THE LOCATIVE INVERSION CONSTRUCTION IN ENGLISH: TOPICALIZATION AND THE PRONUNCIATION OF THE LOWER COPY

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In the Locative Inversion Construction in English, where the subject DP (i.e. the Theme DP) occurs post-verbally, the Location PP appears to occupy the so-called “subject position” (cf. Nishihara (1999, 2005)). In this paper, adopting the copy theory of movement (Chomsky (1995)), I alternatively propose that in this construction, the Spec of TP is filled by the Theme DP. In particular, I argue that the Theme DP undergoes A-movement to the Spec of TP at narrow syntax, with the lower copy in its original position pronounced at PF due to the status of the DP as a focused XP, while the Location PP undergoes overt A'-movement to the Spec of TopP via Topicalization.*

Keywords: Locative Inversion Construction, copy theory of movement, Topicalization, focus, Stylistic Inversion Construction

1. Introduction

It is widely accepted that English exhibits a relatively strict word order; that is, an XP that functions as the subject of a clause, finite or non-finite, generally precedes a verb, as exemplified by the following:

(1) a. John loves Mary.
   b. Tom believes [John to love Mary].

In the Locative Inversion Construction (henceforth, LIC), however, which has been treated as a ‘stylistic inversion’ construction (cf. Emonds (1976), Rochemont (1978), etc.), the subject DP (i.e. the Theme DP) occurs post-verbally, and thus the Location PP appears to occupy the so-called “subject-

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position,” as shown in (2):¹

(2) a. In the corner was a lamp.
    b. Into the room walked John.

To explain this fact, Nishihara (1999, 2005), assuming that both the verbs in the LIC and the subcategorized Location PPs have a P-feature, originally proposed in Nakajima (1996), argues that the Location PP undergoes A-movement to the Spec of TP to satisfy the EPP on T at a point in the derivation, while the Theme DP remains in its original position throughout the derivation. In this paper, I show that Nishihara’s analysis raises not only some theoretical problems but also an empirical one, attempting to propose a new analysis of the LIC without such an ad hoc assumption as that introduced in the previous approaches. In particular, adopting the copy theory of movement (Chomsky (1995)), I argue that the derivation of the construction involves both Topicalization and the pronunciation of the lower copy; that is, the Location PP undergoes overt A’-movement to the Spec of TopP, while the Theme DP undergoes A-movement to the Spec of TP at narrow syntax, followed by the pronunciation of the lower copy in its original position at PF due to the status of the DP as a focused XP (cf. Takano (1998)). Furthermore, following and extending the proposed analysis of the LIC, I argue that the derivation of the Stylistic Inversion Construction (SIC) in French converges in much the same way as the LIC in English. The analysis achieves higher empirical coverage as well as resolving the kind of theoretical problem raised by previous analyses such as Watanabe (1996).

The organization of this paper is as follows. Section 2 presents some basic properties of the LIC to be captured. Section 3, taking the properties into consideration, briefly reviews Nishihara (1999, 2005), which argues that the Spec of TP is filled by the Location PP; then, it shows that his analysis is problematic both theoretically and empirically. Section 4 proposes an alternative analysis of the construction under the copy theory of movement and verifies its validity. Section 5 shows that the proposed analysis of the

¹ In English there is another construction that is often referred to as the ‘PP subject’ construction, where the locative phrase occupies the sentence-initial position and the DP occurs post-verbally, as in (i):

(i) Under the stars is a nice place to sleep. (Rizzi and Shlonsky (2006: 349))

As observed in Stowell (1981), Jaworska (1986), and Rizzi and Shlonsky (2006), this construction exhibits different behaviors with respect to syntactic phenomena. In this paper, I agree with the previous studies that this construction is not related to the LIC at all, and thus, I focus on the LIC, not discussing the PP subject construction any more.
LIC can also be extended to the SIC in French and provides cross-linguistic support for the analysis. Section 6 offers some concluding remarks.

2. Basic Properties of the LIC

In this section, as a first step, I confirm some basic properties that any adequate analysis of the LIC must capture.

2.1. The Subjecthood of the Theme DP

In the LIC, it is the Theme DP rather than the Location PP that is interpreted as the subject of the sentence. This can be shown by some standard tests.

Firstly, in this construction, it is the Theme DP that triggers agreement with a finite verb, as in (3):

(3) a. In the swamp {was/*were} found a child.
   b. In the swamp {*was/were} found two children.

(Ura (2000: 170))

In (3a) and (3b), the unaccusative verb be shows singular and plural agreement with the Theme DPs *a child* and two children, respectively, not the Location PP in the swamp. Given the general assumption that this behavior is a property of the subject, it follows that in the LIC, the Theme DP functions as the subject of the sentence.

Secondly, the Theme DP in this construction is assigned nominative Case, as in (4):

(4) In the garden sat {they/*them}!  (Levine (1989: 1045))

In (4), the Theme DP bears nominative Case, manifested as they. This is, needless to say, another well-known property of the subject DP in English. Sentence (4), thus, provides supporting evidence that the Theme DP in the LIC is interpreted as the subject of the sentence.

2.2. The Theme DP as a Focused XP

In the LIC, the Theme DP, which occurs in the sentence-final position, functions as a specially-focused XP. This can be argued for based on the following facts.

Firstly, if the LIC is appropriately paraphrased into the cleft sentence, it is only the Theme DP that can occupy the so-called “focus position,” as in (5):

(5) a. At the foot of the stairs was his mother.
   b. It was his mother that was at the foot of the stairs.
   c. #It was at the foot of the stairs that his mother was.

(Rochemont (1978: 30))
In (5b), which is an appropriate paraphrase of (5a), the focus position in the cleft sentence is filled by the Theme DP *his mother*. In (5c), on the other hand, the Location PP *at the foot of the stairs* occupies the focus position; according to Rochemont (1978), however, the sentence is not an appropriate paraphrase of (5a). This contrast, thus, suggests that in the LIC, the Theme DP can be interpreted as a focused XP.

Secondly, in this construction, sentence stress is usually assigned to the Theme DP at PF, as in (6), not to the Location PP:

(6) On the wall hangs a portrait of LINCOLN.

(Fukuchi (1985: 122): with slight modifications)

In (6), sentence stress is assigned to the DP *Lincoln*, a part of the Theme DP. Because sentence stress is generally assumed to fall on the element that serves as the focus of the sentence, the Theme DP in the LIC functions as a focused XP.

2.3. The Topichood of the Location PP

In the LIC, the Location PP, which occurs in the sentence-initial position, functions as a topical XP (cf. Bresnan (1994), Nishihara (1999, 2005), etc.). This fact is confirmed from the following syntactic and pragmatic tests for topicality.

One of the most frequently used syntactic tests is the formation of an ‘island,’ a certain syntactic configuration that resists extraction, such as *wh*-movement. In the LIC, the *wh*-element cannot be extracted across the Location PP, as in (7): ²

(7) *I wonder how i [into the room walked John t₁]?

(Rochemont and Culicover (1990: 93))

² Hoekstra and Mulder (1990) argue on the basis of the following example that in the LIC, the *wh*-element can be extracted across the Location PP:

(i) We suddenly saw how into the pond jumped thousands of frogs.

(Hoekstra and Mulder (1990: 32))

At first sight, it would appear that in (i), *how* is extracted across the PP *into the pond*. Masaharu Shimada (personal communication), however, points out the possibility that *how* in (i) is not a *wh*-element but is instead a variant of the declarative complementizer *that*; that is, it is base-generated at the Spec of the embedded CP without any movement. This possibility is, in fact, supported by the contrast in grammaticality with sentence (7). In (7), because the verb *wonder* takes only an interrogative clause as its complement, *how* must be a *wh*-element, not a variant of the declarative complementizer. The ungrammaticality of (7), thus, comes from the movement of the *wh*-element across the Location PP. Taking this into consideration, sentence (i) does not constitute a counterargument against Rochemont and Culicover’s (1990) observation.
(8) a. *Which books did Lee say that [TopP with great difficulty, she can carry t]?
   b. Which book did Mary say that [TP her brother read t]?
   (Nakamura (1996: 288))

In (7), the wh-element how cannot undergo overt wh-movement across the Location PP into the room. This phenomenon is generally observed in the configuration where Topicalization is applied: In (8a), where Topicalization is applied in the embedded clause, the wh-element which book cannot be extracted across the topical phrase via overt wh-movement; in (8b), on the other hand, where such an operation is not used, the overt wh-movement out of the embedded clause to the sentence-initial position presents no problem. Thus, as Nishihara (1999, 2005) argues, sentence (7) suggests that the LIC creates the so-called “topic-island”; that is, the Location PP in the construction functions as a topical XP.

The status of the Location PP as the topic is further supported by the distribution of the LIC: In this construction, the PP must appear in the preceding context, as in (9):

(9) He unscrews the plate and removes it from the door. Behind the plate is a chiselled cavity.

In (9), the explicit expression that evokes the plate in the PP occurs in the preceding sentence. This is a well-known pragmatic property of a topical element. Thus, this behavior suggests that the Location PP in the LIC is interpreted as the topic of the sentence. 3

3 Rizzi and Shlonsky (2006) argue that in the LIC, the Location PP moves to the sentence-initial position not only through Topicalization but also via other kinds of movement to the left periphery, such as wh-movement. As is observed in Culicover and Levine (2001), however, the application of wh-movement of the Location PP in the LIC is very restricted, as in (i):

(i) a. In which city live all your relatives?

In (ia), where the D-linked wh-expression in which city is selected as the interrogative Location PP, the PP can undergo overt movement to the sentence-initial position. In (ib), on the other hand, in which the non-D-linked wh-element where is used, it cannot appear in the sentence-initial position. According to Endo (2007), the D-linked wh-element, unlike the non-D-linked one, forms a topic chain, but not a focus chain. If so, the contrast in (i) strongly suggests that even in an interrogative sentence, the Location PP in the LIC is interpreted as the topical XP.
2.4. ‘Apparent’ A-properties of the Location PP

In the LIC, the Location PP appears to behave like a grammatical subject in some ways; in particular, it exhibits some A-properties.

Firstly, the Location PP can occur in the raising construction, as in (10):

(10) [On that hill] appeared [to be located a cathedral].

(Doggett (2004: 29))

(11) Paul seems [to be very happy with his new job].

In (10), it appears that the PP on that hill is extracted from the embedded clause, occupying the Spec of the matrix TP. As is well known, this phenomenon is derived via A-movement from the embedded subject position to the matrix position, as shown in (11). Sentence (10), thus, might appear to argue for the A-property of the Location PP in the LIC.

Secondly, in this construction, the movement of the Location PP is not sensitive to the weak crossover (WCO) effect, as in (12):

(12) In every dog’s pen peered its owner. (Doggett (2004: 32))

(13) a. Who appears to his mother?
b. *Into every dog’s cage its owner peered.

(Doggett (2004: 58–59))

In (12), the DP every dog, which is contained in the Location PP, can bind the pronoun in the Theme DP. This effect is typically observed when a certain element moves across the pronoun that it binds through A’-movement rather than A-movement: In (13a), which involves the A-movement of the wh-element across the pronoun, the effect is not observed, and thus, the element can bind the pronoun; in (13b), on the other hand, where the A’-movement of the element every dog is applied across the pronoun, the element cannot function as the antecedent of the pronoun. The similarity between (12) and (13a), thus, suggests that in the LIC, the Location PP occupies the Spec of TP through A-movement at a point in the derivation if the PP is assumed to move across the DP, as assumed in Nishihara (1999, 2005).

Thirdly, in the LIC, the negative element in the Location PP can license the negative polarity item (NPI), as shown in (14):

(14) Into none of the classrooms walked any of the students.

(Nishihara (1999: 389))

(15) a. None of the students walked into any of the classrooms.
b. *Into none of the classrooms any of the students walked.

(Nishihara (1999: 389–390))

In (14), where the negative element none appears in the Location PP, it can license the NPI in the Theme DP. This behavior is also found in cases that involve A-movement rather than A’-movement, and it is licensed in terms of
c-command. In (15a), for instance, the negative element in the subject DP, which undergoes A-movement to the Spec of TP, licenses the NPI in the Location PP, while in (15b), even if the negative element in the topicalized element, which occupies the Spec of TopP via A’-movement, c-commands the NPI in the subject DP, it cannot license the item. Thus, the grammaticality of (14) appears to suggest that the Location PP in the LIC undergoes A-movement in its derivation.4


In this section, I briefly review Nishihara’s (1999, 2005) analysis of the LIC in English and point out that his analysis is both theoretically and empirically inadequate.

3.1. A ‘P-feature’ Analysis

In introducing the derivation of the LIC in English, Nishihara (1999, 2005) assumes under the framework of early minimalism (Chomsky (1995))

4 Nishihara (1999, 2005) argues further that the A-properties of the Location PP are also confirmed from the so-called that-trace effect: The movement of the Location PP out of the embedded clause is prohibited in the presence of the complementizer that, as shown in (i):

(i) It’s [in the park], we all believe (*that) t₁ was found a child.

(Doggett (2004: 29))

In (i), the Location PP in the park can be extracted out of the embedded clause only when the complementizer is not realized overtly. This effect, as shown in (ii), is typically observed in the case of extraction of the subject DP, which occupies the A-position; that is, the Spec of TP:

(ii) It’s [a child], we all believe (*that) t₁ was found in the park.

(Doggett (2004: 29))

Many researchers, however, point out that extraction of the subject DP out of the embedded clause does not raise any problems when the complementizer is immediately followed by certain adverbials such as tomorrow and during an operation:

(iii) a. Who, did you say that tomorrow t₁ will regret his words?

b. Which doctor, did you tell me that during an operation t₁ had had a heart attack?

(Hasegawa (1993: 395))

Considering that the embedded subjects in (ii) and (iii) occupy the A-position, the sentences in (ii) and (iii) show that that-trace effects do not provide a diagnosis for whether or not an extracted element occupies the Spec of TP at a point in the derivation. There is a possibility that any element immediately following the complementizer cannot be moved independent from A/A’-properties. Therefore, without further discussion, the ungrammaticality of sentence (i) cannot be taken as the evidence for the A-properties of the Location PP in the LIC.
that both the verbs in the LIC and the subcategorized Location PPs have a P-feature (cf. Nakajima (1996)).\(^5\) This feature can be optionally strong when V rises to v. Nishihara also assumes that when this feature is strong, it raises the Location PP to the Spec of vP for feature checking.\(^6\) Based on these assumptions, he proposes that the derivation of the LIC converges as follows. A Theme DP and a Location PP are base-generated in the Spec and the Comp of the VP, respectively. As soon as V-to-v raising takes place, the strong P-feature triggers the movement of the PP to the Spec of vP for feature checking. When T is introduced by Merge, the PP undergoes A-movement to the Spec of TP for the EPP on T. Finally, when Top is introduced, the PP at the Spec of TP moves to the Spec of TopP via Topicalization. This derivation is schematized below:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{derivation.png}
\end{figure}

To capture both the subjecthood and the topichood of the Location PP, originally pointed out in Bresnan (1994), Nishihara (1999, 2005) argues that in this structure, the PP moves to the Spec of TopP via Spec of TP. Consequently, it follows that in this construction, the EPP on T is satisfied by

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\(^5\) Nakajima (1996) defines a P-feature in a different way from Nishihara (1999, 2005): The P-feature can be optionally strong when it is combined with the strong D-feature on T, and the strong P-feature triggers the overt movement of the Location PP to the Spec of TP. The difference of the definition between the analyses is, however, irrelevant here.

\(^6\) Nishihara (1999, 2005) argues that when a P-feature is weak, a subtype of the there-construction (e.g. *There dwelt in that house an old man*), called the Outside Verbal Existential construction (OVEC), is derived from the same underlying structure as that of the LIC. For further details on the derivation, see Nishihara (1999, 2005).
the Location PP; the Theme DP, in contrast, remains in its original position throughout the derivation.

3.2. Counterarguments

3.2.1. Theoretical Inadequacy

Firstly, one can question the conceptual necessity of a P-feature, which Nishihara (1999, 2005) and Nakajima (1996) assume is essential for the derivation of the LIC. As is well known, the Minimalist approach (Chomsky (2000, 2001)) explores the thesis that human language may be a system that is optimally designed to meet certain interface conditions imposed by other cognitive systems with which the language faculty interfaces. Consequently, when any additional assumptions are introduced to Universal Grammar, they require not only an empirical justification but also a conceptual one. With respect to a P-feature, because neither Nishihara (1999, 2005) nor Nakajima (1996) mentions the nature of its feature at all, it does not satisfy the conceptual requirement and thus is viewed merely as a notion that is introduced to explain only the exceptional behavior of the LIC. Thus, such a conceptually inadequate notion should be eliminated if the empirical consequences can also be explained in some other way.⁷

The second problem comes from the vacuous Topicalization of the Location PP. Under Nishihara's (1999, 2005) analysis, the Location PP, which occupies the Spec of TP at a point in the derivation, undergoes overt A'-movement to the Spec of TopP via Topicalization, as confirmed in (16). It is well known, however, that the vacuous Topicalization of the subject XP is generally prohibited, as shown in the following contrast:

(17) a. *John thinks that himself likes Mary.
   b. John thinks that himself, Mary likes \(_t\).

(Lasnik and Saito (1992: 110–111))

In (17b), where the embedded Topicalization of the object is applied, the anaphor himself is bound by the matrix subject John in its domain.⁸ Based

⁷ A P-feature is also unwarranted empirically. If this feature is assigned to both the verbs in the LIC and their subcategorized Location PP, as assumed in Nishihara (1999, 2005), the canonical word order sentence (e.g. John walked into the room.) will not be generated without any additional assumption, because he assumes that the feature generates either the LIC or the OVEC depending on the strength of the feature, and thus there will be no option of generating the canonical sentence.

⁸ As is well known, according to Principle A of the binding theory (cf. Chomsky (1981), etc.), a reflexive pronoun must be bound in its domain. The notion of ‘domain,’ in passing, is generally defined as follows: \(\alpha\) is the domain for \(\beta\) iff \(\alpha\) is the smallest IP
on this, the fact that the embedded subject cannot be bound by the matrix subject in (17a) suggests that the embedded subject is free in its domain; that is, the subject does not move to the Spec of TopP via Topicalization.\(^9\) Thus, Nishihara (1999, 2005) has to account for the idiosyncratic behavior of the Location PP in the LIC: why the Location PP can exceptionally undergo vacuous movement from the Spec of TP via Topicalization, unlike in many other cases.\(^10\)

The third problem concerns the \(\varphi\)- and EPP-feature checking of the finite T. Nishihara (1999, 2005) argues under the framework of early minimalism that in the LIC, the Spec of TP is occupied by the Location PP, which does not trigger agreement with a finite verb, while the Theme DP remains in-situ throughout the derivation. This means that the EPP-feature on T is checked by the Location PP under the Spec-head relation, while the \(\varphi\)-feature on T is not, because a PP is generally \(\varphi\)-incomplete due to its inherent nature; it would, however, cause the derivation to crash at LF, given the general assumption that the \(\varphi\)-feature on T in English is strong. Moreover, in English, it is rather marked for the EPP on T to be satisfied by the element that does not exhibit agreement with a finite verb, given the generalization that the EPP on T in English is satisfied by a nominal XP that triggers agreement with the verb. Thus, Nishihara is responsible for accounting for the mechanism through which the strong \(\varphi\)-feature on T is checked in the LIC and mentioning why the EPP on T in this construction is satisfied in an id-

(TP) containing \(\beta\) and the governor of \(\beta\) (cf. Hornstein, Nunes, and Grohmann (2005: 248)).

\(^9\) One would suspect that the ungrammaticality of (17a) comes from the incompatibility of the reflexive pronoun with nominative Case valued by the finite T. This possibility is, however, ruled out. For example, if the nominative anaphor is raised via long Topicalization, which is not string-vacuous, the sentence is better than (17a), as shown in (i):

\[(i)\] John thinks that himself, Mary said \(\ell\) won the race.

(Lasnik and Saito (1992: 198))

In (i), the subject DP in the deepest clause is raised to the higher clause through long Topicalization to be bound by the matrix subject. This fact suggests that the reflexive is in principle compatible with nominative Case valued by T. Lasnik and Saito (1992), in passing, point out only that sentence (i) is substantially better than (17a), but they give no account of the asymmetry in acceptability between subject Topicalization and object Topicalization (cf. (17b)). In this paper, this issue is still left open.

\(^{10}\) Takano (1996) proposes that a derivation step that does not contribute to PF is costly. If this proposal is on the right track, the overt movement of the Location PP from the Spec of TP to the Spec of TopP is also problematic in terms of economy, because the movement is string-vacuous due to the lack of a phonological intervener between the two positions.
iosyncratic way.11

3.2.2. Empirical Inadequacy

In addition to the theoretical problems, there is an empirical problem with Nishihara (1999, 2005), who argues that the Theme DP in the LIC remains in its original position throughout the derivation. The problem comes from the obligatory control of PRO in an adjunct clause. In the LIC, it is the Theme DP rather than the Location PP that can control the PRO obligatorily, as in (18):

(18) a. On the corner stood [a woman], without PRO being near another woman.

b. *[On the corner] stood a woman without PRO being near another woman. (Ura (2000: 170–171))

In (18a), the Theme DP *a woman* functions as the controller of the missing subject in the adjunct clause; in (18b), on the other hand, the Location PP *on the corner* cannot control the missing subject. There have been many syntactic conditions proposed regarding the obligatory control of PRO in the literature; Huang (1984), for instance, proposes the following condition, called the GCR (Generalized Control Rule): Co-index an empty pronominal with the closest nominal element.12 According to this condition, PRO must be locally c-commanded by its antecedent, as shown in the following contrast:

(19) a. A woman stood on the corner without PRO identifying themselves. (Ura (2000: 170))

b. *I met three men (last night) without PRO identifying themselves. (Chomsky (1995: 274))

11 Nishihara (1999, 2005) does not discuss at all the mechanism for the feature checking of the Theme DP, either. With respect to the mechanism, he might propose that the feature is checked by the DP adjoined to T at LF. Note here, however, that this proposal would indeed involve a self-contradiction. If the Theme DP in the LIC is adjoined to T at LF, it is predicted that the DP functions as the antecedent of the PRO in the adjunct clause, which is generally assumed to be adjoined to vP, given that covert movement can create a new Control configuration (cf. Chomsky (1995)), because it is the closest DP that c-commands the PRO locally. This prediction is borne out, as seen in Ura’s (2000) later observation (cf. (18a)), and it also appears to be desirable for his analysis; however, because Nishihara (1999, 2005) argues that the Theme DP does not serve as the antecedent of the PRO, contrary to Ura’s (2000) observation, the proposal that the Theme DP is adjoined to T at LF cannot be maintained throughout his analysis.

12 The definition of the notion ‘close’ in terms of c-command is generally stated as follows: α is closer to β than γ, if α c-commands β but γ does not c-command β.
In (19a), the subject DP in the main clause, a woman, functions as the controller of PRO in the adjunct clause, because the DP occupies the Spec of TP, where it c-commands the PRO locally. In (19b), in contrast, the object DP is not interpreted as the intended controller of PRO because the DP remains within VP and cannot c-command the PRO.\footnote{One might wonder on the basis of the following examples whether the syntactic condition on the obligatory control of PRO, such as the GCR, based on locality, is tenable:}

\begin{enumerate}
\item a. John promised [PRO to leave].
\item b. John promised Bill [PRO to leave]. (Jackendoff (1972: 214))
\end{enumerate}

In (ia), the subject DP John serves as the antecedent of PRO in the infinitive complement. The GCR easily explains this fact since the subject is the closest DP to the PRO. In (ib), however, the subject DP also functions as the antecedent of the PRO, although it might appear that the object DP Bill is closer to the PRO than the subject DP. To explain this fact, Jackendoff (1972, 1990) proposes a semantic condition by means of thematic information. According to this condition, the antecedent of the PRO in the infinitive complement selected by the verb promise is the Source DP, irrespective of the presence of the object DP. Larson (1991), however, argues that the verb promise is a kind of ditransitive verb that selects an object DP and an infinitive complement, and thus, the complement is base-generated at a higher position than the object DP is. If Larson’s (1991) idea is on the right track, the subject DP is the nominal element that c-commands the PRO locally; consequently, the syntactic condition, which is based on locality, can capture the fact in (i) without difficulty. In this paper, I assume that obligatory control is explained under the syntactic approach.

\section{Proposal}

\subsection{Theoretical Assumptions}

\subsubsection{A Theory of Agree and Its Locality}

The theory that I assume in this paper is a theory of Agree, as advocated by Chomsky (2000, 2001, etc.). Under this theory, an Agree operation is introduced as the operation for dealing with feature valuation, and the operation takes place under the structural relation in (20), based on the assumption for the probe-goal system in (21):

\begin{equation}
\text{(20) Agree:}
\begin{align*}
P & > G \quad \text{Agree (P, G)}, \quad \text{where P is a probe and G is a matching goal, ‘$>$’ is a c-command relation: P c-commands G.}
\end{align*}
\end{equation}
(21) Probe-Goal System:
   a. Matching is non-distinctness.
   b. D(P) is the sister of P.
   c. Locality reduces to ‘closest c-command.’
   d. Probe and Goal must be active. (Chomsky (2000: 122))

In (20) and (21), it is indicated that unvalued features of P and those of G are valued under the following conditions: (i) the features of P and G must match, (ii) P must c-command G, (iii) there cannot exist a matching element intervening between P and G, and (iv) both P and G must have uninterpretable features. Because all the agreement phenomena occur via this operation, feature valuation is no longer the driving force for movement. Under this theory, the EPP is considered to trigger the movement operation.

Furthermore, as stated in (21c), an Agree operation always follows the locality constraint, which is represented by ‘closest c-command.’ Thus, in the following configuration, where Probe (P) c-commands both Goal₁ (G₁) and Goal₂ (G₂) and where G₁ c-commands G₂, P cannot enter into an Agree relation with G₂ across G₁, and thus, it must establish an Agree relation with G₁:¹⁴

\[
(22) \quad \newcommand\uninterpretable{[\text{uninterpretable}]} \quad \begin{array}{c}
\text{P} \\
\text{G}_1 \uninterpretable \\
\text{G}_2 \uninterpretable
\end{array}
\]

However, if G₁ is replaced with an element that does not bear an uninterpretable feature, a different result is obtained: P can establish an Agree relation with G₂ across G₁, as in (23):

\[
(23) \quad \begin{array}{c}
\text{P} \\
\text{G}_1 \uninterpretable \\
\text{G}_2
\end{array}
\]

In this configuration, the establishment of an Agree relation between P and G₂ causes no locality violation, because G₁ with no uninterpretable feature cannot be ‘active’ or cannot serve as the Goal of an Agree relation given the assumption in (21d).

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¹⁴ Hiraiwa (2005) argues that in the configuration, P can enter into an Agree relation with G₂ via Multiple Agree only if it also establishes an Agree relation with G₁ at the same derivational point. Note here that in this case, the Agree relation between P and G₂ does not cause a locality violation, because locality is relativized to “Derivational Simultaneity.” For further details, see Hiraiwa (2005).
4.1.2. The Copy Theory of Movement

In this paper, I adopt the copy theory of movement, which is originally proposed in Chomsky (1995).

In the study of syntax in generative grammar, the trace theory of movement has traditionally been adopted, according to which a moved element leaves a gap behind in its original position, after which the gap is filled by a trace, a phonologically null element, as illustrated below:

(24) Who did you kiss t_i?

In (24), the wh-element who undergoes overt wh-movement to the sentence-initial position, with the trace left behind in its original position. However, when the shift in the mainstream linguistic theory toward the Minimalist approach (Chomsky (1995, 2000, etc.)) occurred, Chomsky (1995, 2000) proposed an approach to movement that is based on the “Inclusiveness” condition: No new elements are introduced by the computational system (Chomsky (2000: 113)). This condition requires that the only grammatical objects available for constructing a linguistic expression be the elements that are part of the numeration and that a syntactic derivation merely combine the objects. It follows from the condition that a trace, which is traditionally conceived of as a new object created by movement, is conceptually inadequate.

The theory is, therefore, replaced with the copy theory of movement, according to which movement is an operation that does not introduce a trace and merely leaves behind a complete copy of the moved element, which is not a newly introduced entity in the course of the derivation. Thus, if an element X moves from α to β, X occurs in β through internal-Merge, with its copy left behind in α. The copy left behind is, of course, normally deleted in the phonological component, given that overt movement must have a PF effect (cf. Chomsky (1995)). As a consequence of this theory, however, it is in principle possible for the lower copy to be pronounced rather than the higher one.¹⁵ This possibility is not predicted in the trace theory of movement, because the lower position of the moved phrase is occupied by a trace, which is generally assumed to be a phonologically null element. The concept is, however, supported by many empirical arguments

¹⁵ Bobaljik (2002) suggests that there is a four-way typology of movement operations: (i) The higher copy is interpreted at LF and pronounced at PF; (ii) the higher copy is interpreted, but the lower copy is pronounced; (iii) the higher copy is pronounced, but the lower copy creates the interpretation; and (iv) both pronunciation and interpretation target the lower copy. For more details, see Bobaljik (2002).
In English, it is generally assumed that the higher copy is pronounced, as is clear from the presence of overt wh-movement (cf. Nunes (2004), Fujii (2006), etc.). Takano (1998), however, argues that the pronunciation of the lower copy is also possible in English if a marked interpretation is necessary for both the LF and the PF interfaces. For example, consider the case of Heavy NP Shift (HNPS) in the so-called to-dative construction. Takano (1998), following the observation that this phenomenon is grammatical only when the ‘shifted’ element functions as the focus of the sentence (cf. Rochemont (1978)), proposes that the to-dative construction, exemplified in (25a), is derived via the obligatory overt movement of the DP a book across the PP for Case-feature checking; while the HNPS version of the construction, as in (25b), is derived from the way in which the heavy NP undergoes the obligatory movement at narrow syntax and then the higher copy is deleted at the phonological component because the DP functions as the focus:

(25) a. I gave a book to Mary.
   b. I gave to John [a brand-new book about genetics].

(Takano (1998: 862))

As a consequence of the deletion of the higher copy, the lower copy of the heavy NP can be interpreted as a focused XP at LF, and at the same time it is pronounced with a focus stress at PF.

4.2. Analysis

Taking the theoretical assumptions into consideration, I propose that the derivation of the LIC converges in the following fashion. A Theme DP and a Location PP are base-generated in the Comp and the Spec of VP, re-

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16 The status of the heavy NP as a focused XP is supported by the appropriate paraphrase into the cleft sentence, as in (i):
   (i) a. John wants to give to Mary a gift of inestimable value.
      b. It’s a gift of inestimable value that John wants to give to Mary.
   (Rochemont (1978: 33))

In (ib), which is an appropriate paraphrase of (ia), the focus position in the cleft sentence is filled by the heavy NP a gift of inestimable value. This strongly suggests that the heavy NP is always interpreted as the focus of the sentence (cf. the contrast in (5)).

17 This does not mean that only the pronounced lower copy is interpreted as LF, but that it is in principle possible not only for the pronounced copy but also for the unpronounced higher copy to be interpreted properly at LF.
spectively. Then, \( v \) is merged, and V-to-v raising takes place. As soon as T is introduced by Merge, T searches down the tree for a goal, and it enters into an Agree relation with the Theme DP across the Location PP; consequently, the \( \phi \)-feature on T and the Case-feature on the DP are deleted. Furthermore, the Theme DP undergoes A-movement to the Spec of TP to satisfy the EPP on T. When Top is introduced by Merge, the Location PP, which is assigned [+Topic], overtly moves to the Spec of TopP. Finally, when the derivation is transferred to the two interfaces, the lower copy of the Theme DP is pronounced with a focus stress at PF due to the status of the DP as a specially focused XP, and at the same time, it can be properly interpreted as a focused XP at LF. Now all the features that require agreement for convergence can be properly deleted; consequently, the derivation converges, as illustrated in the tree structure in (26):

\[ \text{[v*P Agent [v* [VP Location [V Theme]]]]} \]

In (i), \( v^* \) is a kind of light verb with the ability to assign Agent, and Location and Theme are base-generated in the Spec and the Comp of VP, respectively. This structure is in accordance with the thematic hierarchy proposed in Jackendoff (1972), and there is much cross-linguistic evidence that argues for the structure, as discussed in Hoji (1985), and Takano (1996, 1998), among others.

In this paper, I do not adopt the fine-grained structure in the CP zone, which is originally proposed in Rizzi (1997), although I assume for convenience sake that the topical Location PP targets TopP. Thus, I leave the relevance of this study to the split CP structure open for future research.

More specifically, I argue that the Theme DP in the LIC is associated with an identificational focus in the sense of Kiss (1998), which expresses exhaustive interpretation and occupies the Spec of a functional head. In fact, this is argued for by the following sentence:

\[ \text{(i) On the wall hung canvasses, but not paintings. (Bresnan (1994: 86))} \]

In (i), the Theme DP in the LIC is contrasted with the other DP in the but not phrase. According to Kiss (1998), this is a property of an identificational focus DP, and it is not observed in the case of an information focus, which merely conveys new information and involves no syntactic reordering.
Note here that in this structure, the establishment of an Agree relation between T and the Theme DP does not cause a locality violation, although the Location PP intervenes between them. This is because the Location PP need not be assigned any structural Case due to its inherent nature and thus does not function as the Goal of an Agree relation with T, given the assumption in (21d). Furthermore, in this derivation, the EPP on T is satisfied at narrow syntax not by the Location PP but by the Theme DP, which enters into an Agree relation with T, although the higher copy at the Spec of TP is deleted in the phonological component, as assumed in Takano (1998).21 Thus, this structure raises none of the theoretical problems discussed in 3.2.1, because the EPP on T is satisfied by the Theme DP at nar-

21 Strictly speaking, Takano (1998) claims that in English, the pronunciation of the lower copy is limited to the object DP, based on the following passive sentences:

(i)  a. [A brand-new book about genetics] was published. (Takano (1998: 865))
Sentence (ia), where the higher copy of the passivized Theme DP is pronounced at the Spec of TP, is grammatically correct, whereas sentence (ib), in which the lower copy of the DP is realized in its original position, is ungrammatical. If this claim is valid, the deletion of the higher copy of the Theme DP in the LIC should be problematic theoretically, because the copy occupies the Spec of TP. Runner (1995), however, proposes that the there-construction in English involves the deletion of the head of the chain formed by the overt movement of the Theme DP. This means that the deletion of the head of the chain, which fills the Spec of TP at narrow syntax, is possible in principle even in English. Furthermore, the following sentence, in which the passivized Theme DP remains in its original position and the expletive there is overtly realized, is not problematic at all:

(ii) There was heard a rumbling noise. (Takami and Kuno (2002: 39))
row syntax, which enters into an Agree relation with T, as in many other cases in English, and the Location PP is then raised out of its original position to the Spec of TopP without occupying the Spec of TP at a point in the derivation. In addition, my analysis, which does not use such an ad hoc assumption as a P-feature, can generate without any additional assumption the canonical word order sentence (e.g. *John walked into the room.*), which could not be generated under Nishihara’s (1999, 2005) analysis (cf. footnote 6), if the Location PP and the Theme DP do not function as the topical XP and the focused XP, respectively.

In this subsection, I have proposed a new analysis of the LIC without an ad hoc assumption such as that introduced in the previous approaches. In the next subsection, I demonstrate that this analysis provides a natural explanation for a wide range of data observed in the previous sections.

4.3. Explanation

4.3.1. The Subjecthood of the Theme DP

In this subsection, I explain the subjecthood the Theme DP in the LIC exhibits, which Nishihara’s (1999, 2005) analysis cannot explain. First of all, in this construction, as observed in (3) and (4), the Theme DP triggers agreement with a finite verb and is assigned nominative Case, repeated here as (27) and (28):

(27) a. In the swamp {*was/were} found a child.
    b. In the swamp {*was/were} found two children.

(28) In the garden sat {*they/them}!

In (27a) and (27b), the verb *be* shows singular and plural agreement with the Theme DPs *a child* and *two children*, manifested as *was* and *were*, respectively. In (28), the Theme DP bears nominative Case, manifested as *they*. Given Radford’s (2004) generalization in the framework of an Agree theory that an unvalued Case feature on a goal is valued as nominative by a probe carrying finite tense if probe and goal match in φ-feature (cf. Takezawa (1987)), the facts just noted strongly suggest that the Theme DP in the LIC enters into an Agree relation with the finite T; they can be cor-

This fact, given Runner’s (1995) approach to *there*-construction, means that even in an English passive sentence, the deletion of the higher copy of the passivized DP is possible when the expletive occurs in the sentence. This also empirically suggests that in English, the higher copy at the Spec of TP can be deleted given the right context. Thus, I simply conclude that the pronunciation of the lower copy of the Theme DP in the LIC raises no theoretical problem, and do not discuss further related details.
rectly accounted for under my analysis. In the structure shown in (26), as soon as T is introduced by Merge, T enters into an Agree relation with the Theme DP, and the φ-feature on T and the Case-feature on the DP are deleted. As manifestations of the establishment of the Agree relation, the DP is assigned nominative Case from the finite T, and at the same time, the finite verb is realized depending on the value of the φ-feature on the DP.

Secondly, the Theme DP in the LIC can be interpreted as an antecedent that obligatorily controls PRO in an adjunct clause, as confirmed in (18a), repeated here as (29):

(29) On the corner stood [a woman] without PRO being near another woman.

In (29), the Theme DP *a woman* is interpreted as the controller of the missing subject in the adjunct clause, which is adjoined to vP. As discussed in 3.2.2, the obligatorily controlled PRO must be locally c-commanded by its antecedent (cf. Huang (1984)), and this implies that the Theme DP in the LIC moves from its original position to the position where the DP can locally c-command PRO in the adjunct clause. The fact can also be properly explained by my analysis in the following manner. In the proposed structure, the Location PP undergoes overt A′-movement to the Spec of TopP, while the Theme DP moves to the Spec of TP at narrow syntax, with the higher copy deleted at PF due to the status of the DP as a focused XP, as illustrated in (30):

(30)

In this structure, because the Location PP c-commands both the higher copy of Theme DP and PRO in the adjunct clause, and because the higher copy c-commands the PRO, it is the higher copy that c-commands the PRO locally. As a consequence, it follows from the condition on obligatory control that the Theme DP can control PRO in the adjunct clause ob-
ligatorily. Note here that it is not problematic at all for the higher copy to make a semantic contribution in determining the reference of PRO, because the copy theory of movement in principle makes it possible for the unpronounced copy as well as the pronounced copy to be interpreted properly, as noted in footnote 17.²²

4.3.2. The Dual Properties of the Location PP

In this subsection, I give an account of the topichood and alleged A-properties of the Location PP in the LIC.

Let us start by considering the topichood of the Location PP. In this construction, the PP forms an island, as confirmed in (7), repeated here as (31):

(31) *I wonder how [into the room walked John t₁]?

In (31), the wh-element how cannot be extracted across the Location PP into the room. As seen above, this behavior of the PP is similar to that of the topicalized XP in the case of Topicalization, which occupies the Spec of TopP at narrow syntax. It can also be predicted properly by my analysis, with an accurate explanation for the nature of island constraints left open:²³ In the structure in (26) above, the topicalized Location PP moves

²² This explanation is further supported by the following fact on the binding of the reciprocal pronoun each other: In the LIC, the reciprocal contained in the Location PP can be bound by the Theme DP, as in (i):

(i) Beside each other, sat two young boys quietly. (Chung (2002: 128))

In (i), the Theme DP young boys serves as the antecedent of the reciprocal in the Location PP. As is well known, according to the Principle A of the binding theory (cf. Chomsky (1981), etc.), a reciprocal pronoun must be bound in its domain. Thus, sentence (i) strongly suggests that in the LIC, the Theme DP A-binds the reciprocal contained in the Location PP at a point in the derivation. Under my analysis, when T is introduced by Merge, the Theme DP, which establishes an Agree relation with T, undergoes A-movement across the Location PP to the Spec of TP, although the higher copy is deleted at PF due to the status of the DP as a focused XP, as shown below:

(ii) [TP The [VP Loc [ V <The> ] v] T]

At this point in the derivation, the higher copy of the Theme DP, which occupies the Spec of TP (i.e. A-position), A-binds the Location PP, which remains in its original position. This configuration satisfies the requirement for anaphor binding; consequently, the reciprocal pronoun contained in the Location PP can be co-referential with the Theme DP.

²³ The nature of island constraints has been one of the controversial issues in linguistic theory, and thus, many studies have been done on the issue. For further details, see Hornstein, Lasnik, and Uriagereka (2007) and Boeckx (2008), among others.
overtly to the Spec of TopP via Topicalization and thereby constitutes a topic-island; consequently, no element can be extracted across the Location PP.

Let us turn to the alleged A-properties of the Location PP, based on which Nishihara (1999, 2005) claims that the Location PP occupies the Spec of TP at a point in the derivation. Firstly, the Location PP in the LIC can occur in the raising construction, as confirmed in (10), repeated here as (32):

(32) [On that hill]i appeared [i to be located a cathedral].

In (32), the PP on that hill appears to undergo A-movement from the Spec of the embedded TP to the Spec of the matrix TP, as indicated by a trace. This fact appears not to be explained under my analysis at first glance; in this analysis, it is A′-movement rather than A-movement that the Location PP is assumed to undergo at narrow syntax. However, the fact is also explained under the analysis without raising any problem, as schematized below:

(33) [TopP Loc [TP <The> … [TP <The> … [VP <Loc> [V <The>]]]]]

In this configuration, the Location PP moves directly to the Spec of the matrix TopP via Topicalization, while the focused Theme DP undergoes A-movement to the Spec of the matrix TP through the Spec of the embedded TP at narrow syntax, although the lower copy is pronounced at PF.24 25 In this analysis, it follows that what undergoes the raising operation is the Theme DP, which enters into an Agree relation with T, and thus the Location PP merely moves overtly to the sentence-initial position via Topicalization after the application of the raising operation of the Theme DP.

Secondly, in the LIC, the DP contained in the Location PP can bind the pronoun in the Theme DP, as confirmed in (12), repeated here as (34):

(34) In every dog, i’s pen peered its owner.

24 The long-distance movement of the Location PP from the Spec of the embedded VP to that of the matrix TopP is not sensitive to the Phase Impenetrability Condition, because there is no strong phase (CP or v*P) between the matrix TopP and the embedded VP. For further details on this condition, see Chomsky (2000, 2001).

25 Note that the application of long Topicalization in the raising construction raises no problem, as shown in (i):

(i) John, Paul claims Mary seems to love i. (Kallmeyer and Romero (2008: 9))

In (i), where the raising operation is applied in the deepest clause, the object DP in the clause undergoes overt movement to the highest clause via long Topicalization. This suggests that Topicalization is in principle compatible with the raising operation.
Because it appears at first sight that the grammaticality of (34) is similar to that of the case involving A-movement (cf. (35a)), and because it is different from that of the case of A′-movement (cf. (35b)), Nishihara (1999, 2005) claims that the movement of the Location PP in the LIC is not sensitive to the WCO effect; that is, the PP undergoes A-movement to the Spec of TP at a point in the derivation.26 This fact, however, can also be captured properly under my analysis, as illustrated below:

(36) the LF representation: \[ VP \text{ Loc } [ V \text{ The } ] \]

This is the relevant part of the LF representation of the LIC. In this configuration, the Location PP, which undergoes A′-movement to the Spec of TopP at narrow syntax, occupies its original position due to reconstruction at LF. At the same time, the Theme DP, which moves overtly to the Spec of TP through A-movement, can also be interpreted in its original position at LF. Thus, it follows that the Location PP can c-command the Theme DP at the LF representation. As a consequence, the intended bound pronoun interpretation of the Theme DP is possible. One would wonder, however, why the A-movement of the Theme DP must be reconstructed at LF, given the generalization that A-movement does not exhibit a reconstruction effect. Remember here Takano’s (1998) approach to HNPS, in which he proposes that even in English, the pronunciation of the lower copy is permissible if a marked interpretation is necessary for both the LF and PF

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26 Strictly speaking, Nishihara (1999, 2005) merely points out the asymmetry in the grammaticality among sentences (34) and (35a); he does not discuss the details of the grammaticality of (34) and (35a) and the ungrammaticality of (35b). If we adopt his mode of analysis, however, the difference in grammaticality between the sentences in (35) should be accounted for as follows. In (35a), where the subject DP who moves across the adjunct phrase through A-movement, which shows no reconstruction effect, the pronoun variable in the adjunct phrase is c-commanded by the binder in the subject DP throughout the derivation including the LF representation; consequently, the intended variable reading is permitted. In (35b), on the other hand, the topical PP into every dog’s cage moves across the subject DP via A′-movement, which is allowed to be reconstructed; as a consequence, the pronoun variable in the subject DP cannot be c-commanded at LF by the binder contained in the topical element due to reconstruction, and thus, the intended variable reading is not possible. Given this account, in (34), because the Location PP moves across the Theme DP through A-movement (cf. (16)), the pronoun variable in the Theme DP is c-commanded by the binder in the Location PP throughout the derivation; consequently, the intended variable reading is obtained.
interfaces, arguing that HNPS is derived via the pronunciation of the lower copy due to the proper interpretation of the heavy NP as a focused XP at LF. In this paper, I argue that the LIC is also derived via the pronunciation of the lower copy of the Theme DP, which functions as the focus of the sentence, as in (26); consequently, the focused Theme DP can be interpreted properly in its original position at LF.

This explanation can also capture another syntactic property of the LIC: In this construction, the negative element in the Location PP can license the NPI, as confirmed in (14), repeated here as (37):

(37) Into none of the classrooms walked any of the students.

(38) a. None of the students walked into any of the classrooms.
    b. *Into none of the classrooms any of the students walked.

In (37), where the negative element none appears in the Location PP, it can license the NPI in the Theme DP. Because this behavior is, as confirmed in the above contrast, typically observed in the case that involves A-movement (cf. (38)), it would appear to support the idea that the derivation of the LIC involves the A-movement of the Location PP to the Spec of TP. The behavior, however, can also be explained under my analysis along the lines of the explanation of the grammaticality of (34).27 In the LIC, where the Location PP and the Theme DP move to the Spec of TopP and that of TP, respectively, the PP occupies its original position at the LF representation via reconstruction into VP, and the Theme DP can also be interpreted in its original position as a specially focused XP at LF. Consequently, it follows that the Location PP can c-command the Theme DP at the LF representation, as represented in (36), and thus the negative element contained in the

27 Although Nishihara (1999, 2005) does not give a detailed explanation for the (un-)grammaticality of (38a) and (38b), their difference in grammaticality can be accounted for as follows. In (38a), where the subject DP occupies the Spec of TP through A-movement, the negative element in the subject DP can license the NPI in the Location PP, because A-movement exhibits no reconstruction effect and thus the negative element asymmetrically c-commands the item at the LF representation. In (38b), on the other hand, the negative element in the topicalized Location PP, which undergoes A′-movement to the sentence-initial position, cannot license the NPI in the subject DP. This is because the topicalized PP, which moves across the subject DP through A′-movement at narrow syntax, is required to be interpreted in its original position at LF due to reconstruction. Consequently, the negative element in the PP cannot c-command the NPI at the LF representation. In passing, the licensing mechanism of the NPI at LF is argued for in Boeckx (2008), among others.
PP can license the NPI in the DP.\textsuperscript{28, 29}

5. The Stylistic Inversion Construction in French

So far, I have proposed a new analysis of the LIC, in which the topicalized Location PP moves overtly to the Spec of TopP, while the focused Theme DP undergoes A-movement to the Spec of TP at narrow syntax with the lower copy in its original position pronounced at PF. In this section, I consider the SIC in French, exemplified by the following sentence, and I show that the proposed analysis of the LIC can be extended to this con-

\textsuperscript{28} Note that in (37), although the negative element contained in the Location PP does not strictly c-command the NPI due to the presence of the PP projection, the NPI is licensed. This kind of phenomenon is observed in certain cases when computing command relation for binding (cf. Pesetsky (1995)). With respect to the LIC, the grammaticality of (34) independently supports in terms of binding that the Location PP is transparent, and thus, the DP contained in the PP c-commands the Theme DP.

\textsuperscript{29} There is a fact of scope interpretation, which might be problematic for both my analysis and Nishihara’s (1999, 2005): In the LIC, the Location PP always takes a wide scope over the Theme DP, as in (ia):

(i)  a. In some pigeonhole was lying every letter.  (some>every, *every>some)

   b. Some letter was lying in every pigeonhole.  (some>every, every>some)

   (Den Dikken (2006: 132))

This behavior seems idiosyncratic, given that in the canonical word order sentence, as in (ib), the Location PP can also take a wide scope over the Theme DP as well as a narrow scope with respect to the DP, even if the PP overtly remains in its original position. As is well known, the scope ambiguity of (ib) is generally captured by means of QR (cf. May (1977)), according to which a quantifier is adjoined to TP at LF to obtain the two different LF representations. Then, sentence (ia) suggests that the Theme DP does not undergo QR in LF and that the two different LF representations cannot be generated. This, however, is not captured in Nishihara’s (1999, 2005) analysis without any additional assumptions, where the Theme DP in the LIC remains in its original position without undergoing any movement in the same way that the object DP does, because the Theme DP cannot be prevented from being adjoined to TP at LF. Note also that Nishihara (1999, 2005), unlike me, cannot rely on the focus-based account like Takano (1998), because it does not adopt the copy theory of movement, nor does it mention the status of the Theme DP as a focused XP at all. However, I cannot capture the fact without any additional assumptions, either: Under my analysis, the Theme DP can be interpreted at both the Spec of TP and its original position due to the status of the DP as a focused XP; as a consequence, when the higher copy is interpreted, the copy asymmetrically c-commands the Location PP, which remains in its original position due to reconstruction into VP. Thus, I must answer why the higher copy of the Theme DP does not make a semantic contribution only in the determination of scope interpretation. In this paper, I leave this question unresolved for future research.
struction to achieve greater empirical coverage:\(^{30}\)

(39) Que fait Jean?
what does John
‘What is John doing?’ (Déprez (1990: 47))

In (39), the wh-element *que* undergoes overt movement to the sentence-initial position, and the subject DP *Jean* occurs post-verbally. To account for this fact, based on the observation that the distribution of the SIC is limited to wh-agreement environments, Watanabe (1996) proposes that the EPP on T is cancelled as a result of wh-agreement; that is, the subject DP remains in its original position at narrow syntax.\(^{31}\) In this section, I show that his proposal entails some theoretical and empirical problems. I argue instead that the SIC in French is derived in much the same way as the LIC in English. That is, the derivation of the construction involves both the overt A′-movement of a non-subject XP and the pronunciation of the lower copy of the subject DP at PF.


5.1.1. Wh-agreement and the Suspension of the EPP

As noted above, based on the observation that the SIC in French is found when wh-agreement is involved, Watanabe (1996) proposes the following under the Agr-based system: (i) as a manifestation of wh-agreement, the EPP on Agr-sP does not require its Spec to be filled at narrow syntax; and (ii) the subject DP undergoes covert movement to the Spec of Agr-sP for the EPP at LF. Thus, given these assumptions, the derivation of the SIC, as in (39), is schematized below:

\[
\begin{align*}
(40) & \quad \begin{array}{c}
\text{[CP wh} \\
\uparrow \text{wh-agreement} \\
\text{A′-movement}
\end{array}
\end{align*}
\]

In this structure, the wh-element undergoes overt A′-movement to the Spec of CP, while the subject DP remains in its original position at narrow syntax.

\(^{30}\) The proposed analysis of the LIC, without any difficulty, can further accommodate Preposing around *Be* (e.g. *More important has been the establishment of legal services*), which is pointed out in the literature as sharing a number of similarities with the LIC, although I cannot go into the matter because of a lack of space in this paper.

\(^{31}\) The SIC in French is not only possible in matrix interrogatives but is also applicable in embedded interrogatives, relative clauses, and a certain kind of subjunctive complements. For further details, see Kayne and Pollock (1978) and Watanabe (1996), among others.
because of the suspension of the EPP on Agr-sP induced by \textit{wh}-agreement.

In this manner, the EPP on T in the SIC is cancelled at least at the level of narrow syntax. This behavior is, however, extremely exceptional, given the generally accepted assumption that the EPP-feature on T is strong in French. Watanabe (1996) attributes this exceptional behavior to \textit{wh}-agreement on C.

\subsection*{5.1.2. Theoretical and Empirical Problems}

Firstly, I must point out that Watanabe’s (1996) idea that the EPP is suspended due to \textit{wh}-agreement is theoretically inadequate, because \textit{wh}-agreement on C and the EPP on T do not have anything to do with each other and because it is not clear at all why there is a correlation between \textit{wh}-agreement and the suspension of the EPP. Consequently, the idea is viewed as merely a descriptive generalization, unless a plausible explanation is given for the correlation. Furthermore, needless to say, the operation is inevitably counter-cyclic (cf. Hiraiwa (2005)). This is quite idiosyncratic, given the standard view that syntactic derivations proceed cyclically. Thus, if such an idiosyncratic idea is introduced to UG, it must be well motivated theoretically as well as empirically.

The analysis is also empirically inadequate. Consider the following sentence, where the raising operation is applied to the SIC:

(41) Quand semble venir Jean?
when seems to-come John
‘When does John seem to come?’ (Drijkoningen (1988: 44))

(42) On that hill appeared to be located a cathedral. (= (32))

In (41), it appears that the subject DP \textit{Jean} remains within the embedded clause, while the \textit{wh}-element \textit{quand} alternatively undergoes the raising rule, as is the case with the Location PP in the LIC (cf. (42)). This fact would be particularly problematic for Watanabe’s (1996) analysis, which would wrongly predict that the subject DP undergoes A-movement at least to the Spec of the embedded TP, unless an additional assumption was made, as schematized below:

\begin{equation}
[CP \textit{wh} [C \text{Agr-sP [Agr-s[\text{EPP}] ... [Agr-sP subject [Agr-s[\text{EPP}] ... [\text{A\textsuperscript{'}}-movement \text{A-movement}]]]]]]]
\end{equation}

Under his analysis, the EPP on Agr-sP is suspended as a manifestation of
wh-agreement. Thus, we can easily predict that in (41), the EPP on the matrix TP is cancelled as a result of the establishment of an Agree relation between the wh-element and the matrix C; it is, however, impossible to predict that the suspension of the EPP on the embedded TP also arises due to the establishment of wh-agreement in the matrix clause, because the suspension of the EPP would be determined across a clause-boundary or would be determined too globally. Indeed, when wh-agreement is established in the embedded clause, the subject DP in the embedded clause can occur postverbally; however, when wh-agreement is induced only in the matrix clause, the embedded subject DP must occur preverbally, as represented in the following contrast:

(44) ?Avec qui a prétendu Marie que sortirait Jean?
  with whom did claim Marie that would-leave John
  ‘Who did Marie claim that John would leave with?’

(Kayne and Pollock (1978: 604))

(45) a. A quoi voit Luc que Jean est venu?
  at what does-say Luc that John has come
  ‘What makes Luc say that John come?’
b. *A quoi voit Luc qu’est venu Jean?
  at what does-say Luc that-has come John

(Kayne and Pollock (1978: 604))

In (44), the wh-element avec qui, which is base-generated in the embedded clause, undergoes successive cyclic wh-movement through the Spec of the embedded CP; that is, the element triggers wh-agreement in the embedded clause. In this sentence, the embedded subject DP Jean can be postposed to the sentence-final position. In (45), on the other hand, where the wh-element a quoi is base-generated in the matrix clause and thus no wh-agreement is induced in the embedded clause, the embedded subject DP must fill the position before the embedded verb. As just described, Watanabe (1996) could not give an adequate account of the grammaticality of (41) without an additional assumption that the suspension of the EPP could be determined globally.

5.2. Analysis and Explanation

Taking into consideration Watanabe’s (1996) theoretical and empirical problems, I propose that under the copy theory of movement, the derivation of the SIC in French exemplified in (39) proceeds as follows. The wh-element que and the subject DP Jean are base-generated at the Comp of VP and the Spec of vP, respectively. As soon as T is introduced by
Merge, v-to-T raising takes place, and at the same time, T enters into an Agree relation with the subject DP; consequently, the φ-feature on T and the Case-feature on the DP are deleted. Then, the subject DP undergoes A-movement to the Spec of TP to satisfy the EPP on T. When C is introduced by Merge, it establishes an Agree relation with the *wh*-element and raises the element to its Spec overtly. Finally, when the derivation is transferred to the two interfaces, the lower copy of the subject DP is pronounced at PF. Now all the features that require agreement for convergence can be properly deleted; consequently, the derivation converges, as illustrated in the tree structure in (46):

(46) 

In this structure, the EPP on T is satisfied by the subject DP at narrow syntax, which enters into an Agree relation with T, although the higher copy is deleted at the phonological component. This structure, thus, does not raise the sort of theoretical problems that Watanabe’s account does.

Furthermore, this analysis is also preferable to Watanabe’s from an empirical point of view. Consider the case in which the raising operation is applied to the SIC, as confirmed in (41), repeated here as (47):

(47) Quand semble venir Jean?
    when seems to-come John
    ‘When does John seem to come?’

32 It is widely accepted that French includes a rule of v-to-T verb raising, unlike in English. This view is, for example, supported by the contrast between French and English with respect to the formation of yes/no interrogative sentences (cf. Travis (1984)).
In (47), the *wh*-element *quand* undergoes overt movement to the sentence-initial position and the subject DP *Jean* is realized after the embedded verb. Under my analysis, this fact can properly be accounted for, as schematized below:

\[
(48) \quad [\text{CP } \text{wh } [\text{C } [\text{TP } <\text{subject}> [\text{T } \ldots [\text{TP } <\text{subject}> [\text{T } [\text{vP subject} \text{A′-movement} \text{A-movement} \text{A-movement}] \text{V } <\text{wh}>]]]]]]]
\]

In this configuration, the *wh*-element DP moves directly to the Spec of the matrix CP, while the subject DP undergoes A-movement to the Spec of the matrix TP through the Spec of the embedded TP at narrow syntax, although the lower copy is pronounced at PF. In this analysis, it follows that the subject DP undergoes the raising operation, which enters into an Agree relation with T, and thus the *wh*-element merely undergoes overt *wh*-movement to the sentence-initial position after the application of the raising operation to the subject DP. This is exactly the same derivation as that of the raising version of the LIC (cf. (33)).

I have proposed in this section that in the SIC, the *wh*-element moves overtly to the Spec of CP, while the subject DP undergoes A-movement to the Spec of TP at narrow syntax, like the preverbal subject DP, though the higher copy is deleted at PF. This analysis is capable of resolving the theoretical problems with the previous analysis without being at the expense of its empirical adequacy.

6. Conclusion

In this paper, adopting the copy theory of movement (Chomsky (1995), etc.), I have proposed a new analysis of the LIC without such ad hoc assumptions as those introduced in the previous approaches, arguing that the topicalized Location PP undergoes overt A′-movement to the Spec of TopP, while the focused Theme DP undergoes A-movement to the Spec of TP at narrow syntax, followed by the pronunciation of the lower copy at PF. Furthermore, following and extending the proposed analysis of the LIC, I have shown that the SIC in French is derived in a fashion similar to that of the LIC, which resolves the theoretical problems posed in the previous analysis without sacrificing its empirical coverage.
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