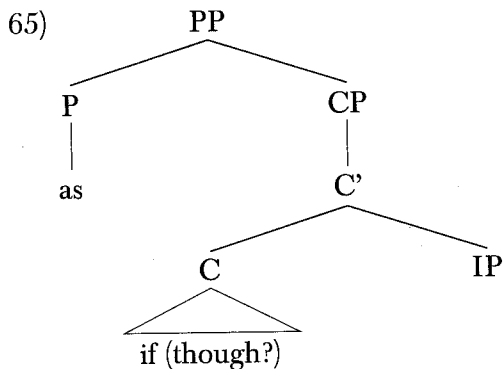
In these examples, the overt complementizers *for* and *that* co-occur with the subordinators. This phenomenon is reported to have been common in Middle English and Early Modern English. In Present-day English the complementizer is dropped and thus only the subordinators are used. As Inoue (2002a) points out, the equivalent of *as if that* is still maintained in Dutch, some dialects of German, and Hebrew, to name a few, among many other European languages. For (63), it is worth mentioning that the subordinators must be structurally higher than the Comp node, which lends support for the analysis of the subordinators as prepositions. I thus hypothesize that *as if*, *as though*, and *like* are each the head of PP, and that *as if* as complementizer might be the result of grammaticalization from P to C, as suggested in Bender and Flickinger (1999).



2. 3. An alternative analysis

Although I have just proposed that the (compound) subordinating conjunctions *as if*, *as though* and *like* are originally prepositions and they are amalgamated lexical units, there seems to be some other possible ways of analyzing the first two subordinators. Here I will consider the possibility of split *as if* analysis, and argue that the compound subordinator analysis is preferred over the split analysis.

In the preceding section, I claimed that *as if*, *as though*, and *like* are “grammaticalized” Ps that have dual properties. Here I will examine if *as if* can be decomposed into two separate lexical items. I start by considering the structure in (65) and the following sentences in (66).



- 66) a. John looks [_{PP} as [_{CP} if [_{IP} he were sick]]].
 b. Yumi treats Harue_i [_{PP} as [_{CP} if [_{IP} she_i were her own child]]].
 c. Karen sings [_{PP} as [_{CP} if [_{IP} she were in love]]].

In (65), the subordinator consists of two lexical units, a P⁰ (*as*) and

a C⁰ element (*if*). This analysis is made possible by regarding *as if* as a blend of a comparative clause and a conditional clause. Based upon the meaning of each sentence, the sentences in (66) are expanded to (67a), (67b), and (67c), respectively.

- 67) a. John looks [_{PP} as [he would look [_{CP} if [_{IP} he were sick]]]].
b. Yumi_j treats Harue_i [_{PP} as [she_j would treat her_i [_{CP} if [_{IP} she_i were her own child]]]].
c. Karen sings [_{PP} as [she would sing [_{CP} if [_{IP} she were in love]]]].

In this analysis, *as* serves as a comparative marker, taking an IP complement that is a copy of the main clause. A modal auxiliary that shows up in the *as* clause varies according to the type of mood employed in the conditional *if* clause. The IP, which is placed between *as* and *if*, is considered to be suppressed and/or deleted in the course of derivation.

This idea has been offered in Curme (1931) and Poutsma (1929) among many others. Curme (1931: 282) explicitly states that “Before *if* and *though* all of the clause of comparison is usually suppressed except the conjunction *as*, since the thought is always suggested by the context.” At first glance, this split *as if* analysis seems motivated, because *as if* is a typical manner adverbial of comparison. In fact, not only *as if* but also *as though* clauses are employed in scalar comparative *as ... as if/though* constructions. Below are part of the examples attested in my data.

- 68) a. He understood it **as** clearly **as if** she had uttered the words,

- and the thought kept him anchored to his side of the table in a kind of moved and sacred submission. (EW: 244)
- b. The city had suddenly become **as** strange and vast and empty **as if** he were a traveller from distant lands. (EW: 230)
- c. It was an exotic, or rare beauty, and **as** fresh **as if** the hot-house gardener had justclipt it from the stem. (NH: 15)
- d. For more than twelve long years I have borne it in my memory, and could now reproduce it **as** freshy **as if** it were still before my eyes. (NH: 235)
- e. And with that she walked on in the direction in which she had been going, **as** briskly **as though** it had really been nothing. (GO: 89)

However, the split analysis does not seem to work for the following reasons. First of all, *as* and *if* are never broken up in the surface structure (linear order):

- 69) a. *John looks as, I think, if he were sick.
 b. *Yumi treats Harue as, I'm afraid, if she were her own child.
 c. *Karen sings as, speaking personally, if she were in love.

As shown in (69), any lexical items do not intervene between two morphemes. In relation to this, *as if* does not appear in "right-node raising" constructions:

- 70) a. *John looks as, and Bill looks as, if he were sick.

- b. *Yumi treats Harue as, and Keiko treats Rina as, if she were her own child.
- c. *Karen sings as, and Nancy sings as, if she were in love.

Next, *as if* clauses do not necessarily express hypothetical meaning. The present indicative, instead of subjunctive past, may be used to express certain semantic effect (e.g. the speaker's greater confidence):

- 71) a. John looks as if he is sick.
- b. Yumi treats Harue as if she is her own child.
- c. Karen sings as if she is in love.

In such situations, there is no reason to expand the *as if* clause.

- 72) a. John looks [as he looks [if he is sick]]
- b. Yumi treats Harue [as she treats Harue [if she is her own child]]
- c. Karen sings [as she sings [if she is in love]]

This kind of clause expansion seems to be against the economy of derivation.

Third, *if* cannot be replaced by *though* in the expanded form just because *if* can substitute for *though* in *as if*:

- 73) a. *John looks [as he would look [though he were sick]].
- b. *Yumi_j treats Harue_i [as she_j would treat her_i [though she_j were her own child]].
- c. *Karen sings [as she would sing [though she were in love]].

For this reason, it is necessary to assume more complicated underlying structures for *as though* sentences. These complicated structures seem to be theoretically possible. The *as though* sentences in (74) are one of the possible expanded forms by using both *if* clause and *though* clause.

- 74) a. John looks as he would look if he were sick (though he is not (sick))
b. Yumi treats Harue as she would treat her if she were her own child (though she is not (her own child))
c. Karen sings as she would sing if she were in love though (she is not (in love))

For the reasons stated above, I conclude that the split *as if/as though* analysis is unlikely to hold.

2. 4. Summary

To recapitulate, I gave an overview of the debate on the categorial status of adverbial subordinators in generative grammar, provided diachronic evidence indicating that *as if*, *as though*, and *like* are originally not complementizers but prepositions, and characterized these three subordinators as “grammaticalized” Ps that can also function as complementizers under limited circumstances. Furthermore, I examined whether *as if* is a compound preposition (=one lexical unit) or two separate morphemes, and concluded that the subordinator is best analyzed as a single constituent, namely a complex preposition.

3. Conclusion

In this article I investigated the syntactic character of *as if* clauses based on a wide range of authentic examples. I have distinguished three groups of *as if* clauses, and each of them belong to a different layer in the standard X-bar notation. They are genuine complement *as if* clauses, predication adjunct *as if* clauses (VP-adjunct), and non-restrictive *as if* clauses. In the course of the research, I recognized the gradient nature of the complement-adjunct distinction, and proposed a useful subdivision of *as if* clauses (adverbial complement *as if* clauses) whose syntactic behavior extends over adjunct and complement. The existence of such 'in-between' *as if* clauses has received little, if any, attention in the literature. It was strongly suggested that the notion of "degrees of subordination" plays an important role in better understanding syntactic structures of adverbial subordinate clauses including *as if* clauses. Further exemplification is needed for adverbial complement *as if* clauses since the discussion of the dual status is confined to a small number of (matrix) verbs.

I also considered the syntactic category of the subordinating conjunctions *as if*, *as though*, and *like*. I briefly summarized the debate over the categorial status of subordinators in generative theorizing and examined the proposal provided by Jespersen (1924) and Emonds (1976). I demonstrated diachronic evidence for positing a category distinction between prepositions and complementizers on the underlying assumption that CP is not recursive. Furthermore, I examined whether *as if* is a lexical item (a constituent) or it can be decomposed into two distinct morphemes.

I argued that the compound preposition analysis is superior to the split *as if* analysis, and suggested that the category P can be re-categorized as complementizers (“grammaticalized” P).

Notes

*I am indebted to Melina Lozano, Bill Crawford, Yafei Li, and Charles Scott for their helpful comments. I wish to thank the following informants for their native speaker’s judgments: Melina Lozano, Brooke Mylrea, Sherry Rieder, Bill Crawford, Don Eneuh, Sean Gaynor, and Charles Scott. My thanks also go to Corinne Tachikawa for suggesting stylistic improvements. Needless to say, all remaining errors are mine.

1. In what follows, I refer to adverbial clauses introduced by *as if*, *as though*, and *like as as if* clauses.
2. Sources of examples are indicated in brackets. Sources for each example sentence and the abbreviations are also given at the end of the main text.
3. COMM797 is a transcript from Committee Meetings on the Testing of Mathematics held in July 1997.
4. This sentence is ungrammatical not merely because of the problem about the scope of negation but because of moving the *as if* complement clause sentence-initially.
5. Among verbs that can take *as if* clauses as their complement are psych-verbs *impress* and *strike* and verbs of characterization *regard*. My data contains the following examples of *impress as if* and *regard as if*.
 - i) a. The vague perception of it, as viewed so far off, **impressed** me **as if** she had suddenly passed out of a chrysalis state and put forth wings. (NH: 158)
 - b. Most students **regard** this subject **as if** it were some sort of

great, green greasy monster waiting to gobble them up.

(JH: 288)

6. COMR6B97 is the second half of the transcript from Committee Meetings on the Testing of Reading held in June 1997.
7. The term “adverbial complement” was first introduced in Nakajima (1961). It refers to any phrase or clause that serves as a required element to complete the description of the situation in the matrix VP. Basically, it refers to the obligatory material in a sentence except subject and object of a (matrix) verb. The “adverbial complement” in this sense is roughly equivalent to Quirk et al.(1985)’s “obligatory adjunct”. The term “quasi-complement” is used in Inada (1984) to refer to what I call “adverbial complement” clauses. In this article, the “adverbial complement” *as if* clauses are used to refer to *as if* clauses whose syntactic behavior extends over complement and adjunct.
8. See Inoue (2002b) for arguments against the raising analysis.
9. The judgment is Kumagai’s. My informants take (41b) to be very awkward, adding one or two question marks. But most of them find a contrast between the b and c sentences.
10. Strictly speaking, obligatoriness is not an absolute requirement for complements because a semantically obligatory element may in some circumstances be realized as an implicit argument in the sense that it is optional at the syntactic level. Among the examples are the objects of the verb *eat* and *read*.
 - i) a. Kathy is eating (something).
 - b. Don’t disturb Michael! He is reading (something).
11. However, most of my informants, who are all non-linguists, reject these two examples.
12. The term “degrees of subordination” was first introduced by Kuno (1973). Similar idea is also addressed in Tagashira (1973), as cited in Masuoka (1997). They all discuss the syntactic properties of Japanese adverbial clauses, but not those of English counterparts.

13. Emonds argues that not only “Conjunctions” but also “Particles” are subsumed under the category “Prepositions.”
14. See *Webster’s Dictionary of English Usage* (1989: 600-3) for the detailed account of the history of conjunctive *like*.

Abbreviations for sources

AG = Albert Goldman, *Elvis*.

AH = Aldous Huxley, *Brave New World*.

AR = Andy Rooney, *Not That You Asked ...*

CSPAЕ = M. Barlow, *The Corpus of Spoken Professional American-English*.

DL1 = David Lodge, *Paradise News*.

DL2 = David Lodge, *Therapy*.

DLE = Doris Lessing, *The Real Thing*.

EW = Edith Wharton, *The Age of Innocence*.

GO = George Orwell, *Nineteen Eighty-Four*.

HG = Geoffrey J. Huck and John A. Goldsmith, *Ideology and Linguistic Theory*.

IM = Iris Murdoch, *The Unicorn*.

JG = John Grisham, *The Firm*.

JH = Jean Healy, *Endangered Minds*.

JL = John Langone, *Harvard Med*.

MM = Daphne Maurer and Charles Maurer, *The World of the New Born*.

MD = Margaret Drabble, *The Millstone*.

NH = Nathaniel Hawthorne, *The Blithedale Romance*.

PA = Peter Ackroyd, *Chatterton*.

RB = Richard Brautigan, *Revenge of the Lawn/The Abortion/So in the Wind Won’t Blow It All Way*.

RH = Randy Harris, *The Linguistic Wars*.

RT = Rick Telander, *From Red Ink to Roses*

SIH = S. I. Hayakawa, *Language in Thought and Action*.

TB = T. Berry Brazelton, *Touchpoints*.

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