# A Short Note on the Distribution of the Expletive It in English

Moritake, Nozomi
Graduate School of Humanities, Kyushu University : Doctoral Program

https://doi.org/10.15017/6790861

出版情報：九大英文学. 65, pp.143-157, 2023-03-31. 九州大学大学院英語学・英文学研究会
バージョン：
権利関係：

# A Short Note on the Distribution of the Expletive *It* in English*

Nozomi Moritake

## 1. Introduction

This paper addresses the distribution of the expletive *it* in English, offering an account of the restriction on the occurrence of the expletive *it* based on the labeling algorithm framework pursued by Chomsky (2013, 2015). As is well known, the appearance of the expletive *it* is confined to the position where a proper CP associate appears in the sentence (Chomsky and Lasnik (1977), Lasnik (1995), Bošković (1997), McFadden (2004), and others). Consider the contrast between (1) and (2). As shown in (1), the expletive *it* can appear in the sentence with the appropriate CP associate, whereas the occurrence of the expletive *it* is not licensed by the TP or NP associates, as demonstrated in (2).[1]

(1) a. It is likely [$_{CP}$ that John is sick].
b. It would be unfortunate [$_{CP}$ for John to be sick].
c. It would be unfortunate [$_{CP}$ to be sick]. (McFadden (2004: 322))

(2) a. *It is certain [$_{TP}$ to leave]. (Chomsky and Lasnik (1977: 472))
b. *It is [$_{NP}$ a man] in the garden. (Lasnik (1995: 18))

We argue that what regulates the distribution of the expletive *it* is deduced from a theoretically available principle implicit in the relationship between expletive *it* and the CP associate: the selectional property of the embedded C head.

The rest of this paper is organized as follows: Section 2 reviews the previous approaches and problems with them. Section 3 lays out the theoretical assumption that this paper adopts. Section 4 provides a main proposal of this paper based on the selectional relation between the expletive *it* and the CP associate. Section 5 analyzes

each sentence by using our proposal offered in the preceding section. Section 6 discusses the consequence of our proposal. Section 7 concludes the paper.

## 2. Previous Studies and Problems

Chomsky and Lasnik (1977), Lasnik (1995), and Bošković (1997) argue that the expletive *it* must be associated with a CP within a sentence in order for the occurrence of the expletive *it* to be licensed. Following this hypothesis, the distribution of the expletive *it* demonstrated in (1) and (2) is correctly captured since (1) is grammatical due to the presence of the CP associate, whereas (2) is ungrammatical because the CP associate is absent. McFadden (2004) also puts forth the descriptive generalization illustrated in (3), observing the contrast between (1) and (2).

(3) a. [J]ust as *there* places restrictions related to definiteness and specificity of a post-verbal DP, *it* places restrictions on a post-verbal clause, in particular that it be a clause … (McFadden (2004: 322))

b. [T]he expletive [*it* – N.M.] can only associate with elements which are themselves eligible to be subjects. (McFadden (2004: 322-323))

Based on the generalization offered by McFadden (2004), consider the examples below:

(4) a. [$_{CP}$ That John is sick] is likely.

b. [$_{CP}$ For John to be sick] would be unfortunate.

c. [$_{CP}$ To be sick] would be unfortunate. (McFadden (2004: 322))

(5) a. *[$_{TP}$ To leave] is certain.

b. [$_{NP}$ A man] is in the garden.

CP can serve as a grammatical subject in (4), as a result of which the expletive *it* is allowed to appear in the sentence; thus, (1) is considered to be grammatical. On the other hand, given that infinitival TP cannot be a subject of its sentence as in (5a), the example in (2a) goes against McFadden's generalization and becomes ungrammatical. In (5b), the NP, *a man*, is arguably eligible to be a subject, but it is not a clause. Therefore, the NP is not taken to be an appropriate associate for the expletive *it*, with the result that the generalization in (3) is violated, and the sentence in (2b) becomes

ungrammatical.

The proposals offered by Chomsky and Lasnik (1977), Lasnik (1995), Bošković (1997), and McFadden (2004) can correctly capture the restriction on the appearance of the expletive *it*: the CP associate must be paired with the expletive *it* in the sentence. However, they lack a theoretical motivation of why the expletive *it* needs the CP associate in the first place. We thus need to derive these proposals from a syntactic theory available in the minimalist program framework.

Recently, Abe (2018) has claimed that the expletive *it* serves as a D head, merges with the CP, and forms a DP. After the DP structure is generated, the expletive *it* moves out of the DP to Spec-T, as represented in (6b) (hereafter, an element marked with strikethrough stands for its copy left behind by movement).

(6) a. It seems that John is happy.

b. [$_{CP}$ [$_{TP}$ It [$_{vP}$ seems [$_{DP}$ D = ~~it~~ [$_{CP}$ that John is happy]]]]]

This proposal also accounts for the distribution of the expletive *it* in a way analogous to the previous studies introduced above in that the expletive *it* can be licensed in the sentence with the CP associate.

However, this proposal has an immediate ramification for the selection of the predicate in light of the traditional perspective. Based on Abe's (2018) analysis, the predicate, *seem*, should select the DP as its complement; however, it has been assumed that *seem* cannot categorically select the DP (Chomsky (1981)). Moreover, Abe (2018) does not offer a principled account of why the expletive *it* must be merged with the CP. We take Abe's (2018) insight concerning the direct merger between the expletive *it* and CP, seeking an alternative analysis with a theoretical motivation.

## 3. Theoretical Assumption: Labeling Algorithm

Chomsky (2013, 2015) claims that Merge is an essential operation of the structure building, and that it comes for free insofar as it conforms to third-factor principles. Merge is assumed to be applicable only to two syntactic objects (SOs), forming a two-membered set without a label. According to Chomsky (2013), the label must be assigned to every set for SOs to be interpreted at the interfaces.

(7) For a syntactic object SO to be interpreted, some information is necessary about it: what kind of object is it? Labeling is the process of providing that information. (Chomsky (2013: 43))

If the label is missing, the set cannot be legible at the interfaces, violating the Full Interpretation (Chomsky (1986 *et seq*)). Therefore, the necessity of the label follows from the assumption that it is the label that makes every SO interpretable at the interfaces. Chomsky (2013) hypothesizes the labeling algorithm (LA) that determines the label of the set. In light of the assumption that the Minimal Search (MS) applies to the set in a top-down fashion when the Transfer applies, Chomsky (2013) argues that the first head located by MS counts as the label of the set. When the set is formed by a head H and a phrase XP, as in $\{_{\alpha}$ H, XP$\}$, MS finds the head H in α and determines the label of α as H, as in (8a). If both members of the set are phrases like $\{_{\alpha}$ XP, YP$\}$, MS cannot locate the label because MS finds X and Y simultaneously and induces the labeling indeterminacy. To solve this problem, Chomsky (2013, 2015) offers two options to label the complex $\{_{\alpha}$ XP, YP$\}$ set. The first solution is a shared agreement feature between two phrases: if the XP and YP share a prominent feature F as a result of agreement, the shared feature F is designated as the label, as in (8b). The other strategy is displacement of one of the two phrases from within the set. According to Chomsky (2013), the XP that undergoes movement is rendered invisible to MS by hypothesis, which makes it possible that the remaining constituent, in this case, Y, becomes eligible as the label of α, as in (8c).

(8) a. $\{_{\alpha}$ H, XP$\}$ (α=H)

b. $\{_{\alpha}\ \{_{X}\ X_{[F]}, \{WP\}\}, \{_{Y}\ Y_{[uF]}, \{ZP\}\}\}$ (α=<F, F>)

c. {XP … $\{_{\alpha}$ XP, YP$\}$} (α=Y)

Adopting these three algorithms, we discuss the distributional restriction on the expletive *it* in the following section.

## 4. Proposal

Based on the previous studies, it is evident that the expletive *it* is only licensed in the environment with the corresponding CP associate, as in (1). This descriptive

generalization can capture the distribution of the expletive *it*, but it remains unclear what is the crucial factor pertaining to the relationship between the expletive *it* and the CP associate.

Note that the previous analyses introduced in Section 2 have in common the argument that the expletive *it* must be associated with the CP within the sentence. Building on this observation, we assume that the expletive *it* is directly merged with the embedded CP and is raised to matrix Spec-T (for an alternative analysis with the expletive *it* being base-generated at embedded Spec-C, see Stroik (1990, 1991, 1996) and Iwakura (2002)). The merger of the expletive *it* with the CP associate is theoretically motivated by the category-selection (henceforth, c-selection) inherently ascribed to the embedded C head.

(9) The embedded C head can c-select the expletive *it* and form the set {*it*, CP}.[2]

It is assumed that a noun phrase is introduced into the derivation after being selected by a head; in other words, the noun phrase cannot enter the derivation unless it is selected by the head. It is thus plausible to assume that the expletive *it* should be selected by the head, with the assumption that the expletive *it* is one of the noun phrases. Although the expletive *it* serves as the noun phrase, the expletive *it* is taken to be an expletive, thus lacking any semantic contribution. An immediate suggestion is that the expletive *it* is not semantically selected but should be categorically selected. Moreover, in light of the previous analyses, the distribution of the expletive *it* is limited to the sentence with the CP associate. Thus, our approach seems a promising analysis for the distributional restriction on the expletive *it*.

The intimate relation between the expletive *it* and the CP associate remains to be stipulated in the previous studies, but our analysis reconsiders this insight and argues that such a relation can be captured by assuming that the expletive *it* is c-selected by the embedded C head. (9) is thus not an *ad hoc* description but is a theoretically motivated proposal based on the c-selection.

Before entering a detailed analysis, we consider where the c-selection should be applied. As noted by Mizuguchi (2019) and Hayashi (2021a, b), it is difficult to

assume that the c-selection is available within the narrow syntax because no restriction can be imposed on Merge due to the hypothesis that Merge comes for free, as discussed in Section 3. To tackle this theoretical issue, Mizuguchi (2019) reanalyzes the selectional relation in view of the labeling algorithm framework, claiming that the label plays a crucial role in the selection at the Conceptual–Intentional (C–I) interface. Based on Mizuguchi's (2019) analysis, for instance, when a verb c-selects the noun phrase, the C–I interface requires that the D (or N) label be provided by SO at the complement position of the verb. Namely, SO must provide the appropriate label to be selected by the head. Assuming that the label contributes to the interpretation at the interfaces (Chomsky (2013, 2015)), Mizuguchi's (2019) proposal is promising in that the label redefines the selectional relation as the interpretational rule of the head and SO. Mizuguchi (2019) also argues that the selection applies to the two elements at the C–I interfaces, suggesting that it has no restriction on Merge. This argument is a theoretically desirable idea under the current framework, in which Merge is a free operation (Chomsky (2013, 2015)). Therefore, we adopt Mizuguchi's (2019) argument that the selection is applicable at the C–I interface (see also Hayashi (2021a, b) for an argument in favor of the view that the selection is available at the interfaces, not within the narrow syntax).

As discussed above, according to Mizuguchi (2019), the selection takes place at the C–I interface through the mediation of the label. What is important is that even if SO is moved, the copy left behind by its movement should take part in the selectional relation with the head. Our proposal in (9) is thus modified as follows:

(10) The expletive *it* can be merged with the embedded CP, as in {*it*, CP}. Even if the expletive *it* undergoes movement out of this set, the copy left behind by movement of the expletive *it* can be c-selected by the C head of the CP associate at the C–I interface.

As demonstrated in the next section, the expletive *it* undergoes movement to matrix Spec-T after it is merged with the CP, leaving a copy behind within the set {~~*it*~~, CP}. We assume that this copy can be c-selected by the C head of the CP associate at the C–I interface (see also Hayashi (2021a, b) for an analysis that the copy can participate

in the selection).

## 5. Analysis

### 5.1. The Obligatory Presence of the CP Associate

Our proposal can straightforwardly capture the close relation between the expletive *it* and the CP associate: the expletive *it* must be paired with the embedded CP in the sentence. Observe (1) and (2), repeated here as (11) and (12), respectively.

(11) a. It is likely [$_{CP}$ that John is sick].
b. It would be unfortunate [$_{CP}$ for John to be sick].
c. It would be unfortunate [$_{CP}$ to be sick]. (McFadden (2004: 322))

(12) a. *It is certain [$_{TP}$ to leave]. (Chomsky and Lasnik (1977: 472))
b. *It is [$_{NP}$ a man] in the garden. (Lasnik (1995: 18))

Based on our proposal in (10), if the relevant C head does not exist in the derivation, the expletive *it* cannot be c-selected, and the sentence cannot be derived in the first place. Therefore, (11) is grammatical because of the presence of the embedded CP headed by C that is able to c-select the expletive *it*, whereas the absence of the potential selector of the expletive *it* causes the ungrammaticality of (12).

### 5.2. The Derivation

We now turn to the discussion of the derivation of the sentence involving the expletive *it*. Take the sentence in (6a), repeated here as (13a), for example. Because the predicate, *seems*, used in (13a) is an unaccusative verb, we adopt Epstein, Kitahara, and Seely's (2016) proposal that Root (R) and v* of the unaccusative verb are introduced into the derivation with these two elements being pair-Merged, resulting in the amalgam <R, v*>.[3] With this in mind, consider the derivation of (13a), which is illustrated in (13b-d).

(13) a. It seems that John is happy.
b. {$_{\beta}$ that {$_{\alpha}$ John is happy}} (α=<phi, phi>)
c. {$_{\gamma}$ It {$_{\beta}$ that {$_{<phi, phi>}$ John is happy}}}
d. {$_{\eta}$ C {$_{\zeta}$ It {$_{\varepsilon}$ T {$_{\delta}$ seems {$_{\gamma}$ ~~It~~ {$_{\beta}$ that {$_{<phi, phi>}$ John is happy}}}}}}}

(β=γ=C, δ=<R, v*>, ε=T, ζ=<phi, phi>, η=C)

As shown in (13b), after the embedded clause *{John is happy}* is formed, *that* is subsequently merged with it, as in *{that {John is happy}}*. At this point, LA determines the label of α as <phi, phi>. After the application of LA, the expletive *it* is merged with the set β, forming the set {*it*, CP}, as in (13c). In the matrix CP phase level operation, the expletive *it* is eventually raised out of the set γ to matrix Spec-T. As a result of this movement, the rest of the labels is determined when LA is applied to the set, and the derivation converges.

In terms of the selectional relation, the expletive *it* is correctly c-selected by the embedded C head at the C–I interface because the copy of the expletive *it* is included in the set with the CP associate, as in (13d). Note in passing that the label of the embedded clause is C, thus satisfying the selectional requirement imposed on *seems*, which can c-select a clausal complement.

What remains to be explained is why the expletive *it* must move out of the set {*it*, CP} to yield a well-formed sentence. As discussed above, the expletive *it* and CP make a symmetrical {XP, YP} configuration at some point in the derivation. As argued by Chomsky (2013), this symmetrical set causes labeling indeterminacy, which is not tolerated in the current framework because all of the sets must be labeled correctly for interpretation at the interfaces. The set {*it*, CP} cannot be assigned the label without modification because of the symmetrical {XP, YP} structure with no shared agreement feature. Thus, there is only one way to avoid this labeling problem: movement of the expletive *it* to matrix Spec-T, allowing only C(P) in the set to be visible by MS and LA. Consequently, the label of the set with the CP associate is determined as C, as shown in (13d). The obligatory movement of the expletive *it* to matrix Spec-T is attributed to the requirement that all SOs be labeled for interpretation at the interfaces (Chomsky (2013)).

Before moving onto the next section, we have to consider whether or not a *that*-clause can be moved out of the set {*it*, CP} after (13c) is created; movement of the *that*-clause is assumed to be available in principle since we adopt the free-merger hypothesis based on Chomsky (2013, 2015). However, this alternative option cannot

yield the grammatical sentence, as evidenced by (14).

(14) *That John is happy seems it.

The derivation of (14) is roughly shown in (15).

(15) a. {that {$_{\alpha}$ John is happy}}

b. {$_{\gamma}$ It {$_{\beta}$ that {$_{<phi, phi>}$ John is happy}}}

c. {$_{\varepsilon}$ {$_{\beta}$ that {$_{<phi, phi>}$ John is happy}} {$_{\delta}$ seems {$_{\gamma}$ It ~~{$_{\beta}$ that {$_{<phi, phi>}$ John is happy}}~~}}}[4]

After the sets in (15a, b) are formed by successive merger operations, the *that*-clause, rather than the expletive *it*, is moved to matrix Spec-T, as in (15c). This derivation causes an immediate problem with the label of γ. As shown in (15c), the set of γ only includes the expletive *it*; as a result, the label of γ is determined as D, but this situation is not tolerable given c-selection because the predicate, *seems*, cannot c-select D, as discussed in Section 2 (e.g. Chomsky (1981)). The derivation in (15) is thus doomed to crash at the C–I interface due to the unsaturated c-selectional property of the predicate, *seems*; hence, we should abandon a possibility that the *that*-clause moves out of the set {*it*, CP} to matrix Spec-T.[5]

## 5.3. Apparent Counterexample

Based on our proposal, the expletive *it* can appear in the sentence involving a CP associate, with the expletive *it* being c-selected by the embedded C head. However, although the CP associate headed by *for* is involved in (16a), the derived sentence, where *who* is extracted from within the embedded CP, is ungrammatical, in contrast to (16b), in which there is no *wh*-movement. (16b) is taken from McFadden (2004: 322).

(16) a. *Who$_{i}$ would it be unfortunate [$_{CP}$ for $t_{i}$ to be sick]?

b. It would be unfortunate [$_{CP}$ for John to be sick]. (=1b)

Although the availability of the expletive *it* is assured by the presence of the C head capable of c-selecting the expletive *it*, the resulting sentence in (16a) is ill-formed. The ungrammaticality of (16a) is accommodated independently of the c-selectional requirement between the expletive *it* and the CP associate. Pesetsky and Torrego

(2001) and McFadden and Sundaresan (2018), and others argue that the overt complementizer cannot be followed by the trace of the subject, which is sometimes referred to as the comp-trace effect. This restriction is almost analogous to the well-known *that*-trace effect. In light of the comp-trace effect, the derivation of (16a) is problematic because the overt complementizer *for* precedes the trace of *who*, as shown in (16a). Thus, (16a) is ungrammatical even though the expletive *it* can be c-selected by the embedded C head.

## 6. Consequence

As observed in the preceding sections, we have only dealt with the sentence in which the expletive *it* is linearly separated from the CP associate: the expletive *it* is moved from within the set {*it*, CP} to matrix Spec-T. However, there is a grammatical sentence where the expletive *it* and the CP associate are adjacent to each other, as in (17) (Stroik (1990, 1991, 1996), Authier (1991), Bošković (1997), Postal and Pullum (1998), Nomura (2003), and others).

(17) John resented (it) that Georgina was leaving. (Authier (1991: 730))

One might think that the expletive *it* remains in the set in {*it*, CP} in (17); however, this prediction cannot be maintained because of two reasons. First, as discussed in Section 4, the expletive *it* must vacate the base-generated position to assign the label to the set {*it*, CP}; otherwise, the derivation crashes due to the failure of the labeling. Second, there is syntactic evidence in support of the movement analysis for the expletive *it*. In (18), the expletive *it* and the CP associate are intervened by the adverb, *quite sincerely*, modifying the matrix verb, *believe*. The fact that the expletive *it* is followed by the matrix adverb strongly suggests the extraction of the expletive *it* out of the set {*it*, CP}, with the subsequent raising to the matrix clause.

(18) I believe (it) quite sincerely that Lou will resign soon.
(Stroik (1996: 248))

Let us analyze the derivation of (18), in which the adverb, *quite sincerely*, is omitted for the sake of brevity. Consider the rough derivation of (18), which is represented in (19):

(19) a. {that {$_{\alpha}$ Lou will resign soon}} (α=<phi, phi>)

b. {$_{\gamma}$ it {$_{\beta}$ that {$_{<phi, phi>}$ Lou will resign soon}}}

c. {$_{\eta}$ I {$_{\zeta}$ v* {$_{\varepsilon}$ it {$_{\delta}$ R {$_{\gamma}$ ~~it~~ {$_{\beta}$ that {$_{<phi, phi>}$ John is happy}}}}}}}

(β=γ=C, δ=R, ε=<phi, phi>)

d. {$_{\kappa}$ C {$_{\iota}$ I {$_{\theta}$ T {$_{\eta}$ ~~I~~ {$_{\zeta}$ R-v* {$_{<phi, phi>}$ it {$_{R}$ ~~R~~ {$_{\gamma}$ ~~it~~ {$_{\beta}$ that {$_{<phi, phi>}$ John is happy}}}}}}}}

(ζ=η=R-v*, θ=T, ι=<phi, phi>, κ=C)

After all the derivations of the embedded CP are completed, the expletive *it* is merged with the resulting structure, as in (19b). In this derivation, as represented in (19c), we assume that R and v* are separately introduced into the derivation by set-Merge; namely, they do not undergo external pair-Merge. Based on the free merger hypothesis advanced by Chomsky (2013, 2015), this option is theoretically available if and only if the derivation converges. The rest of the matrix v*P phase level operation proceeds as follows: R is merged with the set γ, and the expletive *it* subsequently moves to matrix Spec-R. After these operations, v* is introduced into the derivation, and it is agreed with the expletive *it* through phi-features. Finally, the subject is merged with the resulting set ζ. In this derivation, the expletive *it* and R(P) share the agreement feature, which allows the set of ε to be labeled as <phi, phi>. In the matrix CP phase level, the derivation continues, as in (19d), and the rest of the labels is assigned to the sets felicitously by LA. In passing, the convergence of the derivation of (18) confirms the analysis that R is firstly set-Merged with the embedded CP, after which v* is set-Merged with the resulting structure.

Finally, let us consider the c-selectional relation in (19). In this derivation, the copy of the expletive *it* left behind by movement to matrix Spec-R is correctly c-selected by the embedded C head because there is a copy of the expletive *it* in the set {~~*it*~~, CP}, which satisfies the selectional requirement proposed in (10). Note that the c-selection by *believe* is also satisfied in this derivation. In light of the assumption that R is considered as a verb due to the presence of v*, which is a categorizer of R, and it can take a clausal complement in the case of *believe*, the c-selectional property of *believe* is saturated at the C–I interface because the label of C, which has a clausal status, is available at the complement position of R.

## 7. Conclusion

This paper has dealt with the restricted distribution of the expletive *it*, arguing that the underlying reason behind the availability of the expletive *it* is constrained by the factor pertaining to the c-selectional relation between the expletive *it* and the C head involved within the CP associate. The advantage of our analysis is that the obligatory presence of the CP associate is naturally deduced from the c-selectional requirement between the expletive *it* and the C head: the expletive *it* must be directly merged with the CP associate and form the set {*it*, CP} to satisfy the c-selectional property. Using the proposed analysis, we have demonstrated that the derivation with the expletive *it* is correctly accommodated.

## Notes

*Earlier version of this paper was presented at the 165th Meeting of the Linguistic Society of Japan. I would like to express my sincere gratitude to Nobuaki Nishioka for his invaluable comments and suggestions. I thank Antony Craven for his stylistic improvement. I am also grateful to the audiences at the conference, who offered me many helpful comments. Needless to say, all remaining errors and inadequacies are my own.

[1] It is well known that English has two types of an extraposition construction with dummy *it* (Kondo (2015) and references cited therein). Aside from these distinctions, this paper focuses on the examples with the expletive *it* that McFadden (2004) deals with, such as (1) and (2). A further investigation of these two classifications is left for future research.

[2] In English, *there* also serves as an expletive element, and it is argued that the expletive *there* must be paired with an NP associate within the same clause (Hazout (2004), Hornstein (2009), and others). For a detailed discussion of this issue, see Moritake (2023) and the references cited therein. Moritake (2023) presents an analysis in a way analogous to our proposed analysis in that the expletive *there* and the NP associate form a set {*there*, NP}, and the expletive *there* moves out of the set to make the labeling possible, just as with the expletive *it* within the set {*it*, CP}.

[3] According to Epstein, Kitahara, and Seely (2016), external pair-Merge of R to v* applies to the constructions including passive, unaccusative, and bridge verbs. These verbs have the unavailability of accusative Case assignment to the complement in common.

[4] See Mizuguchi (2016) for the derivation of sentences with *that*-clause subjects in terms of the labeling algorithm framework.

[5] Note that the *that*-clause cannot be topicalized when the expletive *it* is involved in the sentence, as in (ia) and (iia).

(i) a. *[That he had solved the problem]$_i$ we didn't really find it very surprising $t_i$.
b. We didn't really find it very surprising that he had solved the problem.
(Higgins (1973: 159))

(ii) a. *[That Mary left]$_i$ John knows it $t_i$.
b. John knows it that Mary left. (Bošković (1995: 34))

Although the derivations of (ia) and (iia) are assumed to have no labeling or selectional problem (for a detailed discussion of how a sentence like (ii) is derived, see Section 6), they are not tolerated due to some intricate reasons. Assuming that the expletive *it* and *that*-clause have the same index and that R-expression must be free in any environment, Iwakura (1991) argues that the ungrammaticality of the sentence like (ia) and (iia) is attributed to the Condition C violation in that the fronted *that*-clause binds the expletive *it* with the same index. However, there are many issues to be considered to identify the reason behind the ungrammaticality of (ia) and (iia). Thus, this issue is left for future research.

## References

Abe, Jun (2018) "How to Probe Expletives," *Studia Linguistica* 72, 76-112.

Authier, J.-Marc (1991) "V-Governed Expletives, Case Theory, and the Projection Principle," *Linguistic Inquiry* 22, 721-740.

Bošković, Željko (1995) "Case Properties of Clauses and the Greed Principle," *Studia Linguistica* 49, 32-53.

Bošković, Željko (1997) *The Syntax of Nonfinite Complementation: An Economy Approach*, MIT Press, Cambridge, MA.

Chomsky, Noam (1981) *Lectures on Government and Binding*, Foris, Dordrecht.

Chomsky, Noam (1986) *Knowledge of Language: Its Nature, Origin, and Use*, Prager, New York.

Chomsky, Noam (2013) "Problems of Projection," *Lingua* 130, 33-49.

Chomsky, Noam (2015) "Problems of Projection: Extensions," *Structures, Strategies and*

*Beyond: Studies in Honour of Adriana Belletti*, ed. by Elisa Di Domenico, Cornelia Hamann, and Simona Matteini, 3-16, John Benjamins, Amsterdam.

Chomsky, Noam and Howard Lasnik (1977) "Filters and Control," *Linguistic Inquiry* 8, 425-504.

Epstein, Samuel D., Hisatsugu Kitahara, and T. Daniel Seely (2016) "Phase Cancellation by External Pair-Merge of Heads," *The Linguistic Review* 33, 87-102.

Hayashi, Norimasa (2021a) "Selection in Head-Internal Relative Clauses in Japanese: A Labeling Solution," *The Proceedings of WAFL* 15, 37-44.

Hayashi, Norimasa (2021b) *Labels at the Interfaces: On the Notions and the Consequences of Merge and Contain*, Doctoral dissertation, Kyushu University.

Hazout, Ilan (2004) "The Syntax of Existential Constructions," *Linguistic Inquiry* 35, 393-430.

Higgins, Francis R. (1973) "On J. Emonds's Analysis of Extraposition," *Syntax and Semantics 2*, ed. by John P. Kimball, 149-195, Seminar Press, New York.

Hornstein, Norbert (2009) *A Theory of Syntax: Minimal Operations and Universal Grammar*, Cambridge University Press, Cambridge.

Iwakura, Kunihiro (1991) "Expletive *It* and CP-Trace," *Linguistics Analysis* 21, 97-115.

Iwakura, Kunihiro (2002) "A Minimalist Approach to Expletive Constructions in English," *English Linguistics* 19, 186-210.

Kondo, Ryoichi (2015) "Two Types of Extraposition Construction in English," *English Linguistics* 32, 346-356.

Lasnik, Howard (1995) "Last Resort," *Minimalism and Linguistic Theory*, ed. by Shosuke Haraguchi and Michio Funaki, 1-32, Hituzi Syobo, Tokyo.

McFadden, Thomas (2004) *The Position of Morphological Case in the Derivation: A Study of the Syntax-Morphology Interface*, Doctoral dissertation, University of Pennsylvania.

McFadden, Thomas and Sandhya Sundaresan (2018) "What the EPP and Comp-Trace Effects Have in Common: Constraining Silent Elements at the Edge," *Glossa* 43, 1-34.

Mizuguchi, Manabu (2016) "De-Activation of φ Through Pair-Merge," *English Linguistics* 33, 108-118.

Mizuguchi, Manabu (2019) "Ambiguous Labeling and Full Interpretation," *Studia Linguistica* 73, 563-603.

Moritake, Nozomi (2023) “On the Derivation of *There*-Constructions: A {*There*, Associate} Analysis,” *Studies in English Literature: Regional Branches Combined Issue* 15, 249-262.

Nomura, Masashi (2003) “Expletives Move!,” *WCCFL* 15, 207-220.

Pesetsky, David and Esther Torrego (2001) “T-to-C Movement: Causes and Consequences,” *Ken Hale: A Life in Language*, ed. by Michael Kenstowicz, 355-426, MIT Press, Cambridge, MA.

Postal, Paul M. and Geoffrey K. Pullum (1988) “Expletive Noun Phrases in Subcategorized Positions,” *Linguistic Inquiry* 19, 635-670.

Stroik, Thomas (1990) “Expletive NPs in Object-Position,” *Canadian Journal of Linguistics* 35, 13-27.

Stroik, Thomas (1991) “Expletives Revisited,” *Linguistics Analysis* 21, 23-33.

Stroik, Thomas (1996) “Extraposition and Expletive-Movement: A Minimalist Account,” *Lingua* 99, 237-251.