

The Locative Construction in English and Japanese^{* **}

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1. Introduction

Analyses of Locative Inversion (LI) constructions such as (1) have focused on two properties of this construction: its noncanonical word order (i.e., “PP V NP”) and the verb types that can enter into the construction.

(1) Out of the mist appeared John.

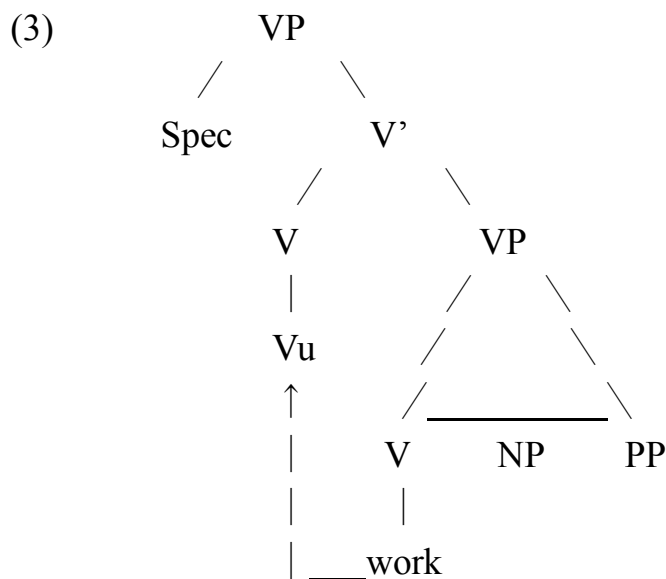
As for the verb types, it has been generally held that only unaccusative verbs such as verbs of existence and appearance can be attested in the LI construction, as shown in (1) (see Coopmans [1], Hoekstra and Mulder [2] for example). Recent studies, however, contest this widely held “unaccusative analysis,” indicating that some unergative verbs can also turn up in the LI construction (see Levin & Rappaport Hovav [4] among others). For instance, the verb *work*, which is typically classified as an unergative verb, can be found in the LI construction. The following example is drawn from Levin & Rappaport Hovav [4: 224]:

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** We are grateful to an anonymous *Linguistic Analysis* reviewer for invaluable comments and suggestions that have improved the form and content of this paper. Needless to say, all remaining errors and inadequacies are our own.

(2) On the third floor worked two young women called Maryanne Thomson and Ava Brent, who ran the audio library and print room.

Kuwabara [3] assumes, adopting the split-VP hypothesis, that unergative verbs found in the LI construction are derivationally changed into unaccusative ones. According to his analysis, the VP structure of (2) can be represented as in (3):



As the above diagram shows, the unergative verb *work* is base-generated as the head of the lower VP, then moves to the head of the upper VP; there it is incorporated into an abstract unaccusative verb *Vu* which is not phonetically realized.¹ The point is that unergative verbs found in the LI construction are derivationally shifted into unaccusative ones by incorporation into the phonetically null unaccusative verb in the upper VP. The major advantage of Kuwabara's analysis is that it can account for the fact that, while unergative verbs found in the LI construction show properties similar

¹ 'Vu' in (3) stands for 'unaccusative verb.'

to those of bona fide unaccusative verbs, they also behave differently in some respects (see [3] for more detail).

The question we will address in this paper is, What are the contents of the phonetically null unaccusative verb *Vu* postulated by Kuwabara [3]? We will show that empirical evidence for the contents of *Vu* can be found in the Japanese locative counterpart to the English LI construction.

2. The Japanese Counterpart to English Locative Inversion

Nakajima [6] points out that the English LI construction shares a variety of important properties with the Japanese “*niwa – iru*” construction, which he claims to be the Japanese counterpart to the English LI construction.² Following Nakajima, we here refer to the construction as “the Japanese locative construction,” with two examples shown below:

- (4) a. kono biru –no nikai -ni -wa
 this building GEN second floor LOC TOP
 koureisha -ga hataraite –iru.
 senior persons NOM work
 ‘On the second floor in this building are working senior
 persons.’
- b. kouen –ni -wa takusanno kodomotachi –ga
 park LOC TOP many kids NOM
 asonde –iru.
 play
 ‘In the park are playing many kids.’³ [6: 52-53]

² See [6] for more detail, where eight similarities between the two constructions are presented.

³ Abbreviations: GEN = Genitive case; LOC = Locative; TOP = Topic; NOM = Nominative case.

Nakajima observes that the unergative verbs such as *hataraku* ‘work’ and *asobu* ‘play’ in (4) are lexically shifted into stative verbs when they co-occur with the locative *ni*-phrase. This kind of lexical shift, however, cannot be overtly observed in English; in Japanese, on the other hand, we can obtain overt evidence for the lexical shift because it is overtly manifested by the morpheme representing a state, that is, the existential affix *-iru*, as shown in (4). Thus the Japanese locative construction can be schematized as shown below (see [6: 53]):⁴

(5) [PP NP -ni -wa] [NP NP-ga] [v V-te-iru]
 LOC TOP NOM

It is true that the above schema can be applied to *some* of unergative verbs, but it cannot be applied to verbs of motion such as *run* and *walk*, which are also classified as unergative verbs (see Levin & Rappaport Hovav [4] for example). However, verbs of motion are typically attested in the English LI construction, as in (6):

(6) Into the room walked John.

It is important here to think of the Japanese counterpart to the English LI construction involving verbs of motion since they have been considered to show unaccusative behavior in the presence of directional PPs (see Coopmans [1], Levin & Rappaport Hovav [4] among others). According to the analysis of Nakajima [6], the motion verb *aruku* ‘walk’ is predicted to be lexically shifted into a stative verb when it co-occurs with both the directional *ni*-phrase and the

⁴ Nakajima [6: 53] says that “[t]he particle *-niwa* attached to the sentence-initial phrases is composed of a locational particle (postposition) *-ni* and the topic marker *-wa*, and the affix attached to the verbs, *-iru*, is the same morpheme as the main verb representing a state (i.e., *iru*, ‘be present’).”

existential affix *-iru*.⁵ The ungrammaticality of the following Japanese locative construction, however, shows that it is not the case:

- (7) *sono -heya -ni -wa John -ga aruite -i -ta
 the room LOC TOP NOM walk PAST
 ‘Into the room walked John.’

We can make the above sentence acceptable by using the affix *-kuru* expressing ‘come’ instead of the existential affix *-iru*, as shown below:⁶

- (8) sono -heya -ni -wa John -ga aruite -kita
 the room LOC TOP NOM walk PAST
 ‘Into the room walked John.’

We can conclude, from what has been shown above, that there are two types of Japanese locative constructions corresponding to the English LI construction: the “*niwa - iru*” construction and the “*niwa - kuru*” construction:⁷

- (9) The Japanese locative constructions:

- (i) the “*niwa - iru*” construction (= (5)):

[PP NP -ni -wa] [NP NP-ga] [v V-te-iru]
 LOC TOP NOM

⁵ As shown below, the *ni*-phrase can mean both location and direction. The abbreviation LOC here represents both location and direction. Note also that the affix *-ita* at the final position in the sentence of (7) is the past form of the affix *-iru*.

⁶ Note that the affix *-kita* at the final position in the sentence of (8) is the past form of the affix *-kuru*.

⁷ As shown in (9), the two constructions have the same syntactic structure and, therefore, their difference can be attributed to the difference of meaning between the affix *-iru* and the affix *-kuru*. Thus we can say that the choice between the two constructions depends on the verb’s meaning. We leave the problem to further study.

(ii) the “*niwa – kuru*” construction:

[PP	NP	-ni	-wa]	[NP	NP-ga]	[V	V-te-kuru]
		LOC	TOP			NOM				

In the next section, we will see, from the viewpoint of syntactic structure, how unergative verbs found both in the English LI construction and in the Japanese locative construction can be shifted into unaccusative ones.

3. Derived Unaccusativity and the Null Morpheme BE / COME

Consider again the Japanese example (4a), which is repeated here:

(4a) kono biru –no nikai –ni –wa
 this building GEN second floor LOC TOP
 koureisha –ga hataraitte –iru.
 senior persons NOM work

‘On the second floor in this building are working senior persons.’

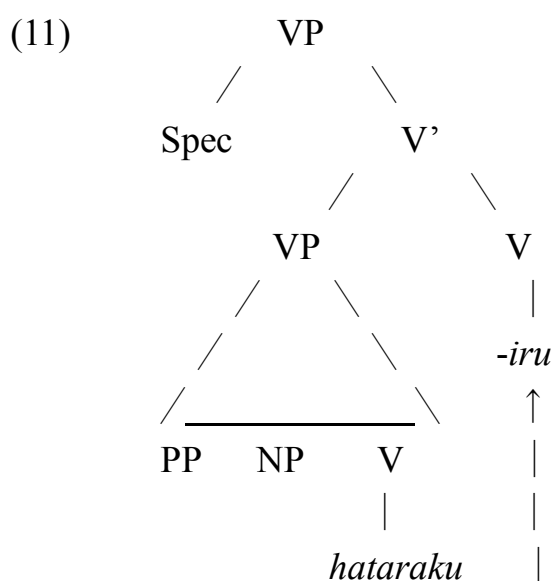
The Japanese verb *hataraku* ‘work’ is regarded as an action verb, since it can co-occur with the *de*-phrase representing the place where an action is done, but not with the *ni*-phrase representing the place where someone or something exists:

(10) kono biru –no nikai {-de / *-ni}
 this building GEN second floor LOC
 -wa koureisha –ga hataraku.
 TOP senior persons NOM work

‘Senior persons work on the second floor in this building’

Action verbs are generally considered as unergative verbs. Thus, like

the English verb *work*, the Japanese verb *hataraku* ‘work’ is classified as an unergative verb. However, we should notice that, as in (4a), the verb *hataraku* ‘work,’ when combined with the existential affix *-iru*, can co-occur with the *ni*-phrase. As just stated above, the *ni*-phrase can co-occur with stative verbs like verbs of existence and appearance. Since stative verbs are generally classified as unaccusative verbs, we assume that the verb *hataraku* ‘work’ can be considered to be shifted into an unaccusative verb when it is combined with the existential affix *-iru*. This verb shift is syntactically represented in (11):



As shown above, head-to-head movement occurs from the lower verb *hataraku* ‘work’ to the upper affix *-iru*, which, in Japanese, yields a visible amalgam of the two heads (i.e., ‘*hataraitte-iru*’, as in (4a)). The above structure of the Japanese verb *hataraku* ‘work’ in (11) differs from that of the English verb *work* in (3) only in the head position: while Japanese is right-headed, English is left-headed. It is, therefore, reasonable to suppose that the English null unaccusative verb *Vu* in (3) corresponds to the Japanese existential affix *-iru* in (11). For convenience, let us represent *Vu* corresponding to the existential affix *-iru* as BE. Then the verb *work* in (3), after raising from the base

V-position to the upper head null BE, forms the complex verb ‘work + BE,’ which corresponds to the Japanese complex verb *hataraitte-iru*.

Consider next the case of verbs of motion found in the LI construction. Does the verb *walk* in (6), for example, form the complex verb ‘walk + BE’ after head-to-head movement, as the verb *work* does? The answer is no because the Japanese counterpart to the English LI construction sentence (6) includes not the affix *-iru* but the affix *-kuru* ‘come,’ as already shown in comparison between (7) and (8). We can, therefore, represent V_u corresponding to the affix *-kuru* as COME. Then the verb *walk* in (6), after head-to-head movement, forms the complex verb ‘walk + COME,’ which corresponds to the Japanese complex verb *aruite-kuru* (see (8)).

To summarize, the VP structure of the English LI construction can be roughly schematized as in (12):⁸

$$(12) \quad [VP \quad [v \ V_i\text{-BE /COME}] \quad [VP \quad [v \ t_i] \quad \dots \quad]]$$

As the above schema shows, an unergative verb found in the LI construction is base-generated within the lower VP, then raising to the head of the upper VP, where it is incorporated into an unaccusative verb BE or COME which is not phonetically realized. In this way, the application of verb raising creates a verbal complex ‘V+BE / COME,’ which enables unergative verbs to be derivationally shifted into unaccusative ones when they appear in LI constructions.

The most important point of this section is that, by comparing the English LI construction with the Japanese locative construction, we can clarify the contents of the phonetically unrealized unaccusative verb V_u , which is simply postulated in Kuwabara [3]: the null morpheme BE and the null morpheme COME. In the next section, we will show that the type of PP found in the LI construction can be

⁸ As for the null morpheme COME, Nakajima [5] also presents a similar analysis, but he deals with only the null morpheme COME without referring to the null morpheme BE. We will return to this point later.

properly predicted with respect to the type of null morpheme.

4. Two Types of PP in Locative Constructions

So far, we have represented the particle (postposition) *-ni* appearing in the Japanese locative construction mainly as a locational particle (i.e., LOC). As briefly mentioned in section 2, the particle *-ni* can also be used as a directional particle. For example, the PP including the particle *-ni* in (13) is used as the locative PP, whereas the one in (14) is used as the directional PP:

(13) **The locative PP including the particle *-ni* (= (4a)):**

kono biru -no nikai -ni -wa
this building GEN second floor **LOC** TOP
koureisha -ga hataraitte -iru.
senior persons NOM work

‘On the second floor in this building are working senior persons.’

(14) **The directional PP including the particle *-ni* (= (8)):**

sono -heya -ni -wa John -ga aruite -kita
the room **DIR** TOP NOM walk PAST

‘Into the room walked John.’⁹

Interestingly, the above verbs usually co-occur with the *de*-phrase rather than the *ni*-phrase when they appear without the affix *-iru* or *-kuru* (see also section 3). This fact indicates that the affixes *-iru* and *-kuru* are related to the type of PP. More interestingly, the *ni*-phrase co-occurring with the affix *-iru* is always locative, as in (13), whereas the *ni*-phrase co-occurring with the affix *-kuru* is always directional,

⁹ DIR in (14) represents ‘Directional.’

as in (14). We may, therefore, reasonably suggest the following licensing condition:

- (15) the affix *-iru* licenses the locative PP, whereas the affix *-kuru* licenses the directional PP.

As an illustration, let us see again the sentences of (13) and (14); the verbs *hataraku* ‘work’ in (13) and *aruku* ‘walk’ in (14) raise respectively to the affixes *-iru* and *-kuru* within the upper VP, from which they c-command the *ni*-phrase (i.e., PP) in each sentence (see (11) for the relevant structure). We assume here that the affix determines the semantic type of its c-commanding PP. From the above contrast between (13) and (14), we can further assume that only the PP c-commanded (i.e., licensed) by the affix *-iru* or *-kuru* can be raised to the sentence-initial position in the Japanese locative construction.

Now we suppose that the licensing condition (15) can also be applied to the English LI construction, the only difference being whether the affix is overt (Japanese) or covert (English). We can then predict that the null morpheme BE corresponding to the Japanese particle *-iru* licenses the locative PP, whereas the null morpheme COME corresponding to the Japanese particle *-kuru* licenses the directional PP. Let us see diagram (3) again for an example. As in (3), the unergative verb *work* raises to the upper null head V_u (i.e., null BE) to form the complex verb ‘work + BE.’ As just predicted above, the PP c-commanded by the complex verb ‘work + BE’ is licensed as the locative PP *on the third floor*, as in (2).

We can further predict that, like the Japanese locative construction, the English LI construction allows only the licensed PP to be raised to the sentence-initial position. This prediction is borne out by the following contrast:

- (16) a. {Into / *In} the room walked John.

b. John walked {into / in} the room.

It is intriguing that the type of the preposed PP affects the grammaticality of the sentence in the LI construction: in the normal sentence (16b), the motion verb *walk* can co-occur with both the locative PP *in the room* and the directional PP *into the room*; on the other hand, the motion verb *walk* can co-occur only with the directional PP in the LI construction, as in (16a). As just stated above, we assume that only the licensed PP can be preposed in the LI construction. Here recall that the verb *walk* raises to the upper head null COME, not null BE, to form the complex verb ‘walk + COME.’ Since the null morpheme COME licenses the directional PP, it is clear that only the directional PP *into the room* is allowable in the LI sentence, as in (16a). Thus, given our analysis, we can easily account for the above contrast.

We can conclude, from what has been said above, that there exist two types of affixes which are related to the type of PP both in the Japanese locative construction and the English LI construction. Whether they are visible or not, such affixes can correctly account for the properties concerning the type of PP found in locative constructions.

5. Conclusion and further inquiry

This paper is intended as an elaboration and a development of the analyses of Kuwabara [3] and Nakajima [5]. We have first pointed out that Kuwabara [3] just postulated the phonetically unrealized unaccusative verb in LI constructions without clarifying the contents of them; we have suggested, by comparing the English LI construction with the Japanese locative construction, that there are two types of phonetically unrealized unaccusative verbs: the null BE and the null

COME. It is true that Nakajima [5] and [6] also suggested the existence of the two null morphemes in LI constructions. But Nakajima fails to capture the relation between the two null morphemes BE/COME and the co-occurring verb types. We have, furthermore, shown that each of the null morphemes BE and COME in English corresponds to the Japanese affixes *-iru* and *-kuru* respectively, making it clear that the type of affix (or morpheme) is closely related to the type of PP both in Japanese and in English.

We look briefly at a wider implication of our study. As we have suggested throughout this paper, the null morphemes BE and COME are related to the verb types; more concretely, the null morpheme BE is related to verbs of existence, whereas the null morpheme COME is related to verbs of appearance. The point here is that verbs of existence are dealt with differently from verbs of appearance. Many studies, however, do not make any clear distinction between verbs of existence and verbs of appearance, taking it for granted that these two types of verbs can be treated as one group not only in LI constructions, but in other constructions. That is, many studies focus on the common aspects between the two verb classes. On the other hand, we have focused on the different aspects between them, which enables us to arrive at the conclusion that there exist two types of (null) morphemes (i.e., BE and COME). It appears, then, that focusing on the differences between verbs of existence and verbs of appearance further provides us with valuable insights into the syntax of locative constructions.

Works Cited

1. Coopmans, Peter. 1989. Where Stylistic and Syntactic Processes Meet: Locative Inversion in English. *Language* 65: 728-751.
2. Hoekstra, Teun, and Rene Mulder. 1990. Unergatives as Copular Verbs: Locational and Existential Predication. *The Linguistic*

Review 7: 1-79.

3. Kuwabara, Kazuki. 1995. Buntaitouchi –no Shintakkusu (The Syntax of Stylistic Inversion. In *Nichieigo –no Uhouidou Koubun (Rightward Movement Constructions in Japanese and English)*, ed. by Takami, Ken-ichi. Tokyo: Hituzi-syobo. 93-118.
4. Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity: At the Syntax- Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
5. Nakajima, Heizo. 1993. Seisei-bunpou Sai-Nyumon 8: Seisei-riron –wa Genri-teki Setumei-wo Kanou-ni-suru (Reintroduction of Generative Grammar 8 (series): The Theory of Generative Grammar can Provide Principled Explanation). *Gengo (Language)*: 104-109.
6. —. 2001. Verbs in Locative Constructions and the Generative Lexicon. *The Linguistic Review* 18: 43-67.