

On Interpretations of Implicit Complements*

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1. Introduction

In English there are some predicates which allow their complements to be 'dropped', though those complements are semantically obligatory to the activities denoted by the predicates.^{1, 2} For example, some of transitive verbs, which obligatorily take objects, can optionally drop them. In traditional grammar, a transitive verb with its complement 'missing' is regarded as a transitive verb in its intransitive use. It is true that predicates with their complements dropped are intransitive at the level of (surface) syntax, because they take no phonetically explicit complements after them. Although they are syntactically implicit, we can understand or interpret the missing complements. This implies that the (semantic roles of) missing complements are required even by the *intransitive* predicates. Nakau (1994b) proposes, from a semantic viewpoint, that every predicate obligatorily takes two arguments (semantic roles). In this paper, I will follow his idea and assume that every predicate takes a semantic complement, regardless of whether it is syntactically transitive or not.

According to Allerton (1975) and Fillmore (1986), interpretations of implicit complements fall into two complementary classes: indefinite interpretation and definite interpretation. 'Indefinite interpretation' means that the missing complement is disjoint in reference with any antecedents in the context. 'Definite interpretation' means that the missing complement is linked in reference with something in the context. Consider the following sentences.

- (1) a. Mary bakes ϕ every Sunday.
b. Yesterday, Mary arrived at Riverside. But she would have to leave ϕ in a week or two.

The implicit complement in (1a) has only an indefinite interpretation. We call such a complement an 'implicit indefinite complement' (IIC). With this indefinite property, the IIC cannot be coreferential with something salient in the discourse. The implicit complement in (1b), on the other hand, has only a definite interpretation and is coreferential with something salient in the context, i. e., *Riverside*. We call such a complement an 'implicit definite complement' (IDC).

Note that some verbs do not take any implicit complements at all, as is instantiated by the following examples.

- (2) a. A: Did the committee members solve the food problem?
 B: They're approaching *(the solution).
- b. A: Did she take the medicine?
 B: No. She didn't take *(it).

In this paper, I will discuss the complementarity in the distribution of the IIC and the IDC. I will examine what kind of semantic factor is involved in it. This semantic factor will answer the following question: What are the characteristics of the IIC and the IDC? In other words, it will answer the question as to how we can identify the semantic primitives of the IIC and the IDC. Throughout this study, we will see that the complementarity is deeply concerned with the semantic factor 'pre-existence of the referent of a complement'. It will be clear that the two alternative interpretations of implicit complements (i. e. , the IIC and the IDC), as in (1), are derived from whether or not the referents of the complements are supposed to be pre-existent. As our analysis goes on, we will see that the data as in (2) can also be explained.

This paper is organized as follows. In section 2, after providing some data, I will make a proposal which will give an account for the complementary distribution of the IIC and the IDC. Section 3 is devoted to verifying our proposal. In section 4, we will see that some other facts related to implicit complements can also be explained within our analysis. Section 5 makes concluding remarks.

2. A Proposal

Consider the examples in (3) and (4), where IICs and IDCs are involved, respectively.

- (3) a. A: Have you been baking cookies?
 B: ?I've been baking ϕ , but not cookies.
- b. A: Have you been digging wells?
 B: I've been digging ϕ , but not wells. I've been digging graves.
- (4) a. Yesterday, Mary arrived at Riverside. But she would have to leave ϕ in a week or two.
- b. Alan realized that he would have to pull the boat ashore by himself. He felt tired. The water was cold and the wind was strong. But he pulled ϕ as hard as he could.
- c. I went to see the cricket. George was watching ϕ already.
- ((4b, c) from Allerton, 1975)

From the data in (3), which involve IICs, we should notice that the referents of the complements do not pre-exist before the activities denoted by the predicates; or rather, the referents come into existence as a result of the denoted activities. More specifically, in (3a), the referent of the missing complement implied

by the verb, which is parallel to cookies (say, bread), comes into existence as a result of the activity of baking; in (3b), the referent of the implicit complement, i. e., graves, also come into existence after the activity of digging. In other words, in cases where pre-existence of the referent of a complement is not presupposed, the option of IIC is allowed. By contrast, from the data in (4), where IDCs appear, we should notice that the referents of the complements have already existed before the denoted activities. Specifically, the implied referents in (4) (i. e., *Riverside*, *the cricket (game)*, and *the boat*) pre-exist before the situations (activities) described in these sentences. In other words, the option of the IDC is allowed in cases where pre-existence of the referent of a complement is presupposed. We can thus say that the semantic factor 'pre-existence of the referent of a complement' is deeply concerned with the choice of the IIC and the IDC. If this semantic factor is relevant to the (un)acceptability of the IIC and the IDC, the two alternative interpretations of implicit complements are derived from whether or not the referents of complements are supposed to bear this semantic factor. I propose, here, the following as a generalization on the choice of the IIC and the IDC.

- (5) An implicit complement has a definite interpretation if the referent of the complement is supposed to be pre-existent; otherwise it has an indefinite interpretation.

Considering the notion 'pre-existence', we can define what kind of entity can be included among the complements whose referents are supposed to pre-exist before the activities and what kind of entity can be included among the complements whose referents come into existence after the activities.

Among the first class, we can naturally include complements which represent certain places, because a place pre-exists even before the occurrence of the situation or event described by the sentence. For example, *the table* in *John's book is on the table* and *the station* in *John went to the station* pre-exist even before the occurrences of the described situations (or activities). In other words, a sentence with an IDC requires a pre-existing entity as its constituent (complement). In addition, entities which are affected by the subjects can also be included among the first class. That is because a subject can carry out a certain activity only if the object exists beforehand. For example, in *John pushed the car*, the action 'pushing' is possible only if the referent of *the car* pre-exists. That is, the situation described by the sentence requires a pre-existing entity as its constituent. We call these two sub-classes, the referents of whose members pre-exist before the situations (or activities), the PLACE and the PATIENT, respectively.

The second class, where the referents of complements are not presupposed to be pre-existent, includes resultant complements. Products of some activities (resultant entities) come into existence after the activities are carried out. For example, *a picture* in *John painted a picture* had not existed before the activity 'painting' was carried out. It is a resultant entity. We call this class of complement as the RESULTANT.³

If our proposal in (5) is at work, then we predict that the PLACE and the PATIENT can be the IDC and that the RESULTANT can be the IIC. In the next section, I will examine the IIC (3.1) and the IDC (3.2) in detail to verify our proposal.

3. The Pre-Existence of the Referent of a Complement and the Complement Omissibility

3.1. Implicit Indefinite Complements

3.1.1. The RESULTANT

First of all, consider the contrast between the B's utterances in (6), both involving the verb *bake*.

(6) a. A: What were you doing last night?

B: I was baking ϕ .

b. A: How do they usually cook potatoes in Ireland?

B: They boil potatoes. They don't bake *(potatoes).

In (6a), where the complement is missing, the sentence is acceptable. In (6b), where the interpretation of the complement is (indefinite) 'ingredient' (e.g., 'potatoes'), the sentence is unacceptable with its complement 'dropped'. How can we accept the B's utterance in (6a)? A possible clue lies in the contrast in (7).

(7) a. A: Have you been baking cookies?

B: ?I've been baking ϕ , but not cookies.

b. A: Have you been baking potatoes?

B: *I've been baking ϕ , but not potatoes.

Though somehow marginal, the B's utterance in (7a), where the implicit complement implies (indefinite) 'baked goods', is much better than that in (7b), where the implicit complement implies some ingredient. (If the implicit complement in (7b) has the interpretation of 'baked goods' (e.g., 'bread' or 'cookies'), the whole utterance becomes pragmatically anomalous.) The contrast in (7) leads us to conclude that, whereas complements with the interpretation of 'baked goods' can be 'dropped', complements with the interpretation of 'ingredients' cannot. Now we can provide an explanation for the acceptability of the B's utterance in (6a) by saying that the implicit complement in question has the interpretation of 'baked goods'.

As we have seen, the verb *bake* may take either of the two possible interpretations for its complement: 'baked goods' or 'ingredients'. For the sake of convenience, we tentatively call the verb *bake* with the former complement *bake*₁ and the verb with the latter complement *bake*₂. Here, we can

naturally consider the complement of *bake* : to be an instance of the RESULTANT, because 'baked goods' come into existence as a result of 'baking'. On the other hand, the complement of *bake* : is an instance of the PATIENT, because 'ingredients' pre-exist and undergo various changes through the subject's action of 'baking'. Then, from the data in (6)–(7), it is implied that the RESULTANT can be dropped and be the IIC but the PATIENT cannot.

Note here that the implicit complements in the examples above have an indefinite interpretation, not a definite (context-dependent) interpretation. Considering the complementary distribution of the IIC and the IDC, we predict that, in a context where an implicit complement is forced to be linked with an antecedent (a definite interpretation), the implicit complement construction would be deviant. This prediction is correctly borne out in the data below.

- (8) a. A: Who baked : the birthday cake?
 B: John baked : *(it). RESULTANT
- b. A: Who baked : the rotten potato?
 B: John baked : *(it). PATIENT

The data in (8) lead us to conclude that the RESULTANT cannot be the IDC but the IIC, whereas the PATIENT cannot be implicit at all.⁴

Then, if the complement of a verb may serve more than one interpretation, all of which are classified into the RESULTANT, we predict that the complement with any of those interpretations can be dropped to be an IIC. This prediction is correctly borne out in the following data involving the verb *act*. The sentences in (9) show that the verb may take, as its complement, either 'a role in a play' or 'a play' (cf. Lehrer, 1970).

- (9) a. Mary is going to act (the role of) *Lady Macbeth*. 'role'
 b. Mary is going to act *Macbeth*. 'play'

Note that both interpretations fall into the RESULTANT in that both the role of *Lady Macbeth* and the play itself are recreated, or instantiated, through the activities carried out by Mary (cf. Quirk et al., 1985; Lehrer, 1970). Consider the implicit complement constructions in (10). The B's utterances in (10) are both acceptable.

- (10) a. A: Are you going to act the role of *Lady Macbeth*?
 B: I'm going to act ϕ in the play, but not the role of *Lady Macbeth*. RESULTANT

- b. A: Are you going to act *Macbeth*?
 B: I'm going to act ϕ , but not *Macbeth* RESULTANT

Thus, the data in (10) support our generalization that the RESULTANT, whose referent does not pre-exist before an activity, can be the IIC (but not the IDC).

Among the RESULTANT, there is a somewhat different (and presumably peripheral) kind of sub-class. It is a verb class called a 'cognate verb', which takes a 'cognate object': e. g., *dance* (dance), *dream* (dream), *sing* (song), *think* (thought). Cognate objects are somewhat different from the (prototypical) RESULTANT, in that their referents represent the processes of the denoted activities. However, we must not ignore the fact that the complement of a cognate verb does not pre-exist before the activity denoted by the verb; for example, a dream comes into existence in the course of dreaming. It is in this sense that cognate objects fall into the RESULTANT. (Notice also that cognate objects are often regarded as a subclass of the resultant objects. cf. Jespersen, (1961)) Then, we predict that cognate objects will bear an indefinite interpretation when they are dropped.⁵

Now consider the following implicit complement constructions, involving cognate verbs *dance* and *sing*.

- (11) a. Mary dances the tango badly. Can you dance ϕ ? '(any) dance'
 b. A: Have you been singing 'Yesterday'?
 B: ?I've been singing ϕ , but not 'Yesterday'. 'a song/songs'
 ((11a) from Lehrer, 1970)

Both examples are acceptable and each implicit complement has an indefinite interpretation, distinct from the possible antecedents (*the tango* in (11a) or *'Yesterday'* in (11b)). Then, cognate objects, which are of the RESULTANT, can be IICs (but not IDCs). Thus our generalization in (5) holds.

In this subsection, we have examined the relation between the IIC and the pre-existence of the referent. It has been clarified that the RESULTANT, whose referent is not presupposed to be pre-existent, can be the IIC (but not the IDC), but that the PATIENT, whose referent is presupposed to be pre-existent, cannot be implicit at all.⁶

3.1.2. Semantic Restriction on Implicit Complements

Before we go into the explanation of the IDC, it should not be overlooked that there remains a puzzling fact which imposes a condition on the acceptability of the IIC. There are exceptional predicates which do not follow the claim that the RESULTANT can be the IIC. They include verbs such as *create* and *make*, which seem to be typical representatives of the RESULTANT-taking predicate. Consider the

following examples.

(12) A: Have you been making cookies?

B: *I've been making ϕ , but not cookies.

Our analysis predicts that the verb *make* can take an IIC because its complement comes into existence as a result of the activity. But this is not the case.

We suppose that the deviancy of (12B) is due to the lack of the semantic restriction which should be guaranteed by the verb. Notice that the RESULTANT-taking predicate which can take an IIC (e. g. , *bake* : and *act*) can semantically restrict the range of what comes into existence. On the other hand, predicates such as *make* or *create* are unable to restrict the ranges of their products, even though they are classified into the RESULTANT-taking predicate. Thus, we appeal to the semantic ability of a verb to restrict its resulting entity. Then, the IIC is possible if the referent of a complement is presupposed to be pre-existent and if the predicate can semantically restrict the range of products (i. e. , RESULTANT). The latter condition, not the former, distinguishes between *bake* : and *act*, on the one hand, and *make* and *create*, on the other.

3.2. Implicit Definite Complements

Let us now turn to the IDC. In this section, we will see that complements whose referents are presupposed to be pre-existent can be IDCs.

3.2.1. The PLACE

The PLACE complement can be divided into two classes: The first class of PLACE represents only a spatio-temporal or a statal position in which the subject is located, i. e. , a location; the second class does not represent a location, but has some (directional) relation to the subject, such as a source, a path, and a goal.⁷ As we have seen before, the PLACE is a complement whose referent pre-exists before the subject brings about the situation (or event) described by the sentence (see section 2).

First, consider the following example, involving the verb *be*, a typical instance which takes a complement of the first class of PLACE.

(13) A: What is this box?

B: It's a shrine.

- A: What is in it?
 B: A sutra is ϕ .

The implicit complement in (13) implies 'in it'. The sentence does not have a reading such as 'A sutra is in *some [an unspecified] place*'. Thus, the above example shows that the complement of the first class of PLACE is allowed to be the IDC (but not the IIC).⁸

Let us now consider the PLACE of the second class, taking the verb *leave* as an example. The complement of the verb *leave* may take either of the two interpretations: 'place' (*leave*₁) or 'thing' (*leave*₂).

- (14) a. Mary has to leave ₁ Riverside in a week or two. 'place'
 b. I left ₂ my umbrella on the train. 'thing'

The complement with the former interpretation (14a) is considered to be a PLACE (a source), because the complement *Riverside* represents a starting point from which the subject *Mary* undergoes a positional change. The place *Riverside*, of course, pre-exists before *Mary* leaves there. On the other hand, the complement with the latter interpretation (14b) is a PATIENT.⁹

With this in mind, consider the following implicit complement constructions.

- (15) a. Yesterday, Mary arrived at Riverside. But she would have to leave ₁ ϕ in a week or two. PLACE (source)
 b. Susan gave me an umbrella. *Unfortunately, I left ₂ ϕ on the train. PATIENT

The sentence in (15a) is acceptable, where the implicit complement is forced to have a PLACE (a source) interpretation, but the sentence in (15b) is not, where the implicit complement is forced to have a PATIENT interpretation. This contrast indicates that the PLACE of the second class can be the IDC but the PATIENT cannot.

Notice here that the implicit complement in (15a) has a definite (context-dependent) interpretation, not an indefinite one. Sentence (15a) does not have an interpretation such as '... she would have to leave somewhere [an unspecified place] in a week or two'. We can explain this fact in terms of the generalization presented in (5): If (15a) had an IIC, its referent would not pre-exist. However, this is not the case, because, as we have mentioned above, the PLACE is taken to be a pre-existing entity. Therefore, the implicit complement in (15a) does not have an indefinite interpretation. (As for (15b), the implicit complement does not have an indefinite interpretation either, because, as mentioned before, the PATIENT cannot be implicit at all. The sentence does not have an interpretation like 'I left something [an unspecified object] on the train'.) Thus, we can say that the PLACE of the second class can also be the IDC (but not

the IDC), whereas the PATIENT cannot be implicit at all.^{10, 11}

3.2.2. The PATIENT

Although we have seen in the preceding section that the PLACE can be the IDC, which is favorable to our analysis, we must draw attention to the undesirable result which the above discussion has brought about. That is, the PATIENT cannot be even the IDC.¹² One may argue that it contradicts our prediction, because our proposal in (5) expects the PATIENT to be the IDC. However, there are some PATIENTS which can be IDCs. In fact, the PATIENT can be divided into two sub-groups: the PATIENT which can be the IDC and the PATIENT which cannot. In this subsection, I will argue that, besides the pre-existence requirement, the PATIENT must meet another condition to be the IDC.

Although PATIENT complements such as *leave* : (and *bake* :) cannot be implicit at all, there are, as we mentioned above, some predicates which take IDCs. Consider the examples in (4b, c), repeated below.¹³

- (16) a. Alan realized that he would have to pull the boat ashore by himself. He felt tired. The water was cold and the wind was strong. But he pulled ϕ as hard as he could.
 b. I went to see the cricket. George was watching ϕ already.

The referents of the implicit complements in (16) are considered to be pre-existent and to be PATIENTS. *The boat* in (16a) must be pre-existent in order for Alan to push it. *The cricket* in (16b) must also be pre-existent in order for George to have been watching it.

Considering the difference between the complements of *leave* : and *bake* : , on the one hand, and those of *push* and *watch* , on the other, we notice that the PLACE is somewhat linked to the latter predicate but it is not to the former. I suggest that the PATIENT-taking predicate must meet the following condition to take the IDC: The predicate must be lexically specified for the PLACE. One way to meet the condition is for the PATIENT somehow to undergo a positional change. This is the case with the verb *push* . The verb is lexically specified for a goal (i. e. , the PLACE), and thus the following sentence, involving a goal prepositional phrase, is acceptable.

- (17) Mary pushed the cart to the garage.

In sentence (16a), though a goal phrase is missing, we can say that it is still specified by the verb. Because of this lexical specification, the verb can meet the condition and, as a result, the IDC is allowed.

Along this line, we can account for a little more complicated contrast observed with the verbs *win* and

lose. They may take either of the two interpretations: 'competition' (*win*₁ / *lose*₁) or 'prize' (*win*₂ / *lose*₂). When these complements are omitted, these sentences show a clear contrast as in (18).

- (18) a. The Cowboys won₁ (the 28th Superbowl Championship).
 b. Koga won₂ *(a gold medal) at the Barcelona Olympics.

In (19), the passive forms of these sentences are both acceptable, which indicates that both subjects are syntactically categorized into the PATIENT.

- (19) a. The 28th Superbowl Championship was won₁ by the Cowboys.
 b. The gold medal was won₂ by Koga at the Barcelona Olympics.

However, we should notice that the full sentence in (18a) has the option of being translated into the following sentence, where the complement *the 28th Superbowl Championship* is in a prepositional phrase which represents a place where the event took place.

- (19) a'. The Cowboys won at the 28th Superbowl Championship.

The sentence (18b), on the other hand, has no option like this. This fact suggests that *win*₁ (and *lose*₁) is lexically specified for the PLACE, with the prepositional phrase incorporated into the predicate.¹⁴

Here we follow Nakau's (1994a) analysis of the EVENT proposition. Nakau argues that the EVENT proposition takes two arguments: the EVENT, which represents an event and bears a phasal aspect (e. g., occurrence, continuation, and completion of an event), and the [PLACE] (<+directional>), representing the place where the EVENT takes place, as its complement (see Nakau, 1994a; 1994b: 312, for a detailed discussion). According to his analysis, the full sentence in (18a) consists of two arguments: *The Cowboys won*, which represents an event involving a phasal aspect (presumably, the occurrence of the event) and *the Superbowl Championship*, representing the place. Then, in our analysis, the complement in (18a) is an instance of the PLACE (cf. note 3). On the other hand, as indicated by the lack of the option like (19a'), *win*₂ (and *lose*₂) is not lexically specified for the PLACE, and the complement is regarded as a 'pure' instance of the PATIENT.

Again, the complement in (18a), *the 28th Superbowl Championship*, can be an IDC (not an IIC), because the referent of it is presupposed to be pre-existent and the condition proposed above is met. The complement in (18b), *a gold medal*, cannot be implicit at all because, while the pre-existence of its referent allows the option of the IDC, the above condition is not met.

In this subsection, we have seen that the PLACE and the PATIENT, whose referents are

presupposed to be pre-existent, have the option to be the IDC (but not the IIC). In order for the latter to be the IDC, the extra condition must further be met: the predicate must be lexically specified for the PLACE.^{16, 16}

3.2.3. Summary

In this section, we have made it clear, from the generalization in (5), that the complementary distribution of the IIC and the IDC reflects the dichotomous presupposition for the pre-existence of the referent of a complement. The option of the IIC is allowed if the referent of a complement is not pre-existent: the referent comes into existence as a result of an action. This is the case with the RESULTANT. Besides the non-pre-existence requirement, there is another condition for the RESULTANT to be the IIC. The predicate must be semantically restrictive enough to narrow the range of the product (the RESULTANT). As for the IDC, the referent of a complement must be presupposed to be pre-existent. Thus, the option of the IDC is allowed for the PLACE and the PATIENT. In order for the PATIENT to be the IDC, the predicate must further be somehow lexically specified for the PLACE.

Therefore, we finally conclude that our proposal in (5), repeated below for the sake of convenience, correctly captures the complementary distribution of the IIC and the IDC.

- (5) An implicit complement has a definite interpretation if the referent of the complement is supposed to be pre-existent; otherwise it has an indefinite interpretation.

Given that the interpretation of an implicit complement is determined by the presupposition, and assuming that the predicate (type) determines the complement type, we can say that the predicate determines which interpretation (IIC or IDC) an implicit complement has. Hence, the interpretation of an *implicit* complement is guaranteed.

4. Related Issues

In this section, we will see that our analysis can provide a clear explanation for apparently puzzling distribution of implicit complements. I will discuss the contrastive behavior within polysemous verbs (i. e. , between central and metaphorical senses) with respect to the complement omissibility (4.1) and the contrastive behavior of synonymous verbs (4.2). The discussion in this section will further support our argument that the pre-existence of the referent of a complement, which depends on the types of predicates, is relevant to the complementary distribution of the IIC and the IDC.

4.1. Polysemous Words and Implicit Complement Constructions: Metonymy and Metaphor

In this section, we consider some interesting facts on implicit complement constructions, which are found in polysemous verbs. That is, whereas complements with one interpretation of a verb can be IDCs, complements with another interpretation of the same verb cannot.

4.1.1. Metonyms: *Open* and *Close*

In this section, we examine the relation between metonymy and the omissibility of complements, by taking two verbs *open* and *close* as examples. The verbs *open* and *close* can take either 'thing' (e.g., envelope or drawer) (*open*₁ / *close*₁) or 'shop' (*open*₂ / *close*₂) as their complements. These complements show different acceptability with respect to the IDC.¹⁷ Whereas the complement 'shop' can be an IDC, the complement 'thing' cannot. Consider the following sentences, cited from Fillmore (1986) with a slight modification.

- (20) a. She opened₁ *(the envelope).
 b. She opened₂ (the shop) early.
- (21) a. She closed₁ *(the drawer).
 b. She closed₂ (the shop) early.

The complements of *open*₁ / *close*₁ are PATIENTs in that the things which are opened changes their appearances after the subjects carry out the actions. Apparently, these predicates are not specified for the PLACE. Thus, in a-sentences, the only possible option for implicit complements, i.e., the IDC, is missed; hence the sentences are unacceptable. The complements of *open*₂ / *close*₂ are different from those of *open*₁ / *close*₁. Following the analysis of Nakau (1994a), we consider that *the shop* in b-sentences is the [PLACE] of the EVENT, which corresponds to the PLACE in our analysis (cf. 3.2.2). Then, the b-sentences can be paraphrased something like 'She started/stopped her business activities early and the place was at the shop'. Since the referent of the complement is pre-existent and the predicates are specified for the PLACE, *the shop* can be dropped and become an IDC.¹⁸

Considering the historical development of the meanings of *open* and *close*, we find that *open*₂ and *close*₂ have (metonymically) diverged from *open*₁ and *close*₁, respectively. (The origin of *open*₂ dates from 1693 and that of *close*₂ from 1838, centuries after those of *open*₁ and *close*₁, respectively; cf. *OED*¹.) Through the semantic diversion, the predicate-type of the verbs *open* and *close* changed, whether by accident or not, from the PATIENT-taking to the PLACE-taking predicate. Because of the predicate transition, *open*₂ and *close*₂, in turn, have acquired the ability to omit their complement and to

take an IDC.

We have seen in this subsection that the contrastive behavior in (20) and (21) can be accounted for within our analysis: the PLACE, whose referent is presupposed to be pre-existent, can be dropped (IDC), but the PATIENT whose predicate is not lexically specified for the PLACE cannot.

4.1.2. *Approach and Arrive*

In this section, by taking two verbs *approach* and *arrive* as examples, we deal with another interesting fact which is similar, in nature, to the one discussed in 4.1.1: the relation between metaphor and the omissibility of complements (cf. Fillmore, 1986). Consider the following data, cited from Fillmore (1986) with a slight modification, where both of the b-sentences are metaphorical.

- (22) a. They approached : (me).
 b. They approached : *(the solution).
 (23) a. She arrived : (at the summit).
 b. She arrived : *(at the answer).

Notice that the metaphorical sentences become unacceptable with their complements dropped. The contrasts between the basic sentences and metaphorical sentences can be captured within our analysis.

The complements in (22a) and (23a) bear basic senses and represents certain spatial positions (goals). They are, in our analysis, naturally considered to be instances of the PLACE, which is supposed to be pre-existent. Because of the presupposition, they are allowed to become IDCs, as the sentences show. On the other hand, the complements in (22b) and (23b) bear metaphorical senses and represent goals (endpoints) of the activities. Some may classify them into the PLACE, but if we carefully look at them, we notice that the sentences have more implications. The complements in these sentences are results of some activities rather than (metaphorical) goals. A solution or an answer is created as a result of problem-solving activity. Considering this fact, we should classify them into the RESULTANT rather than into the PLACE. Then, it follows that their referents are not presupposed to be pre-existent. Given that complements whose referents are not pre-existent can be IICs but not IDCs, we can easily account for the unacceptability of the implicit complement constructions in (22b) and (23b). These sentences do not at all have the option of taking an IDC when the complements are missing.^{19, 20}

Considering the historical development of meaning, we find that *approach* : and *arrive* : have metaphorically diverged from *approach* : and *arrive* : , respectively (cf. *OED*¹). Through the semantic diversion, whether by accident or not, the predicate-type of the verbs *approach* and *arrive* changed, in the

direction opposite to that of *open* and *close*, from the PLACE-taking predicate to the RESULTANT-taking predicate. Because of the predicate transition, *approach* : and *arrive* : , in turn, have lost the ability to take an IDC.

We have seen in this subsection that the contrast found in (23) and (24) can be accounted for, again, within our analysis: The PLACE, whose referent is presupposed to be pre-existent, can be the IDC, but the RESULTANT, whose referent is not, can only be the IIC.

4.2. Synonyms and Implicit Complement Constructions

In this section, we examine the relation between close synonymy and the omissibility of complements, which is referred to in Fillmore (1986). Fillmore presents the set of closely synonymous predicates, *leave*, *vacate*, and *abandon*, which seems to pose a question on our analysis. Each of the three verbs in (24) denotes some movement of its subject and its complement represents some point of origin.²¹

- (24) a. Mary left the town at noon.
 b. Visitors are required to vacate their rooms before 11 a. m.
 c. About 2 million or more of the Rwandans have abandoned their country.

The subjects in the sentences above are referred to as moving entities, moving from certain places: *the town* in (24a), *their room* in (24b), and *their country* in (24c). In spite of the semantic similarity of those predicates, they show a clear contrast with respect to the acceptability of implicit complement constructions.²² Consider the sentences in (25), cited from Fillmore (1986).

- (25) a. When did she leave ϕ ? [IDC]
 b. *When did she vacate ϕ ?
 c. *When did she abandon ϕ ?

The verb *leave* allows implicit complement constructions (the IDC), as in (25a); on the other hand, the verbs *vacate* and *abandon* do not allow any implicit complement constructions. If they are all classified into the PLACE, simply following the above observation on (24), our analysis cannot capture the contrast in (25).²³

Since all the referents of these predicates are presupposed to be pre-existent, the only way to account for the contrast is to appeal to the types of the PATIENT, by saying that the complement of *leave* is an instance of the PLACE or of the PATIENT whose predicate is lexically specified for the PLACE and that the complements of *vacate* and *abandon* are instances of the PATIENT whose predicate is not lexically

specified for the PLACE.

As for the PLACE/PATIENT contrast, let us utilize the passive construction, which is often taken as a diagnosis of the affected complement (the PATIENT). Consider the following passive sentences, which show that the complement of *leave* is not a PATIENT (a PLACE) whereas the complements of *vacate* and *abandon* are PATIENTS.

- (26) a. *The town was left by John.
 b. The room was vacated by the visitor.
 c. The ship was abandoned by the sailors.

Now, we have to pin down the type of the PATIENT which the latter two verbs belong to. Here, we should notice the difference in implication between *leave* and *vacate/abandon*. That is, the latter verbs have the meanings such as "give up the control of" or "give up possession or occupancy of", but the verb *leave* does not (cf. *RHWCD*). Considering the different implications of 'giving up something' seriously, I propose that the above-mentioned interpretation of those verbs, i. e., movement from a certain place, is not relevant to the lexical specifications of *vacate* and *abandon*. Although we cannot deny the flavor of 'movement', those two verbs are not lexically specified for the PLACE (the source). Then, their complements cannot be IDCs, though their referents are pre-existent, because they do not meet the condition for the PATIENT to be the IDC: The predicate of the PATIENT must be lexically specified for the PLACE. Now the contrast in (25) can be explained: sentence (25a) allows the IDC because it is a PLACE, whereas sentences (25b, c) do not allow any implicit complements because the referents of their complements are presupposed to be pre-existent and because the extra condition is not met in those sentences.

5. Concluding Remarks

In this paper, I have made a proposal which attributes the complementary distribution of the IIC and the IDC to 'pre-existence of the referent of a complement'. In the course of our analysis, it has been clarified that a complement can be an IIC if its referent is not presupposed to be pre-existent, or can be an IDC if its referent is presupposed to pre-existent. Although complements are implicit, we can easily derive either of the interpretations (the IIC or the IDC) because predicates still remain in implicit complement constructions. Our analysis in this paper can cover the related facts concerning the relation between implicit complements and metonymy, metaphor, or synonymous predicates.

Although our analysis makes a piece of contribution to the study of the distribution of implicit complements, we have some further issues to consider. One of them is the relation between the specificity (restrictiveness) of complements and the IIC/IDC contrast. In 3.1.2, we proposed, for the IIC, the

condition that predicates must be semantically restrictive enough to narrow the product. We notice that predicates which may take IDCs do not restrict the range of their complements (but the contexts specify their interpretations). If this line of analysis, which is based on the semantic specificity of complements, is put forward, then the complementary distribution of the IIC and the IDC may be recaptured in a more straightforward way. Another issue is concerned with the PATIENT. In this study, it has been clear that the IDC is related to the PLACE in one way or another. Then, we have to consider the implication of the PLACE to the PATIENT which can be the IDC. Besides these two questions, we have found some exceptions to our analysis, such as the *telephone/ring up* distinction and the *wait/await* distinction (cf. note 21), and other leftovers.²⁴ We reluctantly leave those questions open.

Notes

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¹ We define 'complement', following Fillmore (1986), as a postverbal constituent which is conceptually obligatory, including prepositional phrases.

² We will not discuss derivational operation of implicit complements. We remain neutral as to the idea that those complements are deleted through some syntactic operation.

³ Our classification is parallel to the analysis proposed in Nakau (1989, 1994b). He divides archetypes of propositions into three classes: the STATE, the PROCESS, and the ACTION, which are attributed to the state/nonstate and the action/nonaction distinction (cf. section 4; See Nakau, 1994b for the syntactic diagnoses of these distinctions).

(i)	Proposition	Predicate	Aspects	Pre-existence
a.	STATE	: BE (THING, PLACE)	<+state, -action>	+
b.	PROCESS	: GO (THING, PLACE)	<-state, -action>	+
c.	ACTION	: DO (ACTOR, THING)	<-state, +action>	+/-

The ACTION is subdivided into three: the AFFECT, the EFFECT, and the ACT.

(ii) Predicate	Pre-existence
a. AFFECT (ACTOR, PATIENT)	+
b. EFFECT (ACTOR, RESULTANT)	-
c. ACT (ACTOR, RANGE)	-

Our term *the PLACE* corresponds to the [PLACE] (<+/-directional>) in (i). The [PLACE] (<-directional>) is the complement of the BE, which represents only a physical or statal position of the THING. The [PLACE] (<+directional>) is the complement of the GO and represents the notions such as SOURCE, GOAL, PATH, DIRECTION, and combinations among them. Our term *the PATIENT* corresponds to the [PATIENT], which is the complement of the AFFECT. The [PATIENT] "is a participant which undergoes, or at least can undergo, any change in position or quality through direct contact (physical, perceptual, or psychological) with ACTOR or its medium (like INSTRUMENT)". Nakau (1989) argues that their referents are all presupposed to be pre-existent, as indicated in (i) and (ii).

Our term *the RESULTANT* corresponds to the [RESULTANT], the complement of the EFFECT, which "is a participant which comes into existence as a consequence of ACTOR's carrying out the action denoted by the verb". The referent of the [RESULTANT] is not presupposed to be pre-existent. As for the [RANGE], see the discussion in 3.1.1.

⁴ The following data from Allerton's (1975), including the verb *play*, provides another piece of evidence to support our claim.

- (i) a. John is playing the Moonlight Sonata.
- b. John is playing the xylophone.
- c. John is playing.

The verb *play* may take either of the two interpretations as its complement: 'musical composition' (i. e., (ia)) or 'musical instrument' (i. e., (ib)). The former is an instance of the RESULTANT in that "the referent is *recreated*" as a physical sound wave through the activity (cf. Quirk et al., 1985). The semantic role 'musical instrument', on the other hand, is an instance of the PATIENT. Allerton notes that sentence (ic) implies an unspecified (indefinite) musical composition (i. e., RESULTANT) and a specified (definite) musical instrument. Again, as was the case with the contrast in (7), the examples in (i) show that the RESULTANT can be the IIC. (As for the IDC of the PATIENT in (ic), see note 16.)

⁵ In Nakau (1994b), cognate objects are classified into the [RANGE], the complement of the ACT (cf. note 3). The [RANGE] "is a participant which delimits the value range of the action denoted by the verb in such a way as to specify that action more narrowly. (Hence, V + NP as VP forms a single action integrated as a whole.)" Since the referent of the [RANGE] is considered to be pre-existent in Nakau (1989),

cognate objects, whether they are classified into the RESULTANT or the [RANGE], expect the IIC when they are dropped.

⁶ As for the IDC of the PATIENT, see the discussion in 3.2.2.

⁷ See note 3.

⁸ The (syntactically) transitive predicate which takes the first class of PLACE, such as *inhabit* and *weigh*, do not at all allow the IDC.

(i) a. A: What the hell inhabits this plain?

B: I don't know what inhabits *(this plain).

b. A: Which boxer weighed 180 pounds?

B: This boxer weighed *(180 pounds/that weight).

We leave open the deviancy of the B's utterances in (i).

⁹ According to Nakau's (1994b) analysis, *Riverside* is an instance of the [PLACE (SOURCE)]. On the other hand, *the umbrella* is of the [PATIENT].

¹⁰ The same line of analysis provides an account for an interesting fact about the verb *contribute*, which is pointed out in Fillmore (1986). The verb takes two complements: 'recipient' and 'thing'. Consider sentence (ia), where the former implicit complement serves as an IIC, and the latter one as an IDC.

(i) a. I've already contributed ϕ (to the movement). ϕ : 'things'

b. A: What did you contributed to the relief organization?

B: I contributed secondhand books, clothes, and some money.

c. A: What did you do with the money in your bank?

B: I contributed *(it) to a relief organization.

In a context where implicit complements are forced to have a definite interpretation (ib, c), 'recipient' can be implicit but 'thing' cannot. By definition, the first complement is a PLACE and the second one is a PATIENT. The interpretation of (ia) derives from the generalization that the PLACE is taken to be a pre-existing entity. Thus, it can be an IDC.

¹¹ Notice that our observation in this section is compatible with Lakoff's (1993) Setting Principle: Settings are omissible. According to Lakoff, *here* in *Harry is arriving (here) at noon* and *to me* in *Rover came (to me) when I called him* are settings, which are actually omissible. In our analysis, they are instances of the PLACE (of the second class).

¹² This is consistent with Fillmore's (1986) observation that complements with the interpretation

"patient (or theme) which designates a change-of-state" cannot be the IDC.

¹³ The PATIENT complements of *play* (cf. note 4; note 16) can also be an IDC. Moreover, 'body-part'-taking predicates, such as *nod*, *shrug* and *wave*; *shave*; *change*, and *wash* can systematically take IDCs. Consider the following implicit complement constructions with the body-part-taking verbs *shrug* and *shave*.

- (i) a. Charlie shrugged (his shoulders).
- b. A: I heard that Samson had decided to have his hair cut.
- B: Yeah. And look, the barber's now shaving $\#$ (himself)/ $\#$ (him(=Samson))

I regard body parts as instances of the PATIENT, whose referent pre-exists, because they are affected by the subjects (cf. section 2). As for the fulfillment of the condition which is suggested below, I can not say for certain how cognate verbs are specified for the PLACE.

¹⁴ Concerning the possibility of deleting a path preposition from a prepositional phrase following an intransitive verb of motion, Taylor (1989: 210) suggests an analysis based on incorporation. According to him, the path (preposition) is incorporated into the verb. Consider the following pairs of sentences, cited from Taylor (1989), which are related in meaning and form.

- (i) a. He swam across the Channel.
- b. He swam the Channel.
- (ii) a. He regularly fly across the Atlantic.
- b. He regularly fly the Atlantic.

As a consequence, Taylor concludes that the event in each pair is encoded by a transitive sentence. (See, also, Levin, 1993; cf. Nakau, 1994a)

¹⁵ As for the acceptability of the IDC in (16b), the analysis proposed for the contrast between *win*₁ /*lose*₁ and *win*₂ /*lose*₂ seems to give an explanation. Compare sentence (16b) with the following sentence, which is unacceptable with its complement dropped.

- (i) There was a soccer game on TV last night. I watched *(it).

The difference between them is that the subject in (16b) *George* was on the ground, where the cricket game is held, whereas the subject in (i) *I* was not on the ground, where the soccer game was held (rather (s)he was in front of the TV set). According to Nakau (1994a), the EVENT proposition consists of an EVENT predicate, which denotes an event, and a [PLACE] complement, which denotes a position where the event

takes place. Given this analysis, and considering the difference in interpretation between (16b) and (i), the acceptability of the IDC in (16b) and the unacceptability in (i) can be accounted for. The former is an EVENT proposition, which can be interpreted as something like "... George was doing 'game-watching' on the ground where the cricket game had been held'. Then, the complement in (16b) is an instance of the PLACE, and can be an IDC. On the other hand, (i) is not interpreted as an EVENT proposition. Thus, the complement in (i) cannot be a PLACE. Rather, it must be a PATIENT, because its referent pre-exists. Even though it is a PATIENT, it cannot be an IDC, because the predicate *watch* in (i) is not lexically specified for the PLACE.

¹⁶ One exception is the verb *show*, which does not allow its PLACE complement, but its PATIENT complement, to become an IDC (cf. Lehrer, 1970).

- (i) A: What did you show Mary?
 B: *I showed the review. 'Mary'
 (ii) A: Who did you show the review?
 B: I showed Charles ϕ . 'the review'

However, in certain contexts as in (iii), the PLACE complement of the verb can be an IDC.

- (iii) a. I showed my passport ϕ and they let me go.
 b. [Scene: a gallery]
 A: What did you show Mary?
 B: I showed the Picasso.

We leave the data in (i)–(ii) to further research.

The verb *play* may be another exception (cf. note 4). The PATIENT complement of the verb 'musical instrument' can be an IDC. According to the analysis in 3.2.2, a predicate must be lexically specified for the PLACE in order for its PATIENT complement to be an IDC. Because I cannot answer the question of how the verb meets this condition, I leave it to further research.

¹⁷ Note that neither *open*₁ nor *open*₂ (and neither *close*₁ nor *close*₂) takes an IIC.

¹⁸ The syntactic diagnoses of predicate types (the *there*-construction test and the extraposition test), suggested in Nakau (1994b), classify the complement of *open*₁/*close*₁ and that of *open*₂/*close*₂ into the [THING (PATIENT)] and the [PLACE] (<+directional>), respectively (cf. note 3; See Nakau, 1994b).

¹⁹ Notice that *approach*₂ and *arrive*₂ cannot take IICs either. This is inconsistent with our analysis, because complements whose referents do not pre-exist could be IICs. One might say that the effect of metaphor is at work on the unacceptability of the IIC, but we leave this puzzling issue open.

²⁰ The syntactic diagnosis of predicate types (the *there*-construction test), suggested in Nakau (1994b), classifies the complement of *approach*₁ / *arrive*₁ and that of *approach*₂ / *arrive*₂ into the [PLACE] (<+directional>), presumably the GOAL, and the [THING (PATIENT)], respectively (cf. note 3; See Nakau, 1994b). Within his analysis, the latter needs some explanation, because its referent is presupposed and the predicates seem to be lexically specified for the PLACE.

²¹ The same kind of contrast is observed with the set of *telephone* and *ring up* and with the set of *wait (for)* and *await*. As for the first contrast, *telephone* can only take an IIC, whereas *ring up* can only take an IDC (cf. Allerton, 1975). As for the second contrast, *wait (for)* can take an IDC but not an IIC, whereas *await* cannot take any implicit complement. These contrasts remain problematic even in our analysis.

²² Some may say that the contrast in (25) is due to the fact that *leave* can be an intransitive verb, whereas *vacate* and *abandon* do not have the option. Even if this is the case, the question still remains why *leave* has the option of being intransitive but *vacate* and *abandon* do not. From a semantic viewpoint, following Nakau's (1994b) proposal, we assume that 'syntactically intransitive' verbs such as *leave* in (24a) also take two arguments (cf. section 1).

²³ The syntactic diagnoses of predicate types (the *there*-construction test and the extraposition test), suggested in Nakau (1994b), classify the complement of *leave* and that of *vacate/abandon* into the [PLACE] (<+directional>), presumably the SOURCE, and the [THING (PATIENT)], respectively (cf. note 3; See Nakau, 1994b).

²⁴ Our analysis does not work on the verbs such as *eat* and *study*, typical instances of the predicate which can take the IIC.

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