

Papers from the Thirtieth Conference
November 10-11, 2012
and from
the Fifth International Spring Forum
April 21-22, 2012
of
The English Linguistic Society of Japan

JELS 30

日本英語学会第30回記念大会（慶應義塾大学三田キャンパス）・
国際春季フォーラム第5回大会（甲南大学）研究発表論文集
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President, Toshiaki INADA, Nagasaki University
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本書は、2012年4月21日、22日に甲南大学にて開催された日本英語学会第5回国際春季フォーラム、および同年11月10日、11日、慶應義塾大学三田キャンパスにて開催された日本英語学会第30回記念大会における研究発表論文とワークショップ要旨を収録しています。投稿辞退の分は除き、締切日までに投稿された論文を掲載しています。

第30回記念大会運営委員長
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[I]

**Thirtieth Conference
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Reconstruction into Parasitic Gaps

Jun Abe

Tohoku Gakuin University

Keywords: reconstruction effects, parasitic gaps, weak crossover, Make-OP, Single Tree Condition

1. INTRODUCTION

It has been the standard claim since Kearney (1983) observed the following contrast that reconstruction into parasitic gaps (PG) cannot take place:

- (1) a. Which books about himself did John file *t* before Mary read *e*?
b.*Which books about herself did John file *t* before Mary read *e*?

Chomsky (1986:60) takes this fact as indicating that PG constructions “are not simply ‘multiple gap’ constructions,” with the implication that the null operator analysis he advocates is on the right track. However, Munn (1994:407) claims, contra Chomsky, that “the asymmetry in anaphor reconstruction is not a property of parasitic gaps *per se* but rather of the nature of multiple gap constructions...,” providing the following data:

- (2) a. Which picture of himself did [every boy who saw *e*] say Mary liked *t*?
b.*Which picture of herself did [every boy who saw *e*] say Mary liked *t*?

In contrast to the pattern of reconstruction shown in (1), these data show that anaphor reconstruction into PGs are possible, but not into real gaps.

This paper aims to provide a new analysis of the above paradigm of reconstruction in PG constructions. In so doing, it crucially relies on Lebeaux’s (2009) Single Tree Condition, which basically requires that licensing of such elements as anaphors, pronouns, and bound variables is conducted in terms of a single position of a chain in a single representation such as LF. I propose that the QR-like operation that is part of Chomsky’s LF mechanism for making operator-variable chains leaves pro behind rather than trace. The impossibility of reconstruction in PG constructions is then attributed to a violation of weak crossover (WCO).

2. BACKGROUND ASSUMPTIONS

Munn (1994) tries to account for reconstruction effects of A’-movement that involves null operators, on the basis of Chomsky’s (1993) mechanism of LF operations that intends to derive legitimate operator-variable chains at LF. Chomsky (1993) raises the question how a legitimate operator variable chain is derived for such a case as the following, which involves pied-piping:

- (3) (guess) in which house John lived *t*

He claims that “the appropriate LF form of interpretation requires ‘reconstruction’, as in [4]” (p. 202):

- (4) a. [which *x*, *x* a house] John lived [in *x*]
b. [which *x*] John lived [in [*x* house]]

Given the copy theory of movement, (3) is actually represented as follows:

- (5) [in which house] John lived [in which house]

Chomsky then proposes two LF operations to derive an appropriate LF form such as (4a) and (4b) from (5). One is a QR-like operation that converts (5) to either (6a) or (6b) below:

- (6) a. [which house] [in *t*] John lived [which house] [in *t*]
 b. [which] [in [*t* house]] John lived [which] [in [*t* house]]

The other is LF deletion that applies in such a way that “in the operator position [Spec, CP], everything but the operator phrase must delete ... in the trace position, the copy of what remains in the operator position deletes.” (p. 203) If this deletion operation applies to (6a,b), the following representations are derived:

- (7) a. [which house] [~~in *t*~~] John lived [~~which house~~] [in *t*]
 b. [which] [~~in [*t* house]]] John lived [~~which~~] [in [*t* house]]~~

Chomsky takes these as legitimate LF representations that will be mapped into (4a,b) in a straightforward manner. In what follows, I follow Munn (1994) in calling the combination of the QR-like operation and LF deletion “Make-OP”.

This mechanism for creating a legitimate operator-variable chain captures reconstruction effects of Condition A in a straightforward manner. Consider the following example:

- (8) John wondered which picture of himself Bill saw.

To apply Make-OP to the surface structure of this sentence will give rise to the following two LF representations:

- (9) a. John wondered [which picture of himself] [~~*t*~~] Bill saw [~~which picture of himself~~] [*t*]
 b. John wondered [which] [~~*t* picture of himself~~] Bill saw [~~which~~] [*t* picture of himself]

(9a) represents the reading where *himself* refers to *John*, whereas (9b) represents the reading where *himself* refers to *Bill*. But this simplest mechanism faces a problem when we consider

reconstruction effects of Condition C, as illustrated below:

- (10) John wondered which picture of Tom he liked.

In this sentence, *he* cannot refer to *Tom*, which thus indicates that the fronted *wh*-phrase is forced to reconstruct in this case, unlike such a case as (8), in which the reconstruction in question is optional. To capture this asymmetry, Chomsky first proposes what he calls a preference principle to the following effect:

- (11) Try to minimize the restriction in the operator position.

This principle demands that the well-formed LF representation of (10) be the following:

- (12) John wondered [which] [~~*t* picture of Tom~~] he liked [~~which~~] [*t* picture of Tom]

In this representation, *he* cannot refer to *Tom* due to Condition C, the correct result. In order to capture the optionality of reconstruction in such an anaphor case as (8), he adopts an LF criticism approach to anaphors. Under this approach, (8) has either (13a) or (13b) after LF criticism applies to *himself*:

- (13) a. John self-wondered [which picture of *t_{self}*] Bill saw [which picture of himself]
 b. John wondered [which picture of himself] Bill self-saw [which picture of *t_{self}*]

The preference principle forces Make-OP to apply to these representations in the following manner:

- (14) a. John self-wondered [which] [~~*t* picture of *t_{self}*~~] Bill saw [~~which~~] [*t* picture of himself]
 b. John wondered [which] [~~*t* picture of himself~~] Bill self-saw [~~which~~] [*t* picture of *t_{self}*]

(14b) correctly represents the reading in which *himself* refers to *Bill*. As for (14a), Chomsky

(1993:209) claims that this “would break the chain (*self*, t_{self}), leaving the reflexive element without a θ -role at LF.” Thus the disfavored option, given below, is chosen as the only convergent derivation.

- (15) John self-wondered [which picture of t_{self}] [~~Bill~~ saw [~~which picture of t~~] [t]]

This represents the reading in which *himself* refers to *John*.

With this much in background, Munn (1994) examines whether the above mechanism can be extended to those A'-chains that involve null operators. On the grounds that reconstruction effects arise in null operator constructions, he starts his discussion with the following assumption:

- (16) Null operators and their traces are copies of the elements that license them.

As Munn (1994) notes in the final section, this raises the question “*how* the relevant copies are induced into the structure.” A simple answer will be to abandon postulating a null operator and to adopt, instead, an analysis according to which the anaphoric relation between a null operator and its antecedent is replaced by movement of the antecedent itself. Such an approach is in fact proposed by Vergnaud (1974) for relativization and by Nunes (2004) for PG constructions. In this paper, however, I will not commit myself to particular analyses for such constructions, and simply follow Munn in assuming (16).

Given this assumption, the most significant consequence of Chomsky’s mechanism of Make-OP comes from reconstruction effects of relativization, such as illustrated below:

- (17) a. the picture of himself that Bill likes
 b. the picture of Bill_i that he_i likes
 (Munn 1994:402)

(17a) shows that a reflexive that is included in

the antecedent phrase of a relative clause can be reconstructed into that clause, and (17b) shows that reconstruction with respect to Condition C does not take place in such a configuration, unlike such a case as (10). Munn posits the following structures for (17a) and (17b), respectively, as the ones to which Make-OP will apply:

- (18) a. the picture of himself [_{CP} which picture of himself that [_{TP} Bill likes which picture of himself]]
 b. the picture of Bill [_{CP} which picture of Bill that [_{TP} he likes which picture of Bill]]

Cliticization of the lowest occurrence of *himself* into *likes* and application of Make-OP in (18a) will derive the following LF representation:

- (19) the picture of himself [_{CP} [which] [~~picture of himself~~] that [_{TP} Bill self-likes [~~which~~] [t picture of t_{self}]]]

This represents the reading in which *himself* refers to *Bill*. Applying Make-OP to (18b) in such a way to observe the preference principle would derive the following LF representation:

- (20) the picture of Bill [_{CP} [which] [~~picture of Bill~~] that [_{TP} he likes [~~which~~] [t picture of Bill]]]

This violates Condition C if *he* and *Bill* are taken as coreferring. Munn (1994:402-3) notes that “in the relative clause, however, a copy of the restrictor is recoverable from the head of the relative clause,” and “deletion up to recoverability will thus allow the entire trace site in [20] to be deleted.” Hence, the final LF representation of (17b) is not (20) but rather the following:

- (21) the picture of Bill [_{CP} [which] [~~picture of Bill~~] that [_{TP} he likes [~~which~~] [t picture of Bill]]]

With *he* and *Bill* taken as coreferring in this

representation, no Condition C violation arises, the correct result.¹

3. PROPOSAL

Lebeaux (2009:2) proposes what he calls Single Tree Condition, which states that “[a]ny specific piece of lexical material in an element moved many times must be viewed as occupying a particular position in the chain, rather than occupying several positions at once.” Lebeaux formulates this condition as follows:

(22) *Rule for a candidate set at LF*

Erase all members of a candidate set, except one.

This means that among all the members of a chain, any one member can be a candidate for interpretation of the lexical content of the chain at LF, but only one can serve to this end. I propose that this condition is derivable from the way the condition on recoverability of deletion interacts with the operation of Make-OP for producing a legitimate chain; that is, the LF deletion operation, which is part of Make-OP, must apply up to recoverability, hence producing a chain in which only one member retains its content. I thus posit the following LF condition:

(23) LF deletion operation must apply to a _ given chain up to recoverability.

Recall that Make-OP consists of not only deletion operation but also a QR-like operation that raises an operator, leaving a trace. Thus, this operation converts (24), the LF input of the interrogative sentence *In which house did John live?* to either (25a) or (25b):

(24) [in which house] John lived [in which house]

(25) a. [which house] [in *t*] John lived [which house] [in *t*]

b. [which] [in [*t* house]] John lived

[which] [in [*t* house]]

Under the tenets of the minimalist program, it is reasonable to raise the question whether a trace of an operator created by the QR-like operation has a good theoretical motivation. Given that the trace theory is substituted for by the copy theory due to the inclusiveness condition, which prohibits any new item other than those taken out of the lexicon from being introduced into a derivation, it is rather doubtful to posit a trace as an entity that functions as a place holder after the QR-like operation has applied. I thus propose the following:

(26) The QR-like operation leaves *pro* behind when it raises an operator.

Given this hypothesis, the representations given in (25) are modified into the following:

(27) a. [which house] [in *pro*] John lived

[which house] [in *pro*]

b. [which] [in [*pro* house]] John lived

[which] [in [*pro* house]]

Applying the deletion operation to these representations, we reach the final LF representations:

(28) a. [which house] [~~in *pro*~~] John lived

~~[which house]~~ [in *pro*]

b. [which] [~~in [*pro* house]]] John lived~~

~~[which]~~ [in [*pro* house]]

There are a couple of reasons to prefer such representations over those which are originally proposed by Chomsky (1993). First of all, unlike trace, *pro* is a well-motivated entity in that it is included in the universal inventory of lexical items, though its availability to a given language is subject to parametrization. Further, such a trace-like use of *pro* has its overt counterpart, i.e., the resumptive pronoun strategy in which pronouns serve as variables bound by operators, as illustrated in the following English examples, which indicate that

when a *wh*-phrase is extracted out of an island, a pronoun must be inserted into its original position:

- (29) a. the man who_i they think that if Mary marries *(him_i), then everyone will be happy.
 b. I wonder who_i they think that if Mary marries *(him_i), then everyone will be happy. (Chomsky 1982:11)

Though it is necessary to provide an independent theory for determining when *pro* is available to a given language, these considerations will give enough reason to hypothesize (26).

We are now in a position to discuss those PG cases that show anaphor reconstruction effects and to give a unified account to the pattern of reconstruction exhibited by them under the present assumptions. The relevant examples are repeated below for an expository purpose:

- (30) a. Which books about himself did John file *t* before Mary read *e*?
 b.*Which books about herself did John file *t* before Mary read *e*?
 (31) a. Which picture of himself did [every boy who saw *e*] say Mary liked *t*?
 b.*Which picture of herself did [every boy who saw *e*] say Mary liked *t*?

I propose that the impossibility of anaphor reconstruction, shown in (30b) and (31b), follows as a WCO violation. I assume Chomsky's (1976) Leftness Condition, given below, as the one responsible for WCO.

- (32) A variable cannot be the antecedent of a pronoun to its left.

A typical example of WCO is illustrated below:

- (33)?*Which boy_i does his_i mother like *t*_i?

Under the present assumptions, applying Make-OP to this sentence gives rise to the following LF representation:

- (34) [which] [~~pro boy~~] does his mother like
 [~~which~~] [pro boy]

In this representation, *his* cannot be taken as a variable bound by *which* according to (32), since it is to the left of *pro*, the variable of *which*.

Let us now consider the examples in (30), which show that anaphor reconstruction into PG is impossible. Their final LF representations will be as follows:²

- (35) a. [which] [~~pro books about himself~~] did John self-file [~~which~~] [pro books about *t*_{self}] before Mary read [~~which~~] [pro books about himself]
 b.*[which] [~~pro books about herself~~] did John file [~~which~~] [pro books about herself] before Mary self-read [~~which~~] [pro books about *t*_{self}]

We do not assume any ordering with respect to the way Make-OP applies to more than one chain. Thus, the deletion operation can apply in any order as long as the resulting chain obeys (23), a condition on obligatory deletion up to recoverability, and the ban on breaking the *self*-chain. Notice further that in each representation, one occurrence of *pro* constitutes part of an argument, simply functioning as a variable, like *pro* in [pro books about *t*_{self}], and the other functions as an argument itself; let us call the former variable *pro* and the latter argument *pro*. Let us then modify the Leftness Condition, given in (32), as follows:³

- (36) A variable *pro* cannot be the antecedent of an argument *pro* to its left, where argument *pro* includes an overt pronoun.

Given this condition, (35a) is a legitimate LF representation, with the argument *pro* that occupies the complement position of *read* being to the right of the variable *pro* in the matrix object position. (35b), by contrast, violates this

condition, since the argument *pro* occupying the complement position of *file* is to the left of the variable *pro* in [pro books about t_{self}].

Let us then consider the examples in (31), which show that anaphor reconstruction into PG is mandatory, contrary to those in (30). Their final LF representations will be as follows:

- (37) a. [which] [~~pro picture of himself~~] did
 [every boy who self-saw [~~which~~] [pro
 picture of t_{self}]] say Mary liked
 [~~which~~] [pro picture of himself]
 b.*[which] [~~pro picture of herself~~] did
 [every boy who saw [~~which~~] [pro
 picture of herself]] say Mary
 self-liked [~~which~~] [pro picture of t_{self}]

While (37a) is a legitimate LF representation, satisfying the modified Leftness Condition, (37b) violates this condition, since the argument *pro* occupying the complement position of *saw* is to the left of the variable *pro* in [pro picture of t_{self}].

Finally, let us consider the following data, which differ from those in (31) only in that the matrix and embedded subjects are swapped.

- (38) a. Which picture of himself did Mary
 say [every boy who saw e] liked t ?
 b. Which picture of herself did Mary
 say [every boy who saw e] liked t ?

Interestingly, in these cases, anaphor reconstruction can take place not only into PGs but also into real gaps, unlike those in (31). Under the present assumptions, the LF output representations of the sentences in (38) will be as follows:

- (39) a. [which] [~~pro picture of himself~~] did
 Mary say [_{CP} [~~which picture of
 himself~~] [_{TP} [every boy who self-saw
 [~~which~~] [pro picture of t_{self}]] liked
 [~~which~~] [pro picture of himself]]]]
 b. [which] [~~pro picture of herself~~] did

Mary self-say [_{CP} [which] [pro picture
 of t_{self}] [_{TP} [every boy who saw
 [~~which~~] [pro picture of herself]] liked
 [~~which~~] [pro picture of herself]]]]

(39a) is a legitimate LF representation, just like (37a). In (39b), cliticization of *herself* takes place from the intermediate Spec-CP to the matrix verb *say*, so that it can refer to *Mary*. This representation does not violate the modified Leftness Condition, since the two occurrences of argument *pro*, one in the complement position of *saw* and the other in the complement position of *liked*, are to the right of the variable *pro* in the intermediate Spec-CP. Hence, (39b) is also a legitimate LF representation.⁴

NOTES

¹For space limitation, I will not discuss Munn's (1994) own proposal on how to deal with the data given in (1) and (2). I refer the reader to Abe (2012), the full version of the present paper.

²I am not committed to the status of t_{self} , which may well be just the copy of *him/herself*. Further, I omitted the copies that correspond to null operators in the representations in (35) simply for an expository purpose. Given (23), null operators are simply deleted, hence playing no role in explaining reconstruction effects. This policy is maintained in what follows in the text.

³In order for this modified condition to work properly, we need to assume that such sentences as in (i) have LF representations as given in (ii), so that *pro* in the object position is identified as variable *pro* rather than argument *pro*.

- (i) a. Who did you see t ?
 b. What did you see t ?
 (ii) a. [wh] [~~pro person~~] did you see [~~wh~~] [pro
 person]

b. [wh] [~~pro thing~~] did you see [~~wh~~] [pro thing]

⁴It will be controversial whether WCO should be captured by such a condition as the Leftness Condition, which exploits the notion of leftness. The more standard characterization of WCO will be the one in terms of c-command. In that case, the relevant condition is something like the following:

- (i) A variable *pro* cannot be the antecedent of an argument *pro* *it does not c-command*, where argument *pro* includes an overt pronoun.

Howard Lasnik (personal communication) points out that even under this condition, (37a) and (39a) can be captured as cases of donkey anaphora, so that, following Haïk's (1984) terminology, the variable *pro* "indirectly binds" the argument *pro* through the quantificational subject (on the assumption that the variable *pro* can c-command out of the argument that dominates it). (35a) may be tougher to deal with, given the anti-c-command requirement on PGs. I must leave these technical details for future research.

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TWO TYPES OF MAIN VERB INVERSION IN ENGLISH*

Akihiko Arano

Tohoku University

Keywords: Locative Inversion, Quotative
Inversion, covert A-movement, intervention
effects

1. Introduction

This paper investigates syntactic properties of Locative Inversion (henceforth LI) and Quotative Inversion (henceforth QI) constructions, as illustrated in (1) and (2) respectively.

(1) Locative Inversion

On the wall were standing two large
blackbirds. (Postal (2004: 18))

(2) Quotative Inversion

“I’m so happy,” thought Mary.
(Collins (1997: 11))

They are similar in their surface forms and instantiate Main Verb Inversion constructions in English, within which elements are ordered roughly as ‘XP V DP.’

The aim of paper is to argue that LI and QI should be analyzed differently, contra some authors who have given a similar treatment to these constructions (Collins (1997) and Wu (2008) among many others). I newly show that the LI and QI construc-

tions differ as to whether they can co-occur with experiencer arguments selected by raising verbs, how pronouns are realized in tag questions, and whether *alone*-final NPs are allowed to occur therein. These differences between the two constructions are explained by arguing that the semantic subject in QI undergoes phrasal A-movement to [Spec, TP] at LF, while that in LI does not, owing to the presence of an expletive in [Spec, TP].

This paper is organized as follows. Section 2 presents the three types of contrast between LI and QI. Section 3 advances our proposal to derive the differences. Section 4 concludes the paper.

2. Empirical Facts

2.1. Fact 1: Intervention Effects by Experiencers

The past literature has shown that both LI and QI can be embedded under raising verbs as exemplified in (3) and (4) (Postal (1977), Kathol and Levine (1993), Wu (2008)).

(3) Near the fountain seem to have been
found two purple bananas and a peach.
(Postal (1977: 148))

(4) “Leave me alone!” seemed to shout the
little girl. (Wu (2008: 100))

What has remained unobserved so far, to the best of my knowledge, is the (in)compatibility of these constructions with experiencer arguments. When the experiencer appears just before the *to*-infinitive, LI is acceptable, but QI is not.¹

(5) On the wall seemed to me to be standing John.

(6) a. “Look at me. I’m still here!” seemed to shout the barn.

b.* “Look at me. I’m still here!” seemed to me to shout the barn.

QI with the experiencer argument is ameliorated when the experiencer is preposed or extraposed, as shown in (7).

(7) a. “Look at me. I’m still here!” to me, seemed to shout the barn.

b.? To me, “Look at me. I’m still here!” seemed to shout the barn.

c. “Look at me. I’m still here!” seemed to shout the barn, to me.

Importantly, not all kinds of intervening phrase are incompatible with QI. In contrast to experiencer arguments, adjuncts are allowed to occur in the middle position of QI.

(8) “Look at me. I’m still here!” seemed on some occasions to shout the barn.

This fact indicates that the unacceptability in (6b) cannot be explained solely in terms of word order restrictions such that there be nothing but *to* between a quote verb and a raising verb in QI. We have to explain why only experiencer arguments fail to appear in QI.

Another property of Quotative constructions to be explained is illustrated in (9), which constitutes a minimal pair with (6b) and shows that Quotative constructions can co-occur with experiencer arguments when inversion is not involved.

(9) “Look at me. I’m still here!” the barn seemed to me to shout.

2.2. Fact 2: The Realization of Pronouns in Tag Questions

As Bowers (1976) observes, tag pronouns in LI are realized as *there*.

(10) In the garden is a beautiful statue, isn’t there? (Bowers (1976: 237))

This is not true of QI, where tag pronouns must correspond to post-verbal DPs, as shown in (11).

(11) a. “Never!” cried a strange man, didn’t he?

b.* “Never!” cried a strange man, didn’t there/it/so?

2.3. Fact 3: Alone-Final NPs

The third difference is concerned with *alone* that appears after NPs and essentially means ‘only.’ When inversion is induced, post-verbal NPs can end with this expression in Quotative but not in Locative constructions.

(12) a. John alone is standing on the wall.

b.?? On the wall is standing John alone.

(13) a. “Look at me!” John alone shouted.

b. “Look at me!” shouted John alone.

3. Proposal

I assume the null expletive analysis of LI, following Postal (1977, 2004) and Bruening (2010). The structure of LI is represented as in (14), where a null counterpart of *there* has occupied [Spec, TP] and, therefore, a semantic subject has remained in-situ.

- (14) LI: The Null Expletive Analysis

$$[\text{CP PP C } [\text{TP expl T } [\text{VP V DP } t_{\text{PP}}]]]$$


Accordingly, this analysis assumes that the sentences in (15) share the abstract structure.²

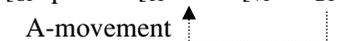
- (15) a. Near the fountain sat a large purple gorilla. (Postal (1977: 146))
 b. Near the fountain there sat a large purple gorilla. (Postal (1977: 146))

As for QI I propose that the semantic subject undergoes covert phrasal A-movement (cf. Polinsky and Potsdam (2012)). Thus, QI is derived as shown in (16), where a quote has moved to [Spec, CP] at surface structure, and a DP subject has moved to [Spec, TP] at LF.

- (16) QI: The Covert A-movement Analysis
 a. Surface Structure

$$[\text{CP quote C } [\text{TP T } [\text{VP V DP } t_{\text{quote}}]]]$$

 b. LF Structure

$$[\text{CP quote C } [\text{TP DP T } [\text{VP V } t_{\text{DP}} t_{\text{quote}}]]]$$


When a subject moves overtly, in contrast, a non-inverted counterpart is derived.

In the following subsections, I show that my proposal provides an account of the characteristics of LI and QI reported in the last section.

3.1. Fact 1

My proposal accounts for the first contrast between the two constructions under the certain assumption about the experiencer argument.

As is well known, English subject-to-subject raising is not blocked by an inter-

veneering experiencer.

- (17) John seems to Mary t_{John} to be happy.

Given that Relativized Minimality relies on the c-command relation (Rizzi (1990)), and that subject-raising does not show Relativized Minimality effects, the experiencer *Mary* seems not to c-command the trace of the subject *John*. Binding consideration, however, shows the opposite result.

- (18) * They seem to him_i to like John_i.

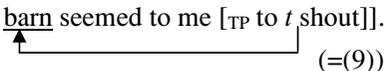
(Chomsky (1995: 304))

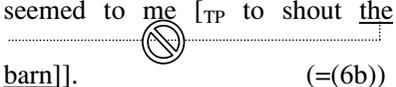
(18) shows that the pronominal experiencer cannot refer to the object in the embedded clause, which is a Condition C effect of the binding theory. Since the binding condition grounds on the c-command relation, the unacceptable status of (18) suggests that the experiencer c-commands into the embedded infinitive. Thus, (17) and (18) pose a problem that we call the experiencer paradox.

I circumvent this problem, following Kitahara (1997) and Epstein et al. (1998), by assuming that the c-command domain of an experiencer changes in the course of derivation. Subject-raising is not prevented, because the c-command relation is not established between the experiencer and the subject in the embedded clause at surface structure. By contrast, the experiencer is able to c-command into the infinitive at the level where the binding theory applies, i.e., at LF.

This assumption predicts that in English, covert A-movement is blocked by the experiencer, whereas overt A-movement is not. Since my analysis of QI crucially

relies on covert phrasal A-movement, it is predicted that Quotative constructions can be embedded under the raising verb unless inversion is induced and the experiencer act as an intervener for movement. Hence, the contrast in (19) falls under my analysis (the sentences in section 2.1. are repeated below with the relevant structure added).

(19) a. “Look at me. I’m still here!” [TP the barn seemed to me [TP to *t* shout]].
 (=9)

b. * “Look at me. I’m still here!” [TP \blacktriangle T seemed to me [TP to shout the barn]].
 (=6b)

(19a) is grammatical because the experiencer does not prevent overt A-movement. (19b) is, on the other hand, ungrammatical due to the status of the experiencer argument as an intervener for covert A-movement. If my analysis is on the right track, (19b) will be improved when the experiencer ceases to be an intervener. Then, it is reasonable that the examples in (20) are grammatical as a result of preposing or postposing the experiencer.

(20) a. “Look at me. I’m still here!” to me_i, [TP \blacktriangle T seemed *t*_i [TP to shout the barn]].

b. ? To me_i, “Look at me. I’m still here!” [TP \blacktriangle T seemed *t*_i [TP to shout the barn]].

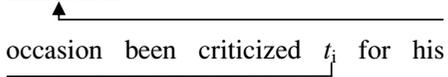
c. “Look at me. I’m still here!” [TP [TP \blacktriangle T seemed *t*_i [TP to shout the barn]], to me_i].
 (=7)

The same effect is observed in Italian, where overt raising across experiencers is prohibited (see McGinnis (1988) for French and Holmberg and Hróarsdóttir (2003) for Icelandic).

(21) Italian

- a. * Gianni_i sembra a Maria [*t*_i essere Gianni seems to Maria to.be stanco].
 ill
 ‘Gianni seems to Maria to be ill.’
- b. A Maria_j, Gianni_i sembra *t*_j [*t*_i to Maria Gianni seems essere stanco].
 to.be ill
 ‘To Maria, Gianni seems to be ill.’
 (Bošković (2011: 4))

Furthermore, given that adjuncts in general do not count as interveners for A-movement because of their A'-status, as shown in (22), the grammaticality in (23) also follows from my analysis: Adjuncts do not preclude covert A-movement.

(22) The pope_i has on more than one occasion been criticized *t*_j for his actions regarding abuse by priests.

 (Bruening (2012: 6))

(23) “Look at me. I’m still here!” [TP_▲ T
 seemed on some occasions [TP to shout
 the barn]]. (=8))

Next, let us turn to LI. The derivation of LI does not involve the A-movement of a semantic subject, because a null expletive is in [Spec, TP]. Therefore, as *there* constructions, LI constructions can co-occur with the experiencer argument.

(24) a. On the wall [TP_{expl} seemed to me
 [TP to be standing John]]. (=5))
 b. [TP There seemed to me [TP to be a
 man standing on the wall]].

Summarizing, I have proposed that QI involves covert phrasal A-movement, while LI does not. It is predicted that only the former is subject to the locality of movement. On the assumption that the experiencer c-commands material to its right only at LF, my proposal has explained why only LI is compatible with the experiencer argument occurring before *to*-infinitives.

3.2. Fact 2

In tag questions, a pronoun in the tag must agree with the syntactic subject, as illustrated in (25).

(25) Guns are dangerous, aren’t they/*it?
 (Adapted from Postal (2004: 41))

Given the test of tag questions, my analysis predicts that LI and QI behave differently. The specifier of TP in LI is occupied by a null expletive. In contrast, this position is occupied by a DP subject in QI. Therefore, it is predicted that a pronoun in the tag

corresponds to an expletive in LI whereas that corresponds to a semantic subject in QI. This explains the second difference, repeated in (26).

(26) a. In the garden is a beautiful statue,
 isn’t there? (=10))
 b. “Never!” cried a strange man,
 didn’t he? (=11a))

3.3. Fact 3

The distribution of *alone*-final NPs is not free. Simplifying somewhat, only NPs sitting in the subject position can host *alone* (see Postal (1974: 99-102)). Thus, *alone* can follow NPs in [Spec, TP], but it fails to modify objects.

(27) a. Jones alone knows the secret
 formula. (Postal (1974: 99))
 b.* Call Bob alone. (Postal (1974: 99))

Given this restriction, the contrast in (28) is expected under my analysis.

(28) a.?? On the wall is standing John
 alone.
 b. “Look at me!” shouted John
 alone.

The post-verbal NP in LI does not move to [Spec, TP] due to the null expletive, and therefore cannot license *alone*. In contrast, the semantic subject moves to [Spec, TP] at LF in QI and the modification by *alone* is allowed.

3.4. A Further Consequence

Another prediction arising from my proposal is that LI’s and QI’s subjects are interpreted in different positions: The former are interpreted in the base position and the

latter in [Spec, TP]. This prediction is supported by control phenomena. (29) and (30) show whether post-verbal subjects in these constructions can be an antecedent of PRO in the adjunct phrase.

(29) a. Two sheiks lay near the oasis without talking.

(Nishihara (1999: 387))

b. * Near the oasis lay two sheiks without talking.

(Postal (1977: 150))

(30) a. “Ah, Pam,” said Sarah, waving her hand in disgust.

(Gyoda (1999: 278))

b. ? “I am so happy,” thought Mary without actually saying.

(Branigan and Collins (1993: 6))

This contrast indicates that the semantic subject is interpreted higher in QI than in LI, which follows from the present analysis.

4. Conclusion

This paper has shown the hitherto unknown contrasts between LI and QI with respect to experiencer arguments, tag questions, and *alone*-final NPs. To explain these contrasts, I have proposed that the semantic subject of QI is moved covertly to [Spec, TP], whereas the semantic subject of LI does not undergo phrasal movement to [Spec, TP], where a null expletive is inserted. The proposed analysis has reduced the first difference to the (in)existence of covert phrasal movement, which is regulated by the locality of movement. The second difference has been accounted for in terms of the identity of elements in [Spec, TP]. Finally,

the distribution of *alone*-final NPs has been related to the position of post-verbal subjects.

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FOOTNOTES

¹ In this paper, I owe the judgment of sentences with no reference to my informants.

² Hiroyuki Nawata (personal communication) asked why null expletives are allowed only when PPs are fronted, and Takashi Shizawa (personal communication) asked why the definiteness effect is not observed in LI, as opposed to *there* constructions. I leave these questions for my future research (cf. Bruening (2010)).

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Lethal Ambiguity in Equative Small Clauses

Yuko Asada
SOLIFIC, Sophia University

Keywords: small clause, EPP feature,
object shift, lethal ambiguity

1. Introduction

It has been observed cross-linguistically that exceptional-case marking (ECM) verbs like *consider* do not behave in the same way with respect to two types of small clauses (SCs)—a predicational small clause (PSC), where the two DPs in the SC express a predication relation, and an equative small clause (ESC), where the two DPs in the SC yield an equative reading (cf., e.g., Den Dikken 2006, Heycock 1994a, b, Rothstein 1995, 2001).¹ This contrast is illustrated by the examples in (1) and (2).

- (1) *PSC* a. I believe [John a genius].
b. I consider [John the murderer].
(2) *ESC* a. *I believe [John Mr. Smith].
b. *I consider [the murderer John].

While the distribution of the two types of SCs as seen above has been investigated across languages (cf. Deron 1983, Rapoport 1987, for Hebrew; Moro 1997 for Italian; Ruwet 1979 for French), the topic has received relatively less attention in the literature of Japanese syntax.

With this background, the aim of this paper is to offer a new analysis of the distribution of ESCs, on the basis of evidence from Japanese. The paper is organized as follows. Section 2

introduces the generalization concerning the distribution of ESCs widely held in previous analyses. Section 3 presents Japanese data that contain SCs, some of which are problematic for the generalization. Section 4 proposes a novel analysis of the distribution of ESCs, based on the evidence from Japanese. Section 5 shows that the proposed analysis makes a correct prediction on the behaviors of English passive and raising constructions. Finally, section 6 summarizes the discussion.

2. Previous analyses

Researchers have made various proposals to capture the contrast in grammaticality as between (1) and (2) (see the references cited above). While these proposals vary in details, they have a common strategy to cope with this issue: selection.

To cite a few, Rapoport (1987) and Rothstein (1995, 2001) attribute the ungrammaticality of examples like (2) to the following generalization:

- (3) An ECM verb selects a PSC, not an ESC.

In a similar vein, Heycock (1994b) and Den Dikken (2006) claim that ESCs and PSCs are selected by different types of verbs, based on the observation that an ESC can occur with a verb like *make* as shown by (4).

- (4) *ESC* If Bill has an alibi for 6pm, that
makes [the murderer John]!

(Heycock 1994b: 235)

According to the two authors, more precisely, the PSC that appears in (1b) and the ESC that appears in (4) have different syntactic representations as in (5)–(6) and (7)–(8), respectively.

- (5) *PSC* [_{VP} consider [_{DP} John Det⁰ [the murderer]]]

- (6) *ESC* [_{VP} make [_{AspP} [the murderer]_j
Asp⁰ [_{DP} John *t_j*]]]
(cf. Heycock 1994b)
- (7) *PSC* [_{VP} consider [_{RP} John Relator⁰ [the
murderer]]]]
- (8) *ESC* [_{VP} make [_{AspP} [the murderer]_j
[Asp⁰+Relator⁰_i [_{RP} John *t_i* *t_j*]]]]]
(cf. Den Dikken 2006)

Putting aside the details of their proposals, as irrelevant here, if we follow these analyses, the ill-formedness of examples like (2), where the verb *consider* selects an ESC, can be attributed to a problem of selection: the verb selects a wrong type of SCs.

As briefly sketched above, in the past literature, the unavailability of ESCs in ECM constructions has been dealt with in terms of the generalization in (3). Unfortunately however, this generalization turns out to be not descriptively adequate, as we will see next.

3. Japanese small clauses

The distribution of SCs in Japanese has been examined to a lesser extent than that in languages like English. Let us then start out by introducing the examples in Japanese that correspond to the English (1) and (2), as below, assuming that examples like these, just like their English counterparts, are SC constructions (cf. Hiraiwa 2001, Kikuchi and Takahashi 1991, Takezawa 1987).

- (9) *PSC*
Watasi-ga/-wa [John-o kodomo-ni/
I-Nom/-Top John-Acc child-Dat
(?)tensai-ni/(?)hannin-ni] omot-ta.
genius-Dat/culprit-Dat consider-past
'I considered John {a child/a genius/the
culprit}.'

- (10) *ESC*
*Watasi-ga/-wa [John-o/hannin-o

I-Nom/-Top John-Acc/culprit-Acc
Smith-san-ni] omot-ta.
Mr. Smith-Dat consider-past
(lit.) 'I considered {John/the culprit} Mr.
Smith.'

The example in (9), where the ECM verb *omou* 'consider' occurs with a PSC, is acceptable,² while the example in (10), where the ECM verb follows an ESC, is judged to be highly deviant. Thus, the pattern of grammaticality of these examples is exactly the same as that of the English examples in (1) and (2), and it can be attributed to the generalization in (3).

However, there are other data from Japanese that do not fall into (3). Consider the examples of passive and potential constructions in (11) and (12).

- (11) *Passive*
Taroo-ga Hanako-ni Ziroo-ni
Taroo-Nom Hanako-Dat Ziroo-Dat
omow-are-ta.
consider-passive-past
'Taroo was considered to be Ziroo by
Hanako.'

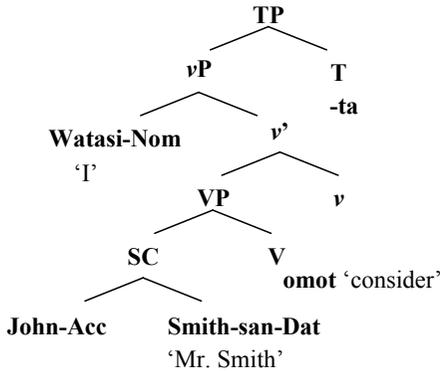
- (12) *Potential*
Taroo-ni(-wa) sono otoko-ga
Taroo-Dat(-Top) that man-Nom
Ziroo-ni omo-e-ta.
Ziroo-Dat consider-can-past
'To Taroo, that man seemed to be Ziroo.'

These examples, just like the example in (10), yield an equative reading, but unlike (10), they are grammatical. Thus, here, the "problem" that makes (10) unacceptable seems to be "repaired."

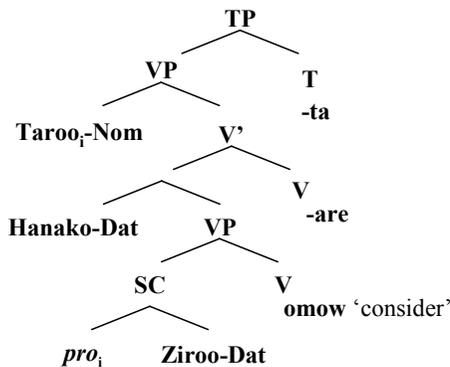
Where does this repair effect come from? To explore more in detail, let us examine the structures of the examples in (10), (11), and (12). The three examples are analyzed as in (13), (14), and (15), under the standard assumption that Japanese passive and potential constructions

involve VP-complementation (cf. Kitagawa and Kuroda 1992; Bobaljik and Wurmbrand 2007, Nomura 2005).³

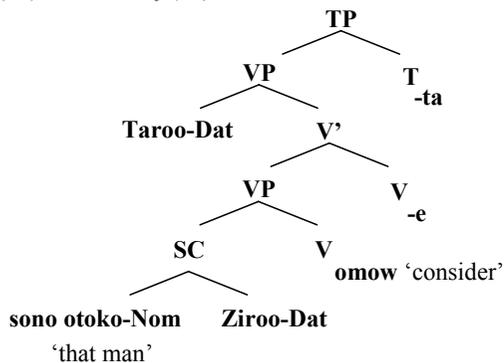
(13) Structure of (10)



(14) Structure of (11)



(15) Structure of (12)



As shown here, the examples in (11) and (12), just like (10), contain an ECM verb that selects an ESC. Thus, the fact that these examples are grammatical is not descriptively compatible with

(3), the generalization often found in the literature.

In what respect, then, do (11) and (12) differ from (10)? If the grammaticality of the former two examples cannot be accounted for in terms of selection between the verb and its SC complement, an alternative explanation of these data is called for. In the next section, I address this issue with a novel approach.

4. Proposal

The description that emerges from the Japanese data above is that in the grammatical examples in (11) and (12), the VP headed by the ECM verb is embedded into a complex predicate headed by an unaccusative verb, while in the ungrammatical example in (10), the ECM verb appears as a simple transitive predicate. This suggests that the failure of licensing an ESC selected by an ECM verb stems from the presence of a transitive *v* in a structure.

In consideration of the above discussion, I propose that the distribution of ESCs is related to a syntactic operation triggered by *v*. More specifically, I will show that the variable behaviors of ECM verbs with respect to two types of SCs can be explained in terms of the following two assumptions. First, I assume that in languages like English and Japanese, the EPP feature on the matrix *v* in ECM constructions triggers overt movement of the closest DP to the domain of *v*P, a process known as object shift (cf. Koizumi 1995, Lasnik 1999; for object shift in Japanese, see Ochi 2009, Tanaka 2002). Second, I adopt the theory advanced by Bošković (2009), which concerns the mechanism of the operation Agree (Chomsky 2000). The author proposes that in cases where Agree involves movement, that is, pied-piping of a valuator, the existence of two potential

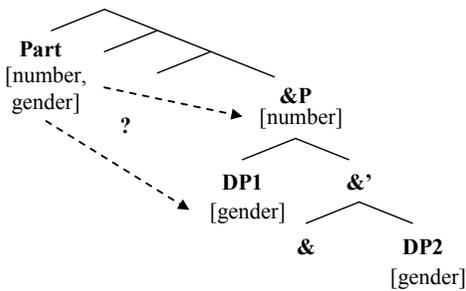
valuators for a single probe in a structure results in ambiguous targeting for movement, and that this makes the movement impossible, thereby canceling the valuation in question (along the lines of McGinnis’s 1998 “lethal ambiguity”). To briefly illustrate Bošković’s proposal, let me cite his example in Serbo-Croatian in (16), which contains a coordinate structure.

(16) *Serbo-Croatian*

Sva sela i sve varošice
 all villages.neut and all towns.fem
 su (juče) uništene.
 are yesterday destroyed.pl.fem
 ‘All villages and all towns were destroyed
 yesterday.’ (ibid.: 455)

In this example, the sentence-final participle exhibits agreement in gender with the last-conjunct in the coordinate structure that appears in preverbal subject position. In his account of this agreement pattern, Bošković argues that the possibility of the first-conjunct agreement is excluded due to a problem of lethal ambiguity, as depicted in (17).⁴

(17) *Lethal ambiguity*



(cf. ibid.: 471)

The participle (Part) in (17) acts as a probe for ϕ -features, matching &P for number and DP1 for gender. This operation must be followed by the movement of a phrase to Spec,PartP, triggered by the EPP feature of Part. However, a problem arises, since there are two potential valuators for the probe, one that requires

pied-piping of &P and the other that requires pied-piping of DP1. This results in ambiguous targeting for the movement, and consequently, the valuation of ϕ -features is blocked. This accounts for the absence of the first-conjunct agreement in example (16), according to Bošković.

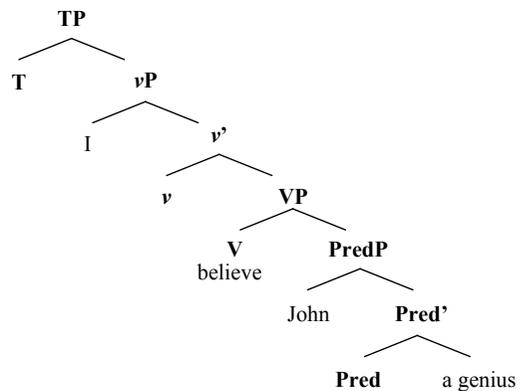
Now, with these two assumptions in hand, let us revisit the data concerning the two types of SCs given above. First, we discussed the English examples in (1)–(2) and their Japanese counterparts in (9)–(10), where an ECM verb appears as a simple predicate. To consider how these examples are analyzed under the present proposal, let us take (1a) and (2a), repeated below, which contain a PSC and an ESC, respectively.

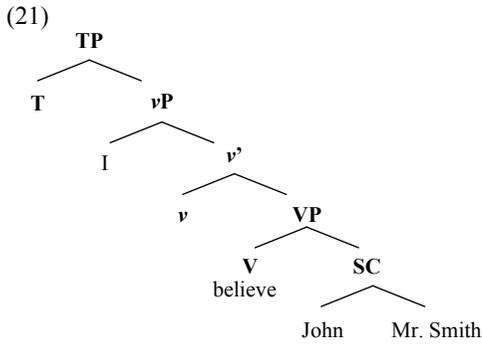
(18) *PSC* I believe [John a genius]. = (1a)

(19) *ESC* *I believe [John Mr. Smith]. = (2a)

Here, I adopt the assumption that a PSC and an ESC are syntactically distinguished in that the former is a projection of the functional head Pred (cf. Bowers 1993), while the latter is simply formed by two DPs.⁵ On this assumption, (18) and (19) are represented as in (20) and (21), respectively.

(20)





In both (20) and (21), the head v , once merged, searches for a goal to value its EPP feature. This should trigger overt movement of the closest DP. In (20), the movement undergoes with no problems, since the DP *John* in Spec,PredP is structurally closer to v than the other DP in complement position and hence, the valuation can determine the pied-piping element unambiguously. This accounts for the grammaticality of example (18). By contrast, a problem arises in (21): here, the two DPs in the SC are equidistant from the probe v , both being potential valuators. This configuration results in ambiguous targeting for movement, and consequently, the valuation in question is blocked. This is why (19) is ungrammatical.

Next, let us consider how the grammaticality of Japanese (11) and (12) is accounted for. As noted above, these examples lack a transitive v . Thus, they are free of the lethal ambiguity problem that stems from the EPP of v (and any other grammatical violations). We therefore correctly predict that these examples are grammatical.⁶

5. English passive and raising constructions

The presented proposal makes a correct prediction on the grammatical status of data concerning English passive and raising constructions. Heycock (1994a) makes the observation that contrasts as between (1) and (2)

are also found in passive and raising sentences, as shown by (22)–(25).

(22) **Anita_i** was considered [_{*t_i*} the culprit].

(23) ***The culprit_i** was considered [_{*t_i*} Anita].

(24) **Belinda_i** seemed [_{*t_i*} the best candidate].

(25) ***The best candidate_i** seems [_{*t_i*} Belinda].

(cf. *ibid.*: 244–245)[bold:YA]

(22) and (24), which contain a PSC, are grammatical, while (23) and (25), which contain an ESC, are ungrammatical. Let us then consider how this contrast is dealt with under the present proposal, by taking the examples of passive constructions in (22) and (23). They are analyzed as in (26) and (27), respectively.

(26) [_{TP} **Anita_i** T⁰ [_{VP} be considered
[_{PredP} *t_i* [_{Pred'} Pred⁰ [_{DP} the culprit]]]]]]

(27) [_{TP} T⁰ [_{VP} be considered
[_{SC} [_{DP} the culprit][_{DP} Anita]]]]

Now, assuming that raising of the surface subject in English passive and raising constructions is triggered by the EPP feature in the domain of C-T (cf. Chomsky 2008), in (26), where there is only one candidate for movement, i.e., DP in Spec,PredP, the valuation proceeds without inducing an ambiguity problem. By contrast, in (27), where the two DPs in the SC are in principle mobile for movement, an ambiguity problem arises, and this makes the movement impossible, thereby canceling the valuation. We therefore predict that (22) is grammatical, while (23) is not, and this is indeed what we observe.

At this point, one might wonder why the Japanese passive sentence with an ESC in (11) is grammatical, while the English counterpart in (23) is ungrammatical. This is because Japanese passive constructions, unlike English passives, do *not* involve raising, as I assume (see note 3), and thus, the valuation of the EPP feature in the C-T domain in the Japanese passive sentence in

(11) can unambiguously determine the pied-piping element, which is the DP externally merged in the specifier position of the passive VP. Hence, the ambiguity problem does not arise in (11), unlike in (23).

6. Conclusion

In this paper, I first showed on the basis of Japanese data that the generalization concerning the ESCs in ECM constructions held in previous analyses is not descriptively correct. Next, I argued that the distribution of ESCs is best explained by the two independently motivated assumptions: object shift and lethal ambiguity in feature valuation (Bošković 2009).

* This paper stems from a chapter in my dissertation (Asada 2011). I am grateful to my dissertation committee members, Naoki Fukui, Yasuhiko Kato, and Takaomi Kato, for their valuable comments that helped me to develop the ideas in this paper. I also thank the audience of the 30th Conference of the ELSJ for their helpful feedback and comments. Of course, all errors are my own.

¹ In this paper, I subsume under the ESCs both small clauses as in (2a), which yield an “identity” reading, and those as in (2b), which convey a “specificational” reading (for related discussion, see, e.g., Den Dikken 2006, Heycock and Kroch 1999).

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² Some informants report that examples like (9), which contain a PSC, are more or less degraded, depending on the type of nominal predicates. I leave for future research the question of what accounts for this judgment.

³ I adopt the viewpoint that Japanese passive sentences do *not* involve raising (cf., e.g., Kitagawa and Kuroda 1992). This assumption becomes more crucial in my analysis, as we will see in section 5.

⁴ Following Munn (1993), Bošković assumes that the first conjunct in a coordinate structure asymmetrically c-commands the second conjunct.

⁵ I leave open the categorical status of an ESC (see e.g. Den Dikken 2006, Moro 2000, for related discussion).

⁶ With regard to potential constructions, examples like (i), where the ECM subject is marked accusative, seem to present a problem for the current analysis, as pointed out by participants of the ELSJ.

- (i) [?]Taroo-wa sono otoko-o
 Taroo-Top that man-Acc
 Zi-roo-ni omo-e-ta.
 Zi-roo-Dat consider-can-past
 ‘To Taroo, that man seemed to be Zi-roo.’

If this example contains a transitive *v*, which bears the EPP feature, we would wrongly predict that the example is ungrammatical due to a problem of lethal ambiguity. I do not have an immediate account of this issue, which I must leave for future research.

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likes every boy Mary does [_{VP} <likes
every boy Mary does [_{VP} e>]]].

先行詞包含型削除文の構造および解釈に
ついて*

(On the Structure and Interpretation of
Antecedent-Contained Deletion in English)

丁 文文 (DING Wenwen)
筑波大学大学院 (University of Tsukuba)

キーワード: 先行詞包含型削除、コピー理論、
追加思考分析、構成性原理、分裂関係節

1. はじめに

(1a) は通常の VP 削除の例である。この文は、(1b) における、do の後ろに省略された内容が、(1c) のように、先行する VP がコピーされることで、解釈される。これに対して、(2a) は、先行詞包含型削除文であり、削除される VP は先行する VP の中に含まれている。(2b) における *does* の後ろに省略された内容は、(2c) と (2d) のように先行する VP をコピーしようとする、空所もコピーしてしまうので、解釈不可能な文になる。これを遡及問題と言う。

- (1) a. John likes Mary, and I do, too.
b. John [_{VP} likes Mary], and I do [_{VP} e], too.
c. John [_{VP} likes Mary], and I do [_{VP} <like Mary>], too.
- (2) a. John likes every boy Mary does.
b. John [_{VP} likes every boy Mary does [_{VP} e]].
c. John [_{VP} likes every boy Mary does [_{VP} <likes every boy Mary does [_{VP} e>]]].
d. John [_{VP} likes every boy Mary does [_{VP}

遡及問題を回避する 1 つの方法として、May (1985) で提案された QR 分析がある。(3) において、*John likes every boy Mary does* に対して、(3b) で示すように、LF において、目的語である *every boy* と後続する関係節 *Mary does* は一つのまとまりとして、主文 IP に付加される。QR 操作の結果、削除された VP と先行する VP の包含関係はなくなる。この時、削除される VP は先行する VP をコピーするため、遡及問題が生じないことになる。

- (3) a. John likes every boy Mary does.
b. [_{IP} [_{DP} every boy Mary does [_{VP} e]]_i [_{IP} John [_{VP} likes *t_i*]]]
c. [_{IP} [_{DP} every boy Mary does [_{VP} likes *t_i*]]_i [_{IP} John [_{VP} likes *t_i*]]]

しかし、QR 操作は、Chomsky (1995) で提案された移動のコピー理論を仮定すると、効力を失うことになる。移動した要素はそれ自身のコピーを残し、コピーは削除される音韻素性を持ち、空になるという移動のコピー理論に従えば、(3b) において、QR 操作によって、ACD 関係節を含む目的語句は先行する VP の外に移動されても、元位置にコピーが残されるので、移動操作は、先行する VP と削除される VP の間の包含関係を無くすることができないことになるからである。

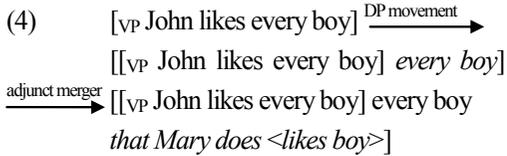
2. 先行研究

この節では、移動のコピー理論を考慮に入れた上で行われた分析を 2 つ概観する。

①後併合 (Late Merger) 分析: Fox (2002)

この分析は、ACD を含む関係節は、(4) で示されるような派生で、後併合されると主張する。具体的には、*John likes every boy* の文に対して、まず目的語 DP である *every boy*

が、基底位置から、右方向の QR 操作によって、VP に付加される。そして、ACD を含む関係節 *that Mary does* が移動先にある *every boy* と併合される。その後、削除される部分は先行する VP をコピーして、文全体が解釈される。



この分析の問題点として挙げられるのは、この分析は QR 操作に依存することになり、したがって、定冠詞付き表現などを含むすべての DP は数量詞的でありうると仮定しなければいけない点である。

② 追加思考 (Afterthought) 分析 : Chomsky (2004:121-122)

この分析は、ACD を含む関係節は NP の追加表現 (付加詞節) として導入されると考える。付加詞節における NP は音声上弱化され、削除される。

- (5) a. John _[VP] likes _[NP] every boy].
 b. John likes every boy (that is, more accurately...) every boy Mary likes.
 c. John _[VP] likes _[NP] every boy Mary does \langle likes \triangleright].

(5a) の *John likes every boy* における目的語 *every boy* を詳しく描写するために、(5b) で示される *every boy Mary likes* のような表現が *every boy* と離れた位置に生起することができる。そして追加表現の中の *every boy* は音声的に削除され、(5c) の ACD 文になる。

この分析の問題点は、(5b) は (5c) の基底構造と仮定されているが、具体的構造は明確にされていない点である。

3. 代案 : 分離関係節 (Split Relative Clause) 分析

ACD を含む関係節の外部主要部は先行する VP の中で目的語として基底生成され、関係節自体は v^*P の付加位置で基底生成されると考える。関係節はそもそも先行する VP の外で生成されるので、QR のような移動操作は要らない。また削除された VP (関係節) は先行する VP の中に含まれていないので、先行する VP をコピーする際、遡及問題が生じない。

この分析は下記の三つの仮定に依存する。

① 削除される範疇は v^*P である (Johnson (2004)参照)。

(6) で示されるように、英語には、*freeze* のような、自他交替を許す動詞が存在する。しかし、(7) からわかるように、この交替は VP 削除では許されない。

(6) This can freeze. Please freeze this.

(7) This can freeze. *Please do.

(Johnson (2004:7))

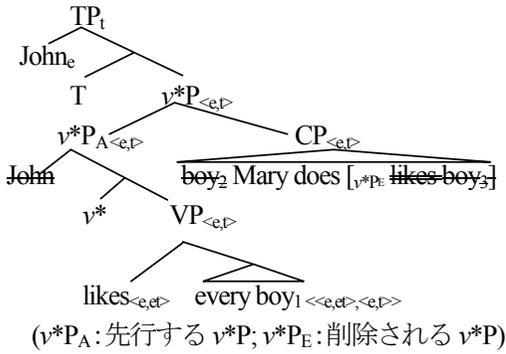
もし VP 削除で削除されるのは VP ではなく、 v^*P であると仮定すれば、この事実は説明できる。すなわち、VP 削除においては、 v_{trans} と v_{unacc} は異なるので、削除の同一性条件に従えば、VP 削除は認可されなくなる。

② 関係節の構造は、マッチング構造 (matching structure) である (Fox (2002), Cresti (2000)参照)。

関係節の主要部はまず関係節内で基底生成され、その後 CP 指定部に移動する。そして、CP の外で外部主要部が基底生成される。

この構造を採用して、ACD 文は (8) の構造を持つと仮定する。

(8) John likes every boy [Mary does [e]].



具体的に、外部主要部 *every boy*₁ は VP の目的語として VP 内で基底生成される。v*P_A に付加している関係節 CP の指定部に内部主要部 *boy*₂ がある。この *boy*₂ は、元位置 *boy*₃ から移動されたものである。

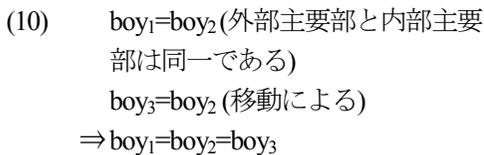
③ 削除の認可条件

統語的に同一の要素のみ削除される。

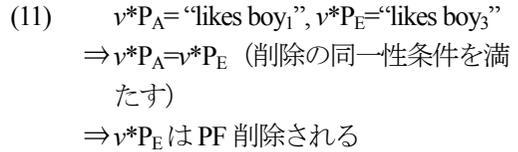
以上三つの仮定を踏まえて、ACD 文の認可は (9) から (11) で示す。(9) では、関係節のマッチング構造を示す。具体的に、*boy*₁ は外部主要部、*boy*₂ は内部主要部、そして *boy*₃ は *boy*₂ のコピーになる。*boy*₂ と *boy*₃ は関係節が形成する段階で音声的に削除される。そして動詞 *likes* は VP 削除によって削除される。



(10) で示すように、関係節の形成は、*boy*₁、*boy*₂ と *boy*₃ が同一であることを保証する。



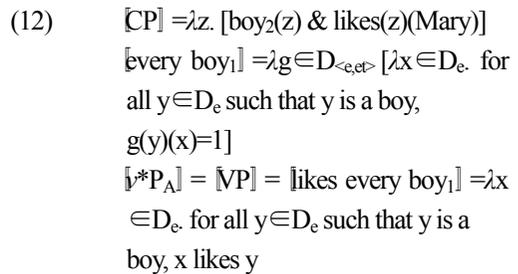
結果として、v*P_A と v*P_E が同一であることになる。したがって、削除の同一性条件を満たし、v*P_E は PF 削除される。



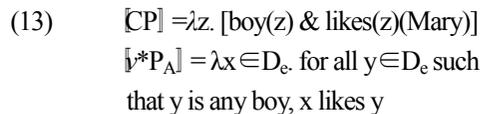
また、解釈については、CP と v*P の構成はいずれも述語修飾(Predicate Modification)¹ によるものとし、一方、v*P_A と TP の構成は関数適用(Functional Application)² によると考える。具体的には、以下のような解釈の手順を仮定する (なお、議論を簡単にするため、v*, T および v*P_A 内にある主語 *John* の解釈には触れない)。

ここで、Heim&Kratzer (1998) にしたがって、普通名詞句 *boy* の意味タイプは <e,t>、数量詞句 *every boy* の意味タイプは <<e,et>;<e,t>>、他動詞 *like* の意味タイプは <e,et> とする。

関係節 CP の解釈は、Cresti (2000) に従うものである。



また、 $[boy_1] = [boy_2] = [boy]$ と定義し、 $[v^*P_A]$ と $[CP]$ を書き換える：



次に順次上へ構成していく：

- (14) $[\nu^*P] = \lambda y. [[\text{boy}(y) \ \& \ \text{likes}(y)(\text{Mary})]$
 $= [\lambda x. \text{boy}(y) \ \& \ \text{likes}(y)(x)]=1]$
 $[\text{TP}] = \lambda y. [[\text{boy}(y) \ \& \ \text{likes}(y)(\text{Mary})]$
 $= [\text{boy}(y) \ \& \ \text{likes}(y)(\text{John})]=1]$
 1 iff for any boy y such that
 John likes y and Mary likes y

ここで、(8) で提案された構造について一点補足する。CP は ν^*P_A に付加する証拠として、(15) をあげる。この文の非文法性は束縛条件 C によるものとすれば、*John* は主文主語 *he* の c-command 領域の中にあることになる。したがって、CP が付加できる位置は、 ν^*P_A だけになる。

- (15) * He_i bought you every picture that John_i wanted to. (Fox (1995:3))

4. データの検証

この節では、3種類のデータを検証する。

① 束縛条件 C に関して、通常の関係節を含む文(17)は束縛条件 C に違反するのに対して、ACD を含む関係節の文(16)は束縛条件 C に違反しない (Fox (2002:84))。

- (16) a. You sent him_i the letter that John_i expected you would.
 b. You introduced him_i to everyone John_i wanted you to.
 (17) a. ?? You sent him_i the letter that John_i expected you would write.
 b. ?? You introduce him_i to everyone John_i wanted you to meet.

(8) の ACD 文の構造から、関係節 CP は通常の関係節の CP と異なり、先行する VP の付加位置で基底生成されるので、関係節内の主語 *John* は先行する VP の目的語 *him* の c-command 領域の外にある。したがって、

ACD 文では、束縛条件 C の違反は起こらない。

② ACD を含む関係節が他の DP に埋め込まれる場合、ACD の解釈について問題が生ずる。例えば、(18a) は、(18b) および (18c) の2つの解釈を持つ。

- (18) a. Beck read [_{DP} a report on every suspect Kollberg did [_{VP} e]].
 (Kennedy (1997:680))
 b. Beck read a report on every suspect Kollberg read.
 c. Beck read a report on every suspect Kollberg read a report on.

分離関係節分析によれば、この2つの解釈は、それぞれ (19a) と (19b) の構造を持つ。

- (19) a. [_{TP} Beck [_{ν^*P} [_{ν^*P_A} read a report on every suspect] [_{report on every suspect} [_{CP} Kollberg did [_{ν^*P_e} ~~read~~ report on every suspect]]]]]
 b. [_{TP} Beck [_{ν^*P} [_{ν^*P_A} read a report on every suspect] [_{suspect} [_{CP} Kollberg did [_{ν^*P_e} ~~read a report on~~ suspect]]]]]

2つの解釈を持つ理由としては、前置詞 *on* が *a report* に対して項の役割をもつ(18a)では、(19a)の構造に加えて、*a report on* がいわば再構成されて動詞の一部に組み込まれる解釈が可能となるため、(19b)の構造も持ちうると思われる。

次に、(20a) の解釈は、(18a)と異なり、1つだけであり、(19b) に対応する主文動詞プラス前置詞の解釈 (20c) は存在しない。理由としては、前置詞句 *in a country* が修飾要素である(20a)では、*every town in* の再構成ができないため、(20c)の解釈はもてないことによると考えられる。

- (20) a. Polly visited every town in a country
Erik did. (Kennedy (2004:3))
b. Polly visited every town in a country
Erik visited.
c. ?? Polly visited every town in a country
Erik visited every town in.

③ Tiedeman の難問と呼ばれる問題がある。すなわち、(21) が示すように、ACD を含む関係節は従属節の主語を修飾することはできず、文末（ないし、節末）に現れる時に文法的となる（Tiedeman (1995:70)）。

- (21) a. * I expect that everyone you do will visit Mary.
b. I expect that everyone will visit Mary that you do.

(21b) は、本論の分析では、(22) の構造をもつことになり、適格であることが予測できる。

- (22) [TP I [_{v*P} [_{v*P_A} expect that everyone will visit Mary] [~~one~~ [_{CP} that you do [_{v*P_E} ~~expect that one will visit Mary~~]]]]]

一方、(21a) は ACD を含む関係節が補文の主語に付加されている構造であるが、ACD の関係節は v^*P に付加されるとする本論の分析の下では、許されない構造になる（補文 v^*P に付加しなおかつ補文の主語になる）。したがって、非文となることが正しく予測される。

5. まとめ

本研究は、ACD に関する 2 つの先行研究を概観した上で、ACD を含む関係節を、外部主要部から分離し、それと 1 つの構成素にならない構造を持つと仮定することによって、ACD に関する 3 種のデータを再検討し

た。この仮定は、遡及問題を回避するという意味論的要請と、VP 削除の認可条件および関係節の構造に関する仮定に基づいている。この構造のもとで、ACD の意味を構成した。

注

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¹ Predicate Modification: If α is a branching node and $\{\beta, \gamma\}$ the set of its daughters, then, for any assignment a , if $\beta]^a$ and $\gamma]^a$ are both functions of type $\langle e, t \rangle$, then $[\alpha]^a = \lambda x \in D. \beta]^a(x) = \gamma]^a(x) = 1$ (Heim&Kratzer 1998:95)

² Functional Application: If α is a branching node and $\{\beta, \gamma\}$ the set of its daughters, then, for any assignment a , if $\beta]^a$ is a function whose domain contains $\gamma]^a$, then $[\alpha]^a = \beta]^a(\gamma]^a)$ (Heim&Kratzer 1998:95)

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Be about to の用法と語用論的意味の類型化 に関する一考察*

(A Study on the Usage and Pragmatic
Typology of *be about to*)

衛藤圭一 (Keiichi Eto)

京都外国語大学非常勤講師 (Kyoto
University of Foreign Studies)

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1. はじめに

本稿の目的は、語用論の立場から、文法書の用例と筆者が収集した実例を考察し、*be about to* の基本類型を提示することである。考察を深めるため、適宜、類義表現 *be going to* との比較およびインフォーマント調査を行い、*be about to* が好んで使用される理由を適切さの観点から論じた。このことを踏まえ、結論として次の2つを主張する。

- (1) *Be about to* の語用論的意味は話し手の社会的立場によって2つの意味に大別できる。
- (2) これら2つの意味が *be about to* の語用論的意味の中心を成す。

2. *Be about to* の意味論的意味と用法

周知のように、*be about to* は近接性(近接未来)を表すが、これは Perkins (1983: 72) が次の(3)で指摘しているように、「~のすぐ近くに」という *about* の空間的意味が時間的意味に拡張されていることによる。

- (3) The distinguishing characteristics

of *BE ABOUT TO*, however, is that the event referred to is regarded as imminent (cf. the spatial sense of *ABOUT* — namely, ‘in the (immediate) vicinity’)

したがって、*be about to* の表す時間の幅は非常に狭く、(4)が示すように、特定の時間を指す表現とは通例共起しない。

- (4) *About to* is used to say that something is going to happen very soon without specifying exactly when. A time expression is not necessary and should be avoided. (Sinclair 2008: 4)
- (5) a. I *was about to* call you.
b. Not: ~~I was about to call you in ten minutes.~~ (Carter 2011: 90)

たとえば、特定の時間を指す *in 10 minutes* を加えた(5b)は非文と判断されるが、この点が類義表現の *be going to* と異なる。

今挙げた記述はいずれも意味論の立場から扱ったもので、語用論の立場から扱ったものは筆者の知る限りほぼ皆無である。以下では後者の立場から用例と実例を考察し、話し手の社会的立場によって語用論的意味は2つのタイプに大別できることを論じる。

3. 語用論的意味タイプ1「段取りとしての発生の合図」—話し手が公的人物の場合

本節では、まず Carter and McCarthy (2006: 671)を取り上げ、使用場面の観察を行う。彼は下のような文脈つきの例を示している。

- (6) [public announcement from the buffet car on a train]
We would like to advise all

passengers that the third and final sitting of breakfast *is now about to start*. Any further passengers who require breakfast, you are advised to take your seats in the restaurant car now.

アナウンスを通して開始を告げるという点は次の実例(7)にも共通している。

- (7) “Ladies and gentlemen, the third and final task of the Triwizard Tournament *is about to begin!*” (*HARRY POTTER and the Goblet of Fire*)

(6)と(7)を観察すると、用法上の特徴が2つあることに気づく。1つは、開始を告げる発話が公共の場で行われていること、今1つは話し手が車掌や司会者などの社会上然るべき立場にある人物であるということ、このような立場に該当する話し手を本稿では便宜上、公的人物と呼ぶことにする。今触れた2点を踏まえると、公的人物が公務において、次の予定、手順、過程といった段取りを述べる際に *be about to* が使用されやすいという仮説を立てることができる。

本仮説の妥当性を検証するため、以下では Leech(1987: 70)の例(8)と Leech(2004: 70)の例(9)を比較検討することにしたい。Leech は改訂にあたり、*be about to* の典型例として(8)から(9)に差し替えているがこれはなぜだろうか。

- (8) They *are about to* leave. (= ‘They are leaving.’)
(9) I *am about to* hypnotise you. Don’t be afraid! (I’m going to hypnotise you right now.)

両者の違いに注目すると、(8)が単に近接性を表しているのに対して、(9)は医師が患者に催眠術をかけようとしている場面で、話し手は、社会上然るべき立場にある人物、すなわち公的人物に該当することがわかる。また、(9)に添えられた言い換え文によると、この *be about to* は *be going to right now* と同義であるということになるが、Leech がここで *be about to* を使用しているということは何か理由があると考えるのが妥当である。そこで(9)をさらに観察すると、医師は *be about to* を使用し、聞き手に発生の合図をすることで、催眠術をかけようとしている点に気付くことができる。つまり、意味論的にはこれから催眠がすぐ始まることを述べているが、語用論的には患者に合図をしており、恐がって動いたり逃げたりしないよう心づもりをさせている。

(8)と(9)の比較検討を通して仮説の検証を試みたが、ここまでをまとめると、*be about to* は、意味論的には、次に何かが起こるという近接性を示し、語用論的には、段取りとしてある事柄が発話の直後に発生する、という合図を示す。発生の合図を通して、話し手は聞き手に心づもりをさせたり注意をひきつけて指示をしたりする、といった効果を生みだしている。このような意味論的意味から語用論的意味の拡張は本節の冒頭で扱った(6)と(7)についてもあてはまる。両例において、話し手は公共アナウンスを通して開始を告げているが、語用論的には段取りとして発生の合図をしており、乗客に準備を促したり、観衆の注意を引いて興奮を高めたりしている。

なお、インフォーマント4名¹は皆、上掲の例において、類似表現の *be going to* と比べた場合、近接性を表す *be about to* の方が実際に起こりえる典型例(*probable*)という趣旨の発言をしている。彼らはその理由を述べてはいないが、本稿では次のように考える。公務、行事、催し物などのような公共の場で公

的人物が合図しているのは、次の段取りとして発話の直後に何が始まるかということであるが、このような「発話の直後」という状況と「近接性」という概念はうまくかみ合うため *be about to* が用いられると考えられ、一方、*be going to* は近い未来にある内容が起こるといった意味を指すものの、その出来事が発話の直後に発生するかどうか曖昧である。したがって、語彙的に近接性を表す *be about to* と比べると時間の幅が広い点で間延びした表現に聞こえるために適切ではないと考えられる。

以上から、話し手が公的人物の場合、然るべき状況下で次の段取りとして発生の合図をするといった意味が語用論的意味の柱であり、文脈によって聞き手の注意や関心を引いたり、相手に心づもりをさせたり、指示をしたりするといった効果が観察される、と結論付けることができる。

4. 語用論的意味タイプ2「意図」－話し手が公的人物ではない場合

本節では話し手が公的人物ではない意味タイプ2の中心的意味を扱う。何をもって「中心的意味」とするかについては立場によって異なるが、本稿では「話し手」に基盤を置き、語用論的意味タイプ2の中心的意味は「意図」であると主張する。この主張は、Peter(2004: 7)の示す(10a)下線部の解釈に立脚するものである。

- (10) Its shades of meaning vary with the subject of the grammar (first, second, and third)
- a. I'm *about to* go home. (said with intent)
 - b. The judge *was about to* pronounce the sentence. (future event)

彼は、主語の人称が変わると意味も変わるという趣旨の指摘をした上で、一人称の例(10a)を示しているが、ここで興味深いのは *be about to* の意味を単に *intent* とせず、わざわざ *said with intent* と注意書きをしていることである。この注意書きからわかることは、話し手は近接性を表す *be about to* によって、語用論的には帰宅する意図があることを表している、ということである。以下では Peter の指摘に依拠した上で、一人称主語の用例観察を通し、時制によって「意図」の意味をさらに2つに類型化する。その結論として、*be about to* が過去時制で用いられると「弁明」を表し、現在時制で用いられると「協調の希求」を表すと主張する。なお、以下で示す例につき、インフォーマントは皆 *be going to* より *be about to* を適切と判断しているが、その理由も合わせて考えたい。

4.1 「弁明」－過去時制の場合

本節では過去時制で用いられる *be about to* に焦点を当て、典型的にはどのような場面で使われるのかを、実例の観察を通して検討することにした。次に示す(11)では、ある男性からかかってきた電話に出た女性が対話をしている。

- (11) He thought about it and called Claire. She answered on the first ring.
 “Did you learn something?”
 “Not really, but do you mind if I switch cars with you?”
 “Of course not. I *was about to* call you anyway. The Rochesters just left.” (*Promise me*)

この女性は相手の男性と連絡を取り合うことになっていたのに、自分から電話ができなかったという場面である。こういう状況では、

話し手が相手に対して後ろめたさや気まずさを感じていると解釈できる。この解釈に基づく、当該の表現によって意図を表明することで、相手からの否定的な評価を避けようと話し手が弁明し、相手に事情を理解してもらおうとしていると考えられる。このような話し手の心理は次の事例(12)でも観察される。

(12) “Why weren’t we informed”
Trumann asked.

“We *were about to* tell you. In fact, Thomas and I discussed it this afternoon, just a short time before we got the call.” (*The Client*)

(12)も(11)と同様、We were about to tell you という発話を通して連絡するつもりだったことを表明し、実行に移せなかった事情を相手にわかってもらおうと弁明している。このように「弁明」をすることで話し手は連絡できなかったことに対する非難を避けようと予防線を張っていると考えられる。その証左として、(11)では電話の直前までまわりに第三者がいたため連絡できなかったという理由を添えており、また(12)では、相手が不愉快に思っているという確信を抱いていることから、「それどころか」に相当する談話辞 *in fact* を添えることで、そうする意図が本当にあったとする前言を強めている。

なお、「意図」を表す用法は類義表現の *be going to* にも見られるが、*be going to* は発話の直前にそうしようとしていたのかどうか曖昧なので、発話の時点で瞬時に「弁明」をする(11)や(12)では *be about to* のほうが典型例という結果がインフォーマントから得られたのではないと思われる。

以上をまとめると、「実現できなかった事柄を今まさにやろうとしていた」という状況下で用いられる *be about to* は、語用論的には、「ある行為が実現できなかったことに関して

相手がどう思っているかは知らないが、私はそうするつもりだったのだ」といった「弁明」の意味を表す。この意味を柱として、話し手は相手に誤解を与えないよう理由を添えたり、言葉をつくして非難されないよう予防線を張ろうとしたりすることがある、と結論付けられる。

4.2 「協調の希求」－ 現在時制の場合

最初に次の例(13)をご覧ください。この例は話し手が部屋を出る寸前で聞き手と鉢合わせになり対話をしている場面である。

(13) “Yes, well,” said Fudge, looking embarrassed, ‘we’re *about to* go for a short walk in the grounds, Harry, if you’ll excuse us ... perhaps if you just go back to your class –”
(*HARRY POTTER and the Goblet of Fire*)

下線部が示すように、これからすぐに外出しようとしていることを聞き手に告げた上で、聞き手に退室を促していることがわかる。この一連の流れを踏まえると、話し手は *be about to* を使用して自身の意図を示すことで、「私はこれからすぐに外出するつもりであり、そうさせてほしいと思っている」といった協調を聞き手に求める心理を示唆しようとしていると仮定できる。今仮定した、「協調の希求」は次に示す2例にも観察される。

(14) Don’t go out now – we’re *about to* have lunch. (Swan 2005: 3)

(15) Don’t interrupt me now. I’m (just) *about to* solve a difficult problem. (Declerck 1991: 116)³

(14)は母親が子供に対して *Don’t go out now* と頭ごなしに命令しているが、その後 *we’re*

about to have lunch という発話を通して、すぐお昼にするつもりだ、という意図を示すことで「だからそうしたい」と示唆しており、協調の方策として食卓に着くよう聞き手に求めていると考えられる。(15)も *I'm (just) about to* 以下の発話により意図を示すことで、問題を解決させてほしいと思っていることを示唆しており、このような示唆を通して横槍を入れないよう聞き手に協調を求めている。

(13)~(15)の考察を踏まえると、「差し迫った行為」を実行に移そうとする話し手の意図が読み取れる状況で、「そうさせてほしい」といった心理から何かしらの協調を聞き手に求める際に *be about to* が用いられると考えられる。この考えに基づくと、次の2例の下線部が示すような勧誘表現が後続する例はどのように解釈できるのであろうか。

(16) *We are just about to eat. Do you want to join us?* (Hewings 2005: 24)

(17) *We're just about to go and have something to eat. Would you like to join us?* (Carter and McCarthy 2006: 671)

(16)と(17)は、話し手が同僚とばったり顔を合わせたという場面である。本節の主張に従って(16)を解釈すると、*We are just about to eat* という発話によって意図を示すことで「すぐ食事をとりたい」という心理を示唆していることになり、そうすることで、邪魔をせずにそうさせるよう協調を求めようとしていることになる。ここで注目していただきたいのは、話し手は同僚と鉢合わせになったのが食事時ということを踏まえているために、(13)~(15)のように「失礼をさせてほしい」、「横槍を入れるな」といった表現を通して協調を求めているのではなく、「あなたも良かったら一緒にどうですか」という勧誘表現を利

用して協調を求めているということである。一見すると「私たちがこれから食事をとること」と「聞き手が食事に加わること」は何の関連もないように見えるが、聞き手からの返事が Yes であればそのまま食事をとることができる点、No であっても、「それではまた」と会話を打ち切ってすぐに食事をとることができる点、どちらの点においても、聞き手は協調することになると踏んでいるため、話し手は勧誘表現を通して友好的に協調を求めていると考えられる。

(13)~(17)の例では協調の希求を柱に考察したが、これらの例では下線が示しているように、どういう点で話し手が聞き手に協調を求めているのかが言語化され、文の前後に隣接している点に注目されたい。邪魔をしないよう頭ごなしに命令する場合もあれば、間接的または友好的に協調を求める場合もあるが、いずれにしても、こういった隣接共起が観察される点が、特徴として挙げられる。

なお、本節の例(13)~(17)を通して見たように、協調の希求は、聞き手と鉢合わせになる状況や、聞き手が介入してくる状況で瞬時的に行われるが、このような状況でも *be going to* を入れると、「前々からそうしようと思っていた」という意図の意味と瞬時的状況が合致しないため *be about to* に比べて適切さが劣ることになる。

ここまでの議論をまとめると、意味論的に近接性を示す *be about to* が現在時制で用いられる場合、語用論的には意図を示すが、このように意図を示すことで「私はこれからすぐに~つもりである、だからすぐにそうさせてほしいと思っている」といった協調の希求を表し、どういう点で協調を求めているのかが言語化された表現が隣接する、というのが本節の主張である。

以上、本節では話し手を基盤に「意図」を中心的意味とし、一人称主語の例を精査することで、時制の違いにより「弁明」と「協調

の希求」という 2 つの意味に類型化したが、この 2 つの意味は話し手が公的人物である意味タイプ 1 では観察されない。たとえばタイプ 1 にあたる次の(18)のような現在時制の例では、着陸準備に入る旨を「段取りとして合図」しており、話し手の「意図」にもとづいて協調を求めようとしているわけではない点、また発話者が機長、すなわち公的人物という点で、「協調の希求」の意味を表す用法とは異なる。

- (18) Keep your seat belts fastened,
everyone – we're *about to* land.
⁴(Leech 2004: 70)

5. おわりに

本稿では、be about to の中心的な語用論的意味として、主語が公的人物の場合とそうでない場合により 2 つの意味タイプが認められると主張した。タイプ 1 は、然るべき状況下で次の段取りとして発生の合図をするという意味で、そこから、文脈によって聞き手の注意や関心を引いたり、相手に心づもりをさせたり、指示をしたりするといった効果が観察されると結論付けた。

一方、タイプ 2 の中心的意味は話者の「意図」を表すが、時制の違いにより 2 つの中心の意味が認められる。過去時制の be about to は「今まさに～しようとしていた」という近接性の意味から「～するつもりだった」と語用論的に拡張し、「ある行為が実現できなかったことに関して相手がどう思っているかは知らないが、私はそうするつもりだったのだ」という話者の弁明を表す。一方、現在時制の be about to は「今まさに～しようとしている」という近接性の意味から「～するつもりだ」と語用論的に拡張し、「ちょうどある行為を実行しようとしているところなので、すぐにそうさせてほしい」といった聞き手への協調を求める「協調の希求」を表す。

全体を通してインフォーマント調査および類義表現 be going to との比較を行い be about to に特有の意味を検証したが、両者は意味だけでなく適切さの観点から異なるということが実証できたと思われる。また、語用論的意味は文脈に依存するため、用例の数だけ意味を設定しなければならないが、類型化を図ることで、意味論的意味からどのように語用論的意味へと拡張されるのか、さらには、どのような用法が柱であるのかを明確にできたのではないかと考える。

注

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1. 今回協力していただいたインフォーマント 4 名は全員男性で、それぞれイギリス人 1 名、アメリカ人 2 名、カナダ人 1 名である。
2. 4.2 節中の下線は全て筆者による。
3. 強意の副詞 just を添えることで(15)～(17)のように be about to の近接性がさらに強調されることがある。
4. 残る課題としては、公共の場で使用される未来進行形との比較検討と、スタイルの問題があるが、この点については稿を改めて述べることにしたい。

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**On the A/A-bar Distinction in
Tough-movement and Its Parametric Syntax**

Ezaki Sanae
Kwansei Gakuin University

Keywords: A/A-bar, Case absorption, complex
predicate formation, bounding theory

1. INTRODUCTION

The aim of this paper is to consider that there are two types of movements, A/A-bar movement, in *Tough*-movement. A characteristic of *Tough* construction is studied from early in generative grammar. At the time, Postal (1971) considers *Tough* construction is generated from NP-movement (or A-movement). However Chomsky (1977) discovers some same conditions between acceptance condition for *Tough* construction and occurrence condition for *Wh*-movement (or A-bar movement). After the discovery many linguists believe that *Tough* construction is generated from A-bar movement. However a locality of A-movement is limited than a locality of A-bar movement then A-movement does not acceptable when A-bar movement is excluded. That is, Chomsky's discovery cannot prove that *Tough* construction cannot be generated by A-movement. There is a only one data which cannot be generated by A-movement like a (1).

- (1) This car_i is easy to believe [that everyone wanted to buy *t*_i].

This is the trace moves over a tensed clause. Then English speakers can accept the sentence

in Chomsky (1977). However, many English speakers cannot accept sentences like (1). In other words, many English speakers cannot accept *Tough* construction, which include a long-distance movement. They judge the sentences are ungrammatical absolutely. Then, there is no evidence that A-bar movement not A-movement generates *Tough* construction. However there are not so many studies about this point. Nevertheless, some studies consider derivation by A-movement but the studies only exclude A-bar movement. It does not consider to distinct A and A-bar movement in *Tough*-construction. This paper considers that *Tough* construction is generated by both of A and A-bar movement. A way of a selection, that English speakers select A-movement or A-bar movement in *Tough*-movement, depends on personal not direct. If it is true, it can explain a distinctive character of *Tough* construction.

2. BACKGROUND

In Chomsky (1977), *Tough* construction is generated by A-bar movement but A-movement from the discovery of some common points between *Tough* construction and *Wh*-movement (or A-bar movement).

- (2)a. John is easy (for us) to please *t*.
b. (i) John is easy (for us) to convince Bill to do business with *t*.
 (ii) John is easy (for us) to convince Bill to arrange *for* Mary to meet *t*.
c. John is easy (for us) to convince Bill that he should meet *t*.
d. John is easy (for us) to convince Bill to tell Mary that Tom should meet *t*.
e. (i) *John is easy (for us) to convince Bill of the need for him to meet *t*.
 (ii) *John is easy (for us) to describe to Bill a plan to assassinate *t*.

- f. (i) *What₂ is John fun (for us) [(who₁) to give *t*₁ to *t*₂].
- (ii) *Who₂ are the presents fun (for us) [(which₁) to give *t*₁ to *t*₂].
(compare: the presents are fun (for us) to give to him.)
- (iii) *[To whom]₂ are the presents fun (for us) [(which₁) to give *t*₁ *t*₂].
(compare: the presents are fun (for us) to give to him.)

(Chomsky 1977)

Tough construction has the characteristics like (2). There are two points in (2). First, Long-distance movement that a trace moves over a tensed clause is accepted like (2c). This is a same characteristic of *Wh*-movement (or A-bar movement). Second, (2e) shows that *Tough* construction has a characteristic that *Tough*-movement is sensitive to island effect. *Wh*-movement (or A-bar movement) is also sensitive to island effect like (2f). *Tough*-movement and *Wh*-movement (or A-bar movement) show same characteristics, that the two movements do not obey tensed S condition and are sensitive to island effect. Chomsky (1977) introduce that *Tough*-movement is generated by A-bar movement because of the two characteristics.

(3) Characteristics of *Tough*-movement and *Wh*-movement (or A-bar movement).

- _ _ (I) sensitive to island effect
- _ _ (II) Do not obey tensed S condition

Actually A-bar movement shows both of the two characteristics, (I) and (II). However, A-movement shows the (I). That is, if a claim that *Tough*-movement is A-bar movement not A-movement is true, *Tough*-movement always shows both characteristics (I) and (II). Actually, other studies show that *Tough*-movement shows (II) (Chomsky 1977,

1981), Bach & Horn (1976), Kaplan & Bresnan (1982), Pollard & Sag (1994) and Hornstein (2001)). However, many English speakers judge (1) and (2c), that a trace moves over tensed clause, is ungrammatical and there are many studies, which introduce a sentence like (1) and (2c) is ungrammatical. That is, *Tough*-movement obeys tensed S condition (Ross (1967), Postal (1971), Berman (1973), Lasnik & Fiengo (1974), Soames & Perlmutter (1977) and Browning (1987)). What these data come down to is that *Tough*-movement does not always show (II). In the way, Chomsky (1977) does not show that *Tough*-movement is not A-movement. Chomsky (1977) just shows that *Tough*-movement is A-bar movement. It does not show *Tough*-movement is not A-movement. Then, Ura (2003) claims that there is a personal different dialect in *Tough*-movement for the reasons. His claim is natural in *Tough*-movement in English. This paper claims that there are both A-bar movement and A-movement in *Tough* construction and then English speakers select a way of the movements each other.

3. PROPOSALS

Chapter 2 shows that some English speakers can generate *Tough*-movement by A-bar movement, and others can generate *Tough*-movement by A-movement. Then, this paper proposes (4).

(4) a. There are both A-bar movement and A-movement in *Tough*-movement.

b. In English there are two types personal dialect (not direction).

Type A: A speaker can use the two types movements, A-bar and A-movement.

Type B: A speaker can use only A-movement.

A one of the aim of this paper is to consider that *Tough*-movement has both A-bar movement and A-movement. On the A-bar movement, Chomsky (1977) introduces it from many data. *Tough*-movement has a same characteristic with *Wh*-movement (or A-bar movement). It is that *Tough*-movement does not obey tensed S condition like (1) and (2c). However, there is a theoretical problem in it. If *Tough*-movement is A-bar movement, *Tough*-movement always shows the characteristic (3 II) but sometimes does not. That is *Tough*-movement has a possibility of A-movement. Then, a movement from idiom chunks supports the possibility of A-movement. All English speakers construe an original idiom chunk's meaning in (5) after movement.

- (5) a. Tabs_i should be kept t_i on my brother.
 b. After the long war, the hatchet $_i$ was finally buried t_i .

An idiom chunk meaning is kept after a trace moves from an idiom chunks by A-movement. On the other hand, an original idiom chunk's meaning is not kept after a movement by A-bar movement.

- (6) a. *It was tabs that we kept t on my brother.
 b. *It was the hatchet that we buried t after long tears of war.

(The asterisks show not keeping idiom chunk meaning.)

As a result, A-movement keeps an idiom chunk's meaning after a movement. Then, on *Tough*-movement, it is reported that an idiom chunk's meaning is kept after a movement (Dalrymple & King (2000) and Hicks (2009)).

- (7) a. ^{OK} Tabs_i are difficult to keep t_i on my brother.
 b. ^{OK}The hatchet $_i$ is hard to bury t_i after long years of war.

To keep an idiom chunk's meaning after a movement, the movement is occurred by A-movement as a result from (5,6). As a result, (7) is generated by A-movement. According to (7) and the difference in (1,2c), *Tough*-movement is A-bar movement and A-movement. Moreover, every English speaker keep an idiom chunk's meaning after a movement so there is no English speaker who use only A-bar movement in *Tough*-movement. If English speaker uses only A-bar movement, they cannot keep an idiom chunk's meaning after a movement. As Ura (2003) says, there is a dialect in English about *Tough*-movement. The dialect is not locality dialect but personal dialect. This paper claims that English speakers are districted like a (4b), Type A and Type B. According to the two propositions, it can explain many issues on *Tough* construction. English speaker who belongs to Type A, can generate (1,2c). In other word, they can move a trace over a tensed clause in *Tough*-movement. However, English speaker who belongs to Type B, cannot move a trace over a tensed clause in *Tough*-movement. Then, they cannot generate (1,2c). Whether type A or type B, all English speakers can use A-movement in *Tough*-movement so everyone can construe (7).

4. SYNTACTIC MECHANISM

This paper supports Chomsky (1977, 1981) and Browning (1991) on A-bar movement mechanism.

- (8) John is easy (for us) [_{CP} OP_i [_{IP} PRO to please t_i]].

They use Null operator in this theory. First, the Null operator is base generated in embedded object position and it moves to embedded subject position. At that time, the Null operator is a same index of the matrix subject. On

A-bar movement. On A-movement, the trace moves over tensed clause so it cannot be generated by A-movement. It gives (15) especially (15f) same explanation. The *there* does not have referential index so it cannot move over a weak island by A-bar movement.

- (15) a. ^{OK}A hero is in this town.
 b. ^{OK}There is a hero in this town.
 c. ^{OK}We believe a hero to be in this town.
 d. ^{OK}We believe there to be a hero in this town.
 e. ^{OK}A hero_i is easy to believe *t_i* to be in this town.
 f. *There_i is easy to believe *t_i* to be a hero in this town.

6. CONCLUSION

The aim of this paper is show there are both of movement's type, A-bar movement and A-movement in *Tough*-movement. And then, there are personal dialects in English in *Tough*-movement. One of them is that English speakers use A-bar movement and A-movement and the other is that English speakers use only A-movement at generating *Tough*-movement. According to the proposals, many issue of *Tough* construction, which we cannot explain, are cleared.

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素性継承に基づく英語結果構文の分析 (Feature-Inheritance-based Analysis on Resultative Construction in English)

藤森千博 (FUJIMORI Chihiro)
弘前大学 (非常勤)
(Hirosaki University, part-time)

キーワード：結果構文、小節、目的語繰り上げ、素性継承、格素性の可視性

1. 序

本発表では、(1)に挙げた英語結果構文(以下 resultative)に小節(以下 SC)を補部を取る統語構造を仮定し、さらに Chomsky (2008)で提案された素性継承のシステムを修正した上でその派生を考察する。

- (1) a. The joggers ran their Nikes threadbare
b. They painted the wall green

結果構文において興味深いのは post-verbal DP が統語上どのような位置を占めているのか、という点である。

- (2) Dora_i shouted [_{SC} herself_i hoarse]

(2)に示すように、非能格動詞 resultative において post-verbal DP が再帰代名詞として現れる。再帰代名詞は束縛条件 A によって先行詞に局所的に束縛される必要がある。本発表が仮定するような SC を補部を取る構造では、再帰代名詞が先行詞に局所的に束縛されるには SC を抜け出す(=目的語繰り上げ(以下 RTO)必要があるように思われる。したがって post-verbal DP がどのような構造・派生を経て SC の外部へ移動するのかを明らかにすることを目標のひとつとする。

2. 小節構造による分析

2.1. SC 内の φ-素性照合

本発表同様 resultative に SC を仮定している Tomizawa (2007)の研究で興味深いのは、resultative SC 内で φ-素性の valuation が行われているとする主張である。

- (3) a. ?How threadbare_i do you wonder
[whether they should run [their Nikes <sub>t_i]]
b. *How stupid_i do you wonder [whether
Bill considers [Pete <sub>t_i]]
(Tomizawa (2007): 87)</sub></sub>

Resultative SC 内からの *wh*-island を超える移動は比較的許されるのに対し(3a)、*consider* などが取る SC 内からの移動は許されない(3b)。Tomizawa (2007)はこの文法性の違いを、referential な要素のみが *wh*-island を超えて移動できるとする Rizzi (1990)の主張に基づいて説明している。具体的には、(4)の構造において主要部 F が持つ φ-素性が指定部内の要素が持つ φ-素性と value された場合のみ、F の補部が referential になると仮定している。

- (4) a. [_{FP} XP_[φ] [_F F_[φ] YP]]
(Tomizawa (2007): 89)
b. whether they hammered [[_{XP} the
metal]_[φ] H_{SC[φ]} [_{YP} (how) flat]]
c. whether Bill considers [[_{XP} Pete] H_{SC} [_{YP}
(how) stupid]]

この分析を resultative SC にあてはめると、SC 内において SC 主要部とその指定部の post-verbal DP が φ-素性の valuation を行っているため(4b)その補部である結果句が referential になり *wh*-island を超えて移動できる(3a)のに対し、*consider* などが取る SC(4c)ではそのような φ-素性の valuation が行われておらず、SC の補部である YP は *wh*-island を超えて移動できない(3b)と考えることができる。

一方、この resultative SC 主要部が持つ φ-

素性に関して、Tomizawa (2007)は post-verbal DP からの抜き出しが許される(5)ことから、(6)のような提案を提示している。

- (5) a. the Nikes_i (that) I ran [[_{DP} the soles of t_i threadbare]
 b. the door_i (that) I painted [[_{DP} the back of t_i] red]
 (Tomizawa (2007): 89-90)
- (6) “..... the head of resultative SCs has *incomplete* ϕ -features, which render extraction out of its ‘subject’ DP relatively free.” (Tomizawa (2007): 91)

つまり、resultative SC 内の ϕ -素性の valuation は不完全なものであると考えるのである。

2.2. SC=S’/CP

Adachi (1985)は、SC 内に S-adverb が現れることから SC は少なくとも S/TP であることを論じており、resultative SC 内にも S-adverb が現れることからこの SC も S/TP であると考えられることができる。

- (7) a. The joggers ran [the pavement *obviously* thin]
 b. The princess kissed [the princess *surprisingly* alive]

さらに Adachi (1985)は、SC 内に Tense が具現化されないことについて、SC は S’/CP であり、その COMP 内に Tense に関する素性を持っていないと仮定することによって説明している¹。

- (8) a. *John considered [[_{COMP} that_{[+Tense][±Past]}] Mary [Ø] intelligent]
 b. *Mary wants [[_{COMP} for_[+Tense]] Bill [Ø] waiting outside]
 c. Bill believes [[_{COMP} Ø] her [Ø] honest]
 (Adachi (1985): 41)

これまでの議論をまとめると、[1] resultative SC 内では不完全な ϕ -素性の valuation が行われており、[2] resultative SC

を CP として捉えることができる、ということになる。

2.3. 素性継承: Chomsky (2008)

これまでの議論を Chomsky (2008)が提案する素性継承の観点から捉える。Chomsky (2008)は T が持つ ϕ -素性(Agree-feature)及び Tense feature は元々 C が持っており、それらが T に継承されることによって TP 内で value されるとしている。また、C 同様 phase 主要部である v も Agree feature を V に継承することによって VP 内で ϕ -素性の valuation が行われるとしている。

- (9) a. C_{[AGREE][TENSE]} T_{[AGREE][TENSE]}
 b. v_[AGREE] V_[AGREE]

この提案をこれまでの議論に当てはめると、resultative SC 内で ϕ -素性の valuation が行われているということは、この SC が C を持ち、C が持つ ϕ -素性が SC 主要部に継承されることによって SC 内で ϕ -素性が value される一方、consider など取る SC は ϕ -素性の valuation が行われておらず、そのような SC には ϕ -素性を持つ C が存在しないと考えることができる²。

- (10) a. [_{CP} C_[Ø] [_{TscP} their Nikes_[Ø] T_{SC[Ø]} threadbare]]
 b. [_{TscP} Pete T_{SC} stupid]

2.4. 提案

ここで Tomizawa (2007)の問題点を指摘したい。Tomizawa (2007)は(11)で post-verbal DP が主節副詞句内の変項を束縛していることから post-verbal DP が主節内に RTO していると論じている。

- (11) The loud clock ticked every baby_i [t_i awake] at his_i/her_i/its_i afternoon nap

本発表でも Tomizawa (2007)同様 post-verbal DP が SC 内から RTO していると仮定するが、この RTO の動機について、Tomizawa は次の

ような提案をしている。

- (12) Raising to SpecvP takes place only when externally motivated.

(Tomizawa (2007): 95)

この”external motivation”の一例として、Tomizawa は束縛変項が束縛される必要性を挙げている。

- (13) a. I believe [everyone not to have arrived yet] (not>every: OK)
b. I believe every defendant_i [_{t_i} not to be guilty] during his_i trial (not>every: *)

Tomizawa (2007)によると、(13a)では束縛されるべき変項がないため RTO する必要がなく埋め込み節主語元位置のままであり not>every の解釈が可能である一方、(13b)では変項を束縛するため RTO する必要があり、その結果 not>every の解釈ができないとしている。

この分析に対して、Chomsky (2008)が指摘するように RTO による作用域の相互作用は RTO の結果ではあるが動機にはならないことに加え、(13)で ECM 構文が用いられているを指摘したい。Hong and Lasnik (2010)によれば、ECM 主語の RTO は随意的であるのに対し SC 主語の RTO は義務的であるという決定的な違いがある。

- (14) a. They're trying to make John_i out [_{t_i} to be a liar]
b. They're trying to make out [John to be a liar]
(15) a. They're trying to make John_i out [_{t_i} a liar]
b. *They're trying to make out [John a liar]

Tomizawa は外的動機の有無によって RTO の有無を説明しようとしているが、Hong and Lasnik の主張が正しければ、SC 主語は動機の有無に関わらず常に RTO していることになるため、resultative に SC を仮定する分析を

提案しながら ECM を用いて post-verbal DP の RTO の動機を説明している Tomizawa (2007)の分析は事実を正しく捉えていないと言わざるを得ない。したがって本発表では Hong and Lasnik (2010)にしたがい、SC 主語は義務的に RTO すると仮定する。

次に、Tomizawa (2007)が(6)で示した resultative SC における φ-素性の不完全さをどう扱うべきかを考察する。(9)に示したように、定形節では C が持つ Agree feature 及び Tense feature が T に継承された後 TP 内で Nominative Case の valuation が行われる。しかし resultative SC 内で Nominative Case の valuation が行われていないことは post-verbal DP が Accusative Case として現れていることから明らかである。そこで本発表では resultative SC に対して次のような構造を提案する。

- (16) [_{CP} DP_[φ] C_[φ] [_{TscP} \emptyset T_{SC} [_{VP} t_{DP} …]]]

Resultative SC の C が持つ Agree feature は T に継承されずに Cに残ったままであり、Cに残された Agree feature を value するために SC 主語が SpecCP に移動すると仮定する。また、Bošković (2002)などにしたがい、T が EPP 素性だけを持つ場合、その EPP 素性だけを value するために SpecTP へ移動することはできないと仮定する。これらの仮定に基づく resultative SC の統語構造は先に示した(10a)ではなく(17)のようになる。なお、結果句(=AP)の内部構造は Baker (2003)にしたがい、AP の上位に PredP を仮定し、A が持つ θ-role は SpecPredP 内にある要素に与えられると仮定する。

- (17) a. The joggers ran [_{VP} v_[φ] [_{VP} [the pavement]_i V_[φ] [_{CP} t_i C_[φ] [_{TscP} T_{SC} [_{PredP} t_i Pred [_{AP} thin]]]]]]]
b. They hammered [_{VP} v_[φ] [_{VP} [the metal]_i V_[φ] [_{CP} t_i C_[φ] [_{TscP} T_{SC} [_{PredP} t_i Pred [_{AP} flat]]]]]]]

埋め込み節の C が持つ不完全な φ -素性を value した post-verbal DP の φ -素性はこの段階では削除されないためさらに上位の Probe から active なままであり、主節 v から素性継承された主節 V が持つ Agree feature と Agreement relation を結ぶことができる。さらに、Case valuation は Probe と Goal が Agree するだけでなく、Goal が Probe の指定部に移動することによって行われると仮定すると (cf. Bošković (2007), Epstein and Seely (1999)), post-verbal DP は主節 SpecVP へ移動し、Accusative Case を value すると仮定する。

2.5. 日本語 ECM 構文における随意的素性継承: Takeuchi (2010)

この一連の仮定によって、Takeuchi (2010) が議論している日本語 ECM 構文における素性継承の随意性を説明できる。

- (18) a. Taro-wa [_{CP} [_{TP} Yuki-ga baka da]<sub>[φ]] to<sub>[φ]]
omot-teiru
b. Taro-wa [_{CP} Yuki-o_i [_{TP} *t_i* baka da] to]<sub>[φ]]
omot-teiru</sub></sub></sub>

Takeuchi (2010) は、(18a) では埋め込み節の C が持つ φ -素性が T に継承され、ECM 主語は埋め込み節の TP 内で Nominative Case を value されているのに対し、(18b) では埋め込み節の C が持つ φ -素性が T に継承されず C に残っており、ECM 主語はその φ -素性を value するために SpecCP に移動すると論じている。ここで、Case valuation には Probe と Goal の間に Agreement relation が成立していることが前提だとすると、(18b) において埋め込み節の SpecCP で φ -素性を value した ECM 主語が主節内で Accusative Case を value されているということは、この ECM 主語が主節 V が持つ Agree feature とともに Agreement relation を成立させているということを意味する。したがって素性継承されずに C に残った φ -素性を value した DP はさらに上位の Probe からも active でなくてはならず、C が持つ φ -素性はその Goal を inactive にしない、あるいは

削除しない、という意味で不完全であるということになる。以上をまとめ、次のような仮定を提案する³。

- (19) If φ -features in C are not inherited to T and remain in C, they are “incomplete” ones.

したがって本発表では、(19) で提案するように、T に素性継承されずに C に残った φ -素性は “不完全” な φ -素性であり、その φ -素性を value した DP は active なままであり、さらに上位の Probe から Agree され Case value される、と主張する。

3. 提案の問題点とその解決策

3.1. 他動詞結果構文においてなぜ post-verbal DP は SC 主語として生起するのか

Resultative に対してこれまで提案したような構造及び派生を仮定した際に想起されるふたつの問題について議論したい。

ひとつは、「他動詞結果構文においてなぜ post-verbal DP は主節目的語として生起せず SC subject として生起するのか」という問題である。

- (20) a. Mary watered the tulips flat
b. Mary watered the tulips

(20a) の post-verbal DP は結果句なしでも V と共起できる (20b)。つまり post-verbal DP は結果句と V の双方から θ -role を与えられていると考えられる。Hoekstra (1988) は resultative に SC を仮定しつつも、ひとつの D/NP はひとつの θ -role のみを持つとする θ -Criterion を維持するため脱他動化というアドホックな操作も同時に仮定しなければならなかったが、Hornstein (1999) によれば、ひとつの N/DP が複数の θ -role を持つことが可能である。

- (21) a. John hoped to leave
b. [_{IP} John_{< θ -leave>< θ -hope>} [_{VP} John_{< θ -leave>< θ -hope>} [_{hopes} [_{IP} John_{< θ -leave>} to [_{VP} John_{< θ -leave>} leave]]]]]

この分析を基に、他動詞 *resultative* の派生を次のように提案する。

- (22) a. The waiter wiped the table clean
 b. [_{PredP} the table_{<θ-clean>} Pred [_{AP} clean_{<φ>}]]
 c. [_{VP} the table_{<θ-clean><θ-wipe>} [_{V'} wipe_{<φ>} [_{CP} *t*_i [_{TscP} T_{SC} [_{PredP} *t*_i Pred [_{AP} clean]]]]]]]

(22a)の post-verbal DP はまず PredP 内において結果句から θ-role を与えられる(22b)。その後主節 SpecVP に移動して V から内部的 θ-role を与えられる(22c)。

この分析を用いれば、次の例が非文法的であることも説明できる。

- (23) a. *The bears frightened the campground empty
 b. [_{PredP} the campground_{<θ-empty>} Pred [_{AP} empty_{<φ>}]]
 c. * [_{VP} the campground_{<θ-empty><θ-frighten>} [_{V'} frighten_{<φ>} [_{CP} *t*_i [_{TscP} T_{SC} [_{PredP} *t*_i Pred [_{AP} empty_{<φ>}]]]]]]]

(23a)の post-verbal DP は(22a)同様まず PredP 内において結果句から θ-role を与えられる(23b)、その後主節 SpecVP に移動して主節 V から内部的 θ-role を与えられるが(23c)、*frighten* が与える内部的 θ-role と post-verbal DP *the campground* との間に θ-mismatch が生じるため *frighten* の持つ内部的 θ-role が正しく付与されないまま残ってしまい派生が破綻すると思われることができる

また非能格動詞 *resultative* の派生を次のように提案する。

- (24) a. The joggers ran the pavement thin
 b. [_{PredP} the pavement_{<θ-thin>} Pred [_{AP} thin_{<φ>}]]
 c. [_{VP} the pavement_{<θ-thin>} [_{V'} run [_{CP} *t*_i [_{TscP} T_{SC} [_{PredP} *t*_i Pred [_{AP} thin]]]]]]]

(24a)の post-verbal DP は(22-23)同様まず PredP 内において結果句から θ-role を与えられる(24b)。その後主節 SpecVP に移動するが

非能格動詞は内部的 θ-role を持っておらず、post-verbal DP は Case を value するためだけに主節 SpecVP に移動している(24c)と仮定する。

3.2. 非能格動詞結果構文においてなぜ post-verbal DP は Accusative で value されるのか

(24)に示した非能格動詞 *resultative* の分析は次の問題と関連する。すなわち、「非能格動詞結果構文においてなぜ post-verbal DP は Accusative で value されるのか」という問題である。通常非能格動詞には post-verbal DP は現れないが、*resultative* では post-verbal DP が現れ、さらにその DP は Accusative で value されている。なぜこのような Case valuation が可能なのだろうか。本発表では他動詞目的語と同様に構造格として Accusative Case を value するとする立場を取る⁴。その際、Takano (2012)が提案する θ-role 付与と格素性の可視性の関係が重要になる。

(25) θ-roles make the Case features of DPs visible to the computation.

(Takano (2012))

(25)によれば θ-role を与えられた DP は格素性が可視的となり value されなければならない。この仮定を基にここでの問題を説明する。(24b)に示したように、post-verbal DP は結果句から θ-role を与えられている。(25)によれば θ-role を与えられた post-verbal DP は格素性が可視的となり value される必要がある。(19)にしたがうと *resultative* SC では C が持つ φ-素性は T に継承されず不完全であるためこの SC 内では格素性を value できず、post-verbal DP は主節内へ移動して格素性を value されるしかない。このように post-verbal DP が θ-role を与えられたことによって(25)にしたがいが Case valuation が動機づけられると考える。

ではどのような場合非能格動詞が Accusative を value できるのだろうか。この

点に関して、Levin and Rappaport (1995)などが resultative の特徴として指摘している change of state/Accomplishment に注目したい。Accomplishment の特徴のひとつに telic interpretation がある。

- (26) a. The waiter wiped the table in/for two minutes
 b. The waiter wiped the table clean in/*for two minutes

(26b)では atelic interpretation を示す for-phrase を用いることができないため、resultative は telic として解釈されると考えられる。

また、Bobaljik and Wurmbrand (2007)などによると、telicity は V が内在的に持つ特性ではなく、V とその '目的語' が複合的に示す VP の特性である。

- (27) a. John read #in / for an hour
 b. John read the book in / for an hour

read を自動詞として用いた(27a)では telicity を表す in-phrase を用いると意味解釈できなくなるが、目的語を加えて他動詞として read を用いた(27b)では telicity を表す in-phrase を用いることができる。

さらに、 θ -role と Case assignment の関係について述べた Burzio の一般化からも unergative verb が Case を value することを導くことができる。

- (28) *Burzio's generalization*
 A verb which lacks an external argument fails to assign Accusative case.
 >>> A verb which has an external argument can assign Accusative case

(28)は非対格動詞が Accusative Case を与えないという事実が捉えられるための一般化だが、この一般化を「逆さ読み」すると、「外項を持つ V は Accusative Case を付与する能力を持ち得る」と解釈できる。言い換えると、非能格動詞は外項を持つので、(28)の「逆

さ読み」が正しいとすれば、潜在的に Accusative Case を value する能力を有すると考えることができる。通常の非能格動詞で Accusative が value されないのは、仮に post-verbal DP があったとしてもその DP には θ -role が与えられず、(25)にしたがえばその格素性は不可視的なままになってしまうため格素性が value されず派生が破綻してしまうからであり、自ら内的 θ -role を与えることのない非能格動詞は Accusative Case を value する能力を潜在的には有するがそれが常に activate されなくても派生は破綻しないと仮定する。

以上を基に、resultative の telicity を捉えるためには主節 VP が '目的語' を取る必要があるため、通常目的語を取らない非能格動詞であっても VP 内に '目的語' を取らなければならず、post-verbal DP を主節 SpecVP で Accusative Case として value しなければならぬ、と仮定する。具体的には次のような分析を提案する。

- (29) a. The joggers ran the pavement thin
 b. [_{PredP} the pavement Pred [_{AP} thin]]
 c. [_{CP} the pavement_i C_[q] [_{TscP} T_{sc} [_{PredP} _{t_i} Pred [_{AP} thin]]]]
 d. [_{VP} the pavement_i run [_{CP} _{t_i} C [_{TscP} T_{sc} [_{PredP} _{t_i} Pred [_{AP} thin]]]]

Post-verbal DP は結果句から θ -role を与えられ格素性が可視的となる(25)。また resultative を Accomplishment/Telic として解釈するには主節 VP 内に '目的語' を取る必要がある(26-27)。このため非能格動詞が潜在的に持つ Agree feature ((28)の逆さ読み)が activate され、V の Agree feature が Probe となり post-verbal DP を Goal として Agreement relation を結ぶことで post-verbal DP を Accusative Case として value できると考える。

注

¹ Adachi (1985)はさらに次のような規則を仮定し、COMP 内に何の feature もない場合は S' を S として解釈し直すことを提案している。

S'-to-S Rule (Adachi (1985): 41)

$S' \rightarrow S / __ \alpha S$, where α dominates no element with feature.
したがって *consider* などが補部を取る SC は S/TP として再解釈されることになる。

² 後の議論でこの構造を修正する。(cf. (16), (17))

³ Carstens (2001)は Agree によって Goal の格素性を value/delete できるのは Probe が (伝統的な) Case licensor である場合のみだと主張している。この提案に対して(19)の提案は Case licensor となりうる主要部に ϕ -素性が継承されないことを「不完全」と定義することでその主要部との ϕ -素性の valuation では格素性を消去できないと仮定しており、 ϕ -素性が継承された主要部が Probe となる場合 Goal の格素性を value/delete できることになり、なぜ Case licensor のみが格素性を value/delete できるのかを説明しているが、素性継承がどのような場合起きるのか (あるいは起きないのか) ついてはまだ不明確なままであり今後の研究課題としたい。

⁴ Baker and Vinokurova (2010)は構造格以外の格のあり方として「依存格(configurational Case)」について議論している。

- (i) a. Min ehigi-*ni* [bugun kyaj-yax-xyt dien]
I you-ACC today win-FUT-2pS that
erem-mit-im
hope-PAST-1sS
'I hoped you would win today'
b. Keskil Aisen-y [kel-bet dien]
Keskil Aisen-ACC come-NEG.AOR.3sS that
xomoj-do
become.sad-PAST.3sS
'Keskil became sad that Aisen is not coming'

Baker and Vinokurova (2010)によれば、Sakha では埋め込み節主語が RTO し Accusative で license される(ia)。さらに主節動詞が Accusative を value できない自動詞(ib)では非対格動詞)であっても埋め込み節主語が RTO し Accusative として value される(ib)。この事実を説明するため Baker and Vinokurova (2010)は次のような仮定を提案している。

- (ii) If there are two distinct NPs in the same phase such that NP₁ c-commands NP₂, then value the case feature of NP₂ as accusative unless NP₁ has already been marked for case.
(Baker and Vinokurova (2010): 4)

この仮定を用いると非能格動詞 resultative において post-verbal DP が Accusative として value されることを説明できる。具体的には、Post-verbal DP が埋め込み節の SpecCP へ移動することでこの post-verbal DP を上位 CP phase 内の要素と見なすことができる。主節 SpecvP に主節主語が Merge された段階で(ii)にしたがい埋め込み節の SpecCP 内の post-verbal DP を Accusative として value することができる。

ただしこの分析にはいくつかの重大な問題点があり (例えば非能格動詞 resultative に post-verbal DP の出現を許してしまうなど)、考察を進めるのに興味深い分析ではあるが慎重に研究を進める必要がある。

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The Third of the List: Occasioned Social Meanings of Three-part-list Construction

Reiko Hayashi

Konan Women's University

Key words: three-part list construction, occasioned semantics in conversation, categorization, taxonomy, cultural knowledge

1. Introduction

There is a British Lifehacker's blog that includes the following comment:

"The three-part lists are fairly effective, if well-used. Barack Obama, according to one speech-making expert, used 29 of them in his roughly 10-minute victory speech."

The comment is based on the idea that three-part-list or trinomial is one of the rhetorical techniques we commonly use in our day-to-day conversations. The technique of tripling, like *It was delicious, excellent, and fantastic* is widely used both in writing and speaking and the idea of listing three seems very fundamental to the way of effective communication. The three-part-list in everyday language use is generally unmarked. The number three is so deeply engrained in our language use even to the extent that we are not aware of its occurrence. The appearance is quite natural as found in Waonia's talk: 'This morning he was to be at Krannert I told him you know quarter till ten cause I needed to be here I called him three times I finally said either you get up or you're not going out on your date tomorrow night'. Then we might ask why the number three, not a two or a four, works so effectively. Answering the question will not be easy. It is because that three-partedness is

a concept and the mental activity cannot be fully explicated. This is in part true. Concept does not have the substance available for analysis. But it is largely due to a surprising indifference. There is not much prior research on lists, let alone on three-part-list in English or in general. The phenomenon has received less emphasis or been treated as trivial in the field of linguistics or pragmatics. The exceptions are the observations by conversation analysts. Jefferson (1990) has opened up the opportunities to study the phenomenon in conversation as an action that sequences conversation, although very little research has been done since her publication. However, some CA researchers have made some references to this structure. For example, Lerner (1994, 1995) who shows how turn-taking system relevantly operates on the turn where the third item is listed and the speakers produce opportunities to participate in the event. In addition, Atkinson (1984) and Selting (2007) report that the completion of three projects the indication of continuation or discontinuation of talk to its recipients. Related to the constitution of its structure, Schiffrin (1994) analyzes the discourse organization of lists, which is not limited to the three-part-list, and discusses the subjectivity of list activity in narratives.

Jefferson and other CA researchers above have approached it by describing how methodically we organize talk with lists and describe reflectively the structure through which the list items are presented. Their observation that the concept of three-partedness appears as a factual phenomenon and has a form in interaction is based on the assumption that a turn occasions the structure in actual conversation. However, in examining Jefferson's reference of the 'programmatically relevance' of three-partedness to the creation of the structure, her observation intriguingly implies its conceptual or cognitive property. Her explication on the processes through which list-making is projected systematically toward the completion of three items, and on the ways the speakers are constrained by the

idea of three that list ‘*should* so occur’ (p. 66) reminds us of the premise that three-partedness is a cognitive concept speakers treat as a task resource. It is a convention that imposes them to produce three items as a unit. This premise then predicates that it can be construed as one of the methods of producing turns. In the examination of the case in which the other party produces the third after the present speaker finish the two, Lerner (1994: 23) reports that the precise transition of speaker change at the time of completion of three is achieved by the force of a turn and regards that speaker’s such turn orientation triggers a three-part unit as TCU. However, whether the transition is due to the force of turn or to that of unit structure still remains elusive. There is no rational evidence to determine a turn is more powerful. As we will see below turn-take is motivated by the structure of a unit, more specifically the unit in the following segment functions more fundamental to drive sequence than a turn. This paper therefore gives insights into a principle of a unit the users create while examining the interplay with a principle of a turn, both of which are our general concepts they deploy for meaningful talk.

I will quickly look at the creation of a unit in interaction below by reference to the fragment collected by me and transcribed by a native speaker of English.

- Fragment 1
- 1 Terry: Mine are a mess either way
 2 Margie: Some dogs are like that too
 3 Glenn: Yeah
 4 Margie: There are certain things they
 5 they teach a dog to do
 →6 there are three different kind of
 7 like degrees they can set one is
 8 novice then you go to a more
 9 higher up one and then you go
 10 to a higher up one where they
 11 jump over hurdles and get
 →12 chase dumb bells and all kinds
 13 of fancy things and it’s all in
 14 preparation really for dog
 →15 obedience shows trails so
 16 they have to learn to heel and

- 17 sit and do sit stays
 18 Glenn: right right
 19 and down stays [and
 20 Glenn: [They don’t teach them tricks
 21 like roll over
 22 Margie: No uhh uh
 →23 Terry: and play dead and speak and
 24 bring your slippers
 25 Margie: huh uh
 26 John: Hustle bowling pins (all laugh)

In the segment, Margie, a volunteer dog trainer, uses a method of list-making, orienting to the number ‘three’, to explain how her school trains dogs, i.e. she organizes her explanation by listing three items. First, she lists three levels, by virtue of the three, with the expressions, ‘novice’, ‘higher up one’ and ‘a higher up one’ (note ‘and’ and ‘then’). The additional lists emerge by virtue of the number. The last ‘a higher up one’ is formulated with ‘jump over hurdles’, ‘get chase dumb bells’ and ‘all kinds of fancy things’. The semantic content of the obedience is also formulated with ‘heel and ‘sit’ ‘do sit stays and down stays’. While choosing these expressions, she appears to have created the principle of the three-part list construction to systematize her knowledge of listing. The methodic arrangement of her thought with this principle occasions Terry’s participation in the list activity. Terry uses ‘and’ to link Margie’s list-in-progress initiating a three-part unit, which stretches their talk in terms of the description of the teaching of obedience. We can see here that a three-part list construction is deployed to construct the conversational activity to the extent that John says the punch line with a final item. Note, also, that the words they chose for the lists also construct the structure of category, which provides us with the information on how the chosen words develop their meaning in the list. Indeed list-making creates categorical meaning. A list for additive primary color, for example, presents a series of words ‘red’, ‘green’ and ‘blue’. The items as a family of the member of the color identify their categorical relationship of similarity and difference within the list. In

this way the structure of list also offers the opportunity to investigate how the meanings of chosen words are created for and in talk.

This paper reflects on these structure and meaning of three-partedness, examining its epistemic ‘orient-to unit task’, for which the third plays a significant role, and hopes to give an alternative answer to the question addressed by Lerner (1994:31) ‘why each particular party produced a particular action’. Following discussion is addressed to the answer, that is, it lies in the epistemic knowledge speakers create that drives them to talk in relevant ways.

2. The Third in Three-part List Unit

There are a variety of three-part list productions. I will first make a distinction between a ‘recycled-unit’ and a ‘non-recycled-unit’. Jefferson (1990, 65) calls the former format a ‘triple singles’ by citing the instance such as ‘God, she just kept looking, an’ lookin, an’lookin’. As for the latter, it shows up in various forms in either ‘no-recycled three’ or ‘2 recycled + 1’ category (Hayashi, forthcoming), which are generally open for numbering, and thus often project more-to-come. This is not to say, of course, we do not list two or more than three. According to Selting (2007), prosody will signal even one item as possible list item, and listing does not always need to be ‘three’. In the following segment, Carol lists only two items ‘silly silly’ in line 4. If Carol lists three by saying ‘silly silly silly stuff’, a scale of ‘complaint’ is larger than that of the two. If she says ‘silly silly silly silly stuff’, the scale is too large and conveys a sense of ‘muchness’. Three yet is preferred (Jefferson, 1990). Listing three is ‘a implicit or tacit ‘economy rule’ that you wouldn’t (and shouldn’t) add any more after the third one’ (Atkinson 2008).

Fragment 2.

- 1 Nancy: You guys aren’t getting along?
- 2 Carol: Yeah, we’re getting along.
- 3 Nancy: Is it just the two of you?
- 4 Carol: Um hum. It’s like, silly silly
- 5 stuff you know, like I

(Hayashi, 1996: 39)

As for the third in ‘non-recycled-unit’, I will cite below the examples of general properties relevant to the segment 1 (for other properties, i.e. co-construction over multi-turns, floor maintenance, etc., see Hayashi forthcoming) paying more attention to the third than the structures. As these fragments show, the third occurs in quite different manners from the other two. Their prominence includes the followings. (Three items are underlined.)

- (a) The third is more general than the other two.
- (b) The third provides interactive opportunity.
- (c) The third is preceded or followed by recount.
- (d) The third serves for category formulation.

Fragment 3 is a token of ‘no-recycled three’. The third ‘all that’ is more general than the other two. Lerner (1994: 22) says that ‘a search is required to produce something more specific in the projected third-item slot when the third is available and it is a less specific third. Such requirement reflects Jefferson’ observation on the cognitive load on the list-makers to list three items.

Fragment 3.

Jay: Samuel jus’takes things casually en naturall en, - all that,] (Jefferson, 1990:70)

The words such as ‘uh’ and ‘well’ or ‘a pose’ before the third also reflects this cognitive load. Nancy (Fragment 4) treats Carol’s search for a third problematic as she checks the third item can be the excuse. Here the list indeed completes the turn and the third is treated recognizably as the turn transition relevance place (TRP). However, we cannot determine this turn exchange is due to a turn taking imposition. The only observable phenomenon is the reality in which the third is treated problematic in the next turn.

Fragment 4.

- Nancy: Can you live there instead of a dorm?
Carol: What do you mean I have to live there I can't live anywhere else unless I have ah bring up an excuse you

Taxonomy is a conceptual knowledge that has been widely and technically used by experts of various fields to classify things into vertical and horizontal arrangements. The higher level is called ‘superordinate’ and the item at this level has ‘subordinates’. Subordinates are the subcategories’ or ‘subcategory members’ of the ‘superordinate’. The speakers in the fragment are obviously using this basic knowledge about taxonomy for the activity of listing.

Next, to locate the attribution of Terry’s ‘bring your slippers’, I reexamine Margie’s second list. It is evident that the training menus Margie has listed are all subcategories of the ‘obedience training for the show’ from her saying that ‘it’s all in preparation really for dog obedience shows (1.0) trails’ in lines 13-14. Therefore, the second three-part unit items (‘jump over hurdles’, ‘get chase dumb bells’, ‘all kinds of fancy things’) sounds like the subcategories of ‘obedience training on trails’, and thus their mother-node is the ‘obedience training on trails’. However, the unit structure they construct indicates that it is less likely (see Figure 5).

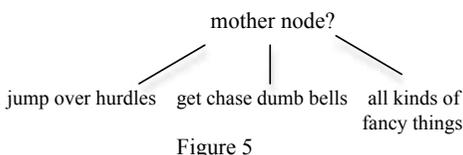


Figure 5

There are three possible observations for this unlikely-ness. First, we cannot determine whether they are really the subcategories of ‘obedience training on trails’ because Margie does not explicitly mention their superordinate (hypernym). She does not say the preposition before the word ‘trail’, and there is a pose for a second before ‘trail’. On the other hand, she clearly states that they are the subcategories of ‘obedience training’.

Second, the ‘jump over hurdles’ and ‘get chase dumb bells’ are listed as the fancy things in the list (in their horizontal relationship of similarity and contrast), so the items in this list should share the semantic

property that ‘fancy things’ possess, which will include the training goods such as ‘hurdles’ and ‘dumb bells’. However, the items in sister-nodes of the ‘obedience training on trails’ (‘heel and sit’, ‘do sit stays and down stays’, ‘play dead and speak’) do not have such property. Therefore the mother-nodes of the items of each list unit are incompatible in terms of the semantic properties of their subcategories.

Third, it is most plausible to say that Terry’s fourth item, ‘bring your slippers’ has the semantic property of the fancy thing and the specification of ‘a fancy thing’ is presented with the word, ‘slippers’.

With regard to the generalized completer such as ‘all kinds of fancy things’, Jefferson (1990: 68) observes that it usually comes after the two specific ones in the three-part-list and that it is an indication that “there are “many more” relevant nameables which will not, and need not, be specified”. Apparently Terry orients to this pragmatic implication of the expression and provides a nameable with specific words.

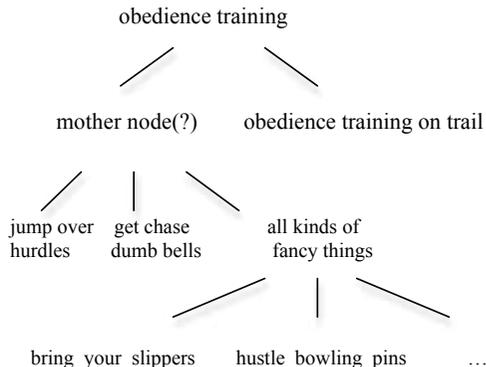


Figure 6

Let me point briefly the creative aspect of taxonomy in this conversation. Taxonomy generally indicates hierarchy relation of words at the vertical level, where words are placed in a ‘kind of’ relationship in terms of generalization and specification, e.g. a bird is a kind of animal; a penguin is a kind of bird (see Cruse 1986). It also indicates the property at the horizontal level, where words are the subcategories or hyponyms of a superordinate and indicate co-hyponym

semantic relation in terms of contrast and similarity. This structural and semantic nature presupposes that taxonomy has more than one hyponym at horizontal level. Therefore giving a word that fits into the structure automatically offers the closed semantic entity of the named an opportunity of constructing a wider or general semantic relation of the named. By this it means that if a speaker names one member of the category, it necessarily denotes that there are other category members. Therefore we can say that the mother-node 'obedience training' has more hyponyms that include locations (one of which is indicated with X in the figures) than 'on trail'.

Judging from this activity of word list that is based on the principle of three-partedness, it is plausible to say that Terry also encodes taxonomy for the fourth item to give one specific example of 'all kinds of fancy things'. Incidentally John also provides one item, 'hustle bowling pins', the presentation of which is plausibly based on the same motivation as Terry's. In this way they specified the meaning of Margie's 'all kinds of fancy things' as illustrated in Figure 6, aside from the question whether the school actually teaches them to the dogs.

The architecture they co-construct identifies that they are engaging in taxonomy based the task-orientation of the list unit, and notably, the thirds serve as a resource for this practice. Furthermore, it is the Margie's task problem of listing in the first list that caused the consequence of this categorization. Her elaboration in the third occasions the co-participation in the activity and co-construction of the semantic relationship in the classified items.

4. Concluding Remarks on Unit Task and on Use of Cultural Knowledge

Talk requires knowledge about language and culture/society: i.e. cultural knowledge, semantic knowledge of words, the knowledge about the relationship between the speakers in the situation, etc. Edwards (1991:523) labels this kind of knowledge with the word 'typicality' and claims that we

choose words for specific purpose based on the fundamental assumption about typicality (consequently the choice reflects the typicality). He then further discusses from Conversation Analysis and Discursive Psychology that such knowledge (a concept like category) is not for researchers, who tend to describe phenomena with 'prescriptive' perspective and determine 'stereotype' or 'prototype' of the phenomena, but it is for the users (speakers). Users use typicality, like 'typical system of three-part-list unit'. It is also the users who make the typicality problematical. His discussion, which reflects Sacks' (1979) well-known observation on categorization by the teenagers who created their own taxonomy of car to categorize themselves to/against the society, stresses that people do not merely describe the phenomenon or show a way of seeing the world by theory, but by displaying the ways of seeing 'typicality', e.g. in Sacks' case, the teenagers show how they see ordinary social behavior by resisting and/or indexing identity with different behaviors or in required ways.

Studies on typicality has been extensively and intensively made since Sacks' work and have found concepts such as 'turn', 'turn-taking', 'preference', 'agreement vs. disagreement', 'assessment', 'recipient design'. They are concepts the users depend on to display how they are dealing with situation for talk.

In more recent study, Bilmes (2009) regards typicality as a resource for semantic construction. He demonstrates how the speakers deploy semantics to deal with the problem of meaning of a certain word they confronted by re-analyzing Sacks' telephone conversation between the social worker and a man who was involved in the family altercation. He shows the speakers orient to concept, semantic category and negotiate the meaning of 'violence' with the words 'move', 'shove', 'hit' and 'smack'. In order to explicate the connotations or the meanings of these words, Bilmes himself, as a researcher, deploys the concept of taxonomy. In the analysis he adds other 'unmentioned' words

as the category members to the ‘actually stated’ words by the speakers and reconstructs the speaker’s taxonomical arrangements of violence with those words. His technique systematically explores the meanings created or implied by the speakers through the reconstructed taxonomic structure. This approach technically incorporates two types of knowledge, (1) semantic knowledge of the words that actually appeared in interaction and (2) our general knowledge about typicality is assumingly available in the context. He therefore accepts researcher’s development of appropriate concepts and methodology, if necessary, for logical explication. The technique, however, has been recurrently questioned by Conversation Analysts as Maynard (2011) reiterates a critical comment on this approach stressing that local problem of meanings are demonstrably handled by the structural approach of a turn, and the use, exploration, and discussion of cultural knowledge should be limited unless the speakers use the knowledge and exhibit it in a visible way within interaction. I restricted my account to the words the speakers used and relied on only those words as used and the ways they hypothesized the talk and generated their method with those words. I hope I have answered Learner’s question ‘why each particular party produced a particular action’. It is because the speakers deal with the contingent cognitive task they face, but not for the sake of a turn exchange. The speakers’ concern about the structural unit and the choice of words reveal that the speakers are monitoring the ways they create them based on the general knowledge of three-partedness, and certainly their treatment of its ‘typicality’ as a device to solve the problematic thirds reflects the ethnomethod Garfinkel (1963, 1984) presents.

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英語における制限的關係節と分裂節の 統語構造と意味に関して*

(Restrictive Relative Clauses and Clefts: At the Syntax-Semantics Interface)

本多正敏 (Masatoshi Honda)

神田外語大学研究員 (Kanda University of
International Studies (Researcher))

キーワード: 關係節, 再構成 (Reconstruction),
定性効果 (Definiteness effect), 分裂文

1. はじめに

本研究の目的は、以下に示す制限的關係節 (1a) と分裂文 (1b) における再構成効果 (Reconstruction effect) ・定性効果 (Definiteness effect) に関わる振る舞いを再考し、その特徴に基づく分析を提案することである。

- (1) a. *The book* [that John bought] was interesting.
b. It was **the book** [that John bought].

本稿では、(1a)の制限的關係節の名詞句 *the book* に相当する部分を主要部、*that* 節を關係節と呼ぶ。また、(1b)の分裂文においてコピーと *that* 節に挟まれた太字の要素が一種の強調的意味を持つことから焦点と呼び、*that* 節を分裂節と呼ぶ。

生成文法の枠組みにおいて、關係節と分裂文は、島の効果を示すことから A-bar 移動により派生するとされている (Chomsky (1977))。また、いずれも再構成効果を示すことが指摘されていることから (第2節にて詳述)、類似した派生を持つとする考察もある (e.g., Reeve (2011))。本稿では、再構成効果は制限的關係節と分裂文に共通する一方、定性効果に関しては、それぞれの構文が異なる振る舞いを示

すことを明らかにし、以下の2点を主張する。

- (2) 制限的關係節は外在的 D が CP を補部とする D-CP 構造を持つが、分裂文はそのような構造を持たない。
(3) 制限的關係節・分裂文は異なる種類の A-bar 移動により派生する。

さらに、上記(2)・(3)の主張に基づいて、先行研究の洞察を振り返り、制限的關係節の A-bar 移動は不定の移動連鎖を形成するのに対し、分裂文の A-bar 移動は、移動要素に応じて定・不定の移動連鎖を形成すると述べる。

本稿の構成は以下の通りである。第2節で制限的關係節・分裂文の再構成・定性効果に関わるデータを示し、第3節では先行研究を見る。第4節で、制限的關係節・分裂文の基本構造と再構成システムを示し、第5節ではその帰結と予測を見る。第6節は結論である。

2. 再構成と定性効果

一般的に、再構成効果は、A-bar 移動した要素が元位置にあり、C 統御 (さらには束縛) の影響を受けているかのように振る舞う現象を指す (Barss (2001))。具体例を以下に示す。

- (4) a. The portrait of himself_i/*him_i/*John_i that he_i painted is extremely flattering.
b. It is proud of himself_i/*him_i/*John_i that he_i seems to be. (Reeve (2011:161))

(4a)は、關係代名詞節の主要部内の再帰代名詞が束縛原理 A を満たす一方、代名詞と指示表現は、それぞれ、束縛原理 B・C に違反しているかのように振る舞うことを示す。また、(4b)の分裂文の焦点位置にある再帰代名詞・代名詞・指示表現も、(4a)と同様の振る舞いを示す。さらに、(4a, b)のデータの他に、数量詞の作用域についても再構成効果が見られることが指摘されている。具体例を見よう。

- (5) a. I phoned the two patients_i that every doctor will examine t_i tomorrow.
[every>two] (Aoun and Li (2003: 98))

b. It was a chicken_i that every dog ate t_i.
[∀ > ∃] (Reeve (2011: 161))

(5a)は、主要部名詞句内の数量詞 *two* が普遍数量詞 *every* より狭い作用域を取る解釈（医者全員が、それぞれ二人の患者を診察するという解釈）が可能であり、関係節内部の移動の元位置にあるかのように振る舞う。(5b)の分裂文も、同様の再構成効果を示しており、焦点位置の数量子は分裂節内の普遍数量子より狭い作用域を取る。このように、制限的關係節と分裂文は再構成効果を示すため、それぞれ、A-bar 移動によって派生すると言える。

ここまで見た再構成効果に関して、制限的關係節の場合、*wh* 演算子を伴う場合は、再構成効果が生じなくなると Aoun and Li (2003) は指摘しており、Reeve (2011) は同様のことが、分裂文にも当てはまるとしている。¹ この点を踏まえ、本稿では、制限的關係節・分裂文が、それぞれ *that* 型の関係節・分裂節を持つ場合、再構成効果がより生じやすくなるを考える。従って、以下で提示するデータは *that* を伴う制限的關係節・分裂文に限ることとする。

以上のデータを見る限り、再構成効果について制限的關係節と分裂文は類似した振る舞いを示すと言える。その一方、Browning (1987) は、定性効果に関わるデータを示しながら、これらの構文の A-bar 移動における定性の違いを指摘している。具体的な例を以下に示す。

(6) a. * There were the men_i in the garden.
(Browning (1987: 130))

b. * John made the headway_i on that problem. (ibid.)

(7) a. The men_i that there were t_i in the garden were all diplomats.
(Browning (1987: 130))

b. * It was the men_i that there were t_i in the garden. (ibid.)

(8) a. The headway_i that we made t_i on that problem was not sufficient.
(Browning (1987:130))

b. * It was the headway_i that we made t_i on that problem. (ibid.)

上記の例文は、*there* 構文(6a)、そして、イディオム内(6b)に定冠詞 *the* を伴う定表現の名詞句が生起できないことを示しており、一般的には、定性効果と呼ばれている (Milsark (1974))。 (7a, b) は、定冠詞 *the* を伴う関係節主要部の名詞句は定性効果を引き起こさない一方、分裂文の場合は定性効果を引き起こすように振る舞うことを示す。言い換えれば、制限的關係節の場合、名詞要素の *headway* のみが関係節内の元位置にあるかのように振る舞うのに対し、分裂文では、定冠詞を含む焦点要素全体が移動の元位置にあるかのように振る舞う。(8a, b) のイディオムの対比も、同様の振る舞いの違いを示す。Browning (1987) は、(7a, b) と (8a, b) の対比に基づき、関係節の A-bar 移動により不定の痕跡が残るのに対し、分裂文は定の痕跡を残すと述べている。

ここまでの要点を整理すると、①再構成効果を示す点で、制限的關係節と分裂文は類似性を示すが、②制限的關係節は定性効果を示さないのに対し、分裂文は定性効果を示すという違いがある。

以上を踏まえた上で、本稿で取り組む疑問は二点ある。一つは、分裂文がイディオムの再構成を認めるかどうかである。既に分裂文が再構成効果を示すことを見たが、(8b) は定性効果により非文法性が生じていると考えられるため、分裂文におけるイディオムの再構成が可能かどうかはこのデータだけでは不明である。もう一つは、定性効果と再構成効果がどのように結びついているかである。これまで示してきた制限的關係節のデータから、主要部の定冠詞を除く名詞句要素が移動の元位置にあるかのように振る舞うと言えるが、分裂文の場合、焦点位置の定冠詞の有無が再構成効果にどのような影響を与えるかは不明である。これらの疑問二点に取り組むため、英語母語話者 3 名（アメリカ出身 2 名、イギ

リス出身1名)へのインフォーマント調査を行った。以下ではその結果を順に述べる。

まず、分裂文の焦点位置にイディオムの名詞句が生起するかどうかを、定冠詞・修飾要素の有無の観点から調査した結果を、インフォーマントの判断と共に、以下に示す。

(9) a. * It was the track_i that Mary kept t_i of her expenses.

b. ^{??} It was track_i that Mary kept t_i of her expenses.

cf. The careful track_i that Mary kept t_i of her expenses pleased me.

(10) a. * It was the careful track_i that Mary kept t_i of her expenses.

b. It was careful track_i that Mary kept t_i of her expenses.

(9a, b)は、焦点化されたイディオムの名詞句が定冠詞を伴う場合は強い非文法性を示すのに対し、定冠詞が無い場合は文法性が若干向上する点で文法性に違いがあることを示す。(10a, b)の対比は、修飾表現を加えたイディオムの名詞が定冠詞を伴う場合は非文法性が生じるが、定冠詞を伴わない場合は文法的になることを示す。また、(9b)と(10b)を比較すると、修飾表現を伴う(10b)の方が、文法性が高い。以上のデータから、分裂文はイディオムの再構成効果を示すが、これは、定冠詞を伴わず、修飾表現が付加されている場合に文法性が高くなると言える。定性効果の観点から見ると、分裂文の A-bar 移動は焦点要素全体の定性を反映しており、焦点位置に定名詞句がある場合、定性効果が生じるが、不定名詞句が生起すると定性効果は生じないと言える。

次に、分裂文の焦点位置の定冠詞の有無が再構成効果に与える影響を調査した結果を以下に示す。

(11) a. ^{??} It was the two patients_i that every doctor examined t_i yesterday. [every > two]

b. It was two patients_i that every doctor examined t_i yesterday. [every > two]

cf. I phoned the two patients_i that every doctor will examine t_i tomorrow.

[every > two] (Aoun and Li (2003: 98))

(11a, b)の対比は、焦点名詞句が定冠詞を伴う場合、two が普遍数量詞 every より狭い作用域を持つ解釈が困難になることを示す。制限的關係節の場合と比較すると、分裂文の場合、A-bar 移動の性質は、定冠詞を含む焦点要素全体の定性を反映していると言える。

以上の議論は、以下の二点にまとめられる。

(12) a. 制限的關係節と分裂文は再構成効果を示すため、A-bar 移動により派生する。

b. 制限的關係節は定性効果を示さないのに対し、分裂文では、焦点要素が定名詞句である場合、定性効果が生じ、不定名詞句である場合、定性効果は生じない。

次節では、関係代名詞節の形式と意味、及び、再構成効果に関わる分析と分裂文の形式と意味に関わる分析を振り返る。

3. 先行研究

本節では、制限的關係節の基本構造と再構成効果に関わる先行研究、及び、分裂文の形式と意味に関わる先行研究を概観する。

まず、制限的關係節の基本構造に関して、Vergnaud (1974)は、制限的關係節が D-CP 依存関係を持つことを指摘しており、近年の研究では、外在的 D が関係節 CP を補部とする構造を持つことを示すデータと考えられている (Bianchi (1999), Aoun and Li (2003))。以下に具体例と構造を示す。

(13) a. the Paris_i *(that I knew t_i)

(Vergnaud (1974: 265))

b. [_{DP} the [_{CP} Paris_i [_C that [_{IP} I knew t_i]]]]

(13a)は、通常、定冠詞を伴わない Paris のような固有名詞が定冠詞を伴う場合、関係節 CP も生起しなければならないという共起性を示すデータである。このような共起性は、(13b)における、外在的 D (the) が名詞句移動を含

む関係節を CP 補部として選択する構造から導かれるとされている。

また、(13b)の移動要素 (Paris) の統語範疇に関して、Borsley (1997)は、関係節が寄生空所化を認めること等から DP であると主張しており、Bianchi (1999)は、外在的 D に編入する null D を含む DP が関係節内で移動すると提案している。具体例と構造を以下に示す。

- (14) a. the book_i that Bill criticized t_i without reading pg_i (Aoun and Li (2003: 104))
 b. [_{DP} [_D the]_{[CP [_{DP} Φ book]_i [_C that [_{IP} Bill criticized t_i without reading pg_i]]]]}

(14a)は制限的關係節内の目的語位置からの移動連鎖に伴って、付加詞節内に寄生空所 (pg) が生起していることを示す。仮に、関係節内での移動要素が NP であるとする、寄生空所も NP と考えられる。しかし、動詞の補部位置には、DP が生起するのが一般的であることを踏まえると、移動要素 (book) と寄生空所の範疇は DP であると考えられる。Bianchi (1999)は、(14b)の D-CP 構造に基づき、CP 内で null D を含む DP が CP 指定部へ移動し、null D が外在的 D に編入 (Incorporation) することにより、外在的 D と主要部名詞句が解釈関係を結び、関係節が派生すると提案している。

以上の内容をまとめると、制限的關係節の派生において A-bar 移動する要素は DP であるが、その移動は、外在的 D と主要部内の名詞句が解釈関係を結ぶ編入操作を伴うシステムによるものであると言える。また、再構成効果に関して、Chomsky (1995)により提案されている移動のコピー理論によると、A-bar 移動の元位置には移動要素のコピーが残り、そのコピー要素が C 統御や束縛に従うとされている。本研究でもこの提案を採用するが、分析の詳細は次節の提案で述べる。

次に、分裂文の分析を見る。先行研究では、英語の分裂文は存在の前提 (Existential presupposition) と総記焦点 (Exhaustive focus)

の意味を持つとされている (e.g., Reeve (2011))。以下の例を見てみよう。

- (15) a. * It was **nothing**_i that he drank t_i.
 (Reeve (2011: 149))
 b. * It was **everything**_i that John drank t_i.
 (*ibid.*: 150)

(15a)は、分裂文の焦点位置に否定裸数量詞が生起できないことを示す。Reeve (2011)によると、(15a)の場合、分裂節が「彼 (代名詞の指示対象) が何か飲んだものが必ずある」という存在の前提を示すのに対し、否定裸数量詞はその存在を打ち消すという矛盾が生じるため、非文法性が生じるとしている。(15b)は、分裂文の焦点位置に普遍数量詞が生起できないことを示す。Reeve (2011)は、É. Kiss (1998)の総記焦点の考察を踏まえ、「It was shochu that John drank.」という文の場合、「John が飲んだものは、焼酎であって、他のもの (例えば、ビールやワイン) ではない」という総記の意味を持つとしている。従って、(15b)の場合、分裂文の焦点は総記性を示すのに対し、焦点要素の普遍数量詞はこの総記性とは相容れないため、非文法性が生じていると考えられる。

以上で示した存在の前提と総記焦点の意味が構造的にどのように具現化されているかについて、殊に、総記焦点に関しては、先行研究での提案は多岐に分かれるが、紙面の都合上、本稿では、É. Kiss (1998)の FP 分析と複層化した CP 内に焦点の解釈を与える FocusP を想定する分析の二つを見る。これらの分析における構造の概観を以下に示す。

- (16) (i) FP分析 (É. Kiss (1998)) :
 [_{CP} [_{IP} it [_{FP} XP_i [_{F'} be [_{CP} that ... t_i ...]]]]]
 (ii) 複層CP階層内のFocusPに基づく分析
 [A] 複節分析 (Belletti (2008), Haegeman and Meinunger (forthcoming)) :
 [_{CP} [_{IP} it be [_{CP(FocusP)} XP_i [_{CP} that ... t_i ...]]]
 [B] 単節分析 (Meinunger (1998), Hasegawa (2011)) :
 [_{CP2} it be [_{CP1(FocusP)} XP_i [_{CP0} that ... t_i ...]]]

(16 i)は、É. Kiss (1998)が提案した FP 分析に基づく構造である。この構造において、総記焦点解釈は FP 指定部への直接移動により与えられる。(16 ii)は、Rizzi (1997, 2004)により提案されている分離 CP 仮説 (Split CP hypothesis) に基づくアプローチである。このアプローチでは、談話機能に対応して、CP 領域は、文タイプを示す Force、Topic、Focus、文の定性を示す Finiteness に分かるとされている。具体例を以下に示す。

- (17) a. Force ... Topic ... Focus ... Finite ... IP ...
 b. She said [_{ForceP} that [_{TopicP} beans [_{FocusP} never in her life [_{FinitP} had [_{IP} she been able to stand]]]]].

(17b)において、補分標識は Force の階層に生起して、文タイプを「断定 (assertion)」として表示し、時制を伴う要素 (had) が Fin の階層に表れている。これらの階層に挟まれるようにして、Topic・Focus 要素が順に生起している。[A]の複節分析では、主節と分裂節が独立して生起しており、分裂節は Force・Topic の階層を欠く FocP として生起し、焦点要素が FocP の指定部へ移動するとされている。他方、[B]の単節分析では、分裂文全体が単節を成しており、複層化した CP 内の FocusP への移動によって、焦点解釈が与えられる。Meinunger (1998)は、分裂文の it とコンピュータは Topic 階層に生起するとしているが、Hasegawa (2011)はこれらの要素が Force 階層を占めるとしている。それぞれ構造の詳細は異なるが、分裂文全体を一つの節と捉えるアプローチと言える。

以上の分析を比較すると、(16 i)では、分裂節の CP 領域から独立して焦点解釈を付与する FP が想定されているのに対し、(16 ii)では、複層化された CP 領域内の FocP への焦点移動が想定されている。いずれの分析でも、存在の前提がどのように構造的に具現化されているかについては詳しく扱われていないが、焦点移動が起こる分裂節が存在の前提の解釈を担うと考えることができる。

以上では、制限的關係節と分裂節の形式と意味に関わる分析を見た。次節では、本稿で採用する關係節と分裂文の構造と再構成システムを示す。

4. 提案

まず、制限的關係節について、Bianchi (1999)の分析に基づく Aoun and Li (2003)の提案に従い、再構成効果を示す that 節では、關係節内部で null D を含む DP の移動が起こると考える。また、Chomsky (1995)の移動のコピー理論を採用し、A-bar 移動の元位置にコピーが残ると考える。以上を踏まえ、制限的關係節の具体的な構造を以下に示す (括弧<>内の要素は移動要素のコピーを示す)。

- (18) [_{DP} [_D the] [_{CP} [_{DP} Φ book] [_C that [_{IP} Bill criticized <[_{DP} Φ book]> yesterday]]]]]

Bianchi (1999)、及び、Aoun and Li (2003)の分析では、カートグラフィーに基づく構造が想定されているが、本稿では、再構成効果と定性効果を議論の焦点としているため、簡略化した(18)の構造を採用する。

次に、分裂文に関して、本稿では、焦点解釈を指定部に付与する機能範疇 F(ocus)があり、その補部に当たる分裂節が存在の前提として解釈されると提案する。

- (19) a. [_{CP} [_{IP} it [_{FP} XP [_F be [_{CP} that ... <XP>...]]]]]
 b. [_{FP} Exhaustive focus [_F [_{CP} Existential Presupposition]]]

(19)の提案は、É. Kiss (1998)の FP 分析(16 i)と複層化した CP 内に FocusP を想定するアプローチ(16 ii)のどちらにも当てはまるものと考えられるが、本研究では、É. Kiss (1998)の FP 分析における構造を採用する。

以上の分析の要点をまとめると以下のようになる。制限的關係節は D-CP 構造を持ち、null D を含む DP が關係節内の CP 指定部に移動し、移動先で外在的 D と CP 指定部の名詞句が解釈関係を結ぶ。分裂文の場合、定冠詞を含む DP が移動の元位置から FP 指定部へ移

動し、総記焦点解釈を得る。また、分裂節 CP は存在の前提として解釈される。これらの違いを踏まえると、(20a)の帰結が導かれるとともに、(20b)の予測が成り立つ。

- (20) a. 制限的關係節では、再構成による定性効果が生じないが、分裂文では、焦点要素が定名詞句である場合、再構成によって定性効果が生じる。
- b. 制限的關係節では、D-CP依存関係が見られるが、分裂文ではD-CP依存関係は見られない。

次節では、第2節で見たデータを振り返りながら上記の帰結を確かめ、さらに(20b)の予測が正しいことを示す。

5. 帰結

まず、第2節で提示したデータを振り返りながら、(20a)の帰結を確かめる。以下の例を見てみよう ((4a, b)の再掲)。

- (21) a. [DP The [CP [DP Φ portrait of himself/*him_i/ *John_i] [C that [IP he_i painted <[DP Φ portrait of himself/*him_i/ *John_i] >]]]] is extremely flattering.
- b. [CP [IP It is [FP [AP proud of himself/*him_i/ *John_i] [CP that he_i seems to be <[AP proud of himself/*him_i/ *John_i] >]]]].

(21a)の制限的關係節では、null D を含む DP が移動し、元位置にコピーを残す。他方、(21b)の分裂文では、焦点要素が直接移動し、元位置にコピーを残す。それぞれ、移動の元位置にあるコピー要素がC 統御・束縛の対象となるため、再構成効果が導かれる。

次に、イディオム表現の事例を見る。以下の例は、(8a, b)の再掲である。

- (22) a. [DP The [CP [DP Φ headway] [C that [IP we made <[DP Φ headway] > on that problem]]]] was not sufficient.
- b. * [CP [IP It was [FP [DP the headway] [CP that [IP we made <[DP the headway] > on that problem]]]]].

(22a)の制限的關係節の場合、移動の元位置には null D を含む DP のコピーがあり、これがイディオムの解釈関係を構築し、定性効果は生じない。他方、(22b)の分裂文の場合、焦点位置に定冠詞を含むイディオムの名詞句が生起しているが、分裂文は D-CP 構造を持たないため、元位置には焦点要素に対応する定表現のコピーが残る。従って、再構成による定性効果が生じる。

また、本稿で新たに提示したデータにおける分裂文での再構成効果の振る舞いも上述の提案から導かれる。以下の例は、(10a, b)、及び、(11a, b)の再掲である。

- (23) a. * It was [FP [DP the careful track] [CP that [IP Mary kept <[DP the careful track] > of her expenses]]].
- b. It was [FP [DP careful track] [CP that [IP Mary kept <[DP careful track] > of her expenses]]].

- (24) a. ^{??} It was [FP [DP the two patients] [CP that [IP every doctor examined <[DP the two patients] > yesterday]]]. [every > two]
- b. It was [FP [DP two patients] [CP that [IP every doctor examined <[DP two patients] > yesterday]]]. [every > two]

イディオムに関する対比(23a, b)では、焦点要素に対応するコピーが移動の元位置にあるため、(23a)では定性効果が生じる。数量詞の作用域に関する対比(24a, b)では、定冠詞を伴わない(24b)のみが、普遍数量詞 every より低い解釈を許す。

最後に、(20b)の予測を確かめる。第3節で、制限的關係節が外在的 D と関係節 CP の共起性を持つことを見た。他方、本研究では、分裂文は D-CP 構造を持たないと提案しているため、このような共起性は生じないこととなる。この予測は、インフォーマント調査 (第2節で提示したデータ(9-11)の文法性を判断した話者3名) による以下のデータにより確かめられる ((25a)は(13a)の再掲)。

- (25) a. [_{DP} the [_{CP} [_{DP} Φ Paris] [_C that [_{IP} I knew
 <[_{DP} Φ Paris]>]]]]
 b.^{??} [_{CP} ... [_{IP} It was [_{FP} [_{DP} the Paris] [_{CP} that
 [_{IP} Mary knew <[_{DP} the Paris]>]]]]].

(25a, b)の対比は、制限的關係節はDと關係節CPが共起して文法的であるのに対し、分裂文はそのような共起性を持たないことを示す。従って、上述の予測は正しいと言える。

本節では、(20a)の帰結が導かれるとともに、(20b)の予測が正しいことを見た。

6. 結論

本研究では、Browning (1987)を手がかりとして、制限的關係節と分裂文における再構成効果・定性効果の振る舞いを再考し、これらの構文は再構成効果を示す点で類似しているが、分裂文では、焦点要素が定名詞句である場合、再構成による定性効果が生じることを示した。そして、このような振る舞いの違いは、制限的關係節がD-CP構造を持つのに対し、分裂文はFP-CP構造を持つという構造的違いとこれと連動したA-bar移動の性質の違いから生じることを明らかにした。今後は、一見すると、構文間に共通すると思われるような現象・特性を、別の現象・特性も含めて多角的に考察することにより、各構文の形式と意味の対応関係をより明確化することができるとの指針の下、機能範疇を分化するアプローチも視野に入れ、考察を深めていきたい。

注

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1. 具体例に関して、制限的關係節についてはAoun and Li (2003)、分裂文についてはReeve (2011)を参照されたい。

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**The Discourse Function of the *It Is*
That-Construction: From the Perspectives of
*Inference, Specification, and Contrast****

Keita Ikarashi
University of Tsukuba

Keywords: the *it is that*-construction,
abduction, performative clauses, mental verb
clauses

1. Introduction

It is generally accepted that performativity and the speaker's mental attitude toward a proposition can be realized in performative clauses and mental verb clauses, respectively, in English. These linguistic expressions have been discussed in considerable detail in the literature (Ross (1970), Nakau (1994)). However, there are still some untouched constructions that should be handled along similar lines. One of these constructions is the *it is that*-construction, exemplified by the italicized sentence in (1).

- (1) I cannot pay you back today. *It's just that all the banks are closed.*
(Koops (2007: 207))

Syntactically, the pronoun *it* of the *it is that*-construction anaphorically refers to a sentence (Otake (2009), Langacker (2009)).^{1,2} In (1), the first sentence *I cannot pay you back today* is interpreted as an antecedent of the *it*.

Functionally, the construction is often used in explaining the event described in the preceding sentence (Kuno (1973), Declerck (1992)). In (1), the construction explains why the speaker cannot pay the hearer back that day.

The purpose of this paper is to show that the *it is that*-construction can be used to indicate the existence of an inferential process and that the construction should be assimilated to a broad range of other expressions that have been discussed within theories such as performative analysis. The hypothesis is:

- (2) i. The proposition in the *that*-clause has been selected through an inferential process (abduction) from a given set.
ii. The construction serves as a marker to indicate the existence of such an inferential process.

2. Proposal

2.1. Abduction

Before entering into a detailed analysis, I would like to discuss the fundamental notion of abduction, which is crucial to the above hypothesis.

Abduction is an inferential process in which we first observe a phenomenon (=effect), then 'make up the list of possible explanations [=causes] of the phenom[on] under consideration, (Delaney 1993: 15)', and finally, 'select [an explanation (=cause)] from our list of possible explanations (Delaney 1993: 16).' Suppose, for example, that you observe that the ground is wet. You then come up with a set of propositions, such as *someone watered the ground, it rained*, and so forth, which can explain the state of the ground. Finally, you

select the most probable proposition from the set.

It is worth mentioning that abduction is distinguished from deduction, in which an effect is inferred from a cause, in that no set of propositions is formed in the course of deductive reasoning; in deduction, when an event (= the minor premise) is observed, a conclusion is automatically derived by virtue of a major premise. For example:

- (3) MAJOR PREMISE: If it's snowing it's cold.
MINOR PREMISE: It is snowing.
CONCLUSION: It is cold.

(Allwood et al. (1977: 16),
with slight modifications)

Given that one knows that if it is snowing, it is cold, when it is observed that it is snowing, one concludes that it is cold, which is the only proposition derived from the premises.

With the notion of abduction in mind, I will adduce evidence in favor of the hypothesis in (2).

2.2. Evidence for Hypothesis (2-i)

As mentioned in hypothesis (2), the proposition expressed in the form of the *it is that*-construction has been selected from a set of propositions through an inferential process (= hypothesis (2-i)). The typical context with which the construction is compatible is one where abduction takes place.³ The selection of a proposition is involved in the abductive reasoning process. In (1), for instance, the *it is that*-construction is abductively related to the first sentence, because the proposition in the *that*-clause is offered as the most appropriate cause for the speaker's inability to

repay the money in a context in which there can be other possible causes such as *the speaker lost his wallet* or *the speaker does not want to pay the hearer back*.

In what follows, I provide three pieces of evidence that the proposition in the *that*-clause is the conclusion of abduction.

The first evidence comes from the fact that the *it is that*-construction in (4) is unacceptable though the proposition in the *that*-clause represents a cause as (1) does.

- (4) A: The sun is going up.
B: **It is (just) that the earth is turning.*

In (4), the proposition *the earth is turning* is construed to be a cause for the fact depicted in A's utterance. Note that we know that the movement of the sun is caused by the earth's rotation; it is evident that there are no causes for the movement of the sun other than the earth's rotation. In other words, the proposition in the *that*-clause in (4) has not been chosen from a set, and thus, abduction does not take place. The unacceptability of the *it is that*-construction in (4) shows that the inferential process which involves the selection of a proposition (namely abduction) is a precondition for the use of the construction.

The second evidence is obtained by embedding the conversation in (4) within another context like the following:

- (5) [B knows that A believes that the movement of the sun is caused by the sun's revolution around the earth.]
A: The sun is going up.
B: *It is (just) that the earth is turning.*

Under this circumstance, the *it is that*-construction in (4) becomes fully acceptable. In (5), because of A's belief, two causes for the movement of the sun are at issue, namely *the earth rotates* and *the sun orbits around the earth*. Thus, the proposition in the *that*-clause can be interpreted to have been selected as the appropriate cause from the set of two coexisting propositions through abductive reasoning. The difference between (4) and (5) indicates that the acceptability of the *it is that*-construction is contingent on whether the proposition in the *that*-clause is the conclusion of abduction.

Finally, let us consider the following example, in which the *it is that*-construction represents an effect:

- (6) A₁: Tom looked ill when I saw him at school yesterday.
 B: What did he do then? Did he go to the hospital?
 A₂: No. **it's that he left school early.*

In (6), A and B speak of Tom's action caused by his illness. B first incorrectly infers that Tom went to the hospital, and then A₂ offers the fact that Tom left school early as an appropriate conclusion. As the proposition in the *that*-clause is the effect in (6), it is the conclusion of deductive reasoning. Hence, the unacceptability of the construction in (6) shows that the conclusion in the *that*-clause is limited to that of abduction.

From the examples presented here, I conclude that the proposition expressed in the *it is that*-construction is the conclusion of abduction that has been selected from a set of propositions.

2.3. Evidence for Hypothesis (2-ii)

Next, I demonstrate that the *it is that*-construction is used as a marker to indicate the existence of an inferential process involving the proposition selection (i.e. abduction) (= (hypothesis (2-ii))).

If this hypothesis is correct, the following can be predicted: the process of selecting a proposition through abduction is an existing mental process that is evident to the speaker.⁴ Thus, the main clause of the *it is that*-construction (i.e. *it is that*), which indicates the existence of selecting a proposition, has less informative than the proposition in the *that*-clause because in communicating, the speaker focuses on the complement clause, not on the main clause. I provide four pieces of evidence in support of this prediction.

First, the above prediction is confirmed with so-called main clause phenomena. Observe the following example:

- (7) A: Everyone here dislikes Tom.
 B: *It's just that never in his life has he kept his word.*

In (7B), Negative Constituent Preposing (NCP), which fronts a negative constituent and triggers Subject Auxiliary Inversion, takes place in the *that*-clause. According to Hooper and Thompson (1973), NCP is restricted to application in asserted clauses. The assertion of a sentence is its core meaning or main proposition. Therefore, the proposition in the *that*-clause of the *it is that*-construction is asserted and interpreted to be the main proposition in communication.

Next, the following tag questions can serve as confirming evidence for the above prediction:

- (8) A₁: Will you go out with me?
B: Sorry. It's just that ...
A₂: *It's just that you don't like me, {do you / *isn't it}?*

As shown in (8A₂), tag question formation is excluded from the main clause of the *it is that*-construction. Hooper (1975: 105) proposes that “[a] tag question may be formed from the main assertion of a sentence.” Hence, the *that*-clause is more informative than the main clause.

The third evidence is concerned with the omission of the complementizer *that*. Consider the following example:

- (9) It's just ϕ he can't make up his mind.
(Bolinger (1972: 36),
with slight modifications)

Following Underhill (1988) and Thompson and Mulac (1991), when the complementizer *that* is deleted, the main clause subject and verb become secondary to the content of the lower sentence with respect to the topic of the discourse. Therefore, the omission of the *that* in (9) shows that more focus is put on the *that*-clause than the main clause in communication.⁵

Finally, I note that the example in (10), cited from Otake (2009: 145), supports the above prediction.

- (10) “Did you ever try Prozac?” Edward asked. Kim turned to look at Edward.

“Never!” she said. “Why would I take Prozac?” “*Just that you mentioned you had both anxiety and shyness,*” Edward said. “Prozac could have helped both.”

(R. Cook, *Acceptable Risk*)

In the italicized sentence, the *it is* of the *it is that*-construction is omitted. In other words, the main clause of the *it is that*-construction is less informative.

The above analyses lead to the conclusion that the *it is that*-construction is used as a marker to indicate the existence of an inferential process involving proposition selection (i.e. abduction).

3. Comparisons with Performative/Mental Verb Clauses

Thus far, I have shown that when an *it is that*-construction is used, (i) the proposition in the *that*-clause has been selected through a certain inferential process (abduction) from a given set, and (ii) the construction serves as a marker to indicate the existence of such an inferential process. This proposal, then, clarifies the parallelism between the *it is that*-construction and mental verb clauses; both of them refer to one's mental state pertinent to a proposition.

Furthermore, as with mental verb clauses and performative clauses, the use of the *it is that*-construction is optional as in the example below:⁶

- (11) I cannot pay you back today. (*It's just that*) *all the banks are closed.* (cf. (1))

The similarities between the *it is that*-construction, mental verb clauses, and

performative clauses indicate that the *it is that*-construction should be treated in the same fashion as mental/performative verbs.

4. Conclusion

This paper has proposed the following:

- (12) i. The proposition in the *that*-clause has been selected through an inferential process (abduction) from a given set.
- ii. The construction serves as a marker to indicate the existence of such an inferential process.

As argued in section 3, (12) clarifies the parallelism between the *it is that*-construction and performative/mental verb clauses and allows the *it is that*-construction to be analyzed along the same lines as performative/mental verb clauses.

Finally, let me mention Declerck's (1992) claim on the semantic aspect of the *it is that*-construction. Declerck argues that the *it is that*-construction is specificational; that is, the construction specifies the proposition in the *that*-clause as the value for the variable contained in its preceding sentence.⁷ The proposal in (12) indicates how the specificational act of the construction is performed in the actual context. That is, the value is specified through an abductive reasoning process. Thus, this paper elucidates the relationship between the semantic and pragmatic properties of the *it is that*-construction.

Notes

* This is a revised version of the paper

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¹ Some argue that *it* is expletive (Ouirk et al. (1985), Delahunty (1990), Declerck (1992)). Although it is worth clarifying the syntactic status of *it* of the construction, this lies beyond the scope of this paper. Thus, I leave this problem open for future consideration.

² When the pronoun *it* refers to an NP as in (i), the sentence containing the *it* is distinguished from the *it is that*-construction.

- (i) I've got a bit of a problem. *It is that all the banks are closed.*
(Otake (2002: 142))

³ *Typical*, because the proposition in the *that*-clause is not necessarily limited to the cause for the preceding sentence; the construction can be used to represent the effect (cf. Otake (2009)). In Ikarashi (to appear), I propose the licensing condition of the *it is that*-condition representing the effect. For detailed discussion, see Ikarashi (to appear).

⁴ This can be confirmed by the example in (i).

- (i) * Do I suppose the Yankees will win the pennant? (Lakoff (1969: 143))

As (i) shows, it is impossible for the speaker to ask whether his mental state at the speech time is true at the time that he is speaking, perhaps because the speaker knows his mental state at the time that he is speaking. Thus, as Lakoff (1969) argues, to question the subject's own

mental state is nonsensical.

⁵ One of my informants notes that it is common in Australian English to omit the complementizer *that*. This fact should strengthen the analysis here.

⁶ A question arising here is for what purpose the speaker manifests the process of selecting a proposition with the *it is that*-construction. Here, I tentatively propose that the construction is used to give rise to a contrastive implicature. For example:

(i) [The speaker is scratching a leg.]

* It is that I was bitten by a mosquito.

(Otake (2009: 49))

(ii) [B is scratching a leg]

A: Have you got hives?

B: No. *It is that I was bitten by a mosquito.*

In both (i) and (ii), the speaker explains why he is scratching a leg, but only (ii) is acceptable. The difference between these examples is whether there is a proposition contrasted with the proposition in the *that*-clause; in (ii), the proposition in the *that*-clause is contrasted with the proposition *B has got hives*, which is incorrectly inferred by A; in (i), however, such a proposition does not exist. These facts show that the construction may not be used unless there exists a proposition contrasted with the proposition in the *that*-clause. This description can be explained based on the above proposal as follows: in a context such as (i), because there is no proposition contrasted with the proposition in the *that*-clause in that discourse, it makes no sense to use the *it is that*-construction in order to generate the contrastive implicature; hence, the unacceptability in (i).

Although it is important to confirm the

proposal provided here, I will not discuss this issue in further detail in this paper.

⁷ See Declerck (1992) for further details.

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<<http://grammar.ucsd.edu/courses/lign270>

Distributive Binding and Two Types of Binding Theory in Syntax*

Nao Ishino and Hiroyuki Ura
Kwansei Gakuin University

Keywords: Distributive Binding, *Agree*, Reflexivity, φ -feature, multiple feature-checking

1. Introduction

The conception of Binding Theory within the Principle-and-Parameters framework (originally formulated in Chomsky (1981)) depends crucially on the notions of *co-index* and *c-command*. Simply put, it has been stipulated that an antecedent α syntactically binds an anaphor β iff α and β are co-indexed and α c-commands β ($\rightarrow(1)$).

- (1) An antecedent α syntactically binds an anaphor β iff α and β are *coindexed* and α *c-commands* β .

Thenceforth, GB theories have undergone a theory-internal change, and the Binding Theory in GB (as stated above in (1)) has been discarded. Instead, the following two theories with respect to binding have been proposed within the current Minimalist framework: One is Reflexivity Theory ($\rightarrow(2)$) and the other is Agree Theory of reflexive binding ($\rightarrow(3)$).

- (2) **Reflexivity Theory** (e.g., Reinhart and Reuland (1993))

An anaphor β marked [+SELF] is an element that is able to reflexivize the predicate.

- (3) **Agree Theory of reflexive binding** (e.g., Quicoli (2008), Gallego (2010), Reuland (2011))

Syntactic binding of a reflexive β can be recast within the Agree theory under the current minimalist Probe-Goal framework (Chomsky (2004) and subsequent work)

It has been argued in Reinhart and Reuland (1993) that under *Reflexivity Theory* (hereafter, RT) a morphologically complex anaphor (that is, a reflexive which is marked [+SELF]) is regarded as a *reflexivizer* and reflexivizes a predicate. Then it can be interpreted that the reflexive is identified with co-arguments of the predicate. That is, the binding relation under RT is determined according to the argument structure of its predicate.

In contrast, under *Agree Theory of Reflexive Binding* (hereafter, ATRB) the binding relation is determined through feature-checking within the Probe-Goal framework. ATRB has extensively been argued in recent studies, such as Reuland (2011).

Within the recent minimalist literature, as mentioned above, it has also been recognized by advocates for both theories that each theory consistently explains given examples. To put it another way, both theories have been recognized as acceptable

on empirical grounds.

Given their proposals, they lead us to conclude that both binding theories are indispensable for syntactic binding in UG.

What is important here is to explain which of these two binding theories should supplant the other or not, and whether each of them should supplement the other or not.

We would therefore like to set our theoretical aims, as shown in (4) below:

(4) **Theoretical aims:**

We aim to give a theoretically consistent account to the problem as to how Reflexivity Theory (**RT**) and Agree Theory of Reflexive Binding (**ATRB**) conspire with each other to explain syntactic phenomena with reflexives. It will be demonstrated that RT and ATRB are complementarily distributive in Universal Grammar.

To be more concrete, in order to shed light on the scope of the application of two theories, we aim to substantiate, through explicating particular binding phenomena of *Distributive Binding* (hereafter, **DB**), that RT and ATRB are complementarily distributive in UG.

As shown in (5) below, **DB** is acceptable in Japanese:

- (5) ^{OK}[John_i to Bill_k]-ga zibun(-zisin)_i⊗_k-o
 John and Bill-NOM SELF(-self)-ACC
 hihans-ita.
 criticize-PAST
 Lit. ‘John_i criticized himself (John_i), and
 Bill_k criticized himself (Bill_k).’

Under the intended reading of **DB**, a

singular reflexive *zibun(-zisin)* is distributively bound by each of the DPs *John* and *Bill* in the conjoined DP, and it is acceptable in Japanese. On the other hand, it has been recognized (Heim, Lasnik and May (1993)) that **DB** is disallowed in English, as shown in (6) below:

- (6) *[John_i and Bill_k] (each) criticized
 himself_i⊗_k.

In this paper, we will scrutinize the syntactic behaviors of distributive-bound reflexives. Next, we would like to set our empirical aims, as shown in (7) below:

(7) **Empirical aims:**

We aim to make it clear, through ATRB, under what conditions **distributive binding (DB)** is syntactically allowed in Japanese but disallowed in English. We will also derive a cross-linguistic parameter concerning the availability of **DB** with the help of the *φ-defectiveness* of a reflexive.

To be more precise, we will clearly show that the *defectiveness* of the *φ*-features within a reflexive determines whether the reflexive should be conditioned through Reflexivity or through *Agree*.

This paper is organized as follows: We will first precisely observe the (un)acceptability of **DB** in Japanese and in English in §2: Next, we will explain the syntactic mechanism of **DB** through ATRB in §3: In §4, conditions on application of RT/ATRB will be proposed and the parameters concerning **DB** will also be proposed. Then, we will confirm that our

parametric theory of DB will be consistent with cross-linguistic observations: Finally, §5 concludes this paper.

2. Syntactically Distributive-bound

Anaphora

What does a truly distributive binding (DB) in syntax look like?

(8) [α_i and β_k] V REF $_{i\otimes k}$.¹

In (8), the singular reflexive REF $_{i\otimes k}$ is distributively bound by each DP in the conjoined phrase [α_i and β_k] (i.e., α_i binds REF, and β_k also binds REF).

As we have already observed in (5) (as repeated in (9) below), DB is allowed in Japanese.

(9) ^{OK}[John $_i$ to Bill $_k$]-ga zibun(-zisin) $_{i\otimes k}$ -o
 John and Bill-NOM SELF(-self)-ACC
 hihans-ita.
 criticize-PAST

Lit. ‘John $_i$ criticized himself (John $_i$), and Bill $_k$ criticized himself (Bill $_k$).’

It is interesting to note that the other singular reflexive in Japanese *kare/kanajo* -zisin cannot be bound distributively, as shown in (10), contrary to the well-formed example in (9) above:

(10) *[John $_i$ to Bill $_k$]-ga kare(-zisin) $_{i\otimes k}$ -o
 John and Bill-NOM he(-self)-ACC
 hihans-ita.
 criticize-PAST

Moreover, look at (11) below:

(11) *[John $_i$ and Bill $_k$] (each) criticized
 himself $_{i\otimes k}$.

The English third-person singular reflexive *himself/herself* disallows DB irrespective of the presence/absence of the distributive operator *each*, as shown by the ill-formed example in (11) (Heim, Lasnik and May (1994)).

(12) ^{OK}[John $_i$ and Bill $_k$] (each) criticized
 themselves $_{i\otimes k}$.

As mentioned in Footnote 2, English allows the *distributive reading* of the plural reflexive form *themselves*, as shown in (12) above.²

From (9), (10) and (11) it is concluded that the issue as to whether DB is allowed or disallowed depends not only upon the syntactic differences but also upon the lexical properties of a given reflexive.

Next, we will show that DB in (9) is successfully materialized not in discourse but in syntax. Reinhart (1983) argued that we can detect whether a given reflexive is bound in syntax or it is coreferential in discourse by examining whether it can get a bound variable reading or not (see, also, Heim and Kratzer (1998)).

Look at the example in (13):

(13) ^{OK}[Dono gakusei $_i$ to dono kyouju $_k$]-mo
 every student and every professor-INT
 zibun(-zisin) $_{i\otimes k}$ -o hihans-ita.
 SELF(-self)-ACC criticize-PAST

Lit. ‘For every x and for every y that x_i criticized x_i , and y_k criticized y_k .’

In (13) *zibun(-zisin)* gets a bound variable reading. Given Reinhart’s (1983) diagnosis, we can safely conclude here that *zibun(-zisin)* in (9) allows DB in syntax.

Now, we can summarize our observations in this section, as in the chart (14):

(14) Summary

	singular REF	DB
Japanese	<i>zibun(-zisin)</i>	OK
	<i>kare/kanojo-zisin</i>	*
English	<i>himself/herself</i>	*

3. Agree Theory of reflexive binding (ATRB) and Distributive Binding

In this section, we will explain the syntactic mechanism of DB through ATRB. As Bouchard (1984) and Burzio (1991) propose, a reflexive which is deficient in its ϕ -feature (it has often been referred to as ϕ -defective) is defective in its referential interpretation. Accordingly, a ϕ -defective reflexive needs to be supplied with its referentiality.

ATRB, naturally expanding the above assumption to follow the minimalist framework, hypothesizes that a ϕ -defective reflexive should have its ϕ -features checked (Agreed) by Probe (i.e., T(Infl) with the ϕ -feature) in order for it to be properly interpreted at LF. The following stipulation in (15) has been proposed in Uriagereka and Gallego (2006).

(15) α syntactically binds β if they are both Goals of a single relevant Probe; otherwise, α and β are obviative.

(Uriagereka and Gallego (2006))

Given the stipulation in Uriagereka and Gallego (2006), T agrees DP at its Spec in

Nominative Case and both of the subject DP and a reflexive are regarded as two Goals of the single Probe T. Accordingly, we can explain that the subject syntactically binds the reflexive.

Then, we naturally explain that Japanese *zibun(-zisin)* needs the syntactic binding through Agree because its *person*-feature and *gender*-feature are defective (that is, *zibun(-zisin)* can be bound by any of the first, the second or the third-person antecedent; moreover it can be bound by either of a male or a female antecedent). The ordinary syntactic binding of *zibun(-zisin)* can be illustrated in (16a,b):

(16)a. John-ga *zibun(-zisin)*-o hihans-ita.

b. $[_{TP} \text{John}_k\text{-ga } [_{vP} \text{zibun}(-\text{zisin})_k\text{-o hihans}]T]$.

T agrees with the subject *John* in (16b) before Spell-out, and then T can also agree with a ϕ -defective reflexive *zibun(-zisin)*. Agree in the ϕ -feature between T and a ϕ -defective reflexive is required for interpretation. It is therefore natural to assume that a ϕ -defective reflexive is supplied with the ϕ -features through Agree at LF. Given that *John* and *zibun(-zisin)* are Goals for the single Probe T, we explain that the subject syntactically binds the reflexive at the object position.

Notice here that vP phase does not block binding through Agree because Agree by T in the ϕ -feature is assumed to be executed at the post Spell-Out level, as mentioned above.

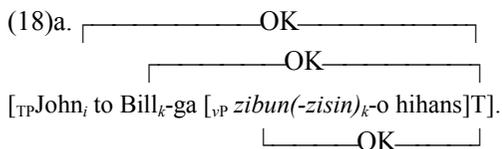
Next, what about a reflexive which is not

ϕ -defective? **Φ -complete** reflexives (for example, *kare-zisin*, *kanojo-zisin* in Japanese and *himself* and *herself* in English are regarded as ϕ -complete due to their fixed interpretations in the ϕ -features (i.e., *person*, *gender*, and *number*)) need not be checked (Agreed) with respect to their ϕ -features. We would here like to propose that the syntactic mechanism of ϕ -complete reflexives, therefore, should be explained under **RT**. The theoretical consequence of binding through Agree is that a ϕ -defective reflexive, which is agreed by T induces the subject orientation, whereas a ϕ -complete reflexive does not. We will summarize our observations in this section, as shown in the chart in (17) below:

(17)

	Japanese		English
	<i>zibun</i> (-zisin)	<i>kare-zisin</i>	<i>himself</i>
ϕ -feature	ϕ -defective	ϕ -complete	ϕ -complete
theory	ATRB	RT	RT
Subject Orientation	<i>yes</i>	<i>no</i>	<i>no</i>

Let us return to the discussion on the syntactic mechanism of DB. Given that T[+tense] in Japanese can enter into multiple feature checking with more than one Goal (Ura (1996), Hiraiwa (2005)), the syntactic mechanism of DB in Japanese can be explained as in the following way depicted in (18):



b. $[\text{TP } \lambda\text{P}[\text{P}(\text{John})] \wedge \lambda\text{P}[\text{P}(\text{Bill})] \text{ T } [\text{VP } \text{V}]]$

Following Partee and Rooth (1983) and Krifka (1990), we derive the LF representation in (18b), which shows that each of the DPs *John* and *Bill* within the conjoined phrase [*John to Bill*] can be interpreted as an independent subject.

Thanks to its multiple checking ability, T in Japanese can Agree both with *John* and with *Bill* distinctively and exhaustively (as shown in (18a)); consequently, DB is allowed in (18a) because each DP in the conjoined phrase (i.e., *John* and *Bill*) can distributively bind a single reflexive *zibun* (-zisin) at LF.

In contrast, the lack of DB with *himself*/*herself* in English and *kare-zisin*/*kanojo-zisin* in Japanese is explained through RT because of their ϕ -completeness. That is, they are only bound by the arguments at the subject position of their predicate. The plural DP at the subject position (such as [*John to Bill*] in (10)) binds a singular *kare-zisin*, resulting in the crash due to the number feature-mismatch at LF.

4. Parametric Variations of Distributive Binding

We have so far observed that a ϕ -defective reflexive is bound through *Agree* and a ϕ -complete one is bound through Reflexivity. Moreover, we have argued that DB is allowed in a situation where T has an ability of multiple feature-checking. In this section, we will demonstrate the necessary conditions of DB, as shown in (19).

(19) **Necessary Conditions of DB**

- [α] A reflexive is ϕ -defective.
- [β] T[+tense] has a multiple feature checking ability

We will summarize that each of the reflexives in the previous section satisfy these conditions in (19), as shown in the chart in (20).

(20)

condition	Japanese		English
	<i>zibun</i> (-zisin)	<i>kare-zisin</i>	<i>himself</i>
α	<i>yes</i>	<i>no</i>	<i>no</i>
β	<i>yes</i>	<i>yes</i>	<i>no</i>
DB	OK	*	*

In the following chart in (21), we will present further consequences of our parameter theory of DB.

(21)

condition	German	Malay	Korean
	<i>sich</i>	<i>diri-nya</i>	<i>caki</i>
α	<i>yes</i>	<i>no</i>	<i>yes</i>
β	<i>no</i>	<i>yes</i>	<i>yes</i>
DB	*	*	OK

Sich ‘SELF’ in German is a ϕ -defective reflexive, but German T[+tense] does not have a multiple feature checking ability. According to our parametric conditions on DB, it is predicted that *sich* in German disallows DB, which is borne out empirically (Gast and Haas (2008)).

Moreover, in Malay, T is regarded as having a multiple feature checking ability because Malay allows multiple Nominative construction. However, *diri-nya* ‘self-him’ in Malay is ϕ -complete. It is then

predicted that *dirinya* in Malay disallows DB, which is also borne out empirically (Sultan (2008)).

5. Conclusion

Under ATRB, we have demonstrated that the syntactic mechanism of DB can be cross-linguistically parameterized under our theory of DB: ϕ -defectiveness of a reflexive and T’s multiple checking ability are the two necessary conditions of DB. Furthermore, we demonstrated that what is important to explain DB is our proposal that the ϕ -feature defectiveness of a reflexive determines whether the syntactic binding of the relevant reflexive is materialized through RT or through ATRB. We have therefore confirmed that the two types of binding theory *RT* and *ATRB* are complementarily distributive in Universal Grammar.

FOOTNOTES

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¹ The index $i \otimes k$ indicates that the so-indexed item (a singular reflexive $REF_{i \otimes k}$) is bound distributively by the item with the index i (an antecedent α_i) and the item with the index k (an antecedent β_k), each of which is conjoined with the other.

² The following example also has the distributive reading:

(i) ^{OK}[John and Bill] criticized *themselves*.
It is argued, however, that such a distributive reading is generated as a logical implication

from the group reading “[John and Bill]_i saw [John and Bill]_i.” (see Langendoen and Magloire (2003)). We therefore omit discussing the distributive reading of plural reflexive forms throughout this paper.

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消費を表す V on/off NP に生起する前置詞
の意味論的考察

(A Semantic Study of the Prepositions in
Consumption Constructions of the Form
V on/off NP)

岩井 真澄(IWAI Masumi)
筑波大学大学院(University of Tsukuba)

キーワード：構文文法、フレーム意味論、
前置詞付き動詞、消費構文

1. はじめに

英語の live on と live off という前置詞付き動詞はほぼ同じ出来事を表す表現である。

- (1) a. He lived on a diet of water and
tinned fish.
b. Their room was bare of furniture
and they lived off porridge.
(COBUILD)

(1a)は「彼らは水と魚の缶詰を食べて生活した」ということを、(1b)は「彼らはポリッジを食べて生活した」ということを表わしていて、どちらの文も共通して「何かを食べて生活する」という出来事を表している。また、live 以外の動詞も前置詞 on あるいは前置詞 off と共起し、それぞれの文がほぼ同じ出来事を表すものがある。

- (2) a. He dined {on/off} steak and wine
at the restaurant.
b. Mary lunched {on/off} ham
sandwiches and milk.
c. John feasted {on/off} steak and

wine at his birthday party.

- d. Poor people exist {on/off} bread
and water.
e. Those who are in poor country
survive {on/off} rice.

例えば、(2a)は「夕食を食べる」という意味の動詞 dine が前置詞 on あるいは前置詞 off と共起し、「彼はレストランでステーキとワインを夕食に食べた」ということを表している。同様に(2b)では「昼食を食べる」という意味の動詞 lunch が、(2c)では「ごちそうを大いに食べる」という意味の動詞 feast が前置詞 on あるいは前置詞 off と共起し、それぞれ「メアリーはハムサンドイッチとミルクを昼食に食べた」、「ジョンは自分の誕生日会でステーキとワインを大いに食べた」ということを表している。また、(2d, e)では(1)に生起している live と似た意味を持つ動詞 exist と survive が生起して、それぞれ「貧しい人たちはパンと水を食べて暮らしている」、「貧しい国に住んでいる人たちは米を食べてどうにか暮らしている」ということを表している。

(1)と(2)の文の意味に注目すると、いずれの文も「何かを食べる」という意味を共通して持っており、食べる行為をする人を表わす名詞が文の主語として、食べ物を表す名詞が前置詞の目的語として生起している。しかし、前置詞 on が生起する場合と前置詞 off が生起する場合とでどのように意味が異なるのかということについては、これまで深く議論はされていない。そこで本稿では(1)と(2)に例示されているような V on NP と V off NP という形式をそれぞれ V on NP 構文、V off NP 構文と呼び、両構文の間にはどういった意味的差異があるのかを明らかにする。そして次の(3)を主張とする。

- (3) a. V on NP 構文は主語と前置詞 on
の目的語が「消費者」と「消費

物」の関係にあることを表し、消費行為を表す傾向がある。

- b. V off NP 構文は主語と前置詞 off の目的語が「消費者」と「供給源」の関係にあることを表し、消費行為が繰り返し行われる消費活動を表す傾向がある。

また、この主張から次に見られる前置詞の生起に関する違いが帰結として得られる。

- (4) a. Mary lives {off/*on} her parents.
b. He dined {off/*on} the restaurant.
c. Ancient people lived {off/#on} the land.

次節では、まず V on NP 構文と V off NP 構文が持つ意味と、前置詞 on・off が持つ意味を考察する。

2. 構文と前置詞の意味

2.1. 構文の意味

COBUILD では(5)の live on と live off という表現に(6)の説明を与えている。

- (5) a. He lived on a diet of water and tinned fish.
b. Their room was bare of furniture and they lived off porridge.

(= (1))

- (6) a. If you live on a particular kind of food, you eat it.
b. If you live off a particular kind of food, you eat it in order to live.

(6)にあるそれぞれの説明から、live on と live off はどちらも「you eat it」という「何かを食べる」ということが共通している。この「食べる」ということに関して、「人間は何かを食べて生きる」という百科事典的知識から、「食べる」ことは「生きる」こと

に必要な行為であると考えられる。そのため、(5)の live on と live off は共に「ある人が何かを食べて生活する、暮らす」ということが共通しているといえる。また、先に見た(2a-c)であればそれぞれ動詞 dine、lunch、feast によって表される「夕食として食べる」、「昼食として食べる」、「ごちそうを大いに食べる」という出来事を達成するために、「何かを食べる」ということが必要となっている。動詞 exist と survive が生起している(2d, e)でも動詞が表す「生きていく」、「生き抜く」という出来事を達成するために「何かを食べる」ということを必要としている。つまり、(1)と(2)にあるような V on NP 構文と V off NP は、「動詞で表される出来事を達成するために何かを食べる」という「何かを食べて V する」という意味が共通している。

Croft (2009)は「何かを食べる」ということは一種の消費を表すと述べており、このことから「何かを食べる」という出来事は「消費フレーム」を喚起させると言うことができる。「何かを消費する」という意味を持つ、この「消費フレーム」は「消費者」、「消費物」、「供給源」という3つの要素から構成される。

2.2. 前置詞の意味

まずは前置詞 on が持つ意味を考察する。

- (7) a. The children were all lying on the floor. (Hill (1968: 115))
b. He is on drugs.

(7a)は「子供たちが床に横たわっている」ということを、(7b)は「彼は薬物に依存している」ということを表している。先行研究で述べられているように、前置詞 on は二つの物・事が接触関係にあることを表す前置詞のため (Dirven (1993), Goddard (2002) など)、その二つの物・事は非常に緊密なよ

り近い関係にあり、互いに密接に関わっていると考えられる。例えば、二つの物が物理的に密接に関係していると(7a)のように空間的な接触と捉えられ、一方が他方と密接に関わって何らかの影響を受けていると(7b)のように依存を表すと捉えられる。このような前置詞 *on* が表す密接な関係を本稿では直接的関係と呼ぶ。

次に前置詞 *off* の意味を考察する。

- (8) a. The cover is off the box now.
 (Hill (1968: 106))
 b. She is off smoking.

(8a)は「ふたが箱から外れている」ということを表している。「外れている」ということは「ふた」が「箱」から離れている状態を表しているため、両者の間に物理的な分離関係が見られる。また、(8b)は「彼女はタバコをやめている」ということを表す文である。ここでは「彼女」が「タバコ(を吸う行為)」から離れているため、「タバコをやめている」と解釈される。つまり「彼女」と「タバコ(を吸う行為)」は互いに離れた関係にある。このように、前置詞 *off* は二つの物・事の分離関係を表す前置詞である (Vanparys (1984), Schulze (1994) など)。先に見た(7)での前置詞 *on* が表す関係と比較すると、(8)では二つの物・事が離れていて、緊密な近い関係にはなく、密接な関係が薄れていると捉えられる。本稿ではこうした前置詞 *off* が表す関係を非直接的関係と呼ぶ。

以上、V on NP 構文と V off NP 構文に共通する意味と、それぞれの構文に生起する前置詞の意味をまとめると次のようになる。

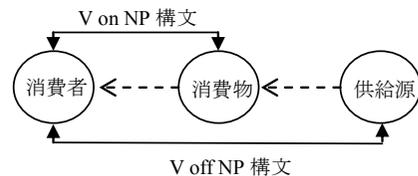
- (9) a. V on/off NP 構文は共通して「消費フレーム」を喚起し、「何かを消費する」という意味を表す。
 b. 前置詞 *on* は二つの物・事が緊

密な近い関係にある直接的関係を表し、前置詞 *off* は二つの物・事が離れた関係にある非直接的関係を表す。

このまとめから、V on NP 構文と V off NP 構文の意味の違いに関して、次の仮説を立てる。

- (10) a. V on NP 構文は「消費者」と「消費物」の関係に注目し、「消費者が動詞で表される行為を行う」と「消費者が消費物を消費する」ことが直接的に関係していることを表す。
 b. V off NP 構文は「消費者」と「供給源」の関係に注目し、「消費者が動詞で表される行為を行う」と「消費者が供給源から何かを得てそれを消費する」ことが非直接的に関係していることを表す。

「消費フレーム」を構成する要素と両構文の関係は、次の図のように簡略的に表すことができる。



図：消費者・消費物・供給源の関係

次節では、(10)の仮説の妥当性を検証していく。

3. 検証

3.1. 名詞の生起

まずは、V on NP 構文での前置詞 *on* に後

続して生起する名詞の観点から仮説を検証していく。

- (11) a. He lived on a diet of water and tinned fish. (= (5a))
- b. He dined on steak and wine at the restaurant.
- c. Horses feed on grass on the hill.

(11a)は「彼は水と魚の缶詰を食べて生活した」ということを表している。構文が喚起する消費フレームを考えると、文の主語の指示対象である「彼」が「消費者」に、前置詞 *on* の目的語の指示対象である「水と魚の缶詰」が「消費物」となる。これに前置詞 *on* が表す直接的関係を考慮すると、「彼が生活する」ということが直接的に「水と魚の缶詰」と関わっていると考えられる。また、(11b)は「彼はレストランでステーキとワインを夕食に食べた」ということを、(11c)は「馬が丘の上で草を食べる」ことをそれぞれ表している。構文が喚起する消費フレームを考えると、ここでもそれぞれの文の主語の指示対象が「消費者」で、前置詞 *on* の目的語の指示対象が「消費物」となっている。これに前置詞 *on* が表す意味を考慮すると、(11b)では「彼が夕食を食べること」と「ステーキとワイン」が、(11c)では「馬が食べること」と「草」が密接に関わっている。よって *V on NP* 構文は「消費者」と「消費物」の関係に注目する構文であるということができる。このことは、前置詞 *on* の後に「消費物」を表さない名詞が生起する場合と比べることができる。

- (12) a. *He dined on the restaurant.
- b. #Ancient people lived on the land.
- c. #Horses feed on the hill.

(12)で前置詞 *on* に後続する名詞はそれぞれ「レストラン」、「土地」、「丘」と場所を表す名詞になっている。「主語の指示対象が生

活する」ことや「主語の指示対象が何かを食べる」ことが場所と密接に関わるとすれば、それはその場所で「生活する」や「食べる」といった出来事が起こると解釈される。また、場所を表す名詞は消費物ではないため、主語の指示対象が前置詞 *on* の目的語の指示対象を消費するといった関係も見られなくなる。このため、場所を表す名詞が生起すると(12a)のように不適格となったり、(12b, c)のように消費の解釈がされず、前置詞句が単に場所を表す表現となる。

一方、*V off NP* 構文の場合、場所を表す名詞句であっても、前置詞 *off* に後続して生起することが可能である。

- (13) a. The old man lives off New York City.
- b. Horses feed off the hill.

(13a)は「高齢の男性がニューヨーク市から援助などを受けて生活している」ことを、(13b)は「馬が丘に生えているものを食べている」ことを表している。構文が喚起する消費フレームを考えると、ここでもそれぞれの文の主語の指示対象が「消費者」となっているが、前置詞 *off* の目的語の指示対象は場所を表しているため「消費物」とは捉えられない。その代わりに、これら目的語の指示対象は、「消費物」を提供する「供給源」と捉えられる。例えば、(13a)では「ニューヨーク市」は「高齢の男性」が生きていくための年金などを提供する供給源を、(13b)では「丘」は「馬」が食べる草などの植物を提供する供給源を表している。先に見た *V on NP* 構文のように、主語の指示対象が行う行為と前置詞 *on* の目的語の指示対象が直接的に関わってはいないものの、何らかのかたちで関わっていると捉えられる。この関係をまさに前置詞 *off* が表しているため、「消費物」ではない場所を表す名詞句であっても、*V off NP* 構文には生起で

きるのである。

このことを踏まえると、次の例に対しても同様に説明を与えることができる。

- (14) a. Mary lives {off/*on} her parents.
- b. He dined {off/*on} the restaurant.
- c. Ancient people lived {off/#on} the land.

(= (4))

それぞれの文で前置詞に後続する名詞句は「消費物」を表していない。そのため(14a, b)のように前置詞onが生起すると不適格となったり、(14c)のように「古代の人々はその土地で暮らした」と場所の解釈となってしまう。それに対し、前置詞 off が生起すると後続する名詞は「供給源」と捉えられるため、(14a)は「メアリーは両親の稼ぎで生活している」と、(14b)は「彼はレストランから出されたもので夕食を済ませた」と、(14c)は「古代の人々は土地から採れるもので暮らした」と解釈される。

以上見たように、前置詞 on/off に後続する名詞に注目することで、両構文の意味的差異を検証した。次は、構文に生起する動詞の観点から意味的差異を見ていく。

3.2. 動詞の生起

次の例では、「踊る」という行為を表す動詞 dance が V off NP 構文に生起している。

- (15) [John wants to be a professional dancer and practices dancing very hard. But he is in difficulties for money, so his parents support him.]
 John dances {off/*on} his parents' savings.

(15)では、文脈が整うことで John dances off his parents' savings. という文が「ジョンは両親

の貯金のおかげで踊ることができる」と解釈される。「踊る」と「何かを消費する」ことの間には密接な関係は見られないことから、そのような直接的関係を表す前置詞 on が生起すると不適格となってしまう。一方、非直接的関係を表す前置詞 off は、両者の間の関係が密接でなくてもよいから、生起可能となる。この場合、(15)は「ジョンが踊ること」が「両親の貯金」といった経済的支援を受けて、それによって与えられたものを消費して踊ることができると考えられるため、his parents' savings は「消費物」ではなく「供給源」と捉えられる。

このように、動詞自体は消費の意味を表さなくても、構文に生起することで文全体が消費の解釈を受ける場合がある。その場合でも、前置詞 on/off の生起に関する違いがあり、それは両構文が表す意味に帰することができる。

3.3. 構文が表す時間に関する傾向

ここでは、両構文が表す時間的な傾向について見ていく。

- (16) a. Since they had nothing, poor people lived {on/?off} nothing but bread and water for a month.
- b. It is said that Japanese people have lived {?on/off} rice since antiquity.
- (17) He dined {on/?off} steak and wine yesterday.

(16a)は「他に何もなかったため、貧しい人たちはパンと水だけで一ヶ月間過ごした」ということを表す文である。インフォーマントによると、この文は「一ヶ月間」という比較的短い期間を表す表現 for a month があるため、前置詞 on の方がより適格となっている。一方、(16b)は「日本人は大昔から米を食べて生活している」ということを表

す文である。この文では「大昔から」という非常に長い期間を表す *since antiquity* という表現があるため、前置詞 *off* の方がより適格となっている。これら(16)の例から、*V on NP* 構文は短い期間での消費行為を表し、*V off NP* 構文は非常に長い期間行われる消費活動を表す傾向があるということが出来る。このことは *live* 以外の動詞でも当てはまるように思われる。(17)は「彼は昨日ステーキとワインを夕食に食べた」ということを表しているが、「昨日」という単発的な、時間軸で見ると非常に短い過去の出来事を表す文では、前置詞 *on* の方が適格となっている。このことから、*V on NP* 構文と *V off NP* 構文には時間に関する意味的な差異があるということが出来る。

4. 結論と今後の展望

以上本稿では、これまで詳細に分析されていない *V on NP* 構文と *V off NP* 構文の意味的差異を、前置詞の意味の違いに帰する方法で考察してきた。本稿の主張は次のようにまとめられる。

- (18) a. *V on NP* 構文は主語と前置詞 *on* の目的語が「消費者」と「消費物」の関係にあることを表し、消費行為を表す傾向がある。
- b. *V off NP* 構文は主語と前置詞 *off* の目的語が「消費者」と「供給源」の関係にあることを表し、消費行為が繰り返し行われる消費活動を表す傾向がある。

今後の課題を述べると、本稿での分析と構文文法がどのように関わっているのかをより詳細に見ていく必要がある。また、データを集めていく中で発見した食べ方を表す動詞と前置詞の共起 (*gorge on*, *gobble on*, *overeat on* など) に関しても、動能構文 (*conative construction*) との関係性を考慮しな

がら、詳細に分析していきたい。

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日本語の「ている」構文の統語構造*
(On the Syntactic Structure of the *-te iru*
Construction in Japanese)

神谷 昇 (KAMIYA Noboru)

千葉大学非常勤講師 (Chiba University)

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1. はじめに

本稿では、日本語において動詞に「ている」が後続する構文 (以下、「ている」構文) の統語構造について検討する。「ている」構文の具体例は(1)である。

- (1) a. 太郎が走っている。
b. 花瓶が壊れている。

広く知られているように、日本語の「ている」構文には中核的な意味として「動作の継続」と「結果状態の継続」があり、(1a)が前者の解釈を、(1b)が後者の解釈を受ける。このような意味の違いについて本稿では、動詞に後続する「ている」の「いる」の統語構造上の位置がそれに重要な役割を果たしていることを議論する。より具体的には、Fukuda (2012) は、「始める」のような相動詞は統語構造上、*vP* の上に位置する High Aspect Phrase (H-AspP) の主要部 H-Asp に生起する場合と、*vP* と VP の間に位置する Low Aspect Phrase (L-AspP) の主要部 L-Asp に生起する場合があることを提案しているが、本稿では Fukuda の提案を「ている」構文の分析に援用し、「いる」は機能範疇であり、それは H-Asp または L-Asp に生起し、前者の場合に

は「ている」構文は「動作の継続」の解釈を、後者の場合には「ている」構文は「結果状態の継続」の解釈を受けることを議論する。

以下、第 2 節では Fukuda (2012) の分析を概観し、第 3 節で「ている」構文の統語構造を提示する。そして第 4 節で本論をまとめる。

2. 日本語の相動詞の位置について

第 2 節では本稿で提示する分析のよりどころとなる Fukuda (2012) による日本語の相動詞の分析を概観する。

Fukuda (2012) は日本語の「始める」「続ける」「終わる」「終える」のようなアスペクトに関わる動詞 (いわゆる「相動詞」) を取り上げ、(2a) に示すように、それらが *vP* の上に位置する High Aspect Phrase (H-AspP) の主要部である H-Asp に生じる場合と、(2b) の構造が表すように、*vP* と VP の間に位置する Low Aspect Phrase (L-AspP) の主要部である L-Asp に生成される場合があることを提案している。なお、以下では説明の便宜上、SVO の語順で構造を提示する。

- (2) a. [TP Subj T⁰ [_{H-AspP} H-Asp⁰ [_{vP} P...]]]
b. [TP Subj T⁰ [_{vP} P v* [_{L-AspP} L-Asp⁰ [_{VP} V Obj]]]]

Fukuda はさらに、H-Asp と L-Asp に生成される相動詞の具体例について、「始める」と「続ける」は H-Asp、L-Asp の双方に生起できるのに対して、「終わる」は H-Asp のみに、「終える」は L-Asp のみに生じることができると主張している。

(2) のような構造を設定することの根拠として Fukuda は、H-Asp および、L-Asp が補部として選択することができる動詞 (句) の制限を挙げている。まず、H-Asp は時間的幅がある事象を描写する *vP* を補部に選択しなければならない。したがって、(3a) に挙げ

るように、H-Asp に生じた「始める」「続ける」は、「歩く」のような非有界的な事象を描写する活動動詞と共起することができる。同様に、到達動詞によって描写される事象であっても、事象の完結までに一定の時間を要する状況であれば H-Asp の要素と共起できる。例えば以下の(3b, c)では、「着く」という事象が終結するまでに一定の時間を要するので、「着く」は H-Asp である「始める」や「続ける」と共起できる。

- (3) a. 子どもが歩き始めた／続けた。
 b. 観光客が京都に着き始めた。
 c. 電車が毎朝定刻に着き続けた。
 (Fukuda (2012))

さらに Fukuda は、H-Asp に対して、L-Asp が選択するのは、達成動詞とその目的語から構成される VP であると述べている。このことから、L-Asp である「終える」は(4a, b)のような到達動詞「着く」「見つける」や、(4c)のような活動動詞「歩く」と共起することが許されないが、(4d)のように、活動動詞の「歩く」に経路を表わす「坂道を」が表出し、動詞句が有界的な事象を描写する場合には「終える」と共起することができるようになる。

- (4) a. #観光客がホテルに着き終えた。
 b. #アマチュア天文学者が新しい惑星を見つけ終えた。
 c. #子どもが歩き終えた。
 d. 子どもが坂道を歩き終えた。
 (Fukuda (2012))

Fukuda は(2)の構造を設定する根拠としてこの他に、相動詞と受動形態素「られ」との相対的な語順も挙げている。より具体的には、(5a)と(5b)の対比から明らかなように、「終える」には受動形態素の「られ」が必ず後続する。

- (5) a. その論文が読み終えられた。
 (Nishigauchi (1993))
 b. *夏子と毅のくつが磨かれ終えた。
 ((5b)は柴谷 (1978)を改変)

この事実は(6)に示すように、「終える」が L-Asp に、受動形態素の「られ」が v に生起する要素であること、および、日本語では構造的に上位の主要部は構造的に下位の主要部より線形順序で後に来るとする仮定から導き出すことができる。

- (6) [TP その論文が_i T⁰ [_{vP} [_v られ]
 [L-AspP [L-Asp 終え] [VP 読み t]]]]

また、(7a)と(7b)の対比が示すように、受動形態素の「られ」は「終わる」に先行しなければならないが、これは(8)に示すように、「終わる」が H-Asp の要素であることから説明できる。

- (7) a. その町が攻撃され終わった。
 b. *その本はようやく書き終わられた。
 (Matsumoto (1996)を改変)
 (8) [TP その町が_i T⁰ [_{H-AspP} [_{H-Asp} 終わる]
 [_{vP} [_v られ] [_{VP} 攻撃する t]]]]

第3節では上記の Fukuda の提案を踏まえ、「ている」構文の分析を提出する。

3. 日本語の「ている」構文の分析

本節では前節で概観した Fukuda (2012)の日本語の相動詞の分析を日本語の「ている」構文の分析に援用し、その統語構造を検討する。より具体的には、動詞に後続する「ている」の部分で「て」と「いる」に分割した上で、(9)を提案する。

持たない vP と VP から構成されていると考えているが、本稿は Fukuda とは異なり、到達動詞は vP を持たない VP のみから構成される構造を持つと仮定する。その結果、「いる」が(13c)では $L\text{-Asp}$ に生成され、それは補部として到達動詞が主要部となる VP を選択している。そして、「いる」が V の意味を取り立てるので、(12c)は結果状態の継続の解釈を受ける。

- (13) a. $[TP \text{ 太郎が}_i T^0 [H\text{-AspP} [H\text{-Asp} \text{ いる}]$
 $[_{v^*P} \text{ } \text{ } v^* [v \text{ 走って}]]]$
 b. $[TP \text{ 太郎が}_i T^0 [H\text{-AspP} [H\text{-Asp} \text{ いる}] [_{v^*P} \text{ } \text{ } v^*]$
 $[VP [v \text{ 切って}] \text{ すいかを}]]]$
 c. $[TP \text{ 花瓶が}_i T^0 [L\text{-AspP} [L\text{-Asp} \text{ いる}]$
 $[VP [v \text{ 壊れて}] \text{ } \text{ } \text{ }]]]$

次に、文中に特定の要素が生じた場合に生じる「ている」構文の解釈について検討する。上述したように、典型的には主語の変化を表す到達動詞(例えば「壊れる」)に「ている」が後続した場合には「ている」構文は結果状態の継続を表すが、(14)に挙げるように、特定の副詞(節)が表出すると到達動詞であっても「変化の過程の進行」を描写することができる。

- (14) 岩が [ごうごうと音をたてながら] 落ちて
 ちている。(筆者の作例)

(工藤(1995), 三原(1997)なども参照)

つまり、(14)では岩が落ちたあとの状態を表すのではなく、今まさに岩が地面に向かって移動している様子を描写するという点が重要である。この事実は(14)で「ごうごうと音をたてながら」という「ながら」節に起因するものと思われる。

このような例に見られる解釈を説明するに当たり、野田(1989)の指摘が重要であると思われるので、まず、それを概観する。野田は

「テレビを見ながら」のような、「ながら」で終わる従属節や、「よく見ずに」のように「ずに」で終わる従属節など、計6種の従属節が主文のどの要素と相関するのかを検討し、「ながら」が主文の aspekto と相関していることを観察している。具体的には、(15)に例示するように、「ながら」節は状態の aspekto の「ている」と共起することができる一方で、非状態の aspekto の「はじめる」とは共起できないことを野田は指摘している。

- (15) a. [テレビを見ながら] ごはんを食べ
 ている。
 b. *[テレビを見ながら] ごはんを食べ
 はじめる。

(野田(1989: 92)を改変)

本論では上記(15)に挙げる野田(1989)の観察を踏まえ、「ながら」節は $H\text{-AspP}$ の指定部に生起し、 $H\text{-Asp}$ により認可されると仮定する。さらに、 $H\text{-Asp}$ に「いる」が生起すると仮定する。その結果、(14)には(16)の構造が付与される((13c)で議論したように、到達動詞は v を持たないと仮定していることに注意されたい)。

- (16) $[TP \text{ 岩が}_i T^0 [H\text{-AspP} [XP \dots \text{ ながら}]$
 $[H\text{-Asp} \text{ いる}] [VP \text{ 落ちて } \text{ } \text{ }]]]$

ここでは $H\text{-Asp}$ に生起した「いる」が VP を補部に選択しているので、(9b)により、 VP が描写する変化の過程を表わす事象が継続的に起きているという解釈を受けることになる。したがって、(14)は結果状態の継続ではなく、変化の過程の進行を描写する。

ここで先に進む前に、(14)と同様に特定の副詞(句)が出現するために「いる」が表出しなければならない例を Tsujimura (2001) の議論を踏まえて検討する。まず、Tsujimura は(17)の例を挙げ、どのような種類の動詞が

程度を修飾する副詞の「とても」と共起できるのかを検討している。

- (17) a. 太郎はとても苦しんだ。
b. 星がとても光った／輝いた／きらめいた。
c. 道がとても広がった。
d. *太郎がドアをととてもたたいた。

(Tsujimura (2001))

より具体的には、(17a)の「苦しむ」のような心理動詞や、(17b)の「光る」「輝く」「きらめく」のような放出動詞、さらには(17c)の「広がる」のような状態変化動詞は「とても」と共起することができるのに対して、(17d)から明らかのように、「たたく」のような動作を描写する動詞は「とても」と共起することができないことを Tsujimura は指摘している。以上の観察を踏まえ、Tsujimura は、「とても」と共起できる動詞は以下の(18)の条件を満たすものであると主張している。

- (18) a. A verb must have a STATE component in its event structure.
b. The STATE component must refer to a gradable property.
c. The gradable property defined over scalar structure must be with nontrivial standard.

(Tsujimura (2001))

なお、(18c)で言及されている nontrivial standard の定義は(19b)である。

- (19) a. An adjective has a trivial standard iff its standard defaults to an endpoint of the scale.
b. An adjective has a nontrivial standard iff its standard is context dependent.

((19): Kennedy and McNally (1999))

(19)を説明するに当たり、Tsujimura は以下のような議論をしている。順番が前後するが、はじめに(19b)については、形容詞 tall を例にとって考えてみたい。例えば、6 フィートの身長の方はスポーツ選手でなければ、かなり背が高い人であると言えるが、バスケットボール選手であればそれほど背が高いとは言えない。このように、文脈により、tall の意味は変わり得るので、tall は(19b)で定義される non-trivial standard を持つ形容詞であると結論付けられる。それに対して(19a)については、awake や wet, empty のような形容詞がこれに相当し、tall とは異なり、文脈によってその意味するところは変化しないという点が重要である。例えば、文脈によって、目の覚め方に違いが生じることはありえない。このことから、これらは trivial standard を持つ形容詞であると考えられる。以上の(18)、および、(19)に示す条件を踏まえると、(17a, b, c)の動詞の意味構造には non-trivial standard により定義される STATE が含まれていると考えられる。例えば、(17a)の動詞、「苦しむ」には文脈、あるいはこの状況を観察している者の主観によって、苦しみの感じ方の度合いが変わり得る。したがって、(17a)は(18)の条件を満たすことになるので、この文に「とても」が生起することができる。それに対し、(17d)の動詞「たたく」の意味構造には STATE が含まれないのでこの文に「とても」は生起することができないと結論付けられる。

ここで興味深いのは、Tsujimura (2001)が挙げる(20)の対比である。

- (20) a. *針金がとても曲がった。
b. 針金がとても曲がっている。

(Tsujimura (2001))

「曲がる」は意味成分に「曲がった状態」を描写する STATE が含まれていると考えられるにもかかわらず(20a)のように単独では「とても」と共起することはできない。しかし、(20b)に例示するように、それに「ている」が後続することで「とても」と共起できるようになる事実が本稿での議論にとって重要である。このような例について Tsujimura は、次のように考える。まず、動詞「曲がる」は(19a)の trivial standard で定義される endpoint により示される状態を描写する。しかし、「ている」が動詞に付加することで、(20b)のような例は endpoint がない結果状態、言い換えると、(19b)の nontrivial standard により定義される「曲がっている状態」を描写することができるようになり、(18c)の条件を満たす。この結果、(20b)は(18)のすべての条件を満たし、「とても」が生起できるようになる。

この Tsujimura (2001)の指摘を踏まえ、本論では、(20b)の例は L-Asp に「いる」が生起することにより「とても」も出現可能になるものとする。つまり、(20b)の構造は(21)であり、この構造で L-Asp に「いる」が生起することにより「曲がっている」が結果状態の継続を描写するようになり、同時に L-Asp の指定部に「とても」が出現することが可能になると考える。

- (21) [TP 針金が_i T⁰ [L-AspP [Adv とても]
[L-Asp いる] [VP [V 曲がって] _t]]]

最後に、愛媛県宇和島方言における「よる」と「とる」の使い分けについて検討する。宇和島方言にも標準語の「ている」構文に相当する構文があるが、工藤(1995)が指摘するように、宇和島方言では典型的には、動詞に「よる」が付加した場合、「動作の継続」の解釈を、動詞に「とる」が後続する場合には「結果状態の継続」の解釈を受ける。具体例はそれぞれ(22a)と(22b)である。

- (22) a. 猫が障子、破りよる。おっぱらいなさい。
b. 猫が障子、破つとる。張り替えなけん。

(工藤 (1995: 262))

本論では(22)の各例には(23)のような構造が付与されているものとする。

- (23) a. [TP 猫が_i T⁰ [H-AspP [H-Asp よる]
[v*P _t v* [VP [V 破る] 障子 (を)]]]]
b. [TP 猫が_i T⁰ [v*P _t v*
[L-AspP [L-Asp とる] [VP [V 破る]
障子 (を)]]]]

つまり、(22)に示す事実について、本稿では、「よる」は H-Asp の表出形であり、「とる」は L-Asp の具現形であると提案する。換言すれば、標準語の「ている」構文では「いる」はその統語構造上の位置に関わらず音形は常に一定であるのに対して、宇和島方言ではその統語構造上の位置に応じて音形の異なる語彙項目として表出するといえる。

4. まとめ

本稿では Fukuda (2012)の相動詞の分析を踏まえ、日本語の「ている」構文の統語構造を検討した。特に、「いる」は H-AspP の主要部と L-AspP の主要部に生起することを主張した。その上で、前者の場合、「いる」はその補部に v*P または VP を選択し、v*P または VP の表す意味を取り立て、「ている」構文は動作・使役事象の継続や、変化の過程の進行を描写することを議論した。また、L-AspP の主要部に生起した「いる」は VP を補部として選択し、VP が表す結果状態の意味を取り立てるので、「ている」構文は結果状態の継続の解釈を受けることを示した。

注

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¹ 本稿の分析，および，受動形態素の「られ」は *v* の要素であるという仮定（第2節で概観した Fukuda (2012) も参照）から，「ている」が「られ」に後続する場合，「いる」は H-Asp の要素であり，「ている」構文は常に動作の継続の解釈を受けると予測されるが，この予測は必ずしも正しくない。(i) の例から明らかのように，結果状態の継続の解釈を受けることもできる。

(i) 壁が赤く塗られている。

このような例について本論は，影山(2006)に倣い，受動形態素の「られ」は統語構造で様々な位置に生じることができると仮定する。その上で，「られ」は L-Asp にも生起できるものとする。つまり，L-Asp を「られ」が生じる位置と「いる」が生起できる位置に精緻化する必要があることを(i)の例は示唆しているものと思われる。なお，詳細は今後の検討課題とする。

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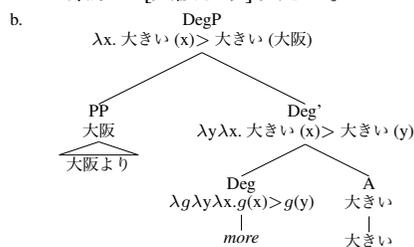
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2 段階的形容詞の意味

段階的形容詞を個体をとって度量を返す計量関数であると想定すれば、(1a) に示される比較述部の意味は (1b) のように示される (Kennedy, 2007)。ここでは、抽象的な比較形態素の *more* は2つの度量の関係、つまり、形容詞を外項に適用することによって得られる度量と、「より」により導かれる比較基準表現に適用することによって得られる度量との関係を表している。なお、ここでは「より」自体には特別な意味がないと想定していることにも注意されたい。

(1) a. 東京は [大阪より] 大きい。



段階的形容詞は計量関数であり、個体属性 (properties of individuals) を表現するために比較構文ではない時にもある種の度量表現と結びつく必要がある (Kennedy, 2007)。そこで音声には反映されない、抽象的な程度形態素 *pos* を想定することにより、比較構文ではない時にも「大きい」という段階的形容詞は度量の関係を表すということが示される。ここで *S* はコンテキストから度量を返す関数を表し、(2b) に従えば、「大きい」という形容詞から喚起されるコンテキスト上の比較基準が導き出され、任意の主語 *x* が持つ度量がこの引き出された度量よりも度合いが大きい場合、「大きい」という形容詞を使用した文が真になるということになる。

(2) a. $[[pos]] = \lambda g \lambda x. g(x) > S(g)(c)$

b. $[[pos \text{ 大きい}]] = \lambda x. \text{大きい}(x) > S(\text{大きい})(c)$

このように比較構文ではない場合、段階的形容詞「大きい」の比較基準はコンテキストにより定められる。一方で、全ての段階的形容詞がコ

幼児の日本語における段階的形容詞の比較基準について

(The Standards of Gradable Adjectives in Child Japanese)

川原功司 (Koji Kawahara)

藤女子大学 (Fuji Women's University)

キーワード：言語獲得、段階的形容詞、日本語、比較基準

1 序

段階的形容詞とは、比較構文や各種の程度構文で使用される形容詞であり、言語によっては比較形態素という形で文法的要素が観察されることもある。一口に段階的形容詞とは言っても、「大きい」といったようなコンテキスト情報を含む形容詞や、「まっすぐ」ないしは、「まがっている」といったコンテキスト情報を含まない形容詞もある。また、コンテキスト情報を含む形容詞であっても、比較構文で使用されれば、コンテキスト情報が含まれないようになるという特徴もある。本稿において報告する実験においては、子供がコンテキスト情報に左右される形容詞と左右されない形容詞に関して、適切に比較基準を設定できるのかどうか、またその比較基準の設定に関して大人の文法と顕著な違いがあるのかどうかを考察する。そして、2種類の実験の結果により、子供は6歳になる頃までには段階的形容詞の意味解釈と、その核になる比較基準を獲得しているということを示す。本稿の構成は以下の通りである。まず、第2節において、段階的形容詞の理論的な分析を概観する。続けて第3節と第4節において、2種類の実験結果について報告し、子供が異なる意味タイプの段階的形容詞の比較基準を適切に設定しているということを示す。最後に第5節で結論を述べる。

ンテキスト情報に左右されるわけではない。たとえば、*bent* という段階的形容詞は曲がりの度合いが少しでもあれば真となりうるし、*straight* という形容詞は、まっすぐの程度が最大限満たされる必要がある。これらの段階的形容詞における度量の程度は、修飾要素を使うことで示される。また、これらの段階的形容詞の特性は下記に示すようなスケール構造に基づいて導き出すことが可能である。そのパターンを4つ以下に示す。下記の図において、黒い円は閉じたスケール、白い円は開いたスケールを表している (Rotstein and Winter, 2004; Kennedy and McNally, 2005; Kennedy, 2007)。

- (3) a. open scale (e.g., *tall*, *short*)
 S: ○————○
 {??slightly, ??perfectly} tall,
 {??slightly, ??perfectly} short
- b. lower closed scale (e.g., *bent*, *straight*) S: ●————○
 {slightly, ??perfectly} bent,
 {??slightly, perfectly} straight
- c. upper closed scale (e.g., *safe*, *dangerous*) S: ○————●
 {??slightly, perfectly} safe,
 {slightly, ??perfectly} dangerous
- d. closed scale (e.g., *full*, *empty*)
 S: ●————●
 {slightly, perfectly} full,
 {slightly, perfectly} empty

段階的形容詞の比較基準は、(4) の原理に基づいて定められる。つまり、閉じたスケール構造が基本的に優先され、開いたスケール構造の場合、ある種「最後の手段」として語用論的戦略に基づいて、文脈から比較基準が導き出されることになる。この原理に従えば、「大きい」のスケール構造は開いているので、比較基準が文脈から引き出されることになる。一方、*bent* の比較基準は下方が閉じているので、閉じたスケールが優先され、文脈情報を必要としないということになる。

- (4) *Interpretive Economy*:
 Maximize the contribution of the con-

ventional meanings of the elements of a sentence to the computation of its truth conditions.

Kennedy (2007)

本稿では、(i) コンテキスト情報に依存する段階的形容詞、(ii) 最小限の基準に基づいた段階的形容詞、(iii) 最大限の基準に基づいた段階的形容詞のそれぞれについて、幼児が適切に比較基準を設定しているのかを調査した2つの実験結果について報告する。

3 実験 I

まずは、比較構文とそうではない文において、幼児が段階的形容詞を適切に使い分けているのかを確認する。「大きい」に関しては、2つの対象物を適切に比較できるかどうか、また当該の3つの対象物を見た後で一般的に「大きい」という概念を確認できるかどうかを調査する。「いっぱい」に関しては、2つの対象物を適切に比較できるかどうか、また単独で水が満たされていないコップを見た時に「いっぱい」と判断するのかどうかを調査する。最後に、「まっすぐ」と「まがっている」を利用し、2つの対象物の形態を適切に比較できるかどうか、また、一連の比較の後で、少し曲がった物体を見た時に「まっすぐ」と判断するのかどうかを調査する。

3.1 参加者とマテリアル

札幌藤幼稚園の25人の子供(男の子10人、女の子15人)に参加してもらった。年齢は年少組と年長組を合わせて、3歳から6歳、平均年齢は4.23歳である。また、16人の大人にもコントロール群として参加してもらった(2人の男性、14人の女性)。彼らは、大学の3年生と4年生で北星学園大学の英語学研究Cの受講者である。

実験に使用したマテリアルは以下の通りである。3つのクマのぬいぐるみ(15 cm、35 cm、45 cm)、3つのコップ(少し水を入れたもの、半分水を入れたもの、いっぱい水を入れ

たもの)、3本のモール(まっすぐのもの、少し曲げたもの、しっかりと曲げたもの)。

3.2 手順

子供がパペット(1人目の実験者)に紹介され、ナレーター(2人目の実験者)にゲームに参加するよう促される。パペットが札幌にきたばかりで周りのことを知らないの、動物の大きさについて教えて欲しい、喋って喉が渴いた、魔法を使うにはどのような形状のモールが適切かといった質問をされる。子供は各々、ゲームに関心を示し、積極的に参加した。

3.3 結果

反応の結果は表1に示す通りである。各々の質問には、1つの適切な反応があるとし、「クマさんが(一般的に)大きい」を真であると想定した。子供から返ってきた適切な反応には1、それ以外には0と記載した。縦の欄が示しているのは解答率であり、0%から100%の数値の幅がある。質問3に対して、3人の子供が「大きなクマさんもいるし、普通のもいるし、小さいのもいる」と答えたが、これは適切な反応に数えた。質問7に対しては、3人の子供と4人の大人が「どちらのモールもまっすぐではない」と答えた。彼らにとって、「まっすぐ」は段階的形容詞ではなく、まっすぐの度合いは常に最大限に満たされていなければならない、比較構文や程度構文に「まっすぐ」は使用できないようである。それ以外には、予想通りの反応が得られた。

3.4 議論

実験Iから得られた結果について考察する。まず、子供は開いたスケールの「大きい」を適切に解釈しており、その解釈は直前の経験に左右されないということが分かった。つまり、たとえ小さなクマを見た直後であっても、クマという動物が一般的に大きいという概念は既に形成されているということになる。このことは、英語で行われた Syrett et al. (2009) らの実

	子供		大人	
	1	0	1	0
1 どっちが大きい? (15 cm と 35 cm のクマ)	100	0	100	0
2 どっちが大きい? (35 cm と 45 cm のクマ)	100	0	100	0
3 クマさんって大きい、小さいの?	100	0	100	0
4 どっちがいっぱい? (少しの水と半分の水)	100	0	100	0
5 どっちがいっぱい? (半分の水といっぱいの水)	100	0	100	0
6 コップの水はいっぱい? (半分の水)	60	40	84	16
7 どっちがまっすぐ? (少し曲がったのと曲がったもの)	88	12	75	25
8 どっちがまっすぐ? (少し曲がったのとまっすぐのもの)	92	8	100	0
9 これはまっすぐ? (少し曲がったもの)	88	12	100	0

表1 実験1の反応

験結果と一致する。

なお、質問6の結果から分かるように、閉じたスケールの形容詞である「いっぱい」の解釈は大人と子供とで異なっている。これは「いっぱいではないコップ」を the full glass と解釈したという Syrett et al. (2009) の英語での実験報告とも一致している。Syrett et al. (2009) は語用論的状况により、子供は大人よりも不正確(imprecise)な用法を許容すると結論づけている。つまり、「水がいっぱいのコップを取って」と言われた時に、少ししか水が満たされていないコップと、半分の水が満たされているコップを提示された場合には、子供は半分の水が満たされているコップを「いっぱい」でもよいと考え、半分の水が入ったコップを不正確に「いっぱい」だと判断したというのである。大人の場合にはその種の不正確さを容認せず、同じ状況ではコップは提示されなかったようである。なお、この実験では拒否をするという反応に対するハードルの高さについても考慮する必要がある、Syrett et al. (2009) でも議論されている。

しかし、本稿では形容詞の種類により比較

基準が変わりうると考える。例えば、「いっぱい」に該当する形容詞は比較基準の変遷を許容するという観察がある。Toledo and Sassoon (2011) は、コップに水を満たす場合と、エスプレッソやワインをそれぞれのカップやグラスに満たす場合の「いっぱい」の基準は異なるという事実を指摘している。「いっぱい」などの段階的形容詞が、コンテキストの情報や比較クラスに左右されることがあるという事実は他にも観察されている (Rotstein and Winter, 2004)。例えば、(5a) において、どちらのタオルのきれいさも最大限に満たされているのであれば、そもそも but 以下に後続する比較構文は許容できないはずである。また、(5b) では図書館がいつもの金曜日の夜と比べて「いっぱい」だというだけのことであり、完全に詰まっているわけではないという背景がなければ意味不明な文になってしまう。

- (5) a. Both towels are clean, but the red one is cleaner than the blue one.
 b. For a Friday, the library is very full.

このように同じ最大限のスケールに基づく段階的形容詞の「いっぱい」と「まっすぐ」であっても、その使用状況は異なりうる。また、これら 2 種類の形容詞は含意のパターンも異なる。straight を否定した場合、その最大限のまっすぐさが否定されることになり、反意語の bent を含意することになる。しかし、full を否定しただけでは、その反意語である empty が含意されるわけではない。(6b) において、this glass にいくらかの水が入っている可能性は否定できないからである (むしろ、いっぱいではないにしても水が入っている場面の方が想定されることが多い)。¹

- (6) a. This wire is not straight. ⇒ This wire is bent.
 b. This glass is not full. ⇏ This glass is empty.

full 「いっぱい」の比較基準を定めるには、その比較クラスも含めて、比較基準を慣習・経

験を通じて身につける必要がある。つまり、コンテキスト情報に左右される形容詞のように、この形容詞は社会的な変異を許容しうる形容詞であると言える。一方、「まっすぐ」の基準は基本的に最大限の部分で固定化されており、質問 7 からも分かる通り、段階的形容詞としてとらえていない大人もいる。つまり、最大限の基準で評価される形容詞の中には、「いっぱい」のように経験が必要でかつ変異がかなりあり得る形容詞と、「まっすぐ」のように変異がないタイプがありうる。子供がコンテキスト情報に左右される形容詞とされない形容詞、さらには左右されない形容詞を分割して最小限の基準と最大限の基準に基づいて形容詞を使い分けしているかどうかを考えるに当たっては、変異の少ない形容詞を用いるのが妥当であると考えられる。この想定に基づき、実験 II では「まっすぐ」と「まがっている」に焦点を当てて子供の比較基準について探っていくことにする。

4 実験 II

子供がコンテキスト情報に左右される段階的形容詞を適切に扱えるということが実験 I により示された。実験 II では、子供が絶対的な基準に基づく段階的形容詞を適切に解釈できるかどうか焦点を当て、「まっすぐ」と「まがっている」について考察していくことにする。

4.1 参加者とマテリアル

札幌藤幼稚園の 13 人の子供 (男の子 5 人、女の子 8 人) に実験に参加してもらった。年少組と年長組を合わせて、3 歳から 6 歳まで。平均年齢は 5.23 歳である。またコントロール群として、藤女子大学の学生 15 人に参加してもらった。マテリアルには、長さ、曲がり具合がそれぞれ異なる色のついたモールを使用を使用した。

4.2 手順

実験者 1 にゲームに参加するように促され、実験者 2 が 2 つのモールを見せ、「一を取って」と指示して、適切だと思ったのを取ってもらった。比較の解釈を避けるため、「一の方」、「どっち」の使用を避けるようにした。なお、子供は皆、積極的に実験に参加してくれた。

4.3 結果

それぞれの質問に対して、1 つのモールを提示したものを 1、判断できない、ないしは 2 つ共と答えたものには 0/2 と記述した。返答の結果に関しては、実験 I に続き、百分率で示してある。なお、2 の質問に対しては赤色のモールを「黄色」と認識した子供が 1 人いた。また、5 の質問に対してどちらが長いのかを吟味した後、どちらかを提示した子供が 3 人いた。これは、どちらかを提示しようとして、差異を無理に探そうとしたためであると考えられる。6 は曲がっているモールを「まっすぐ」と言った子供が 1 人おり、想定外の解答であったため便宜上、0/2 に数えている。² 7 はより曲がりの大きなモールを提示した子供が 2 人いた。9 も「少し曲がった」モールを提示した子供がおり、この子供は 7 でモールを提示した子供と同一人物である。8 は「どちらもまっすぐじゃない」と答えた子供が 1 人いたが、これは 10 で 1 つのモールを提示した子供と同一人物であった。10 ではどちらかのモールを提示した子供が 4 人いたが、その全員がモールの長さを長い間吟味した上で、そのどちらかが僅かな曲がりがあるのではないかと考えた子供たちであった。また、成人では、7 と 9 を比較の意味で捉えた人が 2 人いたが、聞き返すと判断が変わった。

4.4 議論

この実験で重要なのは、2 で明らかに誤りであると思われる質問をしたことである。これにより、被験者に実験者が必ずしも適切な要求

	子供		大人	
	1	0/2	1	0/2
1 青いの取って (青と赤) 適切	100	0	100	0
2 黄色いの取って (青と赤) 不適切	8	92	0	100
3 長い取って (3cm と 6cm) 適切	100	0	100	0
4 長い取って (6cm と 12cm) 適切	100	0	100	0
5 長い取って (12cm と 12cm) 不適切	23	77	0	100
6 曲がってるの取って (まっすぐと少し曲がっている) 適切	92	8	100	0
7 曲がってるの取って (少し曲がっているのと曲がっている) 不適切	15	85	13	87
8 まっすぐなの取って (まっすぐと少し曲がっている) 適切	92	8	100	0
9 まっすぐなの取って (少し曲がっているのと曲がっている) 不適切	8	92	13	87
10 まっすぐなの取って (まっすぐなもの 2 つ) 不適切	31	69	0	100

表 2 実験 2 の反応

をするわけではないという印象を植え付けようとした。³ 考察に入る。7 と 9 の結果から分かる通り、子供は比較構文とそうではない文を区別しているものと考えられる。7 はどちらのモールも曲がっており、「まがっている」モールを一義的には判断できず、また 9 に関してもどちらのモールも曲がっており、「まっすぐな」モールを一義的には決められないからである。ただ、2 名の大人がこの 2 つの質問に対して不正確な反応を示していることは興味深い。どちらか 1 つのモールを提示しなければならないという語用論上の要請から、比較構文として再解釈したのではないかと考えられる。しかし、これらの質問は 2 の明らかに不適切な質問をした後に行われたものであり、この質問だけでは語用論的要素を完全には排除できていなかったのかもしれない。⁴ 子供でもこの種の不正確な使用を容認する者がいたが、質問 9 から分かる通り、大人の方が不正確な使用を

容認する割合が大きかった。また、8 から分かる通り、「まっすぐ」に関しては、子供も大人もより最大限のまっすぐさを求めるようである。子供と大人で顕著な差が見られたのは 10 であるが、これは 2 つのモールのまっすぐさを厳密に吟味した結果であり、使用したマテリアルの性質のため、完璧にまっすぐなモールを提示できなかった結果である。むしろ、厳密にまっすぐなものを探そうとした子供の方が、大人よりも「何かをとってほしい」という語用論上の要請に積極的に従う傾向があるということを示しているものであり、「まっすぐ」という形容詞が最大限の度量を持つ絶対的段階的形容詞としてほぼ確立しているということを示すものである。

5 結論

段階的形容詞は、スケール構造によりその意味が異なり、その構造の核になる部分をお供は 6 歳頃になるまでには完全に身に着けているようである。「大きい」のようなコンテクスト情報に左右されるような形容詞は、比較構文であっても、比較構文でなくとも適切に大きさを比べることができるようである。また、事前に小さなものを見た後でも、一般的に大きいものとは何かという概念も形成しているように思われる。最大限のスケールに基づいた「まっすぐ」のような形容詞と最小限のスケールに基づいた「まがっている」のような形容詞に関する比較基準も形成しており、比較構文とそうではない文における区別もほぼ適切に行うことができるようである。ただし、「いっぱい」のように比較基準の確定に経験が必要で、比較クラス毎に比較基準の設定が必要な形容詞の場合には、大人と子供とで解釈が異なりうる。よって、少なくとも段階的形容詞の比較基準の核になる部分は子供のかなり早い段階で身につけているということが言えるようである。⁵

Notes

¹「いっぱい」は完全に閉じたスケール、「まっすぐ」は下方が閉じたスケールという違いはあるが、以下に見るように完全に閉じたスケールである「open」という述語の否定形は、その反意語である「closed」を含意することになる。よってこの種の含意の差を上方が閉じているスケールかどうかという部分に求めることはできない。

i. This door is not open. ⇒ This door is closed.

含意のパターンに基づく各種形容詞の議論については、Rotstein and Winter (2004) を参照されたい。

²なお、この子供は年長組であり、コミュニケーションが取れていなかったわけではないと思われる。

³あまりに唐突すぎた質問なためか、1 人の子供が赤色のモールを提示してしまったのは今後の実験モデルを考える上での教訓としたい。

⁴この件に関していろいろと質問・議論してくれた古川幸夫氏に深く感謝する

⁵2 つの実験において、不正確な使用を行っていたのは年少の子供たちではないかどうかという質問を岡部玲子氏にいただいたが、むしろ年長の子供たちの方が多いくらいであったということには注意が必要かも知れない

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Feature Inheritance and Four Types of Argument Structure*

Shin-Ichi Kitada
Tohoku University

Keywords: feature inheritance, argument structure, active-passive alternations, *it* extraposition, reflexivization

1. Introduction

This paper proposes a new theory of argument structure within the system of Chomsky's (2008) feature inheritance. Specifically, I claim that four types of argument structure are formed depending on whether uninterpretable θ -features are inherited from the phase head v^* by the head of its complement V.

This paper is organized as follows: Section 2 outlines two theoretical assumptions. Section 3 proposes four types of argument structure. Section 4 shows that the present proposal is supported by actives, passives, *it* extraposition, and reflexivization. Section 5 discusses theoretical implications for an implicit argument in the passive, the phasehood of passive verb phrases, and the constituency of a verb and a direct object. Section 6 concludes this paper.

2. Theoretical Assumptions

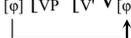
This section sets out two theoretical assumptions that this paper adopts: a feature-inheritance mechanism proposed by Chomsky (2008) and a feature-based θ -theory assumed by Bošković and Takahashi (1998) and Hornstein (1999).

2.1. Feature Inheritance

The first assumption is Chomsky's (2008) fea-

ture-inheritance mechanism. Chomsky claims that syntactic operations are all triggered by uninterpretable features on a phase head (C or v^*). This implies that none of the non-phase heads (T or V) has such features. However, T is considered to realize the effects of ϕ -feature agreement. Chomsky proposes that this is possible because the uninterpretable ϕ -features on C are inherited by T as in (1a). Furthermore, extending this inheritance mechanism to the v^* -V relation as well, it is argued that v^* transmits its uninterpretable ϕ -features to V as in (1b).

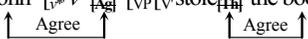
- (1) a. $[_{CP} [C' C_{[\phi]} [_{TP} [T' T_{[\phi]} \dots]]]]$

 b. $[_{v^*P} [v^* v^*_{[\phi]} [_{VP} [V' V_{[\phi]} \dots]]]]$


These inheritance options make it possible for the non-phase head (T or V) to agree with a closest nominal and to raise this agreeing nominal to its specifier position.

2.2. A Feature-Based θ -Theory

The second assumption is a feature-based θ -theory (Bošković and Takahashi (1998); Hornstein (1999)). This kind of theory takes a θ -role to be one of the uninterpretable features on the verbal head (henceforth, θ -feature). Since uninterpretable features must be checked through *Agree*, the uninterpretable θ -features are checked as well. For example, the uninterpretable Agent and Theme features in (2a) are checked as in (2b). (Here and in what follows, [Ag] is intended to mean the Agent-feature and [Th] the Theme-feature.)

- (2) a. John stole the book.
 b. $[_{v^*P} \text{John} [v^* v^*_{[\phi]} \text{Ag}] [_{VP} [V' \text{stole}_{[\text{Th}]} \text{the book}]]]$


In (2b) the [Ag]-feature on v^* is checked by *John*, whereas the [Th]-feature on V is checked

by *the book*. As a result of such agreement, *John* is interpreted as Agent and *the book* is interpreted as Theme.

Given these two theoretical assumptions, the next section will offer the proposal of this paper.

3. Proposal: θ -Feature Inheritance

Thus far, I have shown, in section 2.1., that all of the uninterpretable features are introduced on the phase head. Furthermore, in section 2.2, I have counted a θ -role as one of the uninterpretable features. These considerations lead us to assume that the uninterpretable θ -features are introduced on the phase head v^* as in (3).

- (3) [v^*P [v^* $v^*_{[Ag][Th]}$] [VP [V V ...]]]]

Then, the feature-inheritance mechanism applies. The null hypothesis is that there arise four types of inheritance possibility as in (4).¹

- (4) a. [v^*P [v^* $v^*_{[Ag]}$] [VP $V_{[Th]}$]]]
 b. [v^*P [v^* $v^*_{[Th]}$] [VP $V_{[Ag]}$]]]
 c. [v^*P [v^* v^*] [VP $V_{[Ag][Th]}$]]]
 d. [v^*P [v^* $v^*_{[Ag][Th]}$] [VP V]]]

In (4a), the $[Ag]$ -feature stays on v^* , whereas the $[Th]$ -feature is inherited by V. In (4b), the $[Th]$ -feature remains on v^* , while the $[Ag]$ -feature is inherited by V. In (4c), the $[Ag]$ -feature and the $[Th]$ -features are both inherited by V. In (4d), the $[Ag]$ -feature and the $[Th]$ -features stay on v^* . I propose these four types of argument structure.

The next section will show that all of the argument structures in (4a-d) are actually attested on the basis of actives, passives, *it* extraposition and reflexivization, respectively.

4. Evidence for θ -Feature Inheritance

This section provides empirical evidence that

confirms the argument structures in (4).

4.1. Actives

First of all, I argue that (4a) generates active sentences. For example, the active sentence of (5a) is derived as in (5b).

- (5) a. John stole the book.
 b. [v^*P John [v^* $v^*_{[Ag]}$] [VP stole [Th] the book]]]
 ↑ Agree ↑ Agree ↑

In (5a) *John* acts as Agent and *the book* acts as Theme. These θ -role assignments are available because *John* checks the $[Ag]$ -feature on v^* and *the book* checks the $[Th]$ -feature inherited by V.

One of the key points in the present analysis is that the Agent argument *John* occupies $[Spec, v^*P]$. This is supported by subject-verb agreement. It is generally assumed that an argument in $[Spec, v^*P]$ agrees with the uninterpretable ϕ -features on T. If *John* is in $[Spec, v^*P]$, this Agent argument should agree with the uninterpretable ϕ -features on T. This prediction is borne out by the following example.

- (6) [John] steals/*steal the books.

(6) shows that the verb *steal(s)* must manifest the singular inflection that *John* has as its inherent property. Hence, we can claim that the Agent argument is in $[Spec, v^*P]$.

Another important point in the present analysis is that the Theme argument *the book* in (5b) is in the complement position of V. This is confirmed by verb phrase ellipsis (VPE). I assume with Merchant (2008) that the target of VPE is not v^*P but VP. If the Theme argument occurs in the complement to V, this argument should be deleted along with the VP. This prediction is borne out by the following sentence.

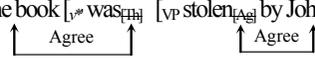
- (7) John will [VP steal [a book]], and Bill will, too.

(7) indicates that the Theme argument *a book* in the second conjunct is deleted along with the VP. Hence, we can maintain that the Theme argument in the active appears in the complement to V.

Therefore, as the present analysis asserts, the active is generated when the [Th]-feature is inherited from v^* by V.

4.2. Passives

Second, I claim that (4b) enumerates passive sentences. For example, the passive sentence of (8a) is derived as in (8b).²

- (8) a. The book was stolen by John.
 b. $[_{v^*P} \text{The book } [_{v^*} \text{was}_{[Th]}] [_{VP} \text{stolen}_{[Ag]} \text{by John}]]]$


In (8a) *the book* works as Theme and *by John* works as Agent (see Marantz (1984); Roberts (1985); Lasnik (1988)). These θ -role assignments are predictable because *the book* checks the [Th]-feature on v^* and *by John* checks the [Ag]-feature inherited by V.

The first point in this analysis of the passive is that the Theme argument *the book* is originally introduced in [Spec, v^*P]. This point is demonstrated by the passive existential construction: The Theme argument in this construction must appear in the position between T and v^* .

- (9) a. There are [many people] being examined by the doctor.
 b.* There are being [many people] examined by the doctor.
 (Akmajian and Wasow (1975: 216-217))

The contrast in grammaticality shows clearly that the Theme argument *many people* must linearly follow the T head *are* but precede the v^* head *being* (see note 2). This fact is accounted for by the hypothesis that *many people* occupies [Spec,

v^*P]. This is the proposal of this paper. In addition, the structural position of Theme occupying [Spec, v^*P] is supported by subject-verb agreement as well. Consider the following sentences.

- (10) a. There *is/are [many people] being examined by the doctor.
 b. [Many people] *is/are being examined by the doctor.

These sentences show that the Theme argument *many people* agrees with the uninterpretable ϕ -features on T. Hence, the claim that the Theme argument in the passive is introduced in [Spec, v^*P] is supported.

The second point in this analysis of the passive is that the Agent argument *by John* in (8b) occurs in the complement position of V. This is demonstrated by VPE: If the *by*-phrase in the passive occupies the complement to V, this argument should be deleted along with the VP. This prediction is realized by the following sentence (see Goodall (1997)).

- (11) Mary said that the books would be returned by Tom, and they were (*[by John]).

(11) indicates that *by John* has to be deleted along with the VP. Hence, we can argue that the Agent argument in the passive is introduced in the complement to V.

One might object, at this point, that the *by*-phrase in the passive is not an argument but an adjunct. However, this objection does not hold. Evidence for the argument status of the *by*-phrase is given by extraction. It has been assumed that extraction of an argument from within an island results in a “weak” violation, whereas extraction of an adjunct from within the island causes a “strong” violation. If the *by*-phrase in the pas-

out of the *by*-phrase is acceptable.

- (18) Who₁ was it demonstrated [by *t*₁] [that John stole some money from the safe]?

A similar argument can apply to the test with respect to the argument status of the *that*-clause as well: Extraction out of the *that*-clause is applicable.

- (19) What₁ was it believed [by everyone] [that Mary bought *t*₁ for her mother]?
(Rochemont (1992: 387))

Hence, we conclude that the *by*-phrase and the *that*-clause are the arguments within the VP.

Therefore, *it* extraposition is derived when both the [Ag]-gument and the [Th]-features are inherited by V.

4.4. Reflexivization

Fourth, I claim that (4d) produces reflexivization (Hornstein (1999); Culicover and Jackendoff (2005); Reinhart and Siloni (2005)). For example, this type of inheritance derives a sentence like (20a) as in (20b).

- (20) a. [John] washes.
b.
$$\begin{array}{c} \downarrow \text{Agree} \\ \text{[}_{v^*P} \text{ John [}_{v^*} v^* \text{ [}_{Ag} \text{ [Th} \\ \uparrow \text{Agree} \end{array}$$
 [VP washes]]].

Both of the [Ag]-feature and the [Th]-feature stay on v^* and they agree with one and the same argument *John* in [Spec, v^*P].⁴ Actually, *John* acts not only as Agent but also as Theme. In addition, the structural position of *John* occupying [Spec, v^*P] is supported by subject-verb agreement: *John* agrees with the ϕ -features on T.

Therefore, reflexivization is generated when both the [Ag]-feature and the [Th]-feature remain on v^* .

To summarize, I have shown that all of the argument structures in (4) are attested by actives, passives, *it* extraposition, and reflexivization.

5. Theoretical Implications

This section explores some theoretical implications of the present analysis.⁵

5.1. Implicit Arguments in the Passive Derived by Argument Ellipsis

To start with, let us discuss an implicit argument in the passive. The present analysis claims that the *by*-phrase in the passive is the Agent argument that checks the [Ag]-feature. This *by*-phrase may be covert as in (21).

- (21) The book was stolen (by John).

Since θ -criterion requires that each θ -feature be checked by one and only one argument, the [Ag]-feature on V in the passive must be checked even in the absence of the overt *by*-phrase. In other words, even if the *by*-phrase is not overtly realized, there is some implicit argument that checks the [Ag]-feature on V.

This claim is supported by fact that an Agent-oriented modifier appears when the *by*-phrase is not overtly realized. The Agent-oriented modifier modifies an Agent argument. In the transitive sentence of (22a), for example, the external argument *they* receives the Agent role, so that the Agent-oriented adverb *willingly* can co-occur. In the middle sentence of (22b), on the other hand, there is no Agent argument, so that *willingly* fails to occur.

- (22) a. They decreased the price *willingly*.
b.* The price decreased *willingly*.
(Jaeggli (1986: 611))

Such an adverb can appear in a passive sentence that lacks the *by*-phrase.

- (23) The price was decreased *willingly*.
(Jaeggli (1986: 611))

This shows that the Agent argument is present in the passives even in the absence of the overt *by*-phrase.

With respect to this point, the implicit argument has been considered to be the passive morpheme (Jaeggli (1986); Baker, Johnson, and Roberts (1989)), *pro* (Boeckx (1998)), or PRO (Collins (2005)). In this paper, however, I claim that the implicit argument is derived by argument ellipsis (Oku (1998); Takahashi (2008)). In fact, this ellipsis strategy is confirmed by (24).

- (24) John was criticized by his mother, but Mary was praised.

Here, with the first conjunct as the antecedent, the second conjunct is ambiguous; it means either that *Mary* was praised by *John*'s mother or that *Mary* was praised by her own mother. The crucial interpretation is the latter sloppy interpretation. Under the *pro* or PRO analysis, this sloppy interpretation appears to be unexpected. Hence, this fact supports the view that the implicit *by*-phrasal argument is derived by argument ellipsis.

5.2. The Phasehood of Passive Verb Phrases

Another implication of the present proposal is related to the phasehood of passive verb phrases. Chomsky (2000) proposes the phase theory, in which all of the syntactic operations apply phase-by-phase. Once a phase is completed, Transfer/Spell-Out takes place. The complement of the phase head is sent to interpretation at the PF and

LF interfaces, only the phase head and its edge being accessible to subsequent operations as a consequence of the PIC. This PIC has the following effect: If an element needs to move out of the phase, it must move to the phase edge before Spell-Out. Taking this effect as a determining condition of the phasehood, Chomsky (2000) argues that the transitive verb phrase is a phase, whereas the passive verb phrase is not.

However, Legate (2003) argues that the passive verb phrase is a phase on the basis of reconstruction effects. (See Legate (2003) for the relevant argument in detail.)

The present analysis claims that the alternation between the active and the passive depends on whether or not the [Ag]-feature is inherited from v^* by V. If the [Ag]-feature remains in v^* , the active sentence occurs; if the [Ag]-feature is inherited by V, the passive sentence occurs. This claim relies crucially on Chomsky's (2008) assumption that only uninterpretable features on the phase head are responsible for syntactic operations. If the phase head v^* did not exist in the passive verb phrase, there would be no uninterpretable θ -features to be checked. Hence, to the extent that the present analysis is correct, the passive verb phrase must be the phase v^*P . Therefore, it follows, as a consequence, that the present analysis supports Legate (2003).

5.3. The Constituency of Verbs and Objects

Finally, I discuss the constituency of a verb and a direct object (a Theme argument). It has been generally assumed that a direct object is defined as a sister of V: the direct object forms a constituent with the verb. However, the present proposal argues that a certain type of θ -feature inheritance produces no constituency between the direct object and the verb. In (4d), for example, both the Agent and the Theme arguments

occupy [Spec, v*P] but not the complements to V.

Postal (2010) asserts that the definition of the object as the sister of a verb does not always hold. Therefore, the present analysis supports Postal's (2010) argument.

6. Conclusion

In this paper, I have proposed a new theory of argument structure as a consequence of θ -feature inheritance. Specifically, four types of argument structure are proposed depending on whether the [Ag]-feature and the [Th]-feature are inherited from v* by V or not. Furthermore, I have discussed theoretical implications of the present proposal for an implicit argument in the passive, the phasehood of passive verb phrases, and the constituency of a verb and an object.

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Notes

¹ I am indebted Yoshiaki Kaneko (personal communication) and Masaru Nakamura (personal communication) for forcing me to come to grips with this null hypothesis.

² I tentatively assume that the v* is occupied by *be* and the V is occupied by the past participle.

³ I am grateful to Takamichi Aki (personal communication) for pointing out this example to me.

⁴ Etsuro Shima (personal communication) poses the question why only this type of argument structure involves one and the same argument, which checks both the [Ag]-feature and the [Th]-feature. I will leave this question for future research.

⁵ Yoshihito Dobashi (personal communication) and Yosuke Sato (personal communication) point out to me that one of the most significant implications that the present analysis has for linguistic theory is to be a solution to the long standing issue concerning the violation of the Minimal Link Condition (MLC) in the passive. The passive has been assumed to occur as a result of A-movement of the Theme argument (the "direct object") from the complement position of V into sentence-initial position across the Agent argument (the "subject"). This MLC violation does not occur under the present analysis, because the "direct object" is introduced originally in [Spec, v*P] and moves from this position into sentence-initial position without crossing the "subject." I will leave a close examination of possibilities of this kind for further research.

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ドメイン・シフトと英語可算名詞の不可算転換について:ニオイ領域のネコ
(Domain Shift and Count-to-Mass Shift of English Count Nouns: 'Cat' in Smell Domain)

小寺 正洋 (Masahiro Kodera)
阪南大学 (Hannan University)

キーワード: ドメイン・シフト, 可算名詞, 不可算転換, 概念化, 容認度

1. はじめに

認知文法によると可算・不可算の区別は有界性にあり (Langacker (2008: 132); Taylor (2002: 367); Talmy (2000: 50-51)), すべての名詞は両用法を用い得るとされる (Taylor (2002: 379); Langacker (2008: 142)). 可算から不可算への転換について Langacker (2008: 143-144) は以下の2つのパターンを挙げている.

i) 指示対象の個性性喪失

After a cat got in the way of our SUV, there was cat all over the driveway.

ii) 指示対象の形状・境界の無意味化

With pre-owned vehicles, you get a lot of car for your money.

i) は Talmy (2000: 52) が 'deformation' と呼ぶ現象で, 'cat' のような典型的な可算名詞が指示対象の個性性を物理的に失うことにより不可算に転換するとされる. deformation に伴う不可算転換については, 可算・不可算用法ともに容認度が低く, 個性性喪失を表す前置修飾を伴った場合には (e.g. *shattered bottle, dismantled car*) 可算用法の容認度が有意に高

いことが指摘されている (小寺 (2012)).

ii) はドメイン・シフト¹に伴う不可算転換であり, 焦点が指示対象の物理的形狀から機能やニオイなどの特性に移ることにより有界性を失い, 不可算と見なされるものである. 'car' は, 有界の路上走行車両からその特性の 'size', 'comfort', 'performance' などの機能面に焦点が移ることによって不可算に転換するとされる.

ニオイ領域 (smell domain) へのドメイン・シフトが引き起こす不可算転換について先行研究の例に以下があり, 生命体として有界である 'baby', 'cat', 'skunk' などがニオイ領域で非有界と概念化され不可算へ転換するとされる.

- a) It smells like new *baby* here. (Reid (1991: 88))
- b) There's a smell of *cat* in this room. (Taylor (2002: 378))
- c) The whole neighbourhood is full of *skunk*. (Radden and Dirven (2007: 73))

本研究では ii) に関して, 'cat' がニオイ領域で概念化され「ネコのニオイ」を指示する場合の不定冠詞・ゼロ冠詞・複数形の容認度について英語母語話者へアンケート調査を実施し, 以下の2点の結果を得た.

- 1) ニオイ領域の 'cat' は可算・不可算用法とも全般的に容認度が高く, 一般的な「ネコのニオイ」の意味では両用法間に有意差が見られない.
- 2) ネコの具体的存在の重要性が増すに従い, 可算用法の容認度が有意に高まる.

上記2点の調査結果を基に, 非有界として概念化された指示対象が可算用法で表現される現象を説明するにはドメイン・シフトの考え方だけでは不十分であり, 伝達意図(ニオイ源の重要性)も考慮する必要があることを主張する.

2. 目的と方法

調査の目的: ニオイ領域へのドメイン・シフト

が引き起こすとされる可算名詞の不可算転換について、ゼロ冠詞・不定冠詞・複数形に対する英語母語話者の容認度をアンケート調査する。調査方法：アンケートをe-mailで個別に配布，回収。

調査対象：英語母語話者 25 名 (米 7 名，豪 8 名，英 10 名)，主に Cambridge 大学院生・研究者 (1 名はその家族)，Queensland University of Technology, International College 及び阪南大学の英語教員。

年齢構成：15-19 歳 1 名，20-29 歳 4 名，30-39 歳 5 名，40-49 歳 10 名，50-59 歳 3 名，60-69 歳 2 名。

調査実施期間：2009 年 9 月～2010 年 2 月。

集計分析方法：リカート5段階回答方式。

- 1 = Totally Unacceptable
- 2 = Moderately Unacceptable
- 3 = Neither Acceptable nor Unacceptable
- 4 = Moderately Acceptable
- 5 = Perfectly Acceptable

必要に応じて，対応のある t 検定を行い有意差の有無を示した。自由度 24 (一部，無回答のため 23)，有意水準 5%。

テスト文：27 のテスト文をランダムに配列した。以下に示す信頼度を見るための 'milk' の3文と分析段階で不適切と判断した1文を除き，計 23 のテスト文が分析対象。テスト語を含む名詞句以外の部分に不自然な箇所がないように，英語母語話者 4 名 (英2名，米1名，豪1名)による英文校正を行った。テスト文の提示方法は以下の通りで，各提示文について基本的に不定冠詞，ゼロ冠詞，複数形の3種類の文を用意した (コンテキストにより不定冠詞もしくは複数形のテスト文がない場合がある)。括弧内はコンテキストで，評価の対象外であることを明示した。

- (After I dropped the milk)
- There was a milk all over the floor. (1.68)
- There was milk all over the floor. (5.00)
- There were milks all over the floor. (1.12)

上記 'milk' のテスト文は調査の信頼度を見るために入れた。不定冠詞，ゼロ冠詞，複数形の容認度はそれぞれ，1.68, 5.00, 1.12 であった。

3. 結果と考察

3.1. 英語・米語・豪英語の差

英・米・豪間で，容認度が平均 2.00 以上の差は見られなかった。平均 1.50 以上の差は 27 件中 3 件で，豪・英間に 2 件，米・豪間に 1 件，米英間に 0 件であった。サンプル数が少なく結論的なことは言えないが，英・米・豪の各英語間に大きな差はないと思われる。

3.2. 動詞句 'to smell + cat'

他動詞 'to smell' が 'to notice or recognize a particular smell' の意味で用いられ，'cat' が個性性を有する動物としての「ネコ」ではなく，非有界の「ネコのニオイ」を指示する場合のゼロ冠詞 (Ø)，不定冠詞 (a/n)，複数形 (pl) の容認度を見る。他動詞 'to smell' には 'to put your nose near something to discover what type of smell it has' の意味もあり，目的語に可算具象名詞を取り得るが，すべてのテスト文で「鼻を近づけて～のにおいを嗅ぐ」の意味に解釈されないようなコンテキストにした。

3.2.1. 主語(ヒト) + 動詞句 'to smell + cat'

本節では，ヒトを主語にした場合の動詞句 'to smell + cat' の a/n, Ø, pl の容認度を見る (表 1)。一般的な「ネコのニオイ」を表す 1)-3) では pl の容認度 (4.48) が最も高いが，a/n-Ø, Ø-pl 間に有意差はなく，可算と不可算用法との間に容認度の違いが見られない。a/n-pl 間で pl が有意に高いが，この有意差は各動物具全般についてのコンテキストで pl が好まれたことが原因であろうと推測される。コンテキストを具体的に示した 4)-6) では，a/n の容認度 (4.58) が最も高いが，a/n-Ø, Ø-pl, a/n-pl 間に有意差はない。7)-8) はさらに具体的なコンテキストで，近くに

一匹のネコがいる可能性を示唆しているが、*a/n-Ø* 間に有意差はない。

次に、1)-8) についてコンテキストの具体性と *a/n*, *Ø*, *pl* の容認度との関係を見る(表2)。*a/n* (1, 4, 7) では、4) と 7) の間に有意差はなく、1) と 4) および 1) と 7) の間に有意差が見られる。これは、コンテキストが具体的になりネコの存在の具体性が増すと *a/n* の容認度が高まる傾向があることを示していると思われる。*Ø* (2, 5, 8) と *pl* (3, 6) の容認度については、いずれ

のコンテキスト間にも有意差が見られない。*a/n* についてのみ具体的なコンテキストで容認度が有意に高いのは、ニオイの発生源である具体的な一匹のネコの存在を示唆するコンテキストでは *a/n* が好まれるためであろうと思われる。一方、*Ø* と *pl* は総称的なネコ臭を意味し、ネコの存在の具体性に関わりなく用いることができる。そのため、*Ø* と *pl* ではコンテキスト間に有意差が現れないのではないかとと思われる。

表 1. 主語(ヒト) + 動詞句 'to smell + cat'

(Each animal has a specific odor.)			av.	t(24)		
				<i>a/n-Ø</i>	<i>Ø-pl</i>	<i>a/n-pl</i>
1	<i>a/n</i>	I can smell a cat, a dog, a cow, etc.	3.92	1.309,ns	0.659,ns	2.064, p<.05
2	<i>Ø</i>	I can smell cat, dog, cow, etc.	4.32			
3	<i>pl</i>	I can smell cats, dogs, cows, etc.	4.48			
(Upon entering the car)			av.	t(23)		
4	<i>a/n</i>	He asked his wife if she could smell a cat.	4.58	1.022,ns	0.245,ns	1.000,ns
5	<i>Ø</i>	He asked his wife if she could smell cat.	4.29			
6	<i>pl</i>	He asked his wife if she could smell cats.	4.38			
			av.	t(24)		
7	<i>a/n</i>	I smell a cat. (I hope it's a friendly cat.)	4.84	1.429,ns		
8	<i>Ø</i>	I smell cat. (I hope it's a friendly cat.)	4.56			

表 2. コンテキストの具体性と *a/n*, *Ø*, *pl* の容認度

			av.	t(24)		
				<i>a/n-Ø</i>	<i>Ø-pl</i>	<i>a/n-pl</i>
1	<i>a/n</i>	I can smell a cat, a dog, a cow, etc.	3.92	2.369, p<.05	2.009,ns	3.130, p<.01
4	<i>a/n</i>	He asked his wife if she could smell a cat.	4.60			
7	<i>a/n</i>	I smell a cat. (I hope it's a friendly cat.)	4.84			
2	<i>Ø</i>	I can smell cat, dog, cow, etc.	4.32	0.000,ns	1.445,ns	0.755,ns
5	<i>Ø</i>	He asked his wife if she could smell cat.	4.32			
8	<i>Ø</i>	I smell cat. (I hope it's a friendly cat.)	4.56			
			av.	t(23)		
3	<i>pl</i>	I can smell cats, dogs, cows, etc.	4.46	0.569,ns		
6	<i>pl</i>	He asked his wife if she could smell cats.	4.38			

3.2.2. 主語(ネズミ) + 動詞句 'to smell + cat'

本節では、動詞句 'to smell + cat' の主語がネズミの場合の *a/n*, *Ø*, *pl* の容認度を見る(表3)。ネズミにとってはネコ臭自体よりニオイの発

生源である具体的なネコの存在の方が重要であり、可算用法が好まれると予測される。

9)-11) はいずれも「ネコのニオイがするとネズミが逃げる」の意味であるが、*a/n*, *pl* ともに容認

度が非常に高く(4.96, 4.96), *a/n*- \emptyset , \emptyset -pl 間に有意差が見られる。 \emptyset の容認度が有意に低く、可算用法が好まれる傾向が見られるが、これはネズミにとってのネコ臭は目の前に存在するネコから発せられるニオイを意味し、焦点がネコ臭ではなく、具体的なネコの存在にあることが原因であろうと推測される。

この推測は、ネコの存在を示唆する具体的なコンテキストで、主語がヒトの場合とネズミの場合での \emptyset と *a/n* の容認度を比較することによっても支持される(表 4)。*a/n* の容認度は 7) と 9) とともに高く(4.84, 4.96)有意差はないが、 \emptyset の容認度は 8) が 10) より有意に高い。これはヒトとネズミでネコ臭が持つ意味が異なることに起因していると思われる。ヒトにとってのネコ臭は必ずしも具体的なネコの存在を想定しなくてもよく、 \emptyset と *a/n* で重要な意味の差はないが、ネズミにとってのネコ臭は具体的なネコが発するニオイを意味するので、 \emptyset の容認度が有意に低いと考えられる。

3.3. 動詞句 ‘to smell of + cat’

本節では、動詞句 ‘to smell of + cat’ での *a/n*, \emptyset , pl の容認度を見る(表 5)。*‘to smell of’* は *‘to have a particular smell’* の意味で用いられ、目的語となる名詞は非有界のニオイを指示する。12)-15) はいずれも「部屋でネコのニオイがする」の意味で、12) と 13) は一匹のネコ、14) と 15) は複数のネコの存在を想定したコンテキストである。12) の *a/n* (3.72) を除き、4.70 を超える高い容認度を示す。12) の *a/n* の容認度が 13) の \emptyset に対して有意に低いのは、「部屋が発するネコ臭」では「一般的なネコ臭」の解釈が期待されるにもかかわらず、*a/n* が「ある特定のネコが発するネコ臭」の意味をもたらした違和感があるためだろうと思われる²。これは \emptyset (14) と pl (15) がともに一般的なネコ臭を意味し、それぞれ容認度が高く (4.76, 4.72)、有意差がないことによっても示される。

表 3. 主語(ネズミ)+動詞句 ‘to smell + cat’

			av.	t(24)		
				<i>a/n</i> - \emptyset	\emptyset -pl	<i>a/n</i> -pl
9	<i>a/n</i>	Mice will leave if they smell a cat.	4.96	3.375,p<.01	3.375,p<.01	0.000,ns
10	\emptyset	Mice will leave if they smell cat.	3.92			
11	pl	Mice will leave if they smell cats.	4.96			

表 4. 主語(ヒト・ネコ)別の *a/n*, \emptyset の容認度

			av.	t(24)	
7	<i>a/n</i>	I smell a cat. (I hope it’s a friendly cat.)	4.84	0.691,ns	
9	<i>a/n</i>	Mice will leave if they smell a cat.	4.96		
8	\emptyset	I smell cat. (I hope it’s a friendly cat.)	4.56	2.141,p<.05	
10	\emptyset	Mice will leave if they smell cat.	3.92		

表 5. 動詞句 ‘to smell of + cat’

			av.	t(24)		
				<i>a/n</i> - \emptyset	\emptyset -pl	<i>a/n</i> -pl
(She keeps a cat.)						
12	<i>a/n</i>	Her apartment smells of a cat.	3.72	3.855,p<.001		
13	\emptyset	Her apartment smells of cat.	4.84			
(She keeps many cats.)						
14	\emptyset	Her apartment smells of cat.	4.76		0.196,ns	
15	pl	Her apartment smells of cats.	4.72			

3.4. 名詞句 ‘the smell of + cat’

本節では、名詞句 ‘the smell of + cat’ での *a/n*, \emptyset , pl の容認度を見る(表 6). 16)-18) は「ネコのニオイがネズミに恐怖心を起させる」という抽象的なコンテキストで、 \emptyset の容認度(4.29) が最も低いが、*a/n*- \emptyset , \emptyset -pl, *a/n*-pl 間のいずれにも有意差はない。19)-20) は「ネコを一匹借りて来てネズミを追い出す」という具体的なコンテキストであるが、この場合も *a/n*- \emptyset 間に有意差はない。

コンテキストの具体性と *a/n*, \emptyset の容認度の関係(16) と19) 及び17) と20) の比較で見ると、それぞれ間に有意差は見られない。16)-20) はいずれも人間の視点からの描写であり、一般的なネコ臭と具体的なネコが発するニオイとの間に重要な意味の違いがない。そのため可算と不可算用法との間に有意差が見られないと思われる。

次に、人間にとってネコの存在が重要である

場合の *a/n*, \emptyset , pl の容認度を見る。21)-23) は「シャンプーしたてのネコのニオイ」というネコが特定できるコンテキストであり、*a/n* と pl の容認度は高く(4.84, 4.84), \emptyset の容認度は有意に低い(2.12)。 *a/n*- \emptyset , \emptyset -pl 間に有意差があり、*a/n*-pl 間に有意差はなく、可算用法が好まれる傾向が見られる。 \emptyset の容認度が有意に低いのは、特定のネコを指示しているにもかかわらず \emptyset であることへの違和感が原因だと思われる。

本調査の準備段階で行ったパイロットでのアンケート調査で、回答者1名(全8名)が ‘identifiable scent’ を指示する場合には(つまり、quality space で他のニオイと区別できる「シャンプーネコ臭」という特定のニオイの種類を指示する場合には)、 \emptyset が可能であるとのコメントを残している。しかし、「シャンプーネコ臭」という種類のニオイは想像しにくいいため、 \emptyset の容認度が低いと考えられる³。

表 6. 名詞句 “the smell of + cat”

			av.	t(23)		
				<i>a/n</i> - \emptyset	\emptyset -pl	<i>a/n</i> -pl
16	<i>a/n</i>	The smell of a cat causes fear in mice.	4.50	0.707,ns	1.926,ns	0.866,ns
17	\emptyset	The smell of cat causes fear in mice.	4.29			
18	pl	The smell of cats causes fear in mice.	4.71			
(Borrowing a cat for an afternoon)			av.	t(24)		
19	<i>a/n</i>	The smell of a cat will make any mice move out.	4.36	1.063,ns		
20	\emptyset	The smell of cat will make any mice move out.	4.60			
			av.	t(24)		
16	<i>a/n</i>	The smell of a cat causes fear in mice.	4.50	0.641,ns		
19	<i>a/n</i>	The smell of a cat will make any mice move out.	4.36			
			av.	t(23)		
17	\emptyset	The smell of cat causes fear in mice.	4.29	1.621,ns		
20	\emptyset	The smell of cat will make any mice move out.	4.63			
			av.	t(24)		
21	<i>a/n</i>	I love the smell of a cat that has just been shampooed.	4.84	9.148, p<.001	8.981, p<.001	0.000,ns
22	\emptyset	I love the smell of cat that has just been shampooed.	2.12			
23	pl	I love the smell of cats that have just been shampooed.	4.84			

4. 結論

‘cat’がネコ臭を指示する時、主要領域である physical space で非有界として概念化され、不可算用法で用いられることが期待されるが⁴、容認度調査では不可算用法が好まれる傾向は見られない。一般的なネコ臭を指示する場合には可算、不可算用法ともに容認度は高く、テスト文のほとんどで4ポイントを超え、不定冠詞、ゼロ冠詞、複数形の間には有意差は見られない。ニオイ源であるネコの存在が重要である場合には可算用法(不定冠詞、複数形)の容認度が有意に高く、重要でない場合にはゼロ冠詞の容認度が有意に高い。これは知覚的に非有界である ‘mashed potato’ や ‘scrambled egg’ が、アメリカ英語では素材と加工過程を伝えたいとの意図が働き (Wisniewski et al. (2003); Wisniewski (2010); Cruse (2004: 273)), ゼロ冠詞単数形ではなく複数形で用いられる傾向が強いと同様の現象と考えられる。知覚的・概念的に非有界の指示対象が、その調理前の素材や発生源の重要性を強調する場合には可算用法で表現される現象は、ドメイン・シフトだけでは十分に説明できず、伝達意図も考慮する必要がある。

‘cat’がネコ臭を指示する場合には、ある一匹のネコが発するネコ臭、複数のネコが発するネコ臭、具体的なネコの存在を必要としない抽象的なネコ臭の3つの状況が考えられる。抽象的なネコ臭はゼロ冠詞単数形で非有界性を示すことで表現が可能であるが、具体的なネコが発するネコ臭を表すには、主要領域の physical space で動物としての有界のネコとニオイとしての非有界のネコ臭の両方を同時に表現する必要がある。ネコ臭の発生源を伝えたい場合には、‘cat’に有界のネコと非有界のネコ臭の両方の意味を同時に付与することになり、これを不定冠詞や複数接尾辞だけで表現することはできない。これを可能にするには、英語で可算名詞に伴うことが義務づけられている限定詞や複数

接尾辞以外の、名詞にとって外部的要因によって非有界性を表し、可算名詞としての ‘cat’ がその可算性を維持できるようにする必要がある。本研究で考察したネコ臭を指示する ‘cat’ の容認度が可算、不可算両用法で一般的に高く、有意差が見られないのは、ニオイ領域で非有界として概念化されていることを動詞や名詞の ‘smell’ で示すことにより、名詞自体で非有界を表す必要がなくなったためだと考えられる。これは、指示対象の個性喪失の場合に個性喪失を表す修飾語句を伴うと(e.g. *shattered bottle*, *dismantled car*), 不定冠詞の容認度が有意に高まる現象と同じであり(小寺 (2012)), 修飾語句によって非有界性を表すことで、可算名詞はその可算性を維持できるようになると考えられる。名詞にとっての外部的要因によって非有界性を表すことで、ニオイの発生源であるネコの存在が重要な場合には ‘cat’ を可算で、重要でない場合には不可算で用いることが可能になると思われる。

注

¹ 本研究で扱う可算名詞の不可算転換については様々な呼称があるが、「ドメイン・シフト」の呼称を用いる。研究者によってこの現象に対する呼称が異なり、Dirven (2003: 14-15) は ‘domain shift’, Cruse (2011: 274) は ‘metonymical reinterpretation’, Evans and Green (2006: 187) は ‘image-schematic transformation’ と呼ぶ。他に ‘semantic extension’ と呼ぶ研究者もある。

² コンテキストとして ‘She keeps a cat.’ の文を与えており、続くテスト文では定冠詞 ‘the’ を用いるべきところで不定冠詞を用いた点に違和感があるため容認度が低いとの説明も可能であるが、それならばテスト文 15) の複数形 ‘cats’ も ‘the cats’ となるべきであり、ゼロ冠詞複数形の容認度も低くなる筈であるが、高い容認度(4.72)を示している。本論考では、テスト文はコンテキストとして与えた文の連続と

してではなく、単独で与えられた文としてその容認度が評価されたと判断する。

- ³ Ø の容認度が低い点については、関係詞節による後置修飾が名詞に限定詞を付与することを要求するためとの主張も可能である。この点は BNC, WordbanksOnline, COCA などのコーパスで単数可算名詞を先行詞とする ‘the smell of + Singular Count Noun + Relative Clause’ の名詞句が見当たらないため確認できない。しかし、‘knowledge’ や ‘education’ などの抽象名詞に関する Quirk et al. (1985: 287) などの主張に反し、不定冠詞と修飾との間に直接的な関係はなく、修飾が不定冠詞を要求するのではなく、不定冠詞が結果的に修飾を要求するとの指摘があり (小寺 (1998)), ‘cat’ についても同様であると考え。
- ⁴ ネコ臭を指示する ‘cat’ がニオイ領域で可算用法を獲得するためには physical space ではなく、quality space を主要領域に昇格させて、その領域内で bounded region を形成する必要がある。ニオイ領域での可算の ‘cat’ は、Langacker (1991: 73-74) が挙げる ‘wine’ の例のように様々な種類のネコ臭の1つを指示するが、本研究で扱うテスト文は一般的なネコ臭を意味しており、当てはまらない。

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身体行為構文の受動文と談話機能*
(The Passive of Bodily Action Constructions
and the Discourse Function)

小栗 哲哉 (Tetsuya Kogusuri)
麗澤大学非常勤講師 (Reitaku University)

キーワード: 身体行為構文, 束縛代名詞, 譲渡
不可能所有, 提示文 形容詞的受身

1. はじめに

英語の *nod one's head*, *wave one's hand* のような表現では、身体部位の動きによる慣習化された行為を表す。

- (1) a. I nodded my head in agreement.
b. Bodo waved his hand and ordered more beer. (BNC)

例えば(1a)では、頭を縦に振るという身体部位の動きが、「頷く」という同意を表している。この種の表現には、他に以下のようなものがある。

- (2) raise (hand), wave (hand), nod (head), shrug (shoulder), bat (eyelid), close (eye)...

本稿では、(1)のような構文を身体行為構文 (Bodily Action Construction) と呼ぶことにする。この構文は、先行研究において、(3)のように受動文にできないことが指摘されている。

- (3) a. * Her eye was winked (by Linda). (Levin 1993: 220)
b. * A toe was stubbed by Philip. (Massam 1990: 190)

しかし、(4)のような実例が、小説や British National Corpus などから数多く観察される。

- (4) a. Heads were nodded in sympathy.
b. Arms were waved ...

先行研究では、主に(3)の容認不可能な事例のみが注目され、(4)のような容認可能な受動文の

事例は、ほとんど注目されていない。

本稿では、身体行為構文の受動化がなぜ可能となるのかを、意味・語用論的観点から考察する。そして、次の主張を行う。

- (5) 身体行為構文の受動化は、統語構造に対応する意味構造が、意味・語用論的特性と相互作用することによって可能となる。

この主張を行うに当たり、まず、(3)の容認不可能な事例に対する先行研究の分析を概観する。

2. 先行研究—束縛代名詞分析

多くの先行研究は、身体行為構文が受動化できないのは、目的語にある所有格代名詞が、主語によって義務的に束縛されるためだと分析する (Massam 1990, Jackendoff 1990, Safir 1996, Reuland 2008 など)。例えば、(6)の所有格代名詞は、主語 Linda と同一指示になることが義務的である。

- (6) Linda winked {her / *his} eye. (Levin 1993)
従って、her は主語 Linda によって、義務的に束縛される束縛代名詞と分析される。

束縛代名詞分析では、身体行為構文の受動化が容認されないという事実が、束縛関係の違反により説明される。受動文の主語位置に生起する束縛代名詞は、by 句の先行詞に束縛されない。このため、(7)のように容認されない。

- (7) a. * His eyebrows were raised by John.
b. * His neck was craned by Ted.

((a): Reuland 2008, (b): Massam 1990)
また、Massam (1990: 190) は、(8a)が容認されないことから、形式的に生起しない場合でも空の束縛代名詞が存在すると分析する。(8b)に類例を挙げておく。

- (8) a. * A toe was stubbed by Philip.
b. * An eye was winked by Mary.

以上の通り、束縛代名詞分析では、束縛条件違反によって、身体行為構文の受動化が容認されないと説明される。このように、束縛代名詞の存在は当該構文を特徴づける重要な要素であるが、それでは、束縛代名詞の生起はどのような

特性によって説明されるのだろうか。

束縛代名詞が生起する理由については、当該構文がもつ意味的特徴が関係すると考えられてきた (Bresnan 1982, Safir 1996 など)。(9)のように、当該構文の主語名詞句は<全体>を、目的語である身体部位名詞はその<部分>を表す。つまり、両名詞句の間に、譲渡不可能所有関係 (inalienable possession relation) が成立する。¹

(9) John raised a hand.
 <全体> <部分>
 ↑ ↑

譲渡不可能所有関係

譲渡不可能所有関係が関わる構文では、名詞句に関して定性効果 (Partee 1999 など) が生じることが知られる。当該構文でも、(11)のように定性効果が生じる (Guéron 2003: 192 より引用)。

(10) John has {a / *the} sister.

(11) John raised {his / *the} hand.

また、代名詞 *it* による代用が不可能なことも、当該構文が譲渡不可能所有関係の成立する表現であることを示す。

(12) John had a cold yesterday, but someone else has {*it / one} now.

(Kimball 1973: 263)

(13) * John waved a hand at me and Bob waved it, too.

身体行為構文の束縛代名詞の生起は、この「他人のものではなく、自分の身体部位によって行う行為」という意味的特性によると考えられる。² 本稿では、先行研究に従い、身体行為構文に束縛代名詞があると仮定し、その存在が受動化の可能性を左右する要因であると考ええる。

次に、束縛代名詞分析を踏まえた上で、身体行為構文の受動化が可能となる事例を考察する。上述の通り、多くの先行研究で、身体行為構文は受動化できないとされてきた。しかし、Bresnan (1982: 159) と Jackendoff (1990: 298) は、束縛代名詞が形式的に現れない場合、身体行為構文の受動化が可能であると述べ、それぞれ(14a, b) のような事例を挙げている。

(14) a. Not a neck was craned when I entered the room.

b. Many teeth were gnashed as the home team went down to defeat.

しかし、彼らの指摘は、(8)の事実観察に反する。形式的に現れない場合にも、空の束縛代名詞を仮定することで、(8)の容認性が説明されるのであった。この(14)や(4)のような受動化可能な事例を説明するためには、束縛代名詞の生起についてより原理的な説明を与える必要がある。次節では、意味・語用論的要因を考慮することで、これらの事例が説明できることを示す。

3. 身体行為構文の受動化と動作主の背景化

3.1. 提案

身体行為構文の受動化が容認される事例を説明するため、ここでもう一度事例を考察しよう。

(15) a. Heads were nodded in sympathy.

b. Arms were waved ...

c. Glances were exchanged, heads were nodded ...

d. ... and the moment they saw her several hands were waved, and several joyful voices screamed ...

((a)(b)は BNC、(c)(d)は小説からの事例)

これらの例から分かるのは、動作主を表す要素が全く生起していないという点である。つまり、身体行為構文の受動文は、*by* 句を含まない短形受動文 (short passive) であるという特徴がある。意味論的な観点から述べれば、身体部位の動きを引き起こす動作主は、描写される場面から背景化されているのである。

この特徴から、当該の受動文において、動作主が意味構造において存在していないと考えることができる。実際、インフォーマントは、(15)の事例に *by* 句や動作主指向の副詞が共起すると容認性が下がると判断した。

(16) a.?? Heads were nodded in sympathy by John and Bill.

b.?? Hands were waved {carefully /

deliberately}.

(16)の事実は、身体行為構文の受動文が、一般的な受動文とは対照的な意味的特性をもつことを意味する。よく知られているように、受動文では動作主が項構造で抑制されるが、動作主の存在自体は意味的には含意される。

(17) a. The ship was sunk by Bill.
(Roeper 1987: 268)

b. The boat was sunk deliberately.
(Bhatt and Pancheva 2006: 557)

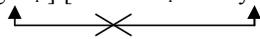
もし動作主が意味構造においても背景化されているとすれば、譲渡不可能所有関係も成立しないことになる。(9)でみたように、譲渡不可能所有関係は、動作主主語とその所有物である身体部位名詞の2つの要素の関係で規定されるからである。譲渡不可能所有関係が成立しないことを裏付ける証拠として、(18)のように定性効果が生じないという事実が挙げられる。

(18) a. The hand was waved in the air, bidding me to enter and follow ...
(J. Aubertin, *Fight with Distances*)

b. The shoulders were shrugged again, now with both hands planted firmly in his pockets.
(L. Miller, *Crossing the Line*)

譲渡不可能所有関係が成立しないとすれば、それによって生じる、束縛代名詞も統語構造に生起しないことになる。これにより、身体行為構文の受動化が可能となると説明される。この統語と意味の対応関係は、(19)に図示してある。

(19) Syn: [NP φ N] [VP be V-en]
Sem: [Agent_i] [Possessor_i Body-Part]



本稿の提案をまとめると、身体行為構文の受動化が可能となる条件は次のようになる。

(20) 動作主が意味的に背景化されることで、譲渡不可能所有関係が成立せず、それにより束縛代名詞が統語構造に生起しないため、束縛条件違反とならず、身体行為構文の受動化が可能となる。

ここで、(20)の提案の帰結として、なぜ身体行為構文の受動文では、動作主の存在が背景化されるのかという問いが生じる。この問いへの答えとして、談話機能に言及した分析を提案する。

3.2. 動作主の背景化と談話機能

身体行為構文の受動文が使用される談話文脈を観察すると、話者が眼前の状況を観察するという共通した特徴がある。(15c, d)を、前後文脈を明らかにした形で以下に再掲する(下線は筆者による)。

(21) a. As Clem got up to leave the kitchen, he noticed Paw and Dooley standing quietly in the doorway to the living room. Glances were exchanged, heads were nodded, and without a single spoken word, it was understood that a new set of ruby glass snifters would be acquired ...

(B. Hepburn, *The Back Roads of Eden County*)

b. As she came up the street on her return she saw three—yes, four heads popping in and out of the parlor windows; and the moment they saw her several hands were waved, and several joyful voices screamed ...

(L. Alcott, *Little Women; Little Men; Jo's Boys*)

(21a)では Clem が台所からリビングに移動した際の登場人物の様子を描写している。下線部では、話者がその場面に起きた出来事が順々に列挙されている。(21b)の下線部でも、その場面に起きた出来事が順々に描写されている。

この「場面の中で、一体何が起こったのかを順々に描写する」という機能は、「出来事を客観的に談話内に導入する」という提示文の機能に合致する。Lambrech (1994) などによれば、提示文とは「確立された話題や前提とは無関係に、談話の中に出来事や実体を導入する文である」とされている。実際、(21)の文も、そのような役割を果たしている。提示文は、基本的に文全体が

新情報を担う焦点となる。文全体が焦点となるので、(22)のように文全体を *What happened?* の返答として用いることができる。

(22) A: *What happened?*

B: *My car broke down.*

(Lambrech 1994: 223)

身体行為構文の受動文も、(21)の文脈を想定した上で、この *What happened?* の返答として適格となる。

(23) A: *What happened?*

B: *Glances were exchanged, heads were nodded ...*

(23)のテストから、当該構文が提示文としての談話機能を果たすことが経験的に裏付けられる。

一方、提示文が表わす出来事は、「存在」や「出現」のような動作主の関わらない出来事を表すことが知られる (Bresnan 1994, Lambrecht 1994, Nishihara 1999 など)。(24)は提示機能を持つことで知られる場所句倒置構文 (*Locative Inversion Construction*) の例である。

(24) a. *Among the guests of honor was seated my mother.* (Bresnan 1994: 78)

b. *Into the room walked John.*

(Nishihara 1999: 382)

この構文では、(25)のように *by* 句や動作主指向の副詞が生起できない。

(25) a. ?? *Among the guests of honor was seated my mother by my friend Rose.*

(Bresnan 1994: 78)

b. * *Out of the room walked a man with long hair deliberately.*

(Nishihara 1999: 395)

(25a)では受動態 *was seated* が、(25b)では非能格動詞 *walk* が生起していることに注目されたい。通例受動態や非能格動詞は、動作主の存在が意味的に含意される。しかし、(25)の事実から、そのような述語であっても、提示文においては動作主性が低い文として解釈されることが分かる。つまり、提示文では動作主は背景化される。

この提示文が持つ意味的特性から、身体行

為構文の受動文で、動作主がなぜ背景化されるのかを説明できる。つまり、文の提示機能により、動作主の存在が背景化され、(21)のように身体行為構文の受動化が容認可能となるのである。

(14)で見た Bresnan と Jackendoff が指摘する例も、提示文による動作主の背景化で容認されていると説明できる。

(14) a. *Not a neck was craned when I entered the room.*

b. *Many teeth were gnashed as the home team went down to defeat.*

(14a)「首が一つも伸ばされなかった」や、(14b)「多くの人の歯が歯ざしりされた」は、それらを引き起こす動作主の存在を明示せず、出来事全体を焦点とする提示文として解釈されると考えられる。この結果として、身体行為構文の受動化が可能になる。

3.3. 形容詞的受身と動作主の背景化

以上、身体行為構文の受動化を可能にする動作主の背景化が生じる条件として、提示文がもつ意味的特性による説明を提案した。この条件の下では、束縛代名詞は生起しない。

しかしながら、こうした説明に対して一見反例と思われるような事例も存在する。

(26) a. *His neck was craned throughout the lecture.* (Bresnan 1982: 171, fn.1)

b. *His craned neck twisted away and he snuffled again.*

(L. Robertson, *Arcane Circle*)

(26)では、受動化された身体行為構文の主語位置に、所有格代名詞が生起し、動作主を指示する束縛代名詞が生起しているように思われる。しかし、Bresnan (1982) は(26a)が形容詞的受身の例であり、*his* は束縛代名詞ではないと述べている。つまり、これらの代名詞は先行文脈にある先行詞を指す前方照応の代名詞だとしている。

ここで、なぜ形容詞的受身の場合に束縛代名詞でなくなるのかという疑問が生じるが、Bresnan は明確な説明を与えていない。しかし、本発表

の動作主の背景化分析では、その理由を形容詞的受身の構文的意味に基づいて説明できる。影山 (2009: 132) でも指摘されているように、形容詞的受身は出来事の最終局面である<(結果)状態>だけを表す。一方、その局面を引き起こす<行為>の部分は含意さない。行為が含意されないので、(27)に示すように行為者である動作主の存在も含意されない。

(27) a. Our workers remain better paid (*intentionally).

b. Some art classes seem restored (*in order to qualify for funding).

(Emonds 2006: 23)

(27a)は動作主指向の副詞 *intentionally* が、(27b)は動作主によってコントロールされる PRO をもつ目的節が生起できないことを示す。従って、結果状態を表す形容詞的受身の構文的意味によって、動作主の存在が背景化され、受動化が可能となると説明できる。

形容詞的受身の場合にも、提示文の場合と同様に譲渡不可能所有関係が成立しない。これは、定性効果が生じないことを示す(28)の例から明らかである。

(28) a. “Baxter, please open your eyes so we can talk.” ... His eyes remained closed. Porter reached over and touched Baxter’s cheek. “Wake up.” He waited. *The eyes remained closed* ...

(R. Whitlow, *Life Everlasting*)

b. The clenched fist still swung at his side... (BNC)

以上の議論から、身体行為構文の受動化を可能にする動作主の背景化は、提示文の場合以外に、形容詞的受身の構文的特性によっても可能となることが明らかとなった。

ここまでの議論をまとめると、身体行為構文の受動化が可能となる要因は、(i)談話において提示文としての機能を果たす場合と (ii)形容詞的受身として生起する場合の2つが存在する。これらの条件は、出来事全体の発生に焦点を置くの

か、出来事の結果状態のみに焦点を置くのかという違いはあるものの、どちらも動作主の存在が含意されない点で共通している。

次節では、本稿の提案するこれら2つの条件が、日本語の身体行為構文の受動化においても当てはまることを示す。

4. 日本語における身体行為構文の受動化

日本語の身体行為構文が受動化された事例として、(29)や(30)が確認できる。

(29) a. 「さようなら。さようなら。さようなら」手が振られ、振り返される。

(中島健二「天気晴朗なれども波高し」)

b. 機内にもぐりこんだ森が、すぐに眉を寄せる。ほとんど機器に触れもせず、大杉に顔を向ける。首が左右に振られた。(胡桃哲「栄光のミッドウェー」)

(30) a. 静香さんが座布団を枕に電灯の下で居眠りをしていた...水平の眉がひそめられていた。(冬川亘「岩窟のピエタ」)

b. 兵の眼は、薄くあけられていた。

(工藤 1990: 61)

(29)は、「手を振る」「首を左右に振る」が受動化された事例で、出来事全体を談話に導入する提示文の例である。一方、(30)では「眉をひそめる」「薄く眼をあける」が受動化され、結果継続を表す「-ている」が付加されている。結果状態を表すことから形容詞的受身の事例と分かる。

これらの表現は、(31)(32)のように、動作主を表すニョッテ句や動作主指向の副詞と共に起できない。つまり、英語の場合と同様に、動作主が背景化されなければならないのである。

(31) a. * 手は彼によってさかんに振られていた。

b. * 水平の眉が静香さんによってひそめられていた。

(32) a. * 手がわざと振られ、振り返される。

b. * 水平の眉が熱心にひそめられていた。

また、(29)(30)の受動表現は、譲渡不可能所有関係が関わらないことが、(33)の実例によって

確認できる（下線は筆者）。

(33) a. 滋子と目が合うと、充血したその目が
う大きく見開かれ、口元が歪んだ。

(宮部みゆき「模倣犯・下」)

b. 天井に向けて、かっと見開かれたその
目には今にもこぼれ落ちそうな涙が光
っております。

(高橋ともみ「夢を追いかけて」)

cf. 花子は驚いて (??その) 眼を大きく見
開いた。

(33a)は、出来事を連続的に描写する提示文の例で、下線部が「滋子の眼の動き」を新たな出来事として導入している。(33b)は、身体部位名詞を前置修飾する形容詞的受身の例である。これらの例では「その」という指示詞が身体部位名詞を限定している。身体部位が動作主から独立した実体として捉えられ、譲渡不可能所有関係が成立しないことが分かる。

よって、日本語の場合にも、提示文と形容詞的受身の2つの要因によって、動作主が背景化され、身体行為構文の受動化が可能となることが分かる。従って、本稿の分析が、日英語の両言語において支持されることが明らかとなった。

5. 結論と今後の課題

以上、本稿では、多くの先行研究で容認不可能とされてきた身体行為構文の受動化が可能となる事例に対し、談話機能と構文的意味を考慮に入れることで説明できることを示した。本稿の結論を(34)のようにまとめることができる。

(34) a. 身体行為構文の受動化が可能となるのは、動作主が意味的に背景化されることで、譲渡不可能所有関係が成立せず、それにより束縛代名詞が統語構造に生起しないため、束縛条件違反とならないからである。

b. 動作主が背景化されるのは、(i)提示文としての談話機能によって出来事全体が焦点となる場合と、(ii)形容詞的受身の構文的特性により、出来事の状

態のみが焦点となる場合が存在する。

つまり、身体行為構文の受動化は、統語構造に対応する意味構造が、意味・語用論的特性と相互作用することで可能となるのである。

ここで明確にしておきたいのが、(34b)の2つの要因の関係である。提示文の場合、その談話機能に特有の出来事解釈により、動作主が背景化されるが、形容詞的受身はその構文的特性によって、背景化が起こる。しかし、これら2つの要因は決して相容れないものではなく、形容詞的受身でありかつ提示文となることも可能である。実際、(28)や(30)の事例は、身体部位のある状態が場面に存在することを談話に導入している事例と見ることもできる。いずれにせよ、本稿の分析では、提示文と形容詞的受身のどちらかの条件さえ満たせば、動作主が背景化されることになる。

最後に、本稿の分析に残された課題を述べておく。まず、「動作主の背景化」という概念の精緻化の必要性が挙げられる。本稿で「背景化」と呼ぶこの現象は、意味構造におけるどのような操作として定式化できるのか。可能性の一つとして、意味構造におけるある種の「削除」操作が考えられる。これに関連する現象として、John broke the vase. vs. The vase broke.のような自他交替がある。今後、分析の形式化、理論化に向け、「動作主の背景化」という意味的現象をより明確に規定することを目指したい。

さらに、提示文の談話機能と動作主の背景化との関連性も明確にする必要がある。そもそも「提示」という概念は機能的なものであり、そうした談話機能が如何にして意味構造の現象に結びつくのか、明らかではない。現時点では両者の結びつきに基づいた説明を提示したに過ぎない。今後、提示文のより詳細な考察と分析を行う必要がある。

注

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1 本稿における譲渡不可能所有関係の定義は、以下のようなものとする。

- (i) A is inalienably possessed by B if A exists only insofar as it is possessed by B.

(Kimball 1973: 263)

2 ちなみに(i)のように譲渡不可能所有関係が成立しない事例も存在する。本稿では、身体行為構文とは異なる用法と考え、考察の対象外とする。

- (i) She raised my hand to her eyes in a questioning way...

(H. Keller, *The Story of My Life*)

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Have/Take an N構文について (On Have/Take an N Constructions)

久米祐介 (Yusuke Kume)
藤田保健衛生大学 (Fujita Health University)

キーワード: have/take, 動詞派生名詞, 文法化,
軽動詞

1. はじめに

現代英語には have がイベントを示す目的語を選択する(1)のような構文がある。

- (1) a. have a walk in the garden
- b. have a swim in the river
- c. have a look at the baby

(cf. Dixon (1991: 336-337))

Wierzbicka (1982)、Quirk et al. (1985)、Dixon (1991)、天川 (1997)、そして秋元 (2002)などの様々な言語学者によって、(1)の構文には次のような特徴があることが観察されている。まず、イベントを示す目的語は接辞を伴わない動詞の原形と同形の動詞派生名詞であり、定冠詞や属格代名詞ではなく不定冠詞と共に現れる。そして、不定冠詞によって動詞派生名詞に示される有界なイベントを一度、あるいは非有界のイベントの一部を行うという解釈が生じる。また、have にはほとんど意味がなく、目的語の動詞派生名詞が意味の大部分を占めており、単純動詞構造とほぼ同じ意味を示す。そして、動詞派生名詞の意味上の主語は動詞 have の主語と同一であると解釈される。本論文では、このような特徴を持つ(1)の構文を have an N 構文と呼ぶ。また、take も have と同様にこのような特徴を持つ動詞派生名詞を目的語に取るので、このような構文を take an N 構文と呼ぶ。しかしなが

ら、興味深いことに、take は have が選択する全ての動詞派生名詞を選択できるわけではない。(2)に示されているように、have は cry, cough, sit-down, talk, think などの動詞派生名詞も補部にとることができ、take はこれらの動詞派生名詞と共起することはできない。

- (2) a. have a cry / a cough / a sit-down / a talk / a think
 - b. *take a cry / a cough / a sit-down / a talk / a think
- (天川 (1997: 70))

一方、make は補部に-tion や-ment などの顕在的な接辞を伴う動詞派生名詞を選択し、顕在的な接辞を伴う動詞派生名詞は不定冠詞だけでなく定冠詞や属格代名詞とも共起する。この点において、make+動詞派生名詞の構文は、have/take an N 構文とは振る舞いが異なるため、議論に含めないこととする。

本論文では、have an N 構文と take an N 構文が英語史においていつどのように生じたのか、そしてこれらの構文がどのような過程を経て現代英語で観察される特徴を持つようになったのかを、歴史コーパスから得られたデータを分析することによって、統語構造の変化と have と take の文法化の観点から議論する。論文の構成は次の通り。2節では、have an N 構文と take an N 構文の歴史的発達に関する先行研究である Trudgill et al. (2002)の主張を概観して問題点を指摘する。さらに、独自の歴史コーパス調査から得られたデータを分析し、have/take an N 構文のプロトタイプは have/take+rest であり、接辞を伴わない、いわゆるゼロ派生名詞が中英語期に可能になったことで have/take+動詞派生名詞が派生し、近代英語期以降に接辞を伴わない動詞派生名詞が定性を失うことによって、不定冠詞を伴う have/take an N 構文の頻度が増していったと主張する。3節では、2節のコーパスデータの分析に基づいて、D 主要部の消失を伴う have an N 構文と take an N 構文の構造変化を提案し、なぜ動詞派生名詞の主語が have/take と同一であると解釈されるのかについて統語的に

示す。4節では、文法化の観点から、have と take を本動詞と助動詞の間に位置付けられる軽動詞と仮定し、意味の漂白化と意味の転移の観点から have と take が選択する動詞派生名詞の違いを説明する。5節は結論である。

2. 先行研究の問題点とコーパスデータの分析

Trudgill et al. (2002)によれば、have は古英語期には所有の意味しか持たなかったが、中英語期から近代英語期にかけて(3)に示されているような換喩的過程を含む意味の拡張によって動詞の意味を獲得した。

- (3) possess > come to possess > receive > take > eat etc. (Trudgill et al. (2002: 8))

そして、彼らは have が中英語期に動詞の意味を獲得するにつれて、もともと take が rest や sleep などのイベントを示す名詞補部を取っていた文脈において、have が徐々に take に取って代わったと分析している。その証拠として以下の点が挙げられている。まず、Claridge (2000)が 1640 年から 1740 年までに書かれた非文学的の散文集である Lampeter Corpus を用いて多語動詞 (multi-word verb)について調査した結果、take が 491 例見つかり、have の 143 例よりも多かったということ。次に、(4)に示されているように、OED に記載されている take an N 構文の初例が have an N 構文の初例よりも古い時期のものであるということ。

- (4) a. My wife, my daughter and herself were taking a walk together.
1766, *goldsm. Vic.-W.* xxviii
b. I went and had a look at the bedroom.
1868, W. Collins, *Moonst.* iii
Rhoda went, had an enchanting walk.
1891, Mrs. Wakford, *Pinch of Exper.* 268
(Trudgill et al. (2002: 9-10))

そして、表 1 に示されている Chadwyck-Healey データベースを用いた調査結果において、1800 年以降に have an N 構文の頻度が高くなっている

ということである。

表 1: Chadwyck-Healey データベースにおける have と take

	Pre-1800		
	take	have	have%
bite	2	0	0%
fall	11	46	81%
look	7	8	53%
rest	45	55	53%
walk	182	2	1%
Total	247	111	31%
Post-1800			
bite	9	8	47%
fall	0	46	100%
look	47	151	76%
rest	30	28	48%
walk	184	28	13%
Total	270	261	49%

(cf. Trudgill et al. (2002: 10))

しかしながら、彼らの分析には問題点がある。まず、初期近代英語期において、take のほうが have よりも頻度が高かったという Claridge (2000)の調査結果とは反対のデータを示している言語学者がいる。Hiltunen (1999)は Oxford Text アーカイブの電子コーパス化したものから 1600 年頃の劇のデータに基づいて、(5)の 4 つのパターンについて調査し、(5a)と(5b)のパターンの頻度が高く、動詞は take よりも have のほうが生産的であったことを示している。Kytö (1999)は、ヘルシンキコーパスから得られたデータに基づき、1500 年から 1700 年の間に見られる make/have/take/give/do+動詞派生名詞について調査し、その中で make と have の頻度が高く、不定冠詞と動詞派生名詞の結びつきが強いと述べている。Tanabe (1999)も 15 世紀の The Paston Letters の中で make と have が動詞派生名詞を選択する頻度が最も高いと主張している。

- (5) a. 動詞 + a(n) + (修飾語) + 名詞
- b. 動詞 + (修飾語) + 名詞
- c. 動詞 + the + (修飾語) + 名詞
- d. 動詞 + (the) (修飾語) + 名詞

また、今回行った中英語期のコーパス (PPCME2)、初期近代英語期のコーパス (PPCEME)、そして後期近代英語期のコーパス (PPCMBE)を用いた調査で得られた have/take an N 構文のデータからは、have が take に取って代わったという証拠は得られなかった。まず、(6) に示されているように、OED が記載している have an N 構文と take an N 構文の初例より古い事例が、それぞれ中英語期と初期近代英語期に見つけられた。

- (6) a. And men fynden þere also the appull tree of
 Adam þat han a byte at on of the sydes

CMMANDEV, 32.787

c1400, Mandev, *Mandeville's Travels*

- b. …your Lady and I will go take a walk in
 the Garden.

VANBR-E3-H, 64.709
1696, Vanbrugh, J, *The Relapse*

(6a)の have an N 構文の事例のほうが(6b)の take an N 構文の事例よりも古いので、OED に初例として記載されている(4)の事例は、have が take に取って代わったという証拠にはなり得ないだろう。

さらに、表 1 に示されているデータの分析に関しても、1800 年を境に 2 つの時代に分けている根拠が明確でないし、fall は have a fall で「転ぶ」、take a fall で「逮捕される」と解釈されるイディオムの一部になっており、fall の意味から直ちに構文全体の意味を予測することができなくなってしまっている。have/take an N 構文の事例として扱うのは適切ではない。加えて、1800 年以前でも walk を除いて have のほうが頻度が高い、あるいはほぼ同じであるので、1800 年以降に have の頻度が増したというだけでは、have が take に取って代わったという証拠としては不十分であろう。

表 2: have/take + イベントを示す補部名詞の生起数

	ME		EModE	
	have	take	have	take
bite	1		4	
look				
rest	35	9	5	15
talk			4	
walk			2	1
Total	36	9	15	16
	LModE		Total	
bite			5	0
look	1	2	1	2
rest	1	2	41	26
talk	11		15	0
walk		3	2	4
Total	13	7	64	32

もし have が動詞的意味を獲得し take に取って代わったのならば、少なくとも初期の時代では take の生起数と補部の多様性が have を上回っているはずだが、表 2 に示されているように、中英語期における have の生起数は take の生起数を大きく上回っており、全ての時代を通して補部の種類も多様である。むしろ、注目すべき点は中英語期の rest の生起数である。have では全 36 例のうち 35 例、take では 9 例全てが rest を補部を選択している。さらに、表 2 の結果を動詞と補部名詞の間に介在する要素について分類してみると、表 3 の結果が得られた。

表 3: have/take と補部名詞の間の介在要素

	定冠詞		属格代名詞			
	have	take	have	take	have	take
ME	2		3		5	
EModE	3	1			5	
LModE					2	
	数量詞		無冠詞		不定冠詞	
ME	11	1	19	1	1	
EModE	3	4	3	5	6	1
LModE	6		1	1	6	4

中英語期と初期近代英語期には、have/take と補部名詞の間に定冠詞または属格代名詞が介在する例はあわせて 19 例見られるが、後期近代英語期には、わずか 2 例しか見られない。これに対して、中英語期には 1 例しか見られない不定冠詞を伴う例は、初期近代英語期から後期近代英語期にかけて 17 例も見られる。

本発表では、これらの観察に基づいて、もともと名詞であった rest を補部に選択する have/take+rest が have/take+動詞派生名詞の起源であると仮定する。中英語期に屈折が水平化されることによって顕在的な接辞を伴わない動詞から名詞への品詞転換が可能になった。その結果、have/take の選択する補部の種類が多様になり、そして have/take+動詞派生名詞という形式が定着し構文化されるにつれて、動詞派生名詞が定性を失ったと主張する。

秋元(2002)はイディオム化の要因の一つとして定冠詞の消失を挙げている。秋元(1989)によれば、イディオム化は次の 4 つの段階で進む。最初の段階は、(7)に示されるように、それぞれの成分の間に制約がなく、文法規則によるみ配列されている段階である。

- (7) put the book on the table
 V NP¹ P NP²

(Akimoto (1989: 354))

(7)の段階では、NP¹ は十分に名詞性を持っており、冠詞がついたり、複数になったりする。また、動詞もほかの動詞と置き換えることができる。次に、(8)に示されているように、動詞と NP¹ との関係が固定され始め、お互いが予測し合う段階に入る。

- (8) a. V — fault — P — NP
 b. V — the — sight — of — NP

(Akimoto (1989: 355))

(8a)では、動詞に find が選ばれるが、前置詞との関係はまだ弱いと言える。(8b)では、動詞に lose, catch, have, take などが選ばれ、動詞と名詞の結合において、名詞は徐々に名詞性を失い始め、前置詞は固定化されていく。さらに、イデ

ィオム化が一層進み、(9)に示されているように、再分析が起こる。

- (9) a. lose [the sight of NP]
 b. lose [(the) sight of NP]
 c. [lose sight of] NP (cf. 秋元 (2002: 41))

(9a)では、動詞 lose が名詞句 the sight を補部に取る通常の文法規則に従って配列されている。この形式が頻繁に使われるようになると、lose と sight の関係が固定化され始め、(9b)のように、sight が定冠詞を失い、抽象化され、名詞性を失っていく。そして、(9c)に示されているように、lose sight of という動詞句が NP を補部に選択する形式に再分析される。そして、最終的に 1 つの語彙構造になり、その意味は文字通りの「姿を見失う」という意味から「忘れてしまう」というより抽象的で 1 つ 1 つの語彙からは予測できない意味に変わり、イディオム化が完了する。秋元(2002)は、このほかにも定冠詞の消失を伴うイディオム化の事例として、(10)を挙げている。

- (10) a. in the chase of → in chase of
 b. under the colour of → under colour of
 c. by the force of → by force of
 d. in the furtherance of → in furtherance of
 e. by the means of → by means of
 f. in the search of → in search of

(秋元 (2002: 38-39))

have/take an N 構文に関しては、定冠詞の消失と動詞派生名詞の抽象化までは見られるが、再分析が起きているかどうかはわからない。また、意味に関しても、不定冠詞 a(n)によって一回ごとの動作やその繰り返しを示すが、Wierzbicka (1982)が述べているように、have/take an N 構文と単純動詞構造との意味上の相違は相的なものであって、構文を構成する 1 つ 1 つの要素から予測できない意味ではないので、完全なイディオム化の過程ではないと言える。

3. Have/take an N 構文の派生

この節では、2節のコーパスデータの分析に基づいて、have an N 構文と take an N 構文の構造変化について議論する。まず、中英語期から初期近代英語期にかけて、屈折の水平化により、顕在的な接辞を伴わない品詞転換が可能になったことにて、have/take + rest から have/take + 動詞派生名詞が派生した。この構造変化を(11)に図示する。

- (11) a. [_{VP} Subj [_V have/take [_{DP} Gen_i/PRO_j [_D the [_{QP} [_{NP} t_it_j [_N rest]]]]]]]]]
 b. [_{VP} Subj [_V have/take [_{DP} Gen_i/PRO_j [_D the [_{QP} [_{NP} t_it_j [_N V+ø]]]]]]]]]

(11)において、定冠詞が D 主要部に現れる場合には PRO が、定冠詞が現れない場合には属格代名詞が NP 指定部から DP 指定部へ移動し、D によりゼロ格または属格を照合される。したがって、(11b)の段階では、have/take の主語とは独立して、属格代名詞または PRO が動詞派生名詞の主語として存在している。そして、初期近代英語期から後期近代英語期にかけて、不定冠詞を伴う例が増加したのに対して、定冠詞や属格代名詞を伴う例がほぼ消失したことから、have/take+動詞派生名詞が定性を失った結果、(12)のような構造に変化したと考えられる。ここでは、Radford (2009)に従って、不定冠詞は QP の主要部であると仮定する。

- (12) [_{VP} Subj [_V have/take [_{QP} a(n) [_{NP} V+ø]]]]]

(12)の構造では、DP が消失しており、D 主要部に基底生成される定冠詞、および D により認可される属格代名詞と PRO は現れることができない。したがって、動詞派生名詞は自身の主語を取ることができなくなり、その解釈を have/take に依存するようになった。

現代英語における動詞派生名詞の項構造の認可については、Alexiadou や Grimshaw などの一連の研究で議論されている。彼女らは、動詞派生名詞を(13)に示されているように、3つの種類に分類している。

- (13) a. The examination of the patients took a long time. (Complex)
 b. The examination took a long time. (Simple)
 c. The examination was on the table. (Result)
 (Alexiadou and Grimshaw (2008: 2))

(13a)は複合事象名詞、(13b)は単一事象名詞、そして(13c)は結果名詞と呼ばれている。彼女らによれば、(13a)の複合事象名詞だけが項構造を持つ。(13b)はイベントを示すが、項構造は持たない。(13c)はイベントの結果生じるもの、あるいはその参加者を表す。興味深いことに、(14)に示されているように、項構造を持つ複合事象名詞は不定冠詞と現れることはできないが、項構造を持たない単純事象名詞と結果名詞は定冠詞や属格代名詞とだけではなく不定冠詞とも共起することができる。

- (14) a. *an examination of the patients
 b. a payment
 (Alexiadou and Grimshaw (2008: 2))

また、Alexiadou and Grimshaw (2008)は、-tion や -ment などの顕在的な接辞を伴う動詞派生名詞が複合事象名詞として項構造を持ち得るのに対して、(15)に示されているように、顕在的な接辞を伴わない動詞派生名詞は単純事象名詞あるいは結果名詞であり、項構造を持つことはないと述べている。

- (15) a. *The constant offer of credit cards to students…
 b. *(The) frequent report of looting…
 (Alexiadou and Grimshaw (2008: 3))

したがって、現代英語における have/take an N 構文の動詞派生名詞は不定冠詞と共起し、顕在的な接辞を伴わず、そして項構造を持たないことから、単純事象名詞であると結論付けられる。

4. 文法化

この節では、have と take が選択する動詞派生名詞の違いを、文法化、特に意味の転移と漂白

化の観点から議論する。一般に、文法化は開放類の語彙項目が閉鎖類の文法的・機能的要素に変化する過程を指す。その際、文法化を受ける要素は統語上の独立性を失い、語彙的意味が希薄化される。Hopper and Traugott (2003)は、文法化の過程を(16)のクラインによって示している。

(16) full verb > auxiliary > verbal clitic > verbal affix (Hopper and Traugott (2003: 111))

本論文では、Kume (2009, 2011)によって修正された(17)のクラインを採用し、have/take an N 構文の have/take は本動詞と助動詞の間にある軽動詞に文法化されたと主張する。

(17) full verb > light verb > auxiliary > verbal clitic > verbal affix (Kume (2009: 143))

have/take が軽動詞に変化する過程は、意味の転移と漂白化という文法化のメカニズムによって説明することができる。すなわち、have/take がもともと持っていた「持つ」や「取る」という語彙的意味が転移あるいは漂白化し、have/take an N 構文の意味の大部分を動詞派生名詞が担うようになり、have/take は外項を導入するという機能的な役割のみを果たすようになったと考えられる。

本論文では、have/take an N 構文における have と take の補部選択の違いは、動詞の語彙的意味が転移したのか、あるいは漂白化したのかという違いに関連していると主張する。have an N 構文では、have の「持つ」という語彙的意味がほぼ完全に漂白化されており、have の主語は様々なタイプの動詞派生名詞の主語となることができる。これに対して、take an N 構文では、take の「取る」という語彙的意味は、動作の起動を表す抽象的な意味に転移したに過ぎず、完全に漂白化されているわけではない。それゆえに、take の主語は意志を伴う動作主であり、それと矛盾する主語を取る動詞派生名詞とは共起することができない。具体的には、(2)の動詞派生名詞 cry, cough, think が表すイベントは主語の意志だけで生じる事態ではないため、その主語は動作主であると同時に経験者(experiencer)で

もある。また、talk は speak とは異なり、主語が話し手であると同時に聞き手でもあることが含意されるため、その主語は動作主であると同時に受容者(recipient)でなければならない。さらに、sit-down は「座る」という行為の後に「座っている」という状態も含意されるため、その主語は動作主であると同時に主題(theme)でなければならない。いずれの場合も、動詞派生名詞の主語が動作主以外の役割も担うので、上記の take の特性と矛盾し不適格となる。

(2) a. have a cry / a cough / a sit-down / a talk / a think

b. *take a cry / a cough / a sit-down / a talk / a think (天川 (1997: 70))

Hopper and Traugott (2003)によれば、意味の転移は文法化の初期段階に起こり、意味の漂白化は文法化の最終段階に起こる。より具体的には、be going to の未来の助動詞の発達において、go はまず物理的な移動の意味から抽象的な移動の意味へと転移し、それから未来の意味を獲得した後に移動の意味が失われたと論じている。したがって、have/take an N 構文では、have と take は同じ軽動詞という範疇に位置づけられるが、have は完全に語彙的意味が漂白化されているのに対して、take には語彙的意味が残されているので、前者は後者よりも文法化が進んでいると考えられる。

5. 結論

本論文では、現代英語の have/take an N 構文にみられる特徴を歴史的発達の観点から議論した。Trudgill et al. (2002) が主張するように have が take に取って代わったのではなく、歴史コーパスのデータ分析から、have/take an N 構文は近代英語期に have/take+動詞派生名詞において動詞派生名詞の定性が失われることにより出現したと提案した。その結果、D 主要部に認可される属格代名詞や PRO が現れることができなくなり、動詞派生名詞の主語が have/take に依存するようになったと主張した。また、文法化の

観点から、have/take an N 構文の have/take を本動詞と助動詞の間にある軽動詞と位置づけ、両者の補部選択の違いは、have は意味の漂白化を受けているのに対して、take は意味の転移にとどまっているという違いに関係していると結論付けた。

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Embedded Topicalization in Irish

Hideki Maki and Dónall P. Ó Baoill
Gifu University and Queen's University Belfast,
Professor Emeritus

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Highest Subject Restriction, Irish, Japanese

1. INTRODUCTION

Chung and McCloskey (1987) were the first researchers to examine embedded topicalization in Irish. One of their examples is shown in (1).

- (1) Dúirt sé [duine ar bith a bhí bocht]
said he person any aL was poor
go dtabharfadh an rialtas
that give(Condit) the government
deontas dó.

a-grant to-him

‘He said that the government would give a
grant to anyone who was poor.’

(Chung and McCloskey (1987: 221, 120a))

The example in (1) shows two remarkable properties of Irish embedded topicalization. First, the topic phrase seems to be in CP SPEC. Second, it does not involve movement, but utilizes the resumption strategy. In this paper, we will investigate the properties of Irish topicalization in more detail, and based on the findings, we claim (i) that lowering of COMP to INFL does not take place in Irish, contrary to McCloskey's (1996) claim, (ii) that the Highest Subject Restriction (HSR) does not apply to resumptive pronouns involved in Irish embedded topicalization, (iii) that both [-Q] and [+Q] COMPs may bear a [+TOPIC] feature in Irish, and the head

positions in charge of embedded topicalization are parameterized among languages, (iv) that the difference in the head positions in charge of embedded topicalization lies in the relationship between the COMP and the INFL, and (v) that the ban against adjunction to adjuncts only disallows adjunction to adjuncts by way of internal merge.

The organization of this paper is as follows. Section 2 reviews the properties of (i) embedded topicalization in English and Japanese and (ii) complementizers in Irish as a background to the subsequent sections. Section 3 provides the embedded topicalization examples in Irish, and Section 4 discusses what they suggest for the theory of (Irish) syntax. Section 5 addresses one remaining question. Finally, Section 6 concludes this paper.

2. BACKGROUND

In this section, we first review the properties of embedded topicalization in English and Japanese, and then, the properties of complementizers in Irish.

First, Maki *et al.* (1999) report that in American English and Japanese, embedded topicalization is permissible in complement clauses of bridge verbs, but impossible in complement clauses of factive verbs or adjunct clauses. The examples in (2) are from American English and those in (3) are from Japanese.

- (2) a. John believes that this book, Mary read.
b. * John regrets that this book, Mary read.
c. * Before this book, Mary read, John had
already read it.

- (3) a. John-wa [kono hon-wa/-o
John-Top this book-Top/-Acc
Mary-ga yonda to] shinjiteiru.
Mary-Nom read COMP believe
‘John believes that this book, Mary read.’
b. John-wa [kono hon-*wa/-o
John-Top this book-Top/-Acc
Mary-ga yonda no]-o

Mary-Nom read COMP-Acc
 kookaishiteiru.
 regret
 ‘John regrets that this book, Mary read.’

- c. [Kono hon-**wa/-o* Mary-ga
 this book-Top/Acc Mary-Nom
 yomu maeni], John-wa sudeni
 read before John-Top already
 yondeita.
 had read
 ‘Before this book, Mary read, John had
 already read it.’

They claim that a topic is licensed in the projection of INFL, and INFL is licensed by adjoining to COMP at LF in English and Japanese.

Second, let us review the properties of complementizers in Irish. Irish has three types of complementizers: the [-Q] marker, the direct relative marker, and the indirect relative marker. Let us illustrate the properties of the COMPs by relevant examples. (4) is a declarative sentence, and the embedded clause is headed by the [-Q] COMP *gur* ‘that.’ When the sentence involves wh-interrogative clause formation, as in (5), the embedded COMP must change to the direct relative marker *aL*, and at the same time, another COMP *aL* must be inserted right after the wh-phrase.

- (4) Creideann Seán gur cheannaigh Máire
 believe John that bought Mary
 an carr.
 the car
 ‘John believes that Mary bought the car.’

- (5) Cad é a chreideann tú a
 what aL believe you aL
 cheannaigh Seán *ʔ*?
 bought John
 ‘What do you believe that John bought?’

There is another way to form a wh-interrogative clause. Observe the example in (6).

- (6) Cad é a gcreideann tú gur

what aN believe you that
 cheannaigh Seán *é/*ʔ*?
 bought John it
 ‘What do you believe that John bought?’

In (6), the topmost COMP of the wh-interrogative clause is an indirect relative marker *a*, the COMP of the embedded clause is a [-Q] COMP, and the embedded clause contains a resumptive pronoun (RP) *é* ‘it’ instead of a gap. Note that (6) becomes ungrammatical, if the resumptive pronoun is replaced by a trace, which suggests that *aN* must bind a resumptive pronoun.

McCloskey (2002) provides an account of the distribution of the COMPs by proposing (7).

- (7) a. C whose specifier is filled by Move is realized as *aL*.
 b. C whose specifier is filled by Merge is realized as *aN*.
 c. C whose specifier is not filled is realized as *go/gur*.

McCloskey assumes that the SPEC of *aL* contains a null operator/null pronoun as a result of movement, that in the SPEC of *aN*, there is a base-generated operator, and that in the SPEC of *go/gur*, there is no operator.

In this paper, for expository purposes, we represent the structure of a wh-interrogative clause by putting a wh-phrase, not its operator, in the SPEC of *aL/aN*, as shown in (8).

- (8) [WH₁ aL/aN [_{IP}...*t*_i/RP₁...]]

3. IRISH DATA

Having outlined the background, let us consider Irish embedded topicalization. In the following examples, the topic phrase X in the embedded topicalization construction is intended to have the connotation of ‘as for X.’ First, the examples in (9)–(11) show that embedded topicalization must involve resumption, not movement, and the target is CP SPEC.

- (9) Creideann siad gur tharraing Seán

believe they that drew/took John
 [an pictiúr de Mháire].
 the picture of Mary
 ‘They believe that John drew/took the
 picture of Mary.’

(10) Creideann siad [an pictiúr de
 believe they the picture of
 Mháire]_i gur tharraing Seán é₁/**t*₁.
 Mary that drew/took John it
 ‘They believe that John drew/took the
 picture of Mary.’

(11) *Creideann siad gur [an pictiúr de
 believe they that the picture of
 Mháire]_i tharraing Seán é₁.
 Mary drew/took John it
 ‘They believe that John drew/took the
 picture of Mary.’

Second, the examples in (12)-(13) show that a
 [+Q] COMP may host a topic.

(12) Níl a fhios agam
 NEG_{be} the knowledge with.me
 cé₂ a tharraing *t*₂
 who aL drew/took
 [an pictiúr de Mháire].
 the picture of Mary
 ‘I don’t know who drew/took the picture of
 Mary.’

(13) Níl a fhios agam
 NEG_{be} the knowledge with.me
 [an pictiúr de Mháire]_i cé₂ a
 the picture of Mary who aL
 tharraing *t*₂ é₁.
 drew/took it
 ‘I don’t know who drew/took the picture of
 Mary.’

Third, the example in (14) shows that a
 resumptive pronoun is possible in the subject
 position in the embedded topicalization construction.

(14) Níl a fhios agam
 NEG_{be} the knowledge with.me

[an fear a [tharraing an pictiúr de
 the man aL drew/took the picture of
 Mháire]]_i cad é₂ a cheannaigh sé₁ *t*₂.
 Mary what aL bought he
 ‘I don’t know what the man who
 drew/took the picture of Mary bought.’

Fourth, and finally, the examples in (15)-(16)
 show that embedded topicalization in Irish is
 permissible in non-genuine complement clauses.

(15) Is trua le Seán [an pictiúr de
 COP regret with John the picture of
 Mháire]_i gur tharraing sé é₁.
 Mary that drew/took he it
 ‘John regrets that he drew/took the picture
 of Mary.’

(16) [An carr sin]_i sular cheannaigh
 the car that before.PAST bought
 Máire é₁, cheannaigh Seán é féin carr.
 Mary it bought John himself car
 ‘Before Mary bought that car, John himself
 bought a car.’

4. DISCUSSION

Let us now consider what the above findings suggest
 for the theory of (Irish) syntax. First, McCloskey
 (1996) argues, based on the distribution of
 (sentential) adverbs, that Irish does not have I-to-C
 movement, the surface position of C is I, which is a
 result of C-to-I lowering, and the verb only moves
 up to I, not to C, in Irish. He defends these claims by
 adopting Chomsky’s (1986: 6) Prohibition on
 Adjunction defined in (17).

(17) Adjunction to a phrase s-selected by a
 lexical head is ungrammatical.

Given (17), the example in (18), which is
 grammatical, would be incorrectly ruled out, as the
 adverb *an chead Nollaig eile* ‘next Christmas’ seems
 to be adjoined to the clause s-selected by the lexical
 head *deiridis* ‘they-used-to-say.’

(18) Deiridis an chéad Nollaig

they-used-to-say the first Christmas
 eile go dtiocfadh sé aníos
 other COMP would-come he up
 ‘They used to say that next Christmas he
 would come up.’

(McCloskey (1996: 59, ex. 30))

Therefore, he concludes that the adverb is not adjoined to the embedded clause, but the COMP is lowered to the V-I complex.

Furthermore, McCloskey (1996) presents the data in (19)-(20), which involve adjunction of adverbs to wh-interrogative clauses, to defend his claims.

(19) *Ní bhfuair siad amach ariamh
 NEG found they out ever
 [an bhliain sin] cé a bhí
 that-year who aL was
 ag goid a gcuid móna.
 steal.PROG their turf
 ‘They never found out who was stealing
 their turf that year.’

(McCloskey (1996: 65, ex. 45))

(20) *Cha bhfuair sé amach ariamh
 NEG found he out ever
 [nuair a moladh don
 when aL recommend.IMPERS for:the
 phost sin é] cé a chuir ina choinne.
 job that him who aL put against.him
 ‘He never found out who opposed him
 when he was recommended for that job.’

(McCloskey (1996: 65, ex. 47))

According to him, (19)-(20) are ungrammatical. This is predictable under (17), because due to the existence of the wh-phrase in the wh-interrogative clause in each sentence, the adverb in each case should be adjoined to CP.

However, the fact is that at least (20) out of (19)-(20) is grammatical with the interpretation in which the adverb modifies the embedded clause. Furthermore, we found that the examples in (21)-(22) are grammatical with the interpretation in

which the adverbs modify the embedded clauses.

(21) Níl a fhios agam
 NEG.be the knowledge with.me
 i rith na hoíche cén tormán
 during the night.Gen what.the noise
 a chuala mé.
 aL heard I
 ‘I don’t know what noise I heard during
 the night.’

(22) Níl a fhios agam
 NEG.be the knowledge with.me
 i rith na hoíche cá háit
 during the night.Gen what place
 ar chuala mé tormán
 aN heard I noise
 ‘I don’t know where I heard a noise during
 the night.’

In (21)-(22), the adverbial phrase *i rith na hoíche* ‘during the night’ is placed before the wh-interrogative clauses, yet the sentences are grammatical with the adverb being interpreted as modifying the embedded clauses. This indicates (i) that under the assumption that the [+Q] COMPs *aL* and *aN* are in C and the wh-phrases are in CP SPEC in Irish, the topic is adjoined to CP, and (ii) that no C-to-I lowering has taken place in the examples with embedded topicalization.

Furthermore, as already shown in (13), not only adjuncts, but also arguments can undergo embedded topicalization, targeting CP. Based on the examples in (21)-(22) and (13), we conclude that no C-to-I lowering takes place in Irish, contrary to McCloskey’s (1996) claim.

Second, the example in (14) shows that a resumptive pronoun may appear in the *highest* subject position. McCloskey (1979) originally claims the Highest Subject Restriction in (23).

(23) *The Highest Subject Restriction (HSR)*
 (cited from McCloskey (2002: 201) with
 slight editing)

In languages which have a fully grammaticized resumptive strategy, the only position from which resumptive pronouns are excluded is the highest subject position within the relative clause.

Ó Baoill and Maki (to appear) provide evidence that the HSR is cancelled by an additional adverb, as shown in (24)-(25).

(24) *Cé₁ ar imigh sé₁?

who aN left he
‘Who left?’

(25) Cé₁ ar imigh sé₁ go hádhúil/is léir/
who aN left he fortunately/evidently/
is dócha/inné/trí lá ó shin/in am?
probably/yesterday/three days ago/in time
‘Who left fortunately/evidently/probably/
yesterday/three days ago/on time?’

The examples in (24)-(25) indicate that the HSR is cancelled by an additional adverb, and the example in (14) indicates that it is also cancelled by an additional phrase in the topic position. Thus, the generalization on the HSR in (23) does not always hold, and it is cancelled by an additional phrase, whether it is an adverb or a topic.

Third, all the examples shown above indicate that [-Q] COMPs, whether they are selected by the higher verbs or not (complements or non-complements of the verbs), and [+Q] COMPs may bear a [+TOPIC] feature in Irish. On the other hand, in English, for example, C cannot bear a [+TOPIC] feature, as shown in (26).

(26) *John believes [[this book]_i [that Mary read _i]].

The contrast between Irish and English thus suggests that the relevant head for embedded topicalization is COMP in Irish, and it is INFL in English. Note that the parallel behavior in English and Japanese embedded topicalization suggests that the relevant head for embedded topicalization is also INFL in Japanese. This indicates that the head positions in

charge of embedded topicalization are parameterized among languages. If this is true, no independent head for a topic phrase need be assumed unless it is independently needed in the language.

Fourth, the difference in the head positions in charge of embedded topicalization lies in the relationship between the COMP and the INFL in the given languages. Irish has overt COMP-Predicate (verb+INFL) agreement, as shown in (27).

(27) a. Síleann Seán **go** **gceannófa**
think John COMP buy.COND.2.sg.

carr.
car

‘John thinks that you would buy a car.’

b. Síleann Seán **gur** **cheannaigh**
think John COMP.PAST bought
tú carr.

you car

‘John thinks that you bought a car.’

In (27a), the embedded predicate (verb+INFL) is of the conditional form, and the COMP is represented as *go*, while in (27b), the embedded predicate is of the past tense form, and the COMP is represented as *gur*. This indicates that there is a visible agreement relation between COMP and the predicate (verb+INFL) in Irish. Then, once the head in charge of embedded topicalization is placed between COMP and INFL, this morphological agreement relationship cannot hold, so that no embedded topicalization is allowed. On the other hand, if COMP can do the work for embedded topicalization, the agreement is successfully established. In English and Japanese, being non-verb initial languages, however, there is no such visible agreement between COMP and INFL which would be blocked when INFL is in charge of embedded topicalization.

5. ONE REMAINING QUESTION

Before closing, we will address one remaining question arising from a comparative study of

embedded topicalization in Irish, English, and Japanese. Maki *et al.* (1999) claim, based on the parallel behavior of embedded topicalization in English and Japanese, that the phenomenon in these two languages receives the same account, and propose that INFL licenses an embedded topic in its SPEC, and INFL itself needs to be licensed by COMP by adjoining to it at LF. Therefore, the contrast between (2a) and (2c) in English, reproduced as (28a) and (28b), and the contrast between (3a) and (3c) in Japanese, reproduced as (29a) and (29b), are explained in the following way.

(28) a. John believes that this book, Mary read.

b. * Before this book, Mary read, John had already read it.

(= (2a) and (2c))

(29) a. John-wa [kono hon-wa/o
John-Top this book-Top/-Acc
Mary-ga yonda to] shinjiteiru.
Mary-Nom read COMP believe
'John believes that this book, Mary read.'

b. [Kono hon-*wa/o Mary-ga
this book-Top/Acc Mary-Nom
yomu maeni], John-wa sudeni
read before John-Top already
yondeita.
had read
'Before this book, Mary read, John had already read it.'

(= (3a) and (3c))

First, in all of these examples, the topics are licensed in IP SPEC, and then, INFL moves to COMP at LF. However, the *b*-examples in (28)-(29) involve adjunction of INFL to the head of adjunct clauses, which is prohibited by Takahashi's (1994) ban against adjunction to non-L-marked phrases, namely, adjuncts and derived subjects.

In Irish, embedded topicalization is possible in complement clauses and adjunct clauses, as shown

in (10) and (16), reproduced as (30a) and (30b), respectively.

(30) a. Creideann siad [an pictiúr de
believe they the picture of
Mháire]_i gur tharraing Seán é_i/**t*_i.
Mary that drew/took John it
'They believe that John drew/took the
picture of Mary.'

b. [An carr sin]_i sular cheannaigh
the car that before.PAST bought
Máire é_i, cheannaigh Seán é féin carr.
Mary it bought John himself car
'Before Mary bought that car, John
himself bought a car.'

(= (10) and (16))

In (30a) and (30b), the topic is in CP SPEC in each case, and these examples are grammatical. The question that immediately arises is why (30b) is perfectly grammatical, in spite of the fact that the topic is in the SPEC of the clause which is an adjunct, which indicates that the merge operation necessarily involves adjunction to an adjunct.

However, there is a clear difference between embedded topicalization in Irish and embedded topicalization in English, for example. Lasnik and Saito (1992) point out that English embedded topicalization does not allow the resumptive pronoun strategy, as shown in the contrast between (31a) and (31b).

(31) a. I believe that this book, you should read
t.

(Lasnik and Saito (1992: 76, ex. 37a))

b. * I believe that this book, you should read
it.

(Lasnik and Saito (1992: 77, ex. 42))

On the other hand, embedded topicalization in Irish must leave a resumptive pronoun. Therefore, a topic in an embedded clause in Irish is merged/adjoined to C'/CP by external merge, while a topic in an embedded clause in English is merged/adjoined to IP

by internal merge. Furthermore, licensing of INFL in the embedded topicalization construction in English involves movement/adjunction to COMP, again, by internal merge. On the other hand, in embedded topicalization in Irish, COMP itself does not move further in order to be licensed, as it can license the topic phrase in its SPEC if it has to.

Thus, the above facts seem to suggest that the ban against adjunction to adjuncts distinguishes internal merge from external merge, and it only disallows adjunction to adjuncts by way of internal merge. If this is correct, then it follows that embedded topicalization in Irish is allowed within non-L-marked phrases, and the contrast between Irish on the one hand, and English and Japanese on the other, is correctly captured. Therefore, the question we addressed in this section turned out to suggest that the ban against adjunction to adjuncts only disallows adjunction to adjuncts by way of internal merge.

6. CONCLUSION

In this paper, we investigated the properties of Irish embedded topicalization in detail, and based on the findings, we argued (i) that lowering of COMP to INFL does not take place in Irish, contrary to McCloskey's (1996) claim, (ii) that the Highest Subject Restriction (HSR) does not apply to resumptive pronouns involved in Irish embedded topicalization, (iii) that both [-Q] and [+Q] COMPs may bear a [+TOPIC] feature in Irish, and the head positions in charge of embedded topicalization are parameterized among languages, (iv) that the difference in the head positions in charge of embedded topicalization lies in the relationship between the COMP and the INFL, and (v) that the ban against adjunction to adjuncts only disallows adjunction to adjuncts by way of internal merge.

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英語における前置詞句主語構文と
Aboutnessに基づく主語の定式化*
(The Prepositional Subject Construction in
English and the Formulation of Subjects
in terms of Aboutness)

三上 傑 (Suguru MIKAMI)
筑波大学非常勤講師 (University of Tsukuba)

キーワード: 前置詞句主語、Aboutness、指示性、
有標性、属性叙述

1. はじめに

英語において、主語は一般的に名詞句であるとされる。以下の(1)は Oxford の英英辞典における主語の定義であるが、このことはその定義からも読み取ることができる。

- (1) subject: a noun, noun phrase or pronoun representing the person or thing that performs the action of the verb, about which sth is stated or, in a passive sentence, that is affected by the action of the verb.
(Oxford Advanced Learner's Dictionary of Current English)

しかしながら、この一般的な認識に反し、一部の前置詞句は、以下の(2)で示されているように、主語として生起することが可能である¹。

- (2) a. Under the table is a comfortable place. (有村 (1987: 22))
b. During the vacation may be convenient. (Quirk, et al. (1985: 658))
c. ? By special delivery is good for sending letters. (有村 (1987: 22))
d. * Because of illness is convenient for not attending the meeting.

(有村 (1987: 22))

- (3) In the corner was a lamp.

一見したところ、これらの文は(3)に示した場所句倒置構文とその形式が類似しているため、単

に前置詞句が文頭へ前置しているだけのようにも思われる。しかし、これらの前置詞句は、場所句倒置構文における文頭の前置詞句と異なり、「主語-助動詞倒置」や「定形動詞との数の一致」等に関して主語性を示すとされる²。

- (4) a. Is [under the bed] a good place to hide? (Bresnan (1994: 110))
b. * Was [under the table] a cat? (松原 (2003: 144))
(5) a. [Under the bed] and [in the fireplace] {*is not/are not} the best (combination of) places to leave your toys.
b. [Down through the hills] and [into the forest] {flows/*flow} the little brook. (Levine (1989: 1015))

この事実を説明するために、Bresnan (1994)をはじめとする多くの先行研究では、これらの前置詞句が実際には名詞句であると主張されてきた³。しかしながら、このNP分析では、前置詞句主語構文の有標性はおろか、なぜ一部の前置詞句のみが主語として機能することができるのかという前置詞句主語の意味特性に対しても適切な説明を与えることができない。

そこで本稿では、これらの問題を解決するために、Rizzi (2006)により提案された Aboutnessに基づく主語の定式化を導入する。

- (6) a. Subject: +aboutness, -D-linking
b. Topic: +aboutness, +D-linking (Rizzi (2006: 122))

この定式化によれば、主語として機能する要素は Aboutness の特性を有していなければならないが、前置詞句主語構文の示す有標性と意味特性はこの主語の定式化の下で適切に捉えられることを示す。そして具体的に、前置詞句主語構文は、前置詞句が有する指示性に基づき認可される有標構文であり、前置詞句主語の意味特性もまた指示性の観点から場所と時間を表わすものに限定されると主張する。

2. 事実観察: 前置詞句主語の意味特性

先に述べたように、すべての前置詞句が主語として機能することができるわけではない。この前置詞句主語が示す意味特性に関して、松原 (2003)は、有村 (1987)の観察に基づき、前置詞

句主語が時間、場所、手段のいずれかの意味特性を持たなければならないとしている⁴。

- (7) a. Under the table is a comfortable place.
b. During the vacation may be convenient.
c. ? By special delivery is good for sending letters.
d. * Because of illness is convenient for not attending the meeting.

(= (2))

松原の判断に従うと、(7a,b)において、場所と時間を表わす前置詞句は全く問題なく主語として機能することができる一方で、(7c)における手段を表わす前置詞句に関しても、(7d)における理由を表わすものとは異なり、話者によって判断の揺れが見られるものの、基本的に容認可能であるということになる。

しかしながら、筆者のインフォーマントによれば、場所や時間を表わす前置詞句と手段を表わす前置詞句の間には容認性に関して明らかな差があり、(7c)の例を含めて、手段を表わす前置詞句が主語として生起している文はすべて不自然であるという。

- (8) a. ? In capital letters will have the best effect.
b. ? By special delivery is good for sending letters.

そして、(8)の文で意図されている意味を表わすためには、(9)で示されているように、前置詞句主語の部分適切な名詞要素に置き換えた上で表わさなければならないとしている。

- (9) a. Writing in capital letters will have the best effect.
b. Special delivery is good for sending letters.

(9a)では writing という動名詞が付け加えられることで、また、(9b)では手段を表わす前置詞 by が省略されることで、それぞれ名詞句主語が形成されている。このように、手段を表わす前置詞句は何らかの方法で名詞句が形成されない限り、主語として解釈されることができない。すなわち、これらの前置詞句はもはや前置詞句主語として扱うことができないのである。

以上の観察から、本稿では前置詞句主語が示

す意味特性に関して以下の一般化を提示する。

- (10) 場所と時間を表わす前置詞句のみが主語として機能することができる。

この一般化は Bresnan (1994)においてすでに指摘されているものと同一であるが、先に述べたように、彼女の分析ではなぜそれらの前置詞句のみが主語として機能することができるのかという疑問に対して説明することができない⁵。

次節では、この前置詞句主語が示す意味特性に関して本稿の分析を提示する。

3. 提案: 前置詞句に内在する指示性に基づく構文の認可

本節ではまず、本稿の具体的な分析を提示するにあたり、Rizzi (2006)により提案された Aboutness に基づく主語とトピックの定式化を導入する。

- (11) a. Subject: +aboutness, -D-linking
b. Topic: +aboutness, +D-linking
(= (6))

この定式化に従う場合、主語とトピックという叙述形成に関与する概念は、D-linking の特性を有するかどうかに関して違いが見られるものの、両概念共に Aboutness の特性を有していなければならない。そして、この Aboutness という特性に関して、Sornicola (2006)は指示性 (Referentiality)の観点から以下の説明を与えている⁶。

- (12) The function of “aboutness” is in fact more typically conveyed by referential elements than by predicative elements. ... [If] an element is an argument, it must be referential.

(Sornicola (2006: 376))

この説明によれば、Aboutness の機能は指示的な要素によって果たされることになる。そのため、たとえある要素の範疇が名詞句でなくても、その要素が内在的に指示性を有する場合には、主語として機能することが原理的に可能になる。

以上のことを考慮した上で、本稿では前置詞句主語構文の示す有標性と意味特性が(11)で提示した主語の定式化の下で適切に捉えらるると提案する。そして具体的には、前置詞句主語構文が、前置詞句の有する指示性に基づき認可

される有標構文であり、前置詞句主語の意味特性もまた指示性の観点から、内在的に指示性を有する場所と時間を表わすものに限定されると主張する。この分析では、主語を決定する際に指示性という概念が重要な役割を果たすことになるため、前置詞句主語は、Bresnan (1994) 等の NP 分析でなされていたのと異なり、特別な仮定を用いた上で名詞句を形成させる必要がない。その結果、前置詞句主語は、その範疇が前置詞句のままでも認可されることになるため、その構文が持つ有標性が捉えられることになる。また、前置詞句主語が示す意味特性に関しても、とりわけ新たな制約を設けることなく、前置詞句に内在する指示性の観点から問題なく説明することが可能になる。

以上、本稿では、前置詞句に内在する指示性に基づく分析を提示したが、本分析が主張する場所と時間を表わす前置詞句の指示性は、いくつかの言語現象を通して経験的に立証されることになる。その一つ目の現象として挙げられるのが、多重 Wh 疑問文である。

- (13) a. I wonder what you fixed *t* {*why/*how/when/where}.
- b. I wonder {*why/*how/when/where} you fixed what *t*.

(大庭 (1998: 155))

(13)において、時間を尋ねる *when* と場所を尋ねる *where* は多重 Wh 疑問文に生起できるのに対し、理由を尋ねる *why* と手段を尋ねる *how* は生起することができない。このことに関して、大庭 (1998)は、多重 Wh 疑問文がその答えとしてペアリストを期待されている文であるとした上で、その目録を作るためには、疑問詞が指示的でなければならないとしている (cf. Stroik (1995))。したがって、このことを考慮すると、(13)の事実は、場所と時間を表わす要素が指示的であると示唆することになる。

次に、二つ目の証拠としては、左方転移文 (Left Dislocation)が挙げられる。

- (14) a. That place, I saw there.
- b. That day, I was sick, then.
- c. * That way, I spoke {so/thus}.
- d. * That reason, I left therefore.

(Endo (2007: 51))

左方転移文とは、文中のある要素を文頭へ移動させ、その元位置には代名詞が置かれる文のことであるが、Endo (2007)によれば、(14)で示されているように、場所と時間を表わす要素のみがその文に生起することできるとされる。そして、この左方転移文の認可に関しても、Lambrecht (2001)は指示性の観点から以下の説明を与えている。

- (15) Left dislocation is defined as “a sentence structure in which a referential constituent which could function as an argument or adjunct within a predicate-argument structure occurs instead outside the boundaries of the clause containing the predicate (p. 1050).”

この説明によれば、左方転移文において、文頭の要素は指示的なものでなければならないが、このことを考慮すると、(14)の事実は、場所と時間を表わす要素の指示性を支持することになる。

さらに、三つ目の現象としては、話題化 (Topicalization)が挙げられる。

- (16) a. Yesterday, a man with blond hair came. (高見・久野 (2002: 406))
- b. In Boston, John drove a car with a sunroof. (高見・久野 (2002: 408))
- c. ?* By taxi, a man with blond hair came. (高見・久野 (2002: 406))

(16a,b)と(16c)の対比から明らかなように、*yesterday* や *in Boston* という時間と場所を表わす要素は全く問題なく話題化を適用することができるのに対して、手段を表わす前置詞句 *by taxi* はそれを適用できない。(11)で示したように、Rizzi (2006)により提案された主語とトピックの定式化によれば、トピックとして機能する要素もまた、主語と同様に Aboutness の特性を有していなければならない。したがって、(16a,b)の事実は場所と時間を表わす要素が指示性を有している証拠に他ならないことになる⁷。

以上、本稿では、前置詞句主語構文が前置詞句の有する指示性に基づき認可される有標構文であることから、その意味特性もまた、内在的に指示性を有する場所と時間に限定されると主張してきたが、本分析はまた、内在的には指示性を有していない手段と理由を表わす前

置詞句に関しても、その指示性が何らかの形で保証された場合、主語として機能することができるのではないかと予測することになる。そして実際に、この予測は経験的に立証される。

(17) ? In capital letters will have the best effect.

(= (8a))

(18) Should I do it in lower case or in capital letters?

I think in capital letters will have the best effect. (Nishihara (2005: 240-241))

(17)で再掲されているように、手段を表わす前置詞句主語は通常、先行文脈がない状態ではその指示性が保証されないために、主語として機能することができない。しかしながら、(18)で示されるように、前置詞句主語の *in capital letters* が前もって文脈に導入されると、その文は全く問題なく容認されるようになる。これは手段を表わす前置詞句が先行文脈に前もって生起することで、そのトピック性が確立された結果、前置詞句の持つ指示性が高められたためであると考えられる。

さらに、文脈による指示性の保証に加え、語彙修飾により指示性が保証される場合もある。

(19) * Because of illness is convenient for not attending the meeting. (= (7d))

(20) [J]ust because of Pete Wilson's dumb mistake doesn't mean you're going to have lights out in Manhattan. (Kanetani (2011: 77))

(19)で再掲されているように、理由を表わす前置詞句もまた、手段を表わす前置詞句と同様に、通常は指示性を有していないため、主語として機能することができない。しかしながら、同じ理由を表わす前置詞句であっても、(20)で示されるように、*just* によって前置詞句が修飾されると、前置詞句主語として認可されることが可能になる場合がある。Jaworska (1986)によれば、*just* によって修飾される場合、その語句は指示性が増すとされる。したがって、(20)では、*just* の修飾によりその前置詞句の指示性が高まったために、主語として機能することが可能になったと考えられる⁸。

4. 前置詞句主語構文の特殊化された機能

ここまで本稿では、Rizzi (2006)により提案さ

れた *Aboutness* に基づく主語の定式化したがい、前置詞句主語構文が前置詞句の指示性に基づき認可される有標構文であるということを主張し、その妥当性を立証してきた。本節では、本分析がもたらす帰結に関して議論する。

このような有標形式を持つ構文に関して、影山 (2009)は、その構文の叙述機能との間で一定の相関関係があるとし、以下の一般化を提示している。

(21) 通常の構造制限が当てはまらないにもかかわらず適格であると判断される事例には属性叙述（時間の流れによって展開されない、モノの固定的・恒常的な性質を述べること）が関わっている。

この一般化によれば、一般的な構造制約に違反している事例であっても、その機能が主語の属性を叙述するというところに特殊化される場合には容認可能であるということになる (cf. Konno (2005))。そして影山は、その一つの事例として、英語の異常受身文を挙げる (cf. Kageyama and Ura (2002))。英語の受動化規則とは一般的に、(22a,b)で示されているように、他動詞が選択している直接目的語や語彙的に指定された「動詞+前置詞」の連鎖が選択している直接目的語に適用されるものであり、(22c)で示されているように、付加詞内の名詞句には適用されないとされる。

- (22) a. Your hamburger was eaten by the dog.
b. The boy was looked after by his grandmother.
c. * This spoon was eaten your ice cream with by the boy.

(影山 (2009: 10))

しかしながら、この一般的な構造制約に違反しているにもかかわらず、以下の対比が示すように、特定の時間に起こった出来事そのものの展開を描くのではなく、出来事を踏まえた上で主語の属性を表現する場合には容認されるようになる。

- (23) a. * This spoon was being eaten with at that moment.
b. This spoon has been eaten with.

(影山 (2009: 10))

(23b)では具体的に、現在完了形を使用すること

によって、「過去の経験」を踏まえた現在の属性を表わす文として解釈できるため、容認可能となっている。この影山の議論を考慮すると、本分析の帰結として、英語において有標形式をとる前置詞句主語構文もまた、その機能が属性叙述に特殊化されるということになる。

事実、岩崎 (2008)は以下に示した前置詞句主語構文の述部制限に基づき、前置詞句主語構文が叙述文として機能しなければならないと主張している⁹。

- (24) a. Under the chair is a nice place for the cat to sleep. (Stowell (1981: 268))
 b. In March suits me. (松原 (2003: 135))
 c. * Under the chair pleased the cat. (Stowell (1981: 268))
- (25) a. Under the chair attracted the cat's attention. (Jaworska (1986: 357))
 b. * Under the chair pleased the cat. (Stowell (1981: 268))

叙述文とは一般的に、「 α be β 」という形式を有した be 動詞文で、 β が α の性質や状態を特徴付けるものであるが (cf. 原口・中村 (1992: 363))、これにより前置詞句主語構文に be 動詞や suit 等のいわゆる「連結詞」が多く生起することや、特定の出来事を表わす述語は生起できないということが説明可能になるとしている。そして興味深いことに、先に見た影山の議論と同様に、特定の時間に起こった出来事を踏まえて主語の属性を表現する場合に容認可能になるという事例が当該構文でも観察される。

- (26) a. * After dinner made me sleepy.
 b. After dinner has always made me sleepy. (岩崎 (2008: 94))

(26b)では、現在完了形が使用され、習慣の解釈が引き起こされることで、主語の性質に焦点があてられた属性叙述文として機能することができるために容認可能となっている。

このように、本分析では、前置詞句主語構文の持つ有標形式により、その機能が属性叙述に特殊化された結果として、述部制限が生じると説明できるため、とりわけ述部に関する制約を個別に設ける必要がないということになる。

5. まとめ

本稿では、Rizzi (2006)により提案された Aboutness に基づく主語の定式化の下、前置詞句主語構文が示す有標性と意味特性に適切な説明を与えた。具体的には、前置詞句主語構文は、前置詞句が有する指示性に基づき認可される有標構文であり、その意味特性もまた、前置詞句が有する指示性の観点から場所と時間を表わすものに限定されると主張した。また、当該構文が有する属性叙述という特殊化された機能に関しても、本分析の帰結として自然に得られるものであることを示した。

注

* 本稿は日本英語学会第 30 回大会で口頭発表した原稿に加筆・修正を加えたものである。本稿を執筆するにあたり、多くの方々から貴重なご助言や有益なコメントをいただいた。この場を借りて感謝を申し上げたい。尚、本稿における不備はすべて筆者の責任によるものである。

¹ 前置詞句は主語以外にも、(i)で示されているように、動詞や前置詞の目的語として機能する場合もある。

- (i) a. The campaigners planned [until Christmas] in detail.
 b. The weather has been fine except [in the north]. (Jaworska (1986: 356))

これらの現象を統一的に説明できる可能性も見込まれるが、本稿では主語として機能する前置詞句にのみ焦点を絞り議論することにする。

² 前置詞句主語が示す主語性は、その生起分布からも支持されることになる。

- (i) a. They considered [after the holidays] to be too late for a family gathering. (Jaworska (1986: 356))
 b. * I expect [on this wall] to be hung a picture of Leonard Pabbs. (Bresnan (1994: 108))

(ia)は ECM 構文の例であるが、この文において前置詞句は定形動詞の直後に生起している。この位置はいわゆる「格付与

位置」であり、通常主語により占められることになる。そのため、(ib)で示されているように、場所句倒置構文における前置詞句はこの位置に生起することができない。なお、前置詞句主語はこの他にも受動文や小節構文等の主語位置に生起することが可能であるが、その詳細に関しては、松原 (2003)等を参照のこと。

3 Bresnan (1994)は具体的に、以下に示した主要部削除分析を提案している。

- (i) a. [NP (A PLACE) [PP under the bed]]
 b. [NP (A TIME) [PP between six and seven]]

(Bresnan (1994: 110))

この分析によれば、前置詞句主語は実際には前置詞句をその補部として選択している名詞句であり、その主要部名詞は省略されたものとして文脈上で解釈されることになる。

4 松原 (2003)は記述的一般化を提示しているのみであり、なぜそのような制約が存在するのかということに関しては説明を与えていない。

5 認知言語学において、「空間」から「時間」へのドメインの拡張は様々な言語現象で確認される (cf. 瀬戸 (1995))。したがって、(10)の一般化は、認知言語学的観点から見た場合にも、有意義なものであると考えられる。

6 指示性とは、言語表現がそれ自体の内在的な特性として指示対象を持っていることである (岩崎 (2009: 86))。

7 本稿では、場所と時間が有する指示性の証拠として、話題化の適用に関する事実を挙げたが、これはあくまでも前置詞句主語の指示性を支持する議論であり、前置詞句主語がトピック要素であると規定することを支持するものではない。

そして実際に、前置詞句主語がトピック要素として解釈されないという事実がいくつかの言語現象により支持されることになる。まず、前置詞句主語が対比の文脈で用いられる場合、(ia)で示されているように、その前置詞句に文強勢を置く

ことができる。

- (i) a. IN Poland was safe but OUTSIDE Poland was most dangerous.
 (Jaworska (1986: 359))
 b. * ON the bed was a dog but UNDER the bed was a cat.

(松原 (2003: 145))

文強勢とは一般に、文の焦点として機能する要素に置かれるものであるため、(ia)の容認性は前置詞句主語がトピック要素として機能しないということを示唆している。事実、場所句倒置構文における文頭の前置詞句は、トピック要素として一般に解釈されるが (cf. Bresnan (1994))、たとえ対比的な文脈で用いられる場合でも、(ib)で示されているように、文強勢を置くことが許されない。

また、Quirk, et al. (1985)が指摘しているように、前置詞句主語構文は Wh 疑問文の答えとして機能することもできる。

- (ii) A: When are you going to have the next meeting?
 B: {On Tuesday/In March/During the vacation} will be fine.

(Quirk, et al. (1985: 658))

- (iii) A: Where did Robin Hood run?
 B: * Into the forest ran Robin Hood.
 (Rochemont and Culicover (1990: 26))

(iiA)は、疑問詞 When が用いられていることから明らかなように、「時」を尋ねる疑問文であり、この文において「時」は焦点として機能しているが、その疑問文の答えとして前置詞句主語構文が使用可能であるという事実は、その時を表わす前置詞句主語が文の焦点として機能できるということを意味する。なお、この振舞いもまた、一般的にトピック要素では観察できないとされるため、前置詞句がトピック要素として解釈される場所句倒置構文は、(iii)で示されているように、「時」を尋ねる疑問文の答えとして機能することができない。

8 廣瀬幸生先生 (私信)によると、ある事柄を否定するためには、それ自体がある

種の話題として確立していなければならないという。このことを考慮すると、(20)における容認性の向上は、justによる語彙修飾に加えて、その文自体が否定文であるということに起因している可能性も考えられる。

- ⁹ 松原 (2003)は、前置詞句主語構文に関する述部制約として、「情報的に軽い動詞 (informationally light V)」でなければならないという一般化を提示している。

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Tough 構文の主節構造について
(On the Structure of the Matrix Clause
in the *Tough* Construction)

中川直志 (NAKAGAWA Naoshi)
中京大学 (Chukyo University)

キーワード: tough 構文, 削除, DegP, NegP

1. はじめに

本稿では、(1)のような tough 構文における主節形容詞の構造的位罫について論じる。

(1) John is easy for Bill_i [PRO_i to please].

仮に tough 類形容詞が A(djective)P の主要部にあって、その後一切移動しないと考えると、(1)における for-DP の統語構造上の位罫を保証することができない。そこで本稿においては、A 主要部に併合された tough 類形容詞が TP と AP の間に介在する範疇の主要部に移動すると主張する。

さらに、tough 類形容詞が、その補部の削除を容認できる点で否定辞と機能を共有していることから、従来の NegP を DegP に読み替え、tough 類形容詞が Deg またはそれに最も近接する主要部まで移動することによって、T と関係づけられなければならないと主張する。主な主張を(2)に挙げる。

(2) a. tough 構文においては、AP と TP の間に、作用域を異にする 2 つの DegP がある。

b. VP 削除を認可する T は義務的に [+Aux] であり、選択的に u[+Deg] を持

つ。

- c. T が u[+Deg] を持たない時は、be 動詞の補部が削除可能。
- d. T が u[+Deg] を持つ時は、T 要素に最近接する [+Deg] 要素を残し、その補部が削除可能。

本稿の構成は次の通りである。2 節においては、tough 構文に現れる for-DP が主節の要素であることを示した上で、それを AP の右側に付加しても、左側に付加しても、正しい線形語順が派生できないことを示し、この問題が TP と AP の間に新たな機能範疇を設けることで解決できると主張する。3 節においては、tough 構文における主節形容詞がその補部の削除において否定辞と同様に振舞うことを示し、そのような振る舞いが、Neg を Deg に読み替え、否定辞がない限り tough 類形容詞が Deg まで移動すると分析することによって、統一的に説明できることを示す。4 節においては、2 節においてその存在を主張した範疇が NegP を読み替えた DegP とは別の DegP であることを示し、そのような分析によって、否定辞に後続する tough 類形容詞や too などの程度を表す副詞の補部が削除できないことに対して、統一的な説明が可能となることを示す。5 節は結論である。

2. for-DP の位罫

(3)、(4)からも明らかのように、tough 構文における for-DP は主節の要素である。

(3) a. *John is easy for Bill for Mary to please.

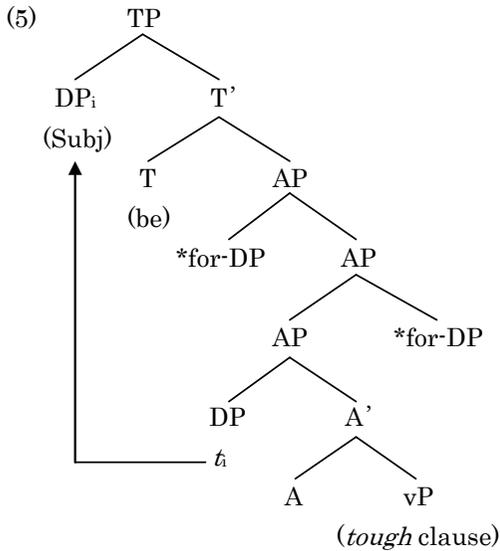
b. John is easy for Bill to please.

(4) a. *This building is tough for there to be a riot in.

b. *July is unusual for it to snow (in).

(Fleisher (2008: 163))

(3a)においては、for-DP が連続しているので、for-Mary は tough 節の統語的主語と考える他ないが、tough 節 (tough 構文における不定詞節) においては主語が顕在化できないため、(3a)は非文となる。従って、(3b)の for-Bill は主節にあると考えられる。しかし、(5)に示すように、そのような for-DP を tough 類形容詞を主要部とする AP の右に付加しても左に付加しても、主節形容詞と tough 節の間に for-DP が現れることはできない。(for-DP は主節を作用域とするので、for-DP を tough 節(vP)に付加することはできない点に注意。)

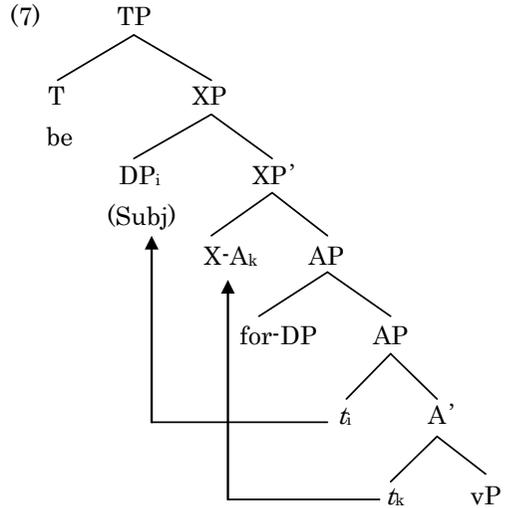


(6a)は for-DP を AP の左に付加した時の語順、(6b)は右に付加した時の語順であり、いずれも非文となる。

- (6) a. *John is for Bill easy to please.
 b. *John is easy to please for Bill.

この問題は、A 主要部に基底生成された tough 類形容詞が AP よりさらに上位の主要部へ移動すると考えれば解消される。(TP の下位に vP 以外の機能範疇を仮定する分析については Belletti(2004)等を参照。)(7)に示

した移動の結果 AP の左に付加した for-DP は線形上、主節形容詞と tough 節の間に現れることになる。



XP の内容については、それを DegP とする分析を後で提示するが、その指定辞位置は A 位置であると考えられる。その根拠としては、(8)や(9)が考えられる。(8)においては、for-whom が John を越えて移動しており、tough 構文の主語はそれを越える wh 移動を妨げないことを示している。

- (8) For whom John is easy to please?

また、(9)は tough 構文の主語が焦点化されていないことを示している。tough 構文の主語は、定名詞句か、generic な意味を持つ不定名詞句でなければならない。

- (9) {*A man/*Someone/John} would be easy to kill with a gun like that.
 (Lasnik and Fiengo (1974: 544))

本節においては、tough 構文の主節において、TP と AP の間に tough 類形容詞の着地点となる機能範疇が存在すると考えられる

ことを概観した。

3. tough 類形容詞の位置

本節においては、**tough** 構文における削除現象に注目しながら、**tough** 類形容詞の構造上の位置について考察する。**tough** 構文における削除の現れ方は(10)に示すおよそ2通りである。

(10) a. John is easy to please, and Bill is.

b. John is easy to please, but Bill is hard.

(10a)においては **be** 動詞の補部 **AP** が削除され、(10b)においては **tough** 類形容詞の補部にある **tough** 節(**vP**)が削除されている。本稿においては **AP** の削除にも **VP** 削除と同様の原理が働いていると仮定する。**VP/AP** 削除を認可するのは「指定部 - 主要部の一致を含む機能主要部」であり、具体的には「時制を担っている機能主要部」がそれにあたると考えるのが一般的である。

(11) Functional heads can license ellipsis of their complement only when they undergo Spec-head agreement.

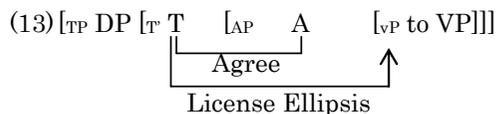
(Bošković (1997: 12))

(12) The feature [+Tense] is a strong agreement feature in English.

(Lobeck (1999:111))

しかし、(11)と(12)に従って考えると、(10a)においては **is** が時制を担っており、**vP** 削除が可能であることが予測できるが、(10b)においては、形容詞 **hard** 自体が時制を担っているとは考えられないので、(10b)が文法的であることを予測できない。

これについて中川(2011: 26)では、**tough** 類形容詞と一致関係に入った **T** が **tough** 節の削除を認可すると分析した。



(中川(2011: 26))

しかしその段階では、なぜ **A** が **T** と関連付けられるのか、またどのように関連付けられるのかという点が先送りであった。本稿では、**tough** 類形容詞が程度を表すという点で否定辞と同様の機能を有する場合があることに注目する。(14)を例に考察する。

(14) a. John is impossible [Op_i to please t_i]

b. *John is not possible [Op_i to please t_i]

(Kaneko (1994:41))

(14a)における **im(possible)**は、(14b)における **not** とほぼ同様の機能を果たしている。(14a,b)の違いについては4節で言及する。)ここで注目したいのが、否定辞が時制要素に隣接、あるいは付着して、**VP** 削除を認可することができる、という事実である。

(15) John is easy to please, but Bill isn't (is not).

また、**VP** 削除を認可できるのは動詞ではなく、助動詞である。(16)は **wants not** を **does not** に代えれば容認可能となる。

(16) *John wants to leave, but Mary wants not *(to) [e]. (Lobeck (1995:189))

したがって、**VP** 削除を認可できる **T** は義務的に[+Aux]でなければならず、その **T** が選択的に否定辞を伴うことができると考えることができる。これを本稿では、否定辞や **tough** 類形容詞をまとめて **Deg** 要素とし、それを選択する **T** が選択的に **u[+Deg]**を持つと定式化する。(2b)に提示した通りである。

(2) b. VP 削除を認可する T は義務的に [+Aux] であり、選択的に u[+Deg] を持つ。

さらに、削除を容認する Deg 要素は時制と結びついていなければならない。(17)においては Deg 要素 not と is が分離されているため、容認性が低下している。

(17) a. John is easy to please, isn't it?
 b. *John is easy to please, is it not?

したがって、Deg 要素の補部の削除が容認されるのは、Spell-Out 時点で、Deg 要素が u[+Deg] を持つ T 要素に最も近い位置にある場合と考えることができる。これを定式化したのが(2d)である。

(2) d. T が u[+Deg] を持つ時は、T 要素に最近接する[+Deg]要素を残し、その補部が削除可能。

ただし、(18)に示したように、接続節（仮定節）にあつては助動詞を伴うことなく Deg 要素の補部が削除可能である。これについては、「接続節に限っては空の T が義務的に u[+Deg] を持つ。」としておく。

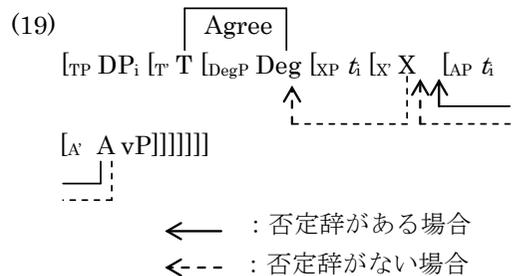
(18) a. John would prefer that Fred leave, and Bill would prefer that he *(leave) as well.
 b. John would prefer that Fred leave, and Bill would prefer that he not [e]. (Lobeck (1995:188))

ここまでの分析を一旦、NegP 分析に従って考えてみると、否定主要部(Neg)が空所である限りにおいて、tough 類形容詞が Neg まで移動し、削除を認可すると考えられる。すると、(10b)に見た、tough 類形容詞が補

部の削除を容認するという事実を、否定辞の補部の削除 ((15)) と同様に説明できることになる。

A が T に関係づけられること自体は、日本語で形容詞に時制接辞が付着することを踏まえれば、不自然ではない。tough 類形容詞は否定辞と同じくその補部の命題内容の実現可能性に対する程度を表し、そのために、T と関係づけられると考えることができる。

ただし、tough 類形容詞は否定の意味ばかりを持つ訳ではない。そこで、NegP を Deg(ree)P に読み替え、肯定文、否定文に関係なく投射されたい。



Deg に現れた要素は、T へ移動するか T と隣接（一致）することで、動詞句削除を認可できるようになる。否定辞は Deg に基底生成されるのに対し、tough 類形容詞は A から X へ移動し、否定辞がなければ Deg まで移動する。Deg に否定辞がある場合 A は X まで移動しそこに留まると仮定するが、これには 1 つ都合のよい事実が挙げられる。否定辞に続く tough 類形容詞の補部が削除される場合、判断には個人差があるようだが、容認性が低下する。(20a)においては not 以降が削除可能であるにもかかわらず、easy が残されたために文法性が低下している。

(20) a. ?John is easy to please, but Bill isn't easy.
 b. John is easy to please, but bill isn't easy to please.

- c. John is easy to please, and Bill is hard.
- d. John is easy to please, and Bill is.
- e. John is easy to please, but Bill is not (isn't).

(20b)が容認可能であることから、(20a)の容認可能性の低下を、easy の重複に還元するだけでは十分な説明とは言えない。また、tough 類形容詞自体に削除を認可する能力があるとする Lobeck(1995)の分析でも説明が難しい。本稿の分析に従って考えると、否定辞が T に付着した段階でその補部が削除可能となるためであると説明できる。

4. 2つの DegP

最後に、前節まで便宜的に XP と仮定した範疇について考えてみたい。一つの可能性は TopP だが、仮にその位置が TopP であるとすると、その指定辞位置に話題要素が現れることが予測される。しかし、否定辞の後に話題要素が現れるということは通常は考えられない。また、標準的な分離 CP 仮説では ToP へ動詞（本稿の場合形容詞）が移動することはないので、XP は ToPP ではないと考えられる。

一方、DegP が AP を直接補部にとるという考え方も問題がある。(21)を例に考えてみよう。

(21) John is not so easy to please.

(21)においては否定辞と easy の間に程度を表す副詞 so が現れている。DegP が AP を直接補部にとるという分析では so の位置を保証することが難しい。

(21)の so のような副詞は gradable な形容詞のみを修飾するという特性 ((22)はこの種の副詞が gradable でない形容詞と共に起しているため非文となっている。)を持っており、

Baker (2003)は(23)の仮説を立てている。(23)は gradable な表現がその θ 位置の一つとして、その程度を規定する要素が現れる位置を持つという趣旨である。

(22) a. *Seven is as prime as two is.

b. #Mary is too pregnant to go on the trip.

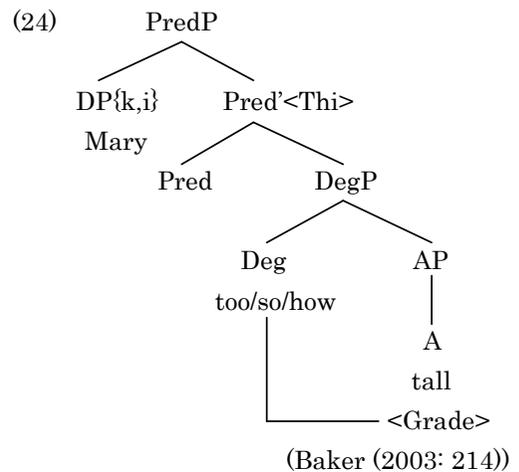
c. *How three-legged is that stool?

(Baker (2003: 213))

(23) “Gradable” expressions have an extra position in their theta-grids for the specification of the degree to which the property holds.

(Baker (2003: 214))

これに従い、Baker は so などの副詞が AP を補部にとる主要部であると主張している。これを図示したのが(24)である。



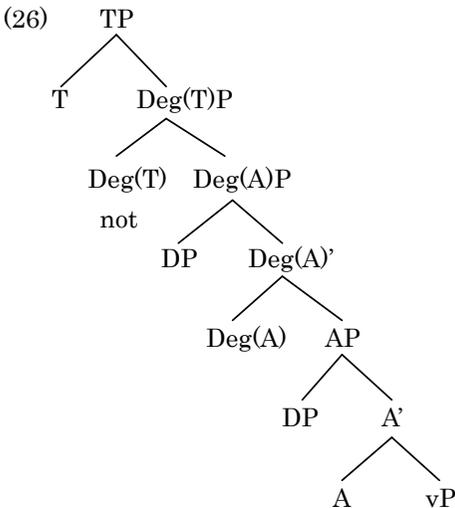
この構造を仮定することによって、(25a)のような例において how だけが wh 移動することなく、easy to please も一緒になって移動しなければならないことが説明される。

一方、本稿の分析にとって興味深いのは、(25b)に示すように、否定辞 not と easy to please が一緒になって移動できないことで

ある。

- (25) a. How easy to please is John?
 b. *Not easy to please is John?

これは、同じく Deg というラベルをつけられながら、否定辞 not と so 等の Deg 表現に構造上同じ位置を与える訳には行かないことを示している。そこで、否定辞が具現する DegP とは別の DegP を仮定し、それをこれまで便宜的に XP としてきた範疇に置き換えることにする。これを図示したのが(26)である。便宜上、上位の DegP を Deg(T)P とし、下位の DegP を Deg(A)P と表記する。



(26)のように仮定することによって、(21)のように否定辞と so が共起できることが説明可能となる。またその一方で、(27a)のように、否定辞 not の後に too などの Deg(A)要素が続き、その補部が削除されることによって容認性が低下している例について、否定辞が T と一致関係に入った段階でその補部が削除可能となるためであると説明できる。これは(20a)に示したように、否定辞の後に形容詞が続きその後が削除され容認性が下がることと同様である。

また、so や too のような Deg(A)要素はその作用域が文全体に及ぶとは考えられないので、上位の Deg(T)が空所であっても、その位置に移動し、T と関係を結ぶことはないと考えられる。すると、(27b)のように否定辞と共起しない副詞としての so を残しながらその補部が削除されることはない、という事実にも自然な説明が可能となる。(27b)の so は T と一致関係に入れないので、その補部の削除を認可できない。これに対し、tough 類形容詞は他に Deg 要素がない場合に限り、(14)に見たように、作用域を文全体に及ぼすことが可能である。したがって、T と一致関係に入ることができ、(10b)のように、その補部を削除することが可能となると考えられる。

- (27) a. *John is strong, but he isn't too
 [AP e].
 b. *Mary told me she was afraid of
 dogs, and she is so [AP e].

(Lobeck (1995:180))

最後に代用表現としての so が本節の議論の対象外であることを確認しておきたい。(28)に示すように、代用表現としての so は否定辞の補部全体の代用表現として機能することができ、その際、線形上は、否定辞と共起する Deg(A)要素の補部が削除できないという、(27a)に対して行った分析に対する反例となっているように見える。

- (28) John is so easy to please, and Bill is
 not so.

しかし、(28)において否定辞の後に現れている so は程度を表す Deg(A)要素であるとは考えられない。代用表現としての so には程度の意味はない。

(29) This question is hard to answer, but
that one is not so.

(29)において、so の先行詞 hard to answer は so を含んでおらず、したがって、先行詞 Deg(A)P を投射しているとは考えられない。また、so 自体も hard の程度について何ら表していない。代用表現としての so はその構造上の位置も含め、Deg(A)要素とは分けて考える必要があるように思われる。

本節においては、否定辞が外部併合される位置としての Deg と、so などの形容詞の程度を表す要素が外部併合される位置としての Deg を構造上別個に仮定する必要があることを示した。先に、(14)において、impossible と not possible の意味がほぼ同じであるという話をしたが、厳密には、impossible は「不可能であること」を命題内で客観的に述べており、これに対して、not には命題に対する話者の主観的判断が含まれていると考えられる。2つの Deg はこの意味でも区別されるべきものと言える。tough 類形容詞は Deg(T)要素が具現しない場合に限り default の Deg(T)要素として、上位の Deg(T)に繰り上がると考えられる。

5. まとめ

本稿では、tough 構文の主節構造において、TP と AP の間に異なる性質を持った 2つの DegP を仮定することによって、for-DP の構造上の位置を保証できるだけでなく、tough 構文で起こる削除の可否について正しい予測ができることを示した。

注

本稿は日本英語学会第 30 回大会における口頭発表の内容を加筆、修正したものである。御司会頂いた松本マズミ先生をはじめ、貴重な助言を頂いた皆様に厚く御礼申し上げる。

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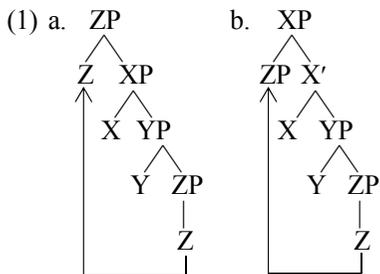
主要部移動と句構造構築 (Head Movement and Phrase Structure Building)

中村太一 (Taichi Nakamura)
東北大学 (Tohoku University)

キーワード：Bare Phrase Structure 理論、長距離主要部移動、助動詞システム、等位構造制約

1. BPS 理論と主要部移動

「併合」操作の導入に伴い、X' 式形は解体され、主要部と句の区別は相対的なものとなった。この Bare Phrase Structure (BPS) 理論 (Chomsky 1995) の下では、(1) に示すように、移動対象が語彙項目である場合、(a) 移動先で自ら投射することも、(b) その場で句となり指定部を埋めることも可能となる (Chomsky (2008))。(以下説明の便宜上、X' 式形に基づく表記を用いる。)



この派生の可能性は、これまで関係節構文等で探求されてきたが (Donati (2006), Donati and Cecchetto (2010))、助動詞・時制の移動についてはあまり研究されてこなかった (Ackema, Neelman, and Weerman (1993), Bury (2003), Koeneman (2010))。本稿では、英語において法助動詞や時制等の助動詞システム要素が長距離依存関係を形成する可能性があることを指摘し、この依存関係が (1) に示す主要部移動によるものであると論じる。

2. 英語助動詞の長距離主要部移動

Langendoen (1970) は、(2a) に基づき、助動詞が主節と従属不定詞節との間で長距離依存関係を形成すると主張した (Chomsky (1971), Homer (2012), Quirk (1965))。

- (2) a. Harry couldn't seem to help falling asleep. (Langendoen (1970: 25))
- b. Harry couldn't/*could help falling asleep (ibid. 26)
- c. *Harry couldn't want to help falling asleep. (ibid.)
- d. John can't seem to help laughing, can/*can't/*does/*doesn't he?

(2b) が示すように “couldn't/can't help V-ing” でイディオム表現を形成するため、(2a) では法助動詞 *couldn't* が主節と不定詞補文節内とで長距離依存関係を形成していると考えられる。この長距離依存関係は、(2c) に示すように、コントロール述語 *want* を超えては形成されない。また、(2d) の tag テストが示すように、*can't* は主節の助動詞として機能する。このように、法助動詞 *couldn't/can't* は *seem* の補部節内と長距離依存関係を形成する。

このような助動詞システム要素の長距離依存関係は法助動詞だけでなく、(3) に示

すように、その他の助動詞要素にも観察される。

- (3) a. I wonder how John went and behaved/*behaves. (時制)
- b. *I wonder how John will go and behaved (定性)
- c. I wonder how John has gone and behaved/*behaves. (相)

(de Vos (2005: 45))

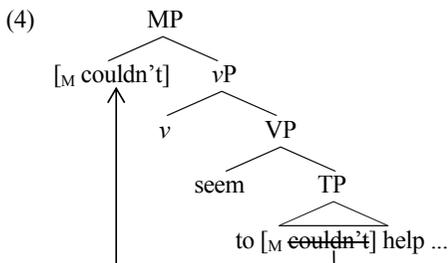
(3) では、疑問詞の *how* は、等位構造制約に抵触することなく、*behave* に選択される疑似項として解釈可能である。このことから、ここでの *and* は *go* の補部節を形成する補文化辞であると考えられる (Carden and Pesetsky (1977), Wiklund (2007))。このような環境を形成する (3) において、(3a-c) がそれぞれ示すように、*go* と *behave* が、*and* 節を超えて、同じ屈折の指定を受けなければならない。このように、屈折指定に参加する助動詞要素も長距離依存関係を形成する。

3. 長距離主要部移動分析

前節でみた助動詞システム要素の長距離依存関係に対し、移動先で自ら投射する主要部移動 (1a) に基づく分析を提案し、その妥当性について検討する。

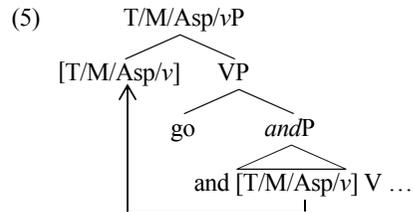
3.1. 提案

(2) に示した、法助動詞 *couldn't* の長距離依存関係形成の派生を (4) に示す。¹



矢印が示すように、不定詞補文節内に基底生成された *couldn't* が、*vP* と併合するために主要部移動し、自らが投射する。²この移動により、元位置で “*couldn't help V-ing*” を形成し ((2a, b))、また移動先で主節の法助動詞となる ((2d))。

次に、(3) に示した、助動詞要素の長距離依存関係形成の派生を (5) に示す。



and 節は定形節と同様、完全な助動詞システムを伴い *go* の補部節として派生に導入される。その後、矢印が示すように、助動詞システム要素が *go* を主要部とする *VP* と併合するために主要部移動し、自らが投射する。³この移動により、同一の助動詞システムが *go* と *V* の屈折を指定することが可能となる。

3.2. 主要部移動と等位構造制約

助動詞システムが形成する長距離依存関係は主要部移動により形成されると提案した。しかし、Chomsky (2000) 以降では、長距離依存関係の形成方法として、移動に加えて、*Agree* 操作も存在する。本節では、等位構造制約をテストとして用い、本稿が扱う長距離依存関係が、*Agree* 操作によるものではなく、主要部移動により形成されていることを示す。

主要部移動は、(6) が示すように、等位構造制約に従わなければならない。

- (6) a. * What has [[_{TP} Betsy *t*_{has} purchased *t*_{what}]
and [_{TP} Sally will talk about *t*_{what}]]?
(Johnson (2002: 118))
- b. Who should [[_{TP} Jane *t*_{should} detest *t*_{who}]
and [_{TP} Harry *t*_{should} adore *t*_{who}]]?
(Bošković and Franks (2000: 107))
- c. So what [[_{C'} will you *t*_{will} do *t*_{what}] and
[_{C'} won't you *t*_{won't} do *t*_{what}]]?⁴

(6a) が示すように一方の等位項のみで T-to-C 移動が行われることは許されず、(6b, c) が示すように両等位項で全域的または平行的に行われなければならない (Williams (1978))。一方、Agree 操作は、(7) に示すように、等位構造制約に従わない。

- (7) There was_{q1}/*were_{q2/1+2} [[_{SC} a man_{q1} in the
bathroom] and [_{SC} two cats_{q2} in the
kitchen]].
(Niinuma and Park (2003: 150))

Agree による一致は第一等位項の小節主語としか許されない。

この点を踏まえると、本稿の提案が正しいければ、(2), (3) の長距離依存関係は等位構造制約に従うと予測される。この予測は、(8)-(10) のデータから、正しい。

(8) では、法助動詞 *cannot* による長距離依存関係の形成を許す *seem* と許さない *want* を主要部とする VP が等位接続されている。

- (8) a. * John **cannot** [[_{VP} seem to help falling
asleep] or [_{VP} want to figure out what to
do next]].
- b. * John **cannot** [[_{VP} want to figure out
what to do next] or [_{VP} seem to help
falling asleep]].

この場合、*want* の補文節内には長距離依存関係形成を強制する要因は何もないにもかかわらず、また両等位項の出現順を入れ替えても、非文法的となる。

(9a, b) が示すように、動詞 *go* は *and* 節を取ることも、不定詞節を取ることも可能である。

- (9) a. John shouldn't go and [[_{T/M/Asp/vP} visit
Harry] or [_{T/M/Asp/vP} apologize]].
- b. John shouldn't go [[_{CP} to visit Harry] or
[_{CP} to apologize]].
- c. * John should go [[_{andP} and visit Harry]
and [_{CP} to apologize]].
- d. * John shouldn't go [[_{CP} to visit Harry] or
[_{andP} and apologize]].

しかし、(9c, d) が示すように、*and* 節と不定詞節を等位接続した場合、非文法的となる。この事実に対して、動詞 *go* が不定詞節を取った場合、助動詞システムの長距離依存関係は形成されないと考えることにより、等位構造制約違反による説明が可能となる。この結論を支持するのが (10) に示す事実である。

- (10) a. John shouldn't go [_{andP} and [[_{vPtransitive}
visit Harry] or [_{vPunergative} apologize]]].
- b. * John didn't go [_{andP} and [_{vPunergative} eat
out with her] or [_{vPunaccusative} then
accidentally fall off the chair]].
(行為者性)

(10) では、(9) と異なり、同一の範疇と考えざるを得ない動詞句が等位接続されている。⁵しかし、等位項が他動詞句と非能格動詞句の場合文法的であるが ((10a))、他動詞句と非対格動詞句の場合非文法的である。この対比は、他動・非能格性と非対格性の区別を言語化する *v* (を含む助動詞システ

ム) が全域的に移動しなければならないことを示している。

これら事実から、本稿の主要部移動による分析が正しいことが支持された。⁶

4. Double Modal 構文

本節では、Hawick Scots の Double Modal 構文を用いて、移動先で投射しない主要部移動 (1b) の可能性について検討する。

Brown (1991) によると、Hawick Scots は、(11) に示すように、根源的法助動詞を認識様態の法助動詞に埋め込むことが可能であり、さらにこの際 (12) に示す特徴を持つ。

(11) He would could do it if he tried.

(= 'he would be able to do it if he tried.')

(Brown (1991: 74))

(12) a. 助動詞間にある種の「時制の一致」関係が形成される。

- i. will can/?will could
- ii. would could/?would can

(ibid.: 97)

b. tag 形成はどちらの助動詞とも可能である。

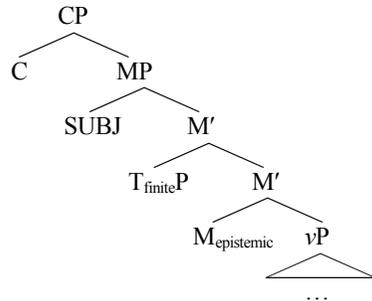
- i. He'll can do it, will he no?
(emphasis on 'futurity')
- ii. He'll can do it, can he no?
(emphasis on 'ability')

(ibid.: 99)

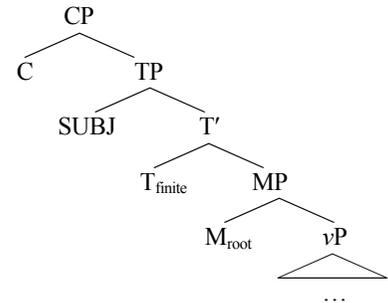
これら諸特徴を説明するに当たり、認識様態の法助動詞 ($M_{epistemic}$) は、根源的法助動詞 (M_{root}) と異なり、発話時における推量を表すため、補文化辞 C の補部として意味上選択されなければならないと仮定する (McDowell (1987), Palmer (2001))。この仮定に基づき、両法助動詞が単体で現れる場合、(13a, b) の節構造が与えられると考える。(13a) では $M_{epistemic}$ の投射が CP の補部

であり、 T_{finite} は $M_{epistemic}$ の第一指定部を占める。一方、(13b) では、 M_{root} の投射が T_{finite} の補部である。

(13) a.

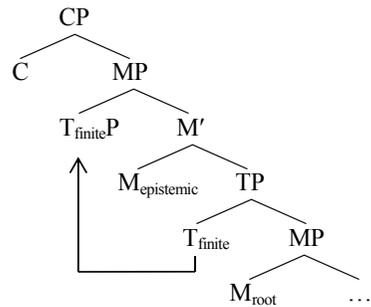


b.



この仮定の下で、上述の Double Modal 構文が示す諸特徴は、(14) に示す派生により説明される。

(14)



$M_{epistemic}$ は、 C との意味選択関係を満たすため、 M_{root} の投射を補部に取り TP を選択する。この基底構造から、矢印が示すように、 T_{finite} が $M_{epistemic}$ と併合するため主要部移動し、移動先で投射せず $M_{epistemic}$ の指定部を占める。移動先で投射しないこと

により、C と $M_{\text{epistemic}}$ との意味的選択関係が移動後も保証される。また、同一の T_{finite} が、移動後に M_{root} と $M_{\text{epistemic}}$ 両者と形式的関係を結ぶことで、(12a), (12b) の特徴も説明される。

5. 結論

本稿は、BPS 理論の帰結として、助動詞システムにおける長距離依存関係が、助動詞・時制の移動と移動先での投射可能性により説明されると論じた。

謝辞

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注

¹ *couldn't* や *cannot* が主要部とみなせないのではないかという旨の御指摘を、藤田耕司先生よりいただいた。本稿では、*couldn't* 等は一語として語彙化されていると仮定する (Palmer (1979), Zwicky and Pullum (1983))。

² この長距離移動は、従来考えられてきた主要部移動制約に違反した移動である (Baker (1988), Travis (1984))。また、この長距離移動は、コントロール述語に加えて、同じく主語繰り上げ述語である *appear* 等を超えても許されない (Langendoen (1970))。これら最小性や介在要素の選択制限等の問題を明らかとするためには、当該の主要部移動を駆動する要因についてさらに検討する必要があると思われる。千葉修司先生と藤田耕司先生にご指摘をいただいた。今後の研究課題としたい。

³ 助動詞システムに *v* が含まれているが、この点については 3.2 節を参照のこと。

⁴ 当該の例は *The Corpus of Contemporary American English* から引用したものである。

⁵ この点については、河野継代先生のコメントにより議論がより明確化できた。

⁶ 等位構造制約が統語操作に課せられる制約であるのかについては、検討が必要である (Bošković and Franks (2000), Fox (2000))。竹沢幸一先生にご指摘をいただいた。今後の研究課題としたい。

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項構造基盤結果構文における in 結果句の 生起について*

(On the Occurrence of *In Resultative* *Phrases in Argument Structure* *Construction-Based Resultatives*)

並木 翔太郎 (Shotaro Namiki)
筑波大学大学院 (University of Tsukuba)

キーワード: 前置詞句結果構文、ASC タイプ、
in 結果句、into 結果句、受動文の状態記述

1. はじめに

本稿では、(1, 2)のように、結果構文の結果句に生起し、結果状態を表す in 句と into 句について考察する。

- (1) a. John broke the vase {into/in} pieces.
b. John cut the steak {into/in} pieces.
(2) a. John pounded the metal {into/*in} pieces.
b. John kicked the door {into/*in} pieces.

従来、結果構文は大きく 2 種類に分類されてきた。一つは、(1)の break や cut のように、本動詞が状態変化の結果を含意する、結果動詞が用いられる結果構文である。もう一つは、(2)の pound や kick のように、本動詞が状態変化を含意せず、行為のみを表す、様態動詞が用いられる結果構文である。この 2 種類の結果構文は、これまで様々な名称で呼ばれてきたが、本稿では、結果句の生起に関しての分析に重点を置くことから、結果句の生起に基づいた名称を採用する。従って、岩田(2009)の名称を採用し、(1)のように、結果句の生起が動詞に基づく結果構文を「動詞基盤結果構文 (Verb-Based Resultatives、以下 V タイプ)」と呼ぶ。また、結果句の生起が項構造構文に基づ

く結果構文を、「項構造構文基盤結果構文 (Argument Structure Construction-Based Resultatives、以下 ASC タイプ)」と呼ぶ。なお、結果句として生起する in 句と into 句を、便宜上、in 結果句と into 結果句と呼ぶことにする。

この結果構文の分類は、興味深いことに、in 結果句と into 結果句の分布の違いにも対応している。Folli and Ramchand (2005)の指摘にあるように、V タイプでは、in 結果句の生起が into 結果句と同様に可能であるが、ASC タイプの場合、into 結果句の生起は容認されても in 結果句の生起は容認されない。in 結果句の生起に関する Folli and Ramchand と同様の指摘は、北原(2009)や小野(2010)でもなされており、共通して、動詞が結果状態を含意する場合には、in 結果句の生起が容認されるという一般化を与えている。

しかし、実際にデータを観察すると、ASC タイプでも in 結果句が生起している、(3-6)のような例が散見される。

- (3) a. The puzzle was smacked in pieces.
b. * The baby smacked the puzzle in pieces.
(4) a. ...the vessel was hammered in two pieces, neck and body, and joined.
b. * John hammered the metal in pieces.
(5) a. The lace curtain was scratched in tatters.
b. * My cat scratched the curtain in tatters.
(6) a. The carpet was clawed in shreds.
b. * A tiger clawed the carpet in shreds.

(3-6)の本動詞 smack, hammer, scratch, claw は、状態変化の結果を含意せず、行為のみを表す様態動詞であることから、(3-6)の結果構文は ASC タイプと看做される。この時(a)の受動文においては、ASC タイプであるにも関わらず、in 結果句が問題なく生起していることになる。このように、受動化された ASC タイプに、in 結果句が生起可能であるという事実の指摘や、それに対する説明を与えた分析は、筆者の知る限り存在しない。

本稿の目的は、なぜ受動化された ASC タイプでは in 結果句の生起が可能になるのかを、前置詞の語彙的意味と受動文の一般的な機能から明らかにすることである。そして、次のように主張する。

- (7) a. into 結果句は状態変化の結果状態へと向かう過程と結果状態に概念的際立ちを与えるのに対し、in 結果句は変化後の結果状態のみに概念的際立ちを与える。
 b. 一般的に、受動文の状態記述解釈では、変化の過程が背景化される。これにより、変化後の状態のみ概念的際立ちが与えられるため、ASC タイプの受動文では in 結果句の生起が容認される。

本稿では、into 句と in 句の意味的違いが、結果句として果たす機能に大きく関わると考える。以下では、位置変化と状態変化の並行性という立場を取り、着点を表す場合に生じる in 句と into 句の意味的差異について考察する。そして、移動事象での考察から得られた帰結が、本稿の分析対象とする結果句での意味的差異に適応可能であるか検証する。

2. in 結果句と into 結果句の意味的差異

2.1. 着点を表す in 句と into 句

Nikitina (2008)や Tutton (2009)等で指摘されているように、移動を表す動詞と、in や on といった場所前置詞句は、特定の文脈で共起する場合、場所前置詞句を移動の着点として解釈することが可能である。

- (8) a. He walked in the room.
 b. He walked into the room.
 (Nikitina (2008: 178))

(8a)は特定の文脈が整うと、(8b)と同様に、「彼は部屋に歩いて入ってきた/入っていった」という旨の解釈が可能になる。Nikitina (2008)も指摘するように、(8)のような表現は、in と into では与える概念的な際立ちが異なることから、意味的に異なる。Nikitina によれば、in は着点

に概念的際立ちを与える一方、into は経路にも際立ちを与えると分析されている。これは少なくとも4つの証拠によって支持される。

一つ目の証拠として、(9)のような、移動の距離に関する文脈での両前置詞句の生起の違いが挙げられる。

- (9) a. [Standing just outside the room]
 John walked {in/??}into the room.
 b. [Standing down the hallway from the room]
 John walked {*in/into} the room.
 (Levin et al. (2009: 16)、一部変更)

(9a)では、「ジョンが部屋のすぐ外に立っている」という文脈によって、移動の経路が概念化される必要がないほど、極めて短いことが保証されている。この場合、in 句の着点解釈は可能だが、into 句を用いた表現は容認されない。一方、(9b)のように、ある程度の移動の距離が文脈によって保証されると、in 句の着点解釈は容認されず、into 句を用いて表現することが可能になる。この対照的な振る舞いは、「into 句は移動の経路と着点を概念化する一方、着点を表す in 句は移動の着点のみを概念化する」という Nikitina の主張を支持している。

二つ目の証拠として、(10)のように、移動にかかった時間を表す It took X time to do... 構文で、これらの前置詞句の分布に違いがあることが挙げられる。

- (10) a. It took ten minutes for Bill to walk {*in/into} the classroom.
 b. Because his bag is too heavy, it took an hour to carry it {*in/into} his room.

(10)はいずれも「部屋に入るまでにどれくらいの時間がかかったか」ということを表しているが、into 句の It took X time to do... 構文への生起は容認されても、in 句の着点解釈は容認されない。Dowty (1979)によれば、この構文に生起可能な述語には「過程の局面」があることになる。移動事象における過程の局面は「移動の経路」に相当する。つまり、into 句が用いら

れる場合には、移動の経路が概念化されており、in 句が着点として解釈される場合には、経路が概念化されていないことになる。

移動の経路の有無に関する事実は、(11)のような進行形の許容性からも示される。

- (11) a. Look! John is running {??in/into} the room.
b. Look! John is pushing Mary {??in/into} the room.

(11)は、話者の眼前で「ジョンがまさに部屋に向かって走っているところ」や、「ジョンがメアリーを部屋の中へと押し込もうとしているところ」を表している。この場合、into 句は容認されても、in 句の着点解釈は容認されない。進行形は一般的に、出来事の間段階を切り取って表現する際に用いられる。言い換えれば、出来事に中間段階が含まれていなければ、過程進行形(process progressive)を用いることはできないことになる。移動事象において出来事の間段階は移動の過程に相当する。つまり、(11)の事実から、into 句が用いられる場合では移動の経路が概念化されているが、in 句の着点解釈では概念化されていないことがわかる。

最後に、位置変化の打ち消し可能性に関して、in 句と into 句では異なる振る舞いを示す(12)の事実も、Nikitina (2008)が主張する in 句と into 句の概念化の違いを支持する証拠として挙げられる。

- (12) a. * Bill {went/walked/stepped} in the room, but he did not enter there.
b. ? Bill {went/walked/stepped} into the room, but he did not enter there.

in 句が着点として解釈される (12a)では、着点への到達を打ち消す文の生起は矛盾が生じるため容認されないが、into 句を用いる(12b)では、多少のぎこちなさはあるものの、到達の打ち消しが可能である。このことも、「into 句は移動の経路と着点を概念化する一方、in 句は着点のみを概念化する」という in と into の違い

を支持する。

移動事象には「起点 (移動の出発点)」、「移動の経路」、そして「移動の着点」という意味的要素が含まれている(Talmy (2000)など)。in 句を用いて位置変化を表現する場合、移動の経路は概念化されず、起点と着点の二地点のみが概念化されていることになる。動詞が移動を表すため、移動物は起点から必然的に離れる。二地点のみが概念化されている状況では、起点から離れることは着点への到達を直接的に意味する。従って、移動の達成を打ち消すことができないと考えられる。

対照的に、into 句が用いられる場合では、「起点」、「移動の経路」、「着点」のすべてが概念化されていることから、起点を離れることが必ずしも着点への到達を含意しない。よって、(12b)のように移動の達成を打ち消すことが可能であると考えられる。

以上のように、in 句と into 句の概念化の違いを考慮に入れることで、(12)の事実が説明されることから、in は着点に際立ちを与える一方、into は着点だけでなく移動の経路にも際立ちを与えるという Nikitina (2008)の観察が妥当であると結論付けられる。

これまで4つの証拠から、in 句と into 句の概念化には経路の有無に関して違いがあることを示した。まとめると、into 句は移動の経路と着点を概念化するのに対して、in 句は着点のみを概念化するという違いが両前置詞句にあることになる。位置変化と状態変化の並行性の観点から、この in 句と into 句の意味的違いが、状態変化の結果を表す際に用いられる場合にも当てはまると予測し、以下検証していく。

2.2. 状態変化の結果を表す in 句と into 句

2.1.節での結論から、状態変化事象での in 結果句と into 結果句の違いについて、(13)のような予測が得られる。

- (13) into 結果句は状態変化の結果状態へと向かう過程に概念的際立ちを与えるのに対し、in 結果句は変化後の結果状態のみに概念的際立ちを与える。

この予測の妥当性を、以下 5 つの事例に基づいて検証する。

まずは、(14, 15)のような、変化の過程に概念的際立ちを与える情報や文脈との共起について考察する。

- (14) a. With multiple strokes, John broke the vase {into/??in} pieces.
b. With multiple scratches, Mary's cat tore the curtain {into/??in} tatters.
- (15) a. The one hundred-story building collapsed {into/??in} pieces by that great explosion.
b. They tore all of the 100 manuscripts {into/??in} tatters.

in 結果句が変化の過程に際立ちを与えないのであれば、変化の過程を修飾したり、強く際立たせるような語彙的情報と共起したりすることは容認されないと予測される。(14, 15)はまさにこの予測を支持している。(14)では、花瓶を壊したり、カーテンを破ったりする際の行為を修飾する with 句が生起しているが、in 結果句の生起は容認度が極めて低い。この with 句は、花瓶が粉々になるまで複数回にわたって打撃を加えたことを表しているため、花瓶が粉々な状態へと変化する「過程」に概念的際立ちを与えることになる。従って、into 結果句の生起は可能でも、in 結果句は容認されないと考えられる。同様に、(15)では「100 階建ての建物」や「100 枚原稿」という名詞の情報によって、状態変化の完了までに多くの時間を要することが含意され、変化の過程が喚起される。この場合も、変化の過程に概念的際立ちを与えられない in 結果句は生起できず、into 結果句のみが容認される。

次に、It took X time to do... 構文での生起について考察する。(14, 15)の場合と同様に、in 結果句が変化の過程に際立ちを与えられないとすれば、この構文の述語に生起することはできないと予測される。この予測の妥当性は、(16)の事実によって示される。

- (16) a. It took John five minutes to break walnuts {into/??in} pieces.

- b. It took Mary an hour to tear the letter {into/??in} tatters.

(10)の移動事象の場合と同様に、変化の過程に要した時間を表すこの構文では、in 結果句は容認されない。これは、in 結果句の意味的な守備範囲が矛盾するためである。一方、into 結果句は、変化の過程に概念的際立ちを与えることから、生起可能であると分析できる。

さらに、(17, 18)のような、進行形での結果句の分布に関する事実からも、仮説(13)の妥当性が支持される。

- (17) a. Look! John is breaking the mug into pieces.
b. ??Look! John is breaking the mug in pieces.
- (18) a. Look! Mary is tearing the letter into shreds.
b. ??Look! Mary is tearing the letter in shreds.

2.1節でも見たように、過程進行形は、出来事の間段階を切り取って描写する表現である。過程進行形では、into 結果句は容認されても、in 結果句の生起は容認されない。このことから、in 結果句が用いられる結果構文では、変化の過程が概念化されていないと考えられる。

四つ目に、(19, 20)に示すような、解釈の含意の違いからも、予測の妥当性を確かめることができる。

- (19) a. John broke the mug into pieces.
b. John hit or beat the mug and then it turned into pieces.
c. * John left the mug in pieces.
- (20) a. John broke the mug in pieces.
b. ?#John hit or beat the mug and then it turned into pieces.
c. John left the mug in pieces.

(19-20)は、(a)の文の解釈が (b)や(c)を含意しているかどうかを表している。(19a)は into 結果句が用いられている結果構文で、マグカップを粉々に壊したことを表している。この文は、

(19b)の「叩くといった行為の結果、マグカップが粉々になった」ことを含意しても、(19c)のような「マグカップが粉々になった状態が続いている」ことは含意できないことが、ネイティブスピーカーの判断によって確かめられた。一方、in 結果句を用いた(20)の結果構文では、(20b)のような行為と変化を含意するときこちなく感じられ、(20c)のような結果状態の残存を強く含意すると判断される。このような解釈含意の判断からも、in 結果句が変化後の結果状態にのみ概念的際立ちを与えていることがわかる。

最後に、(21)のような、状態変化の打ち消し可能性について検証する。

- (21) John cut the steak {into/*in} pieces for his son, but in fact some pieces of steak were still joined to each other because he was not good at using a knife.

(21)は「ジョンがステーキを食べやすいサイズに切ってあげたが、実際には切れていない箇所が複数あった」ことを表している。この場合、in 結果句を用いると、打ち消し文と矛盾が生じるため、容認されない表現となるが、into 結果句の場合は、結果の打消しが矛盾なく可能となる。(21)の事実から、in 結果句の生起する結果構文では、実際に変化が完了していなければならぬと捉えることができる。従って、移動事象の場合と同様に、in 結果句が結果状態にのみ概念的際立ちを与え、into 結果句は変化の過程に際立ちを与える、という予測が妥当であると考えられる。

以上、5つの検証から、移動事象で得られたin 句とinto 句の概念的際立ちの違いが、状態変化の結果状態を表すin 結果句とinto 結果句の意味の違いにも当てはまることが示された。このことから、in 結果句が生起可能な条件として、次のような仮説を立て、以下で検証する。

- (22) in 結果句の生起は、状態変化の変化後の状態にのみ概念的際立ちが与えられる場合に可能になる。

3. 受動文の曖昧性と in 結果句の生起

ASCタイプでin 結果句が生起している(3-6)は、すべて受動文であった。このことを考慮に入ると、受動文には変化後の状態にのみ概念的際立ちを与える機能があり、それによって、ASCタイプでのin 結果句の生起が可能になると考えられる。実際、受動文には、出来事全体を記述する行為記述用法の他に、変化後の状態のみを表す状態記述用法がある(Langacker (1982)や Nakau (1997)など)。

- (23) a. The tree was uprooted.
b. The tree was uprooted when I saw it.
c. The tree was uprooted by the storm.

(Nakau (1997: 740))

- (24) a. The metal was hammered.
b. The metal was hammered when I saw it.
c. The metal was hammered by John.

(23a)は「木が根こそぎ引き抜かれた」ことを表している。この文は、(23b)が示すような「木が根こそぎ引き抜かれたていた」という状態記述と、(23c)のような「木が嵐によって根こそぎ引き抜かれた」という行為記述の2通りの解釈で曖昧である。(24)も同様に、(24a)は「金属がハンマーで叩かれ形状が変化していた」ことを表わす状態解釈の(24b)と、「ジョンによって金属がハンマーで叩かれた」ことを表す行為解釈の(24c)の2通りの解釈で曖昧である。このように、受動文には、状態記述と行為記述の2通りの解釈があることが指摘されている。

この2通りの解釈は、受動化された結果構文でも観察される。興味深いことに、この解釈の曖昧性は、(25, 26)に示すように、in 結果句が用いられる場合とinto 結果句が用いられる場合では生じない。

- (25) a. The vase was broken in pieces.
b. The vase was already broken in pieces when we got there.
c. ??The vase was broken in pieces again and again.

- (26) a. The vase was broken into pieces.
 b. ??The vase was already broken into pieces when we got there.
 c. The vase was broken into pieces again and again.

/in} pieces.

(25)は in 結果句が用いられた結果構文の受動文である。(25a)の解釈は、(25b)と(25c)が示すように、常に、状態記述の解釈しか容認されない。対照的に、into 結果句が用いられた結果構文の受動文 (26a)は、(26b)と(26c)が示すように、常に行為記述の解釈のみ容認される。このことから、in 結果句が用いられる結果構文の受動文は、状態記述の解釈しかないとわかる。

受動文の状態記述は、変化後の状態にのみ概念的際立ちを与える機能を持つと考えられる。従って、ASC タイプの受動文で in 結果句が生起可能になるのは、その受動文の状態記述用法が持つ、「状態にのみ概念的際立ちを与える機能」によると予測する。

in 結果句が生起する ASC タイプの受動文が状態記述の解釈であることは、(27)で行為者の by 句が生起しないことから確かめられる。

- (27) a. The letter was scratched {??in /into} tatters by John.
 b. The puzzle was smacked {??in /into} pieces by Bill.

行為者の by 句が生起できないという事実は、変化を引き起こす行為やその過程が、背景化されていることを示す。(27)の事実から、in 結果句が生起する ASC タイプの受動文は、行為記述ではなく、状態記述であることがわかる。

さらに、in 結果句が生起する ASC タイプの受動文が状態記述の解釈であることは、その受動文が What was X like?の返答として適格であることから支持される。

- (28) a. A: What happened then?
 B: The vase was hammered {into /??in} pieces.
 b. A: What was the vase like?
 B: The vase was hammered {??into

(28a)の What happened then?という疑問文は、「何が起こったか」という非状態的な出来事の発生を尋ねる疑問文である。非状態的な出来事の発生を尋ねるということは、返答に行為も含まれることになる。この場合の返答として、in 結果句を用いた結果構文の受動文は不適切となる。対照的に、(28b)の What was the vase like?は、花瓶の状態を尋ねる疑問文である。(28b)の返答として、in 結果句を用いた結果構文の受動文は適格と判断される。このことから、ASC タイプの受動文が状態記述の解釈しかないと明らかとなった。

以上のように、状態記述用法の受動文では、状態にのみ概念的際立ちを与えることから、in 結果句のもつ、「変化後の状態にのみ概念的際立ちを与える」という機能と矛盾なく一致する。従って、ASC タイプの受動文では in 結果句の生起が容認される、と本稿では説明することができるのである。

4. 結論と今後の課題

本稿では、ASC タイプの受動文で in 結果句の生起が可能になるという新たな事実を示し、なぜ ASC タイプの受動文では in 結果句の生起が可能になるのかという問いについて、前置詞の語彙的意味と、受動文の一般的な機能から説明を試みた。本稿の結論を(29)としてまとめる。

- (29) a. into 結果句は状態変化の結果状態へと向かう過程と結果状態に概念的際立ちを与えるのに対し、in 結果句は変化後の結果状態にのみ概念的際立ちを与える。
 b. 一般的に、受動文の状態記述解釈では、変化の過程が背景化される。これにより、変化後の状態にのみ概念的際立ちが与えられるため、ASC タイプの受動文では in 結果句の生起が容認される。

最後に、本稿の分析に残された今後の課題を述べておく。まず、ASC タイプの受動文全て

において、in 結果句の生起が可能になるわけではなく、(30)に示すように、touch や flick などの様態動詞では容認されない。

- (30) a. ??The vase was touched in pieces.
b. ??The window was flicked in pieces.

(3-6)と(30)の対比から、結果の含意の度合いに関して、様態動詞の更なる下位分類を規定する必要があると考えられる。

さらに、「概念的際立ち」という概念についても精緻化が必要である。一つの可能性として、概念化者(conceptualizer)が出来事を概念化する際に、特に重きを置くような場合に作用するものであると考えられる。今後、理論化に向けて、「概念的際立ち」を明確に規定していきたい。

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Decomposing Demonstratives and Wh-Words

Kunio Nishiyama
Ibaraki University

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1. Introduction

Demonstratives and wh-words in Japanese are long known to consist of at least two parts.

Table1 The *ko-so-a-do* paradigm in Japanese (Martin 1975: 1066, Kuno 1973: 27)

a: individual; b: place; c: direction/alternative; d: adnominal; e: manner; f: adverbial

	proximal	medial/definite
a_	ko-re_	so-re_
b_	ko-ko_	so-ko_
c_	ko-tira/ko-tti_	so-tira/so-tti_
d_	ko-no_	so-no_
e_	ko-nna_	so-nna_
f_	ko-o_	so-o_

	distal	interrogative/indefinite
a_	a-re_	do-re_
b_	a-soko_	do-ko_
c_	a-tira/a-tti_	do-tira/do-tti_
d_	a-no_	do-no_
e_	a-nna_	do-nna_
f_	a-a_	do-o_

The above table shows the common morphemes *ko*, *so*, *a*, *do*, depending on the proximity feature of the word.

Similarly, demonstratives and wh-words in English are often decomposed into two parts, as *th-is*, *th-at*, *th-ere*, *th-en*, *wh-at*, *wh-ere*, *wh-en*, and so forth. See Katz and Fodor (1964: 134), Lacknaker (2001), Déchaine and Wiltschko (2002), Di Sciullo (2005), Bernsterin (2008), Klinge (2008), Leu (2008), and Kayne and Pollock (2010). Among them, Lacknaker (2001: 139) says that “[w]hat [*th*- words and *wh*-words] appear to have in common is some

general notion of *selecting from range of alternatives*” (emphasis by KN), motivating parallel structures for them.

Typically, the bimorphemic analysis in the above literature identifies the two morphemes in *this* and *that* as follows:

- (1) a. th-is: D-[+proximate]
b. th-at: D-[-proximate]

Thus, *th-* indicates definiteness (located in D), and *-is* and *-at* are realizations of the proximity feature.

However, comparison with wh-words points to another analysis for *-at* as THING. Thus, comparison between *th-ere* and *th-en*, on the one hand, and *wh-ere* and *wh-en*, on the other, shows that *-ere* is PLACE and *-en* is TIME. Then, in the same way, comparison of *th-at* and *wh-at* indicates that *-at* is THING.

Another concern comes from Japanese. Comparing *wh-ere* and its Japanese counter part *do-ko* (see Table 1), we see that the two languages have the iconic morpheme order of wh-PLACE. But with demonstratives, the order is reversed:

- (2) a. ko-re: [+proximate]-D
b. a-re: [-proximate]-D (see Table 1)

Compare (1) and (2). Thus, the bimorphemic analysis in (1) has two problems: (i) it has to postulate two distinct entries for *-at* ([-proximate] and THING), and (ii) the morpheme order is iconic for wh-words in English and Japanese but reversed for demonstratives. The purpose of this paper is to solve such problems by proposing a tripartite structure for demonstratives and wh-words.

2. A Tripartite Structure

I propose that demonstratives and wh-words have a tripartite morphological structure of **Det-Dex-N**, which are characterized as follows:

- (3) **Det**: Determiner, the locus for definiteness and the [wh] feature
Dex: Deixis, concerned with the spacial notion of proximity
N: specific primitive lexical contents such as THING, TIME, and PLACE

3. Demonstrative Pronouns and Adnominal Demonstratives in English

At the end of the last section, we discussed adnominal demonstratives. Although the proposed tripartite structure is primarily meant for demonstrative pronouns, this section investigates to what extent the analysis can be extended to adnominal demonstratives. Also, although the proposed tripartite structure is a *morphological* structure, this section discusses the *syntactic* structure of demonstrative pronouns and adnominal demonstratives. (By this way of setting the problem, I am assuming that syntax and morphology are distinct, along the lines of Distributed Morphology.)

One straightforward way to extend the tripartite morphological structure to the syntactic structure, while achieving a unified treatment for demonstrative pronouns and adnominal demonstratives, is as follows:

$$(13) \text{ [DP D [FP F [NP N/}\emptyset\text{]]]}$$

That is, there are two functional projections above NP. F is Deixis in the proposed analysis, but the exact label varies among researchers. For some pronouns, the head is null (but not for *-at* of *th-at*, under the proposed analysis; see (6) above and (16) below). See Panagiotidis (2002) for extensive discussion for the null noun. For example, building on Postal's (1969) insight, Panagiotidis analyzes *we linguists* as $[\text{DP we [FP F [NP linguists]]}]$ and simple *we* as $[\text{DP we [FP F [NP } \emptyset\text{]}]}$.

For Panagiotidis (2002), F in (13) is Num(ber). In this regard, an analysis of *these* and *those* is relevant. Unlike *that*, for which I postulated no [-proximate] feature, *those* seems to contain it. If *these* and *those* are analyzed as *th-ese* and *th-ose*, then *-ese* and *-ose* are a portmanteau of [+proximate, +plural] and [-proximate, +plural], respectively. This suggests that FP in (13) is the locus of both deixis and number. On the other hand, if *these* and *those* are analyzed as *th-e-se* and *th-o-se*, then *-e-* and *-o-* are realization of [+proximate] and [-proximate], respectively, in the context of [+plural], and *-se* is realization of [+plural]. In this analysis, NumberP and DeixisP are distinct phrases. I leave both possibilities open.

Concretely, when N in (13) is null, we have examples like the following:

- (14) a. I like this \emptyset . (cf. Radford 1993, Kayne and Pollock 2010)
 b. I don't like this scarf from Paris but I like that \emptyset from Prague.
 (Panagiotidis 2002:103)

This is analogous to the noun ellipsis in a possessive construction:

- (15) a. I like John's book.
 b. I like John's \emptyset .

When N in (13) is realized as a bound morpheme with a primitive notion, we have demonstrative pronouns like (16) (with their morphological structures), which have the syntactic structure in (17):

- (16) a. *th- \emptyset -at* Det-Dex-THING
 b. *th- \emptyset -en* Det-Dex-TIME
 c. *th- \emptyset -ere* Det-Dex-PLACE

$$(17) \text{ [DP th [FP F [NP at/en/ere]]]}$$

Let us compare *this* (as a pronoun) and *this book*, which is rather straightforward:

- (18) a. $[\text{DP th [FP is [NP } \emptyset\text{]}}]$ (cf. 5a)
 b. $[\text{DP th [FP is [NP book]}}]$

With the pronoun, N is null. The same part is filled with a noun for *this book*. In (18b), *-is* in FP merges with *th-* in DP, and *th-is* as a whole is located in Spec DP (cf. 12). Whether the same thing happens with the pronoun, I leave open.

For *that* and *that book*, the parallelism breaks down:

- (19) a. $[\text{DP th [FP } \emptyset \text{ [NP } \underline{\text{at}}\text{]}}]$ (cf. 6)
 b. $[\text{DP } \underline{\text{that}} \text{ [FP } \emptyset \text{ [NP book]}}]$

Here, *-at* (underlined) is either N (19a) or part of DP (19b). The same analysis holds for *what* and *what N*. (I leave the analysis of *which (N)* for future research.)

The alternation of *-at* in (19) is reminiscent of the following (adapted from Waters 2009: 293f):

- (20) a. Mary is inside *of* the house.
 $[\text{PP in [NP side [KP of [DP the house]}]}]$
 b. Mary is inside \emptyset the house.
 $[\text{PP inside [NP [KP [DP the house]}]}]$

Here, what used to be a noun (*side* of (20a)) is reanalyzed as part of the preposition that selects the NP. Although the alternation in (19) is synchronic but that in (20) is diachronic, the similarity between them is worth notice.

A similar change is observed in *indeed*. As noted by Traugott and Dasher (2001: 159ff), this word used to be “preposition + noun” as *in dede* ‘in action,’ but now the noun is incorporated into the (former) preposition.

In the tripartite morphological analysis of demonstrative pronouns given so far, one part of the slot was null. Although I have yet to find a demonstrative that fills all the parts of Det-Dex-N morphologically, at least at the syntactic level there are cases where the corresponding three parts in the phrase structure are all filled. The following example of nonstandard English cited in Bernstein (1997: 91) and Kayne (2005: 65) are such cases:

- (21) a. this here book b. that there book

They have the following syntactic structure:

- (22) [DP this/that [FP here/there [NP book]]]

Although the order is different, the following example of standard English (again cited in Bernstein *ibid.*) also illustrates a case where the three parts are filled syntactically:

- (23) this guy here

French have similar examples (cf. 4a):

- (24)a. ce livre-ci ce book-here ‘this book’
 b. ce livre-là ce book-there ‘that book’
 (Kayne and Pollock 2010: 215, Bernstein *ibid.*)

4. Demonstrative Pronouns and Adnominal Demonstratives in Japanese

This section shifts to Japanese. In (12) and section 3, adnominal demonstratives are analyzed as located in Spec DP. This indicates that they are a phrase rather than a head. The following Japanese examples confirm this:

- (25)a. ko-no hon b. Taro-no hon
 this-Gen book Taro-Gen book
 ‘this book’ ‘Taro’s book’

We saw in (14) and (15) that there is a parallelism in demonstratives and possessives in English. Let us then extend this parallelism to (25) and assume that *no* in (25a) and (25b) are the same genitive marker. Then, given that a case marker attaches to a phrase, the fact that *no* attaches to *ko* in (25a) indicates that *ko* is a phrase. Although *ko* is a bound form in Modern Japanese, it was a free form in Classical Japanese. This also motivates the phrasal status of *ko*.

Although *no* typically appears in the context of N ___N as in (25b), I assume that the deictic marker *ko* serves as the context for the genitive marker *no*, for FP (DeixisP in the present analysis) is an extended projection of NP in the sense of Grimshaw (2003).⁵

Let us next consider the syntactic structure of *ko-no hon* ‘this book’ in comparison with *ko-re* ‘this’:

- (26)a. [DP D [FP ko [NP re]]]
 b. [DP D [FP ko [NP hon]]]

Here, *-re* ‘THING’ and *hon* ‘book’ are parallel, located in N. In (26b), the genitive emerges, for the reason discussed above, yielding *ko-no hon*. The emergence of *no* here is analogous to *of*-insertion in English. In (26a), because *-re* is a bound form and merges with *ko-*, the genitive does not emerge.

As a matter of fact, *ko-re* ‘this’ has several analytical possibilities. In particular, depending on the phrasal status of *ko-*, we have three options.

As a first possibility, if the parallelism in (26) holds not only between *re* and *hon* but also between the two *ko*’s, then *ko* in (26a) is a phrase in Spec FP and *ko-re* as a whole is a phrasal compound.

If, in contrast, *ko-* in (26a) is a head, (26a) is interpreted as representing a head-initial structure. The morpheme order of *ko-re* is obtained with the original order in phrase structure as a result of merger.

We have a third option if we analyze *ko-* in (26a) as a head and postulate a head-final structure, common in Japanese. In this scenario, (26a) is modified in accord with the head-final structure as [DP [FP [NP re] ko]]. The morpheme

order of *ko-re* is obtained due to the enclitic nature of *-re*. It seems that whether N in a demonstrative is an enclitic or a proclitic depends on the word order of OV or VO. Consider the case of Tamil and Ponapean:

Table 2 Tamil (Dixon 2003: 78/Asher 1985: 150)

a: nominal; b: place; c: place; d: quantity; e: manner

	proximal	distal	interrogative
a	i-nta	a-nta	e-nta
b	i-ngke	a-ngke	e-ngke
c	i-ppa	a-ppa	e-ppa
d	i-ttane	a-ttane	e-ttane
e	i-ppati	a-ppati	e-ppati

Table 3 Ponapean (Micronesia) (Rehg 1981: 143-154)

a: individual/place (sg); b: time (sg); c: pointing (sg); d: adnominal (sg)

	proximal	medial	distal
a	m-et	m-en	m-wo
b	m-et	-	-
c	i-et	i-en	i-o
d	-et	-en	-o

Tamil is an SOV language and Ponapean SVO. N in Tamil is an enclitic (e.g., *-nta* for nominal in Table 2), while N in Ponapean is a proclitic (e.g., *m-* for individual/place in Table 3). Although English is a counterexample to this correlation (an SVO language with an enclitic N as *th-at*), the enclitic order might reflect the old word order of OV in OE or Germanic.

A question arises why we cannot combine *ko-no hon* ‘this book’ and *ko-re* ‘this’, yielding **ko-re (no) hon*. Recall our analysis of English *that* and *that book* (repeated):

- (19)a. [DP *th* [FP Ø [NP *at*]]]
 b. [DP *that* [FP Ø [NP *book*]]]

-re of *ko-re* corresponds to *-at* of *th-at* in occupying N in (19a). In (19b), *-at* appears as a part of the adnominal demonstrative. If the same thing happens in Japanese, **ko-re (no) hon* should be possible, contrary to fact. One easy way out is to resort to blocking. Thus, given simpler and less periphrastic expression of *ko-no*

hon, **ko-re (no) hon* is not generated. In contrast, since there is no more economical expression than *that book* to denote the same notion in English, it emerges as it is. I will return to blocking below, but there is another way to capture the difference between Japanese and English, and that is to analogize it to diachronic variation again (cf. 20).

Modal auxiliaries in English used to be verbs in OE but they are nowadays merged at T. That is, a former occupant of V is now an occupant of T. This leaves the V part empty, and we know that the V part is filled with another verb, as *I can sing* (cf. Roberts and Roussou 2003). This is the situation of (19b): merger of *-at* at Spec leaves N empty, and the position is filled by another noun. In contrast, this “refilling” does not happen in Japanese. This is analogous to German, where the equivalent of English *can* is used without a verb. (I thank Yoshiki Ogawa for bringing up the issue and the suggestion.)

Next, I discuss some further issues surrounding adnominal demonstratives in Japanese.

English has an expression like *this one*, but there is no equivalent in Japanese; *ko-re* serves both for ‘this’ and ‘this one.’ English pronominal *one* is usually translated with *no*:

- (27)a. *akai hon* b. *akai no*
 red book red one

But when the modifying word has the genitive *no*, the pronominal *no* cannot emerge:

- (28)a. *Taro-no hon* b. *Taro-no (*no)*
 Taro’s book Taro’s one

This is a case of haplology, prohibiting the repetition of the same phonological string of **no-no*. In the same way, *ko-no no*, the literal translation of *this one*, is ruled out.

In (28), we saw that *Taro-no* by itself can mean ‘Taro’s one.’ Thus, one might expect that **ko-re no* or *ko-no* can also mean ‘this one’, but this is not the case; **ko-re no* does not exist, and *ko-no* only functions as an adnominal demonstrative. This is accounted for by blocking. Thus, since there is a word for ‘this one,’ namely *ko-re* (cf. 26a), **ko-re no* or *ko-no* with the same meaning are blocked. With **ko-re no*,

it is clearly less economical than correct *ko-re*. For *ko-no*, *no* is a general word for ‘thing’ and loses to a more specific vocabulary *-re* (by the elsewhere principle), which is restricted to demonstratives.

5. Summary and Conclusion

This paper has proposed a tripartite morphological structure for demonstratives and wh-words in English and Japanese. Although they all look bimorphemic, the point of the proposed analysis is that there is one empty slot. The tripartite structure solves the problems of the conventional bimorphemic analysis as noted in section 1. The paper also extends the tripartite morphological structure, extending its scope from demonstrative pronouns to adnominal demonstratives.

As noted in section 1, it has been a common practice in Japanese grammar to break down demonstratives and wh-words into several morphemes. In contrast, such a practice started for English mainly in this century. I hope that the proposed unified treatment of demonstratives and wh-words in the two languages will stimulate researches in more extended domains of the two languages and beyond.

We saw that sometimes the parallelism breaks down (as in the case of *that* and *that book* in (19)), and I left several analytical possibilities open for *ko-re* ‘this’ in (26). I leave such issues for future research.

Tables 4 and 5

Summary of morphological structures of demonstratives and wh-words in English and Japanese

	Det	Dex	N
this	th	is	∅
that	th	∅	at (THING)
what	wh	∅	at (THING)
where	wh	∅	ere (PLACE)
there	th	∅	ere (PLACE)
when	wh	∅	en (TIME)
then	th	∅	en (TIME)
this N	th	is	N
that N	that	∅	N

	Det	Dex	N
ko-re	∅	ko	re (THING)
a-re	∅	a	re (THING)
do-re	do	∅	re (THING)
ko-ko	∅	ko	ko (PLACE)
so-ko ⁶	(so)	so	ko (PLACE)
do-ko	do	∅	ko (PLACE)
ko-no N	∅	ko	N
a-no N	∅	a	N
do-no N	do	∅	N

Notes

*I thank the audiences and Yoshiki Ogawa for helpful comments.

1. The exact identification of *th-* is controversial (i.e., a definiteness marker for Déchaine and Wiltschko 2002, a 3rd person marker compatible with indefiniteness for Bernstein 2008, and a ostensive (i.e., pointing out) marker for Klinge 2008).

2. Kayne (2010: 212) also states that *this* is accompanied by a first person, while *that* is not.

3. But Heine and Kuteva (2002: 109-111) also report cases where a proximate demonstrative developed into a definite article.

4. Kayne (2005: 72, n. 13) also suggests segmentation of *h-ere* and *th-ere*. However, *-ere* is not identified as PLACE. Instead, Kayne postulates PLACE as an independent silent noun. This analysis is partly due to an example like “He spoke thereof,” which seems to necessitate THING rather than PLACE. Under the proposed analysis, *-ere* in this case is reanalyzed as THING through a kind of metonymy.

5. A question remains why the same thing does not happen in English, yielding **this’s book*. Although proper characterization of genitives in English and Japanese are beyond the scope of this paper, note that genitives are more pervasive in Japanese than in English; where English has an N N compound, Japanese has N-Gen N, like *school teacher* vs. *gakkoo-no sensee* ‘school-Gen teacher.’

6. I have been silent about the *so-* series. In Table 1, they are identified as ‘medial.’ Concretely, *so-* means far from the speaker but close to the hearer. With this meaning, *so-* is in Dex. But it also denotes definiteness. With this meaning, it is likely to be located in Det.

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kn20@mx.ibaraki.ac.jp

On Phi-Feature “Copying”

Akane Ohtaka
Tsuda College

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1. INTRODUCTION

(1) illustrates the feature inheritance mechanism proposed by Chomsky (2008). In (1), phi-features on phase heads are transmitted to their complement heads.

- (1) a. [C_ϕ] [T_ϕ] ...
 b. [v_ϕ] [V_ϕ] ...

In this paper, instead of inheritance, I will propose the optional phi-feature “copying” and define it as allowing not only (1) but also (2) and (3).¹

- (2) a. [C_ϕ] [T...
 b. [v_ϕ] [V...
 (3) a. [C_ϕ] [T_ϕ] ...
 b. [v_ϕ] [V_ϕ] ...

That is, as shown in (2), phi-features can remain on phase heads.² Furthermore, phi-features can be copied onto their complement heads, as illustrated in (3).³

I will also show that this analysis can account for the derivations of raising-to-object and object control constructions in Japanese.⁴ The example in (4) is a raising-to-object construction in Japanese.⁵

- (4) Bill-wa Mary-o_i [t_i baka-
 Bill-TOP Mary-ACC_i [t_i fool-
 da-to] omot-teiru.
 COP-COMP] think-PROG

‘Bill thinks of Mary as a fool.’

Under the movement analysis of control discussed by Fujii (2006), Takano (2009, 2010), and Boeckx et al. (2010), object control constructions in Japanese can also be analyzed as involving movement, as seen in (5). In (5), the embedded subject undergoes movement into the higher clause.

- (5) Bill-wa Mary-ni_i [t_i sono
 Bill-TOP Mary-DAT_i [t_i that
 hon-o yomu yoo(ni)]
 book-ACC read COMP]
 meizita.
 commanded
 ‘Bill told Mary to read that book.’

Note that in each sentence above, the embedded clause is analyzed as a CP because it is tensed and is headed by a complementizer. The issue then arises as to how each embedded subject moves out of the CP. In other words, the issue is whether the embedded subject moves through the embedded Spec-CP.

If the Spec-CP is an A'-position, the embedded subject cannot undergo further movement into an A-position because this would lead to improper movement. Assuming the Phase Impenetrability Condition (PIC), however, the embedded subject necessarily stops by at the Spec-CP.

- (6) The Phase Impenetrability Condition
 The domain of H is not accessible
 to operations outside HP; only H
 and its edge are accessible to such
 operations.

Chomsky (2001: 13)

In the next section, I will discuss this issue while reviewing previous analyses.⁶

2. PREVIOUS ANALYSES

To resolve the problem mentioned above, two

types of analyses have been proposed in the literature. Let us first consider the analysis proposed by Takano (2009) and Takahashi (2012), in which each embedded subject moves out of the CP without triggering a violation of the ban on improper movement.

Under Takano's analysis, an object control construction such as (5) is associated with the derivation in (7).

- (7) Bill-wa Mary-ni_i [_{CP} [_{TP} t_i
sono hon-o yomu]
yoo(ni)] meizita.

In (7), the movement of the embedded subject proceeds from the Spec-TP directly to the Spec-VP, which means that there is no violation of the ban on improper movement.

Takano argues that such movement is possible because the CP is not a phase. On the assumption that the CP is a phase, due to the PIC, the subject of the embedded clause obligatorily moves through the Spec-CP. By contrast, if the CP is not a phase, the embedded subject can move out of the CP without passing through the Spec-CP, as illustrated in (7).

Takahashi suggests that abstractly the same holds for a raising-to-object construction such as (4). That is, the CP is not a phase. Takahashi claims that when C(-T) does not value Case, the CP does not constitute a phase. Since the embedded subject in (4) is assigned the accusative Case not by the C(-T), but by the matrix verb, the CP is not a phase under his analysis. Therefore, (4) is derived along the lines of (8).

- (8) Bill-wa Mary-o_i [_{CP} [_{TP} t_i
baka-da]-to] omot-teiru.

In (8), the subject of the embedded clause moves up into the higher clause without yielding improper movement.

Now let us turn to Tanaka's (2002) analysis.

Tanaka argues that a raising-to-object construction such as (4) is derived as shown in (9).

- (9) Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t_i
baka-da]-to] omot-teiru].

The embedded subject in (9) undergoes movement through the Spec-CP, which suggests that improper movement is permitted in Japanese raising-to-object constructions, in sharp contrast to what is assumed in Takahashi (2012). What, then, makes the movement by way of the Spec-CP possible?

On the basis of Tanaka's analysis, Takeuchi (2010) proposes the derivation in (10) for a raising-to-object construction such as (4).

- (10) Bill-wa [_{CP} Mary-o_i [_{TP} t_i
baka-da]-to] omot-teiru.

In (10), the embedded subject moves from the Spec-TP to the Spec-CP.

Takeuchi assumes that the complementizer *to* optionally passes its phi-features to T. When the phi-features remain on C, as in (2a), C becomes a probe for Agree. Agree triggers the movement of the embedded subject in (10). Note that under Chomsky's (2008) analysis, the movement motivated by Agree is analyzed as an A-movement. Since the movement that occurs in (10) is triggered by Agree, it is analyzed as an A-movement.

When phi-features on C are transmitted to T, as in (1a), the embedded subject is assigned nominative Case, as shown in (11) (Takeuchi (2010)).

- (11) Bill-wa [Mary-ga baka-da
Bill-TOP [Mary-NOM fool-COP
-to] omot-teiru.
-COMP] think-PROG
'Bill thinks that Mary is a fool.'

Thus far, we have seen two types of analyses. As mentioned above, I assume with Chomsky

(2008) that the movement triggered by Agree is an A-movement. In addition, under Chomsky's (2008) analysis, CP always constitutes a phase. Thus, I adopt the analyses proposed by Tanaka (2002) and Takeuchi (2010) here. Then, it is assumed that a raising-to-object construction such as (4) is associated with the derivation in (12), where the embedded subject undergoes A-movement through the Spec-CP.

- (12) Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t_i baka-da]-to] omot-teiru].

Similarly, an object control construction such as (5) is derived along the lines of (13).

- (13) Bill-wa [_{VP} Mary-ni_i [_{CP} t'_i [_{TP} t_i sono hon-o yomu] yoo(ni)] meizita].

On the basis of Chomsky's (2008) work, I assume here that the final landing site in each case is the Spec-VP.

Note that each embedded subject first appears in the embedded Spec-*v*P. Then, (12) and (13) are revised into (14) and (15), respectively.

- (14) Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i baka-da]] to] omot-teiru].
 (15) Bill-wa [_{VP} Mary-ni_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i sono hon-o yomu]] yoo(ni)] meizita].

In each derivation above, the embedded subject moves from the Spec-*v*P to the Spec-VP through the Spec-TP and the Spec-CP. What, then, makes the movement from the Spec-*v*P to the Spec-TP possible?

We have already observed that each embedded subject undergoes A-movement from the Spec-TP to the Spec-CP, when the C retains phi-features, as in (2a) (Takeuchi (2010)). In this case, however, the movement from the Spec-*v*P to the Spec-TP cannot be analyzed as an A-movement because the T does not carry phi-features at the stage of derivation under

consideration.

- (16) [_C [_φ] [_T...](=2a))
 Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i baka-da]] to] omot-teiru].

As discussed by Chomsky (2008), the edge feature on T might raise the embedded subject to the Spec-TP, but under Chomsky's (2008) analysis, the movement motivated by an edge feature is A'-movement.

When the C enters into an Agree relation with the embedded subject in the Spec-*v*P, the movement proceeds from the Spec-*v*P directly to the Spec-CP. Note that assuming that TP represents a predication relation, the embedded subject cannot obtain a subject status unless it moves by way of the Spec-TP (Chomsky (1995, 2012)).

- (17) [_C [_φ] [_T...](=2a))
 Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} [_{VP} t_i baka-da]] to] omot-teiru].

When the C passes its phi-features to T, as in (1a), the movement from the Spec-*v*P to the Spec-TP is analyzed as an A-movement. In this case, however, A-movement from the Spec-TP to the Spec-CP is not possible because the C lacks phi-features.

- (18) [_C [_]] [_T [_φ],...](=1a))
 Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i baka-da]] to] omot-teiru].

In this section, I have shown that the derivations of (4) and (5) are (14) and (15), respectively. In each case, the embedded subject undergoes A-movement from the Spec-*v*P to the Spec-VP by way of the Spec-TP and the Spec-CP. I have also shown that this fact cannot be accounted for by the analyses reviewed in this section. In the next section, I will propose a new analysis to account for this.

3. PROPOSALS

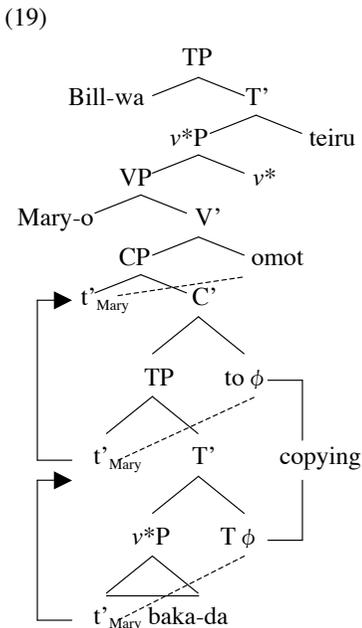
In this section, I will propose the optional phi-feature “copying” and define it as allowing not only (1) and (2) but also (3). That is, phi-features on phase heads can be passed to their complement heads, as in (1), or they can remain on the phase heads, as in (2). Furthermore, they can be copied onto the complement heads, as in (3).⁷

- (1) a. [C_∅] [T_∅]...
 b. [v_∅] [V_∅]...
 (2) a. [C_∅] [T...]
 b. [v_∅] [V...]
 (3) a. [C_∅] [T_∅]...
 b. [v_∅] [V_∅]...

This analysis can account for the derivations presented in (14) and (15) as follows.

- [C_∅] [T_∅]... (= (3a))
 (14) Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i baka-da]]] to] omot-teiru].
 (15) Bill-wa [_{VP} Mary-ni_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i sono hon-o yomu]]] yoo(ni)] meizita].

The structure of (14) is, for instance, as in (19).



In each case above, the embedded subject first occupies the Spec-*v*P. When phi-features on C are copied onto T, as in (3a), both C and T become probes for Agree. Agree triggers the A-movement of the embedded subject from the Spec-*v*P to the Spec-CP by way of the Spec-TP. Then, the embedded subject undergoes further A-movement to the Spec-VP via Agree with V.⁸

In this way, the derivations of raising-to-object and object control constructions in Japanese can be accounted for under the assumption that optional phi-feature “copying” takes place. Note that in each case, the C and T are not involved in the Case assignment. Therefore, the remaining question is why they do not assign Case. Here, I assume that this situation occurs because these phi-features are “weakened” due to copying. Since the C and T carrying the “weakened” phi-features cannot be involved in Case assignment, the embedded subject moves into the higher clause, where it is assigned Case.

With the above in mind, consider the case of a *that* clause.

- (20) [C_∅] [T_∅]... (= (3a))
 a. It seems that John left.
 b. *John_i seems [_{CP} t'_i that [_{TP} t'_i [_{VP} t_i left]]].

If “feature weakening” is always involved in phi-feature copying, then the embedded C and T in (20a), just as those in (14) and (15), will not assign Case. Then, the embedded subject in (20a) is predicted to move out of the CP. However, (20b) is ungrammatical, which suggests that in (20a), the phi-features are not “weakened” even when phi-feature copying takes place. That is, phi-feature copying does not always involve “feature weakening.”

The issue then arises as to when “feature weakening” takes place. If “feature weakening”

depends simply on the differences among languages themselves, then it will not take place in the case of (21a) because (21a) is also an English construction.

- (21) [C_[\phi] [T_[\phi]...=(3a)]
 a. Bill convinced Mary to leave.
 b. Bill convinced [_{VP} Mary_i [_{CP} t'_i [_{TP} t'_i to [_{VP} t_i leave]]]]].

The example in (21a) is an object control construction in English. Under the analysis presented above, (21a) is derived along the lines of (21b).⁹ Crucially, when phi-features on C are copied onto T, as in (3a), the embedded subject in (21a), unlike that in (20a), undergoes A-movement out of the CP. This indicates that in this case, the embedded C and T are not involved in Case assignment. In other words, in the case of (21a), the phi-features are “weakened” due to the copying.

Thus, in the cases of (14), (15), and (21a), phi-feature copying involves “feature weakening.” By contrast, in the case of (20a), the phi-features are not “weakened” even when phi-feature copying takes place. In the former cases, the A-movement of the embedded subject proceeds from the Spec-*v*P to the Spec-CP via the Spec-TP. Then, due to Agree with V, the embedded subject undergoes further A-movement to the Spec-VP.

- [C_[\phi] [T_[\phi]...=(3a)]
 (14) Bill-wa [_{VP} Mary-o_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i baka-da]] to] omot-teiru].
 (15) Bill-wa [_{VP} Mary-ni_i [_{CP} t'_i [_{TP} t'_i [_{VP} t_i sono hon-o yomu]] yoo(ni)] meizita].
 (21) a. Bill convinced Mary to leave.
 b. Bill convinced [_{VP} Mary_i [_{CP} t'_i [_{TP} t'_i to [_{VP} t_i leave]]]]].

In the latter case, the embedded subject does not move into the higher clause.

- [C_[\phi] [T_[\phi]...=(3a)]
 (20) a. It seems that John left.
 b. *John_i seems [_{CP} t'_i that [_{TP} t'_i [_{VP} t_i left]]].

Now, let us consider the differences between the clauses discussed above. The properties of the clauses are summarized below.¹⁰

(22)	<i>That</i> Clauses	Object Control Clauses		RTO Clauses
Language	English (20a)	English (21a)	<u>Japanese</u> (15)	<u>Japanese</u> (14)
Finiteness	[+finite]	<u>[-finite]</u>	<u>[-finite]</u>	[+finite]
Feature Weakening	No	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>

It appears that “feature weakening” takes place depending on the language and the finiteness of clauses.

Note that I assume with Fujii (2006) that the embedded clause in (15) is a nonfinite clause. Fujii proposes the tense alternation generalization shown in (23).

- (23) Tense alternation generalization:
 Tensed subordinate clauses in Japanese are [-finite] if and only if their predicate does not alternate between the present tense form and past tense form.

Fujii (2006: 13)

Since the embedded clause in (15) does not allow tense alternation, as illustrated in (24), it is analyzed as a nonfinite clause under Fujii’s analysis.¹¹

- (24) Bill-wa [_{VP} Mary-ni_i [_{CP} t'_i [_{TP} t'_i Bill-TOP Mary-DAT
 [_{VP} t_i sono hon-o
 that book-ACC

{yom-u/*yon-da}]] yoo(ni)]
 read-Prs/Past COMP
 meizita].
 commanded
 ‘Bill told Mary to read that book.’

In this section, I have argued that phi-features on phase heads are optionally “copied” onto their complement heads. This analysis can correctly account for the derivations in (14) and (15). I have also shown that when phi-features on C are copied onto T, “feature weakening” takes place depending on the language and the finiteness of clauses.

4. SUMMARY

In this paper, I have proposed optional phi-feature “copying” and defined it as allowing not only (1) and (2) but also (3). That is, phi-features on phase heads can be passed to their complement heads, as in (1), or they can remain on the phase heads, as in (2). Furthermore, they can be copied onto the complement heads, as in (3).

- (1) a. [C_[]] [T_[φ]]...
 b. [v_[]] [V_[φ]]...
 (2) a. [C_[φ]] [T...
 b. [v_[φ]] [V...
 (3) a. [C_[φ]] [T_[φ]]...
 b. [v_[φ]] [V_[φ]]...

I have also shown that this analysis can account for the derivations of raising-to-object and object control constructions in Japanese. In each structure, when phi-features on C are copied onto T, as in (3a), both C and T become probes for Agree. Agree triggers the A-movement of the embedded subject from the Spec-*v*P to the Spec-CP by way of the Spec-TP. The embedded subject subsequently undergoes further A-movement to the Spec-VP due to Agree with V.

NOTES

¹ See Saito (2011) for edge-feature transmission.

² Takeuchi (2010) argues that the complementizer *to* optionally passes its phi-features to T. His argument will be discussed in section 2.

³ Ouali (2008) proposes DONATE, KEEP, and SHARE, which correspond to (1), (2), and (3), respectively. Note that his analysis is based on facts given in Berber. In addition, he claims that the application of these three mechanisms is ordered.

⁴ Following Takeuchi (2010) and Miyagawa (2010), I assume that phi-feature agreement exists in Japanese. Note that Uchibori (2001), Saito (2011), and Fukui (2012) assume that Japanese lacks phi-feature agreement. Fukui further argues that chi-feature agreement rather than phi-feature agreement exists in Japanese.

⁵ Following Kuno (1976) and Tanaka (2002), I assume that the subject of the embedded clause obligatorily moves to the higher clause, as in (4).

⁶ In what follows, I will focus on feature transmission from C to T. Specifically, I will argue that phi-features on C are optionally “copied” onto T. Note that it is reasonable to assume that the same holds for feature transmission from *v* to V because not only C but also *v* is a phase head.

⁷ For a discussion on the No Tampering Condition, see Chomsky (2008: 138, 144).

⁸ I assume with Takeuchi (2010) that when phi-features on *to* are passed to T, as in (1a), the nominative Case is assigned, as shown in (11). By contrast, nominative Case assignment does not take place even when phi-features on *yooni* are transmitted to T, as in (1a). This is because the embedded T bearing [-finite] cannot assign Case. The finiteness of an object control clause will be discussed below.

⁹ Following Boeckx et al. (2010), I assume that (21a) can be analyzed in terms of movement.

¹⁰ In (22), RTO stands for “raising-to-object.”

¹¹ The tense of the embedded clause in (4) can be either present or past, as shown in (i).

- (i) Bill-wa Mary-o_i [t_i baka-
Bill-TOP Mary-ACC_i [t_i fool-
{da/datta}-to] omot-teiru.
Prs/Past-COMP] think-PROG
'Bill thinks of Mary as a fool.'

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The Phrasal Element within the Word and the Relationship between Morphology and Syntax*

Tatsuhiko Okubo
University of Tsukuba

Keywords: building block theory, parallel architecture theory, No Phrase Constraint, phrasal compounds, Word-Plus

1. Introduction

Grammatical theories have addressed the topic of where the morphological component is situated. Some theories state that this component is placed before syntax, while others state that it is not ordered relative to syntax. In this paper, the building block theory is used to refer to the former group, whereas the parallel architecture theory refers to the latter group (cf. Ackema and Neeleman (2004)), as expressed by (1) below.

- (1) a. The Building Block Theory
Morphology → Syntax
- b. The Parallel Architecture Theory
Morphology ↔ Syntax

These two theories differ in the directionality between the two components. According to the building block theory, as denoted by the single-headed arrow in (1a), outputs of morphology are inserted into syntax but not vice versa. According to the parallel architecture theory, as illustrated by the double-headed arrow in (1b), outputs of morphology are inserted into syntax and outputs of syntax are inserted into morphology. Thus, unlike the parallel architecture theory, in the building block theory, phrases, or outputs of syntax, cannot be used to form words, or outputs of morphology. This property of the building block theory is represented as No Phrase Constraint, expressed by (2), which states that phrases cannot be inserted into words.

- (2) No Phrase Constraint
Morphologically complex words cannot be formed (by word formation rules) on the basis of syntactic phrases.

(Botha (1981:18))

However, this constraint does not exist within the parallel architecture theory because this theory states that outputs of syntax can be inserted into morphology, as shown in (1b).

The difference between these two theories regarding phrasal compounds is clarified below in (3).

- (3) a. *over the fence* gossip, *after-the-party* mess, *run-of-the mill* work
- b. [*gray elephant*] hunter, [*small car*] driver, [*fresh fish*] shop

(Shimamura (2005), Shimamura (2007))

With regard to the compounds in (3), of crucial relevance to the difference between the two theories is the existence of apparent phrasal elements within the compounds. In (3a), the elements are the italic parts PP or NP, while in (3b), they are the A-N expressions in italics. In the building block theory, the apparent phrasal elements in (3) must be words because if the elements were phrases, the phrasal compounds in (3) would violate (2). In the parallel architecture theory, in contrast, without (2), the elements can be phrases.

According to the building block theory, as discussed above, the apparent phrasal elements in (3) must be words. Thus, the wordhood of the elements should be explained. This topic has been previously explained in several studies (Shimamura (1986, 2003, 2005), Wiese (1996), Harley (2009), Sato (2010), among others). Although these analyses are unique in some respects, they all have the common goal of reducing the size of the apparent phrasal elements to words. According to the parallel architecture theory, reducing the size of the apparent phrasal elements to words is not required because the apparent phrasal elements in (3) can be phrases in this theory.

The purpose of this paper is to resolve the theoretical conflict described above by analyzing apparent phrasal elements. To this end, I will first

argue that (2) is empirically adequate, and that, thus, the building block theory, which complies with the constraint, is empirically more valid than the parallel architecture theory without the constraint. Second, I will also argue that apparent phrasal elements of phrasal compounds are divided into two types. The differences between the two types are reduced to their structural differences in Distributed Morphology (Marantz (1997), Embick and Marantz (2008)), which is based on the building block theory.

In the next section, I will argue that the building block theory is empirically more valid than the parallel architecture theory because (2) must be required to account for the existence of apparent phrasal elements of phrasal compounds.

2. Validity of the No Phrase Constraint

2.1. Ackema and Neeleman (2004)

As discussed in the previous section, the parallel architecture theory provides a word status to apparent phrasal elements of phrasal compounds. Ackema and Neeleman (2004), adapting and adopting this theory, viewed elements as phrases by analyzing Dutch phrasal compounds, as shown in (4).

- (4) a. [namaak [*mobiele telefoon*]]
 ‘imitation mobile phone’
 b. [wereld [*rode wijn*]]
 ‘lit. world red wine, superb red wine’

In (4), the italics are apparent phrasal elements. Of crucial relevance here is the presence of inflection. According to the authors, the phrasal elements in (4) cannot be compounds because the adjectives *mobiele* and *rode* have underlined inflectional endings *-e*. Given the fact that Dutch adjectives within compounds appear without the inflection, the authors analyzed the italic parts in (4) as phrases.

2.2. Lexical Integrity: Syntactic Deformability and Syntactic Analyzability

Recent studies on lexical integrity have casted doubt on the analysis of Ackema and Neeleman. According to these studies, lexical integrity, a property of words, is disintegrated into two components from the viewpoint of differences in the

nature of diagnostics of lexical integrity, specifically, syntactic deformability and syntactic analyzability (Kageyama (2001, 2009)).

- (5) The Two Components of Lexical Integrity
 a. Syntactic Deformability: the internal structures of some elements can be changed by syntactic operations
 b. Syntactic Analyzability: the internal structures of some elements are visible to syntax

The former is related to operations that change the internal structures of some elements, such as internal modification, deletion, or replacement, while the latter is related to those elements that only make reference to the internal structures of the elements, such as anaphor, inflection, or agreement (Kageyama (2001), Haspelmath (2002)). Of the two components, syntactic *indeformability* is sufficient evidence to establish word status (Ackerman and LeSourd (1997), Kageyama (2001, 2009), Haspelmath (2002), Shimamura (2007)). Specifically, if syntactic operations that change internal structures cannot be applied to elements, the elements are words.

A consideration of the two components of lexical integrity immediately raises a question regarding the analysis of Ackema and Neeleman. If an inflectional property is only involved in syntactic analyzability and if syntactic analyzability is not sufficient evidence of wordhood, the presence of inflection is not a diagnostic of the phrasal status of the italic parts in (4). In other words, a test of syntactic deformability, as a property of wordhood, should be performed for confirmation of the elements’ phrasal status.

Among the diagnostics of syntactic deformability, in example (6b), internal modification is carried out for *mobiele telefoon* in example (6a).

- (6) a. [namaak [*mobiele telefoon*]] (= (4a))
 ‘imitation mobile phone’
 b. dure *mobiele* telefoon vs. **mobiele* dure telefoon ‘expensive mobile phone’ (Booij (2010: 186))

If the element were a phrase, it must have been syntactically deformable. Therefore, an adjective

dure ‘expensive’ could only modify *telefoon*. However, example (6b) displays that the adjective cannot do so in actuality, i.e., *mobiele telefoon* is syntactically indeformable. Thus, the apparent phrasal elements in (4) are words rather than phrases. Similarly, for the Dutch phrasal compounds in (6), apparent phrasal elements of English phrasal compounds do not allow for internal modification, as shown in (7).

- (7) a. [[small car] driver]
 b. *[[small green car] driver]
 c. *[[very small car] driver]

(Shimamura (2007))

In (7b), the adjective *green* cannot be inserted between *small* and *car*, and in (7c), the adverb *very* cannot modify *small* only. It is safely said from these observations that the apparent phrasal elements in (7) also have a word status.

In sum, apparent phrasal elements of phrasal compounds in Dutch and English are words because of the syntactic indeformability of the elements. Moreover, the wordhood of the apparent phrasal elements provides support for No Phrase Constraint, and thus, only in that the existence of the constraint is empirically supported is the building block theory empirically more adequate than the parallel architecture theory.

The following section demonstrates that there are two types of apparent phrasal elements and that the two types cannot be captured by traditional analyses proposed by the building block theory.

3. The Two Types of Apparent Phrasal Elements and Word/Word-Plus

We found that words must have syntactically indeformable properties, as discussed in the previous section. However, words are not monolithic. According to Kageyama (2001, 2009), words can be classified into two classes, Word (W) and Word-Plus (W⁺), as given in (8) below.

- (8) a. Both W and W⁺ are subject to the prohibition on diagnostics of syntactic deformability
 b. W does not allow for diagnostics of syntactic analyzability, whereas W⁺

does.

Both W and W⁺ are words, so the two classes do not allow for operations that change their internal structures. However, in regard to the visibility of their internal structures, only W⁺ is syntactically visible.

If all words are divided either into W or W⁺ and if apparent phrasal elements are words, there is possibility that apparent phrasal elements can be either W or W⁺. In this section, I argue that apparent phrasal elements with the structure PP or NP are W-type elements, as shown in (9a), while apparent phrasal elements with the structure A-N are W⁺-type elements, as given in (9b).

- (9) a. *over the fence* gossip, *after-the-party* mess, *run-of-the-mill* work
 b. [*gray elephant*] hunter, [*small car*] driver, [*fresh fish*] shop

There are three differences between W- and W⁺-type elements. First, W-type elements do not allow for plural inflections, i.e. syntactic analyzability, while W⁺-type elements allow for plural or genitive inflections, as given in (10) below.

- (10) a. between-meal(*s) snacks, the wash-hand(*s) stand
 b. [new-books] shelf, [equal rights] amendment, [little girl’s] bicycle

(Shimamura (2005), Shimamura (2007))

Second, W-type elements may occur as adjective complements for the verb *consider*, which means that W-type elements do not have to be embedded in compounds or derivations. In contrast, W⁺-type elements may not be unembedded, as shown in (11) below.

- (11) I consider the painting *run of the mill*.

If W⁺-type elements are unembedded, as Shimamura (2007) noted, the elements are interpreted as phrases rather than W⁺.

Third, meanings of some W-type elements are opaque, while those of W⁺-type elements are always transparent, as demonstrated in (12) below.

- (12) *off the rack* dress ‘made to a standard average size and not made especially to fit you’ vs. [*small car*] driver ‘a car that is small’

In (12), the meaning of the W-type element *off the rack* is non-compositional, but that of the W⁺-type element *small car* is compositional.

As these examples show, there are W- and W⁺-type elements in apparent phrasal elements. This observation poses a serious challenge to traditional analyses employed in the building block theory (Shimamura (1986, 2003, 2005), Wiese (1996), Harley (2009), Sato (2010), among others) because traditional analyses do not recognize the distinction between W- and W⁺-type elements in apparent phrasal elements or identify a structure of W⁺-type elements even if there are distinctions between W- and W⁺-type elements. To solve these problems in the building block theory, in the following section, I employ Harley's (2009) analysis for apparent phrasal elements, elaborating upon certain aspects of her analysis and show that the differences between W- and W⁺-type elements can be reduced to their structural differences in the framework of Distributed Morphology (DM).

4. The Structures of W-Type and W⁺-Type Elements

4.1. Harley (2009)

Before proceeding to the structures of W- and W⁺-type elements, let us review an analysis of Harley (2009) for a structure of apparent phrasal elements. Harley proposed a DM-based unified analysis for several types of compounding. Moreover, she argued that an apparent phrasal element is generated by incorporating a phrase XP into a nominalizing functional head n^0 , as in (13).

- (13) The Structure of Apparent Phrasal Element
 $[_{nP} XP n^0]$

The resultant compound includes the phrase in itself. Thus, this structure violates No Phrase Constraint. Harley avoided the problem by proposing that a phrase XP becomes a $\sqrt{\text{ROOT}}$ -like element when the phrase is merged with n^0 .

Although the structure proposed by Harley is largely correct, it should be revised in certain respects. The first revision is a category of the structure. Harley's structure (13) cannot explain the example in (14) because the category of her

structure is a noun.

- (14) a. a very *off the wall* remark
 b. a way *over the top* remark

Given the fact that the adverbs *very* and *way* can only modify adjectives or adverbs while the modified apparent phrasal elements occur prenominaly, which means that these elements are adjectives, it follows that a category of the italics in (14) is an adjective (cf. Burstein (1992), Shimamura (2003)). The structure proposed by Harley cannot explain this fact.

The other revision is that the structure in (13) alone cannot capture the differences between W- and W⁺-type elements witnessed in the previous section.

To solve this categorical problem and to provide an explanation for the distinction between W- and W⁺-type elements, I propose a new analysis that employs root attachment and outer domain attachment proposed in Embick and Marantz (2008).

4.2. Proposal

Embick and Marantz (2008) suggested in the framework of DM that word formation is carried out in two domains, root attachment and outer domain attachment. For example, the *-ity* form is built in root attachment in (15a), while the *-ness* form is derived in outer domain attachment in (15b).

- (15) a. $[_{nP} \sqrt{\text{ROOT}} n^0]$
 (e.g. curiosity $[_{nP} \sqrt{\text{CURIOUS}} n^0 \text{-ity}]$)
 b. $[_{nP} [_{aP} \sqrt{\text{ROOT}} a^0] n^0]$

(e.g. curiousness $[_{nP} [_{aP} \sqrt{\text{CURIOUS}} a^0 - \emptyset] n^0 \text{-ness}]$)
 In root attachment (15a), $\sqrt{\text{ROOT}}$ is directly merged with the nominalizing head n^0 , resulting in a nominal; in outer domain attachment (15b), $\sqrt{\text{ROOT}}$ is first merged with the adjectivalizing head a^0 , resulting in an adjective, and then, the resultant word is combined with n^0 to form a noun. The attached functional heads can have certain phonological forms, and the phonological forms differ in the environments in which the functional heads occur. For instance, n^0 is realized as the suffix *-ity* in root attachment, while it is realized as the suffix *-ness* in outer domain attachment, as shown in (15) above.

In this paper, I propose that a category of apparent phrasal elements is an adjective and that W-

and W⁺-type elements are built in root attachment and outer domain attachment, respectively, as shown in (16).

- (16) a. [_{AP} XP a⁰]
 b. [_{AP} [_{IP} XP f⁰] a⁰]

Concretely, W-type elements are generated by the attachment of a phrase XP to a⁰, while W⁺-type elements are formed by attachment of the structure [_{IP} XP f⁰], in which the phrase XP is combined with a certain functional head f⁰, to a⁰. For instance, attaching the phrase XP *over the fence* to a⁰ results in a W-type element in root attachment, while the W⁺-type element *small car* is created by the first attachment of the phrase XP *small car* to f⁰ and the second attachment of the resultant structure to a⁰, as shown in (17) below.

- (17) a. [[_{AP} [over the fence] a⁰] gossip]
 b. [[_{AP} [_{IP} [small car] f⁰] a⁰] driver]

In the next section, I provide evidence for the W-type structure (16a) and W⁺-type structure (16b).

4.3. Evidence for W-Type and W⁺-Type Structures

Before presenting evidence for the proposed structures, let us clarify the claim that W-type elements are built in root attachment, while W⁺-type elements are formed in outer domain attachment. As discussed in the previous section, the *-ity* form is derived in root attachment, whereas the *-ness* form is derived in outer domain attachment. Thus, if W-type elements are created in root attachment and W⁺-type elements are built in outer domain attachment, the elements in each type behave in parallel with the *-ity* and *-ness* forms, respectively. In the cases that support these parallelisms, there is evidence of syntactic compositionality. As shown in section 3, inflection can only occur within W⁺-type elements, suggesting that the elements are syntactically more compositional than W-type elements without any inflection. Moreover, the fact that the *-ness* form inherits a selectional restriction of a base word illustrates that the *-ness* form is also syntactically compositional, as shown in (18) below.

- (18) a. He is fond of mountains.
 b. his fondness of mountains

In (18a), the adjective *fond* takes *of mountains* as its argument. This selectional feature is inherited to *fondness*, so the derived noun can take *of mountains*. This evidence supports the syntactic compositionality of the *-ness* form. From these observations, W⁺-type elements are clearly in parallel with the *-ness* form in terms of syntactic compositionality. Given the claim that the *-ness* form is derived in outer domain attachment, we can infer from the parallelism that W⁺-type elements are built in outer domain attachment.

Further parallelism is observed in the interpretations of W⁺-type elements and the *-ness* form. In section 3, I demonstrated that the meanings of W⁺-type elements are transparent, while those of W-type elements are opaque. This difference in compositionality of meaning between the two types of words is also observed in parallel between the *-ness* and *-ity* forms, as given in (19).

- (19) a. *sensibleness* ‘being sensible’ vs. *sensibility* ‘the ability to experience and understand deep feelings, especially in art and literature’
 b. *casualness* ‘being casual’ vs. *casualty* ‘a person who is killed or injured in war or in an accident’

(Shimamura (1990: 26))

The syntactic and semantic parallelism between W⁺-type elements and the *-ness* form can be explained by stating that both elements are derived in outer domain attachment. This parallelism justifies the proposed structure for W⁺-type elements in (16b).

If the proposed structures (16) are correct and n⁰ can be realized as *-ness* in outer domain attachment, it can be predicted that the suffix *-ness* is attached to both W-type elements and W⁺-type elements by merging n⁰ with the structures, as shown in (20)-(21) below.

- (20) a. out-of-wayness, up-to-dateness
 (Shimamura (1986))
 b. Some small cars are comfortable with their small car-ness.

(<http://www.carinfoweb.com/Nissan/>)

- (21) a. [_{IP} [_{AP} [out-of-way] a⁰] n⁰-ness]

- b. [_{nP} [_{aP} [_{IP} [small car] f⁰] a⁰] n⁰-ness]

In (20), the suffix *-ness* is attached to W- and W⁺-type elements. These derived words are accounted for by the proposed structures, as shown in (21). First, the W-type element *out-of-way* and the W⁺-type element *small car* are built. Second, the respective resultant words are combined with n⁰, forming outer domain attachment. In outer domain attachment, n⁰ is realized as *-ness* such that the *-ness* form is derived in both (20a) and (20b). Furthermore, given that the suffix *-ness* can be attached to adjectives, the examples show that W- and W⁺-type elements are adjectives, as illustrated by the structures of the derived words in (21). Moreover, the fact that the adjectivalizing suffixes *-ish* or *-y* can be realized provides further support for the argument, as shown in (22) and (23).

- (22) a. feeling a bit rainy-day-ish
 b. a bit ‘don’t bother’-y
 (Harley (2009))
 c. why-does-it-have-to-be-me-ish
 (Spencer (2005))

- (23) [_{aP} [_{IP} [don’t bother] f⁰] a⁰-y]

The proposed structure is further supported by the ordering of suffixes. In particular, an ordering *X-ish-ness* is well-formed but *X-ness-ish* is not, as shown in (24) below.

- (24) a. [X-ish-ness]
 b. *[X-ness-ish] X = words

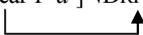
This observation is explained by the structures in (21), where the categorizing functional heads a⁰ and n⁰ are attached to base words in order, but not vice versa.

Moreover, the proposed structures can explain why W⁺-type elements only allow for inflection, as shown in (25)-(26). All of the examples in (25) are W⁺-type elements.

- (25) a. [namaak [mobiële telefoon]]
 ‘imitation mobile phone’
 [wereld [rode wijn]]
 ‘lit. world red wine, superb red wine’
 b. [new-books] shelf, [equal rights]
 amendment, [little girl’s] bicycle
 (26) between-meal (*s) snacks, the wash-hand
 (*s) stand

Recall that a functional head f⁰ is included only in the W⁺-type structure. I argue that this functional head licenses inflection in W⁺-type elements. Based on this explanation, it is natural to say that W-type elements cannot license inflection, lacking the functional head f⁰.

Finally, the structural difference between W- and W⁺-type elements provides an explanation for the fact that W⁺-type elements must be embedded in a larger structure, as shown in (27)-(28).

- (27) [small car] driver
 (28) [_{nP} [_{VP} [_{aP} small car-f⁰-a⁰] √DRIVE] n⁰-er]


The fact that the W⁺-type element *small car* must not be unembedded is accounted for by presence of f⁰. I assume that a structure including the functional head must move to another element with a phonological form. Based on this assumption, it can be explained that the W⁺-type element *small car* must move to √DRIVE to satisfy the requirement of f⁰. This requirement can be satisfied not only in compounding but also in derivation, as shown in (20b) and (22). However, the functional head f⁰ is not included in the W-type structure, so the movement is not carried out and W-type elements can occur without any realized elements, as given in (29)-(30) below.

- (29) I consider the painting *run of the mill*.
 (30) [_{aP}[run of the mill] a⁰]

5. Conclusion

In this paper, I have argued that apparent phrasal elements in phrasal compounds observe No Phrase Constraint, and that, at this point, the building block theory is empirically more valid than the parallel architecture theory. Moreover, given that lexical integrity is disintegrated into syntactic deformability and syntactic analyzability, the apparent phrasal elements can be classified into W- and W⁺-type elements. I have also proposed that the traditional analyses in the building block theory cannot explain differences between the two types, but in DM, the differences can be reduced to their structural differences. Moreover, in this study, I have suggested an internal structure for the

mysterious morphological unit W⁺.

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意味から形を見る： 優先規則体系と文法における
拡張のメカニズム*

(To See Forms from Meaning: Preference Rule Systems
and Extension Mechanisms in Grammar)

大室剛志 (Takeshi Omuro)
名古屋大学 (Nagoya University)

キーワード： 意味、形、'd rather that節、優先規則
体系、文法における拡張

1. はじめに

英語の語の意味を見ていると、その意味を定義するのに、必要十分条件を用いて厳格に、白か黒か明確に区別できる形では、定義できないことに気づく。典型的な意味と典型的な意味からはずれた意味が見られる。語の意味を規定する条件がいくつかあり、それを全て満たすと典型的な意味になり、その条件を一つ欠くと典型的な意味からはずれていく、それでもその語の可能な意味におさまる。しかし、その条件を全て欠いたのでは、もはやその語として特徴付けることはできない。つまり、意味の世界を見ていると、完全に可能、完全に不可能というように、明確に区別できるわけではないと分かる。語の意味は優先規則体系からなると言える (Jackendoff (1985, 1990)等参照)。この考えを踏まえた上で、構文の形の面を見ると、形も一般に考えられているほどは、厳格になってはいないことに気がつく。英語の構文はいろいろあるけれど、どの構文一つを取り上げてみても、そこにはやはり意味の世界と同じように、典型とその典型からはずれた変種が存在する (Kajita (1977)等参照)。したがって、典型と変種が存在する、優先規則体系を成す、ということは、言語の意味にも形にも本質的に備わっている性質である。このような優先規則体系は、では、そもそもどのようにし

て文法に生じるのであろうか。本論文では、ある種の挿入節を参考にしながら、構文において、基本形から変種が生じるメカニズムの一部を探ることにする。

本論文の構成は以下の通りである。2節では、英語の climb という動詞を取り上げ、その典型的な意味と非典型的な意味とを見る。その際、BNC から得られたデータを補足的に用いる。3節では、典型的な意味と非典型的な意味があるということを踏まえた上で、構文の形の方を見る。英語の非常に周遍的な構文である、'd rather が文を直接従える構文を取り上げ、そのような周遍的な構文にも、典型的なメンバーとそこからはずれた変種があることを確認する。非常に周遍的な構文の優先規則体系のありようを観察するので、敢えて母語話者の直感には頼らずに、The Bank of English を用いた独自のコーパス調査から得られたデータを用いる。4節では、3節で見た構文における変種メンバーがなぜ英文法で可能となるのかを説明するために、ある種の挿入節において、基本形から変種を生み出す文法における拡張のメカニズムを探る。それにより、その変種の存在を説明する。5節は結論である。

2. 語の意味に見られる優先規則体系： climb

Jakendoff (1990)は、英語の動詞 climb について、日本人の感覚からすると、驚くことを観察している。¹

(1) Bill climbed down the mountain.

(Jackendoff (1990: 35))

英語の climb は、山から下りる時にも使える。本当かと思つて、現代英語の大規模コーパス The British National Corpus を検索すると、確かに、(2)のような例を確認することができる。

(2) a. He climbed down the ladder.

(BNC, HRA 3793)

b. The crabs have climbed down the cliffs.

(BNC, F9F 23)

では、climb は下方へと下りる時もごく普通に使えて、さきほど驚いた我々の感覚がおかしいのかというと、そうではない。climb の意味の基本は、やはり、上に向かって (UPWARD)、しかも、手足を動かして

て苦労してよじよじと (CLAMBERING) という二つの条件を同時に満足した(3)である。

(3) Bill climbed (up) the mountain.

(Jackendoff (1990: 35))

(1)の climb down は、この二つの条件のうちの一つ、上に向かって (UPWARD) という条件を、down を使うことで、明示的に否定し、climb の基本的な意味からは逸れた、その分、特殊な意味となる。そのため、我々は、驚いたわけである。では、もう一つの条件である CLAMBERING を否定できるかということ、これもできる。できるにはできるが、(1)と同様、(3)の基本的な意味からは、二つの条件の一つを否定した分、特殊な意味となる。(4)を見ると、蛇は手足がないので、clamber できない。CLAMBERING という条件が(4)の climb の意味には欠けている。

(4) The snake climbed (up) the tree.

(Jackendoff (1990: 35))

二つの条件を同時に満足している(3)の climb が基本、典型、そのうちの一つの条件を欠いた(1)と(4)は climb として可能は可能だけれども、一つの条件を欠いた分、特殊となる。では、二つの条件を同時に欠いたらどうなるか、つまり、蛇が下方に動いたらどうなるか (先程見た(2a)は人であるし、(2b)は蟹であるので clamber できるわけで、一方の条件である上方へ (UPWARD) だけを破っているだけなので可能は可能であることに注意) 今は、二つの条件を同時に欠いたらどうなるかを考えているわけで、この場合はどうなるかということ、これではもう、climb という行為として特徴付けることができなくなる。よって、(5)のうに容認可能性は極めて低くなる。

(5) ?*The snake climbed down the tree.

(Jackendoff (1990: 35))

climb の意味を成り立たせている上方へ (UPWARD) と手足を使ってよじよじと (CLAMBERING) という条件のように、その条件が同時に満足された時が典型で、その条件が欠けると典型から逸れてしまうような条件のことを優先条件 (preference condition) あるいは優先規則 (preference rule) と言う。そして優先条件、優先規則で成り立っ

ている体系のことを優先規則体系 (preference rule system) と言う。よって、climb の意味は優先規則体系を成すと言える (詳しくは (Jackendoff (1985, 1990))等参照)。

3. 意味から形を見る： 構文の形に見られる優先規則体系： I'd rather you didn't.

climb という語の意味に典型と変種があることを見たが、これは何も語の意味に限られたことではない。語の意味よりも大きな単位である構文についても広く言える。英語のどの構文を見ても、その構文には、典型と変種が存在する。英語の極めて周辺の構文を取り上げ、そこにまでも基本形と変種があることを見ることで、基本形と変種を同時に許す優先規則体系が言語にとって本質的なものであることを確認する。極めて周辺の構文の優先規則体系のありようを観察するので、母語話者の直感には頼らずに、現代英語の大規模コーパスである The Bank of English を検索して得られた独自のデータを用いる。具体例から入って行くことにする。

(6)は、Charles Webb の *The Graduate* 『卒業』からの一節で、母親が息子のベンジャミンの行動を不信に思い、小言を言っている場面である。

(6) 'I don't meet anyone, Mother, but why did you say that.'

She shook her head. 'Because I can't imagine what else you'd do.'

'But what do you mean by "meet someone"!'.

'Let's forget it.'

'No.'

'Benjamin, I'm not going to pry into your affairs,' she said, 'but **I'd rather you didn't say anything at all than be dishonest.**'

(Charles Webb, *The Graduate*, Penguin Books, p.73)

ここで問題とすべきは、太字で示した部分で、'd rather が文を直接したがえて点である。その点で、特殊であると思うわけだが、実は、Swan (2005: section 491 (pp.474-475))や、Thomson and Martinet (1986: 258-260)などの学習文法書でも既に扱われているし、Culicover (1999: section 3.4.6)でもこの構文に

ついて論じている。

さて、'd rather は、(7a)のように、原形不定詞の動詞句を従えて使われる方が普通である。しかし、(6)や(7b)では、'd rather が節を直接従えていて、その点で特殊である。このような特殊な(6)や(7b)の構文においてさえも、基本形と変種が存在することを示すことにする。

(7) a. I'd rather drink wine than beer.

b. I'd rather you didn't.

(7a)の'd は would の短縮形であれ、had の短縮形であれ、動詞の原形を従えているので、助動詞と分析するのが妥当である。そうすると、最小限の仮定しか立てないとすると、(7b)の'd もそれと同形なので助動詞と考えることができる。そう考えると、(7b)は、助動詞が節を直接従えている構文となり、特殊となる。では、この場合の would や had が少なくとも歴史的には本動詞であることを考慮して、本動詞と考えたらどうか。そう考えれば that 節を直接従える点は特殊ということにならないが、そのように考えると、

(8) Or would you rather she came to see you?

(Agatha Christie, *Elephants Can Remember*, Fontana Books, p.140)

で困ることになる。(8)より、疑問文を形成する時に、この考えの下では、本動詞が主語と倒置をおこしてしまうことになり、この点でもまた、(7b)は特殊であるということになる。よって、(7b)の'd は、助動詞としても、本動詞としても困ってしまい、その点で特殊である。その特殊性を反映してなのか、(7b)はめったに見かけない構文である。この構文は、約3億2900万語からなる BoE (検索当時) に、わずかに473例しか含まれていない。100万語はペーパーバックほぼ10冊に相当するので、そうすると、3290冊読んで473例、つまり、ペーパーバック7冊読んで、やっと初めて1例出会う勘定になる。したがって、(7b)は、英語の非常に周遍的な構文で、あまり見かけない構文と言える。

そのような周遍的な構文の(7b)だが、それでも、(9)に挙げた特徴を全て備えていることに気付く。

(9) a. 補文となる節は仮定法である。

b. 節を従えているのは、'd (= would) rather である。

c. 補文標識 that が無い。

d. 補文の主語は主格である。

e. 主節の主語と補文の主語は異なる。

(9)に挙げた特徴を全て備えているという意味で、(7b)は特殊でめったに見かけないこの構文の中にあつて、その基本形とおぼしきものと考えられる。つまり、(9)の特徴、これがこの構文の優先条件、優先規則であり、それらが束になって、全体で問題の構文の基本形をつくっていると考えられる。(ちょうど、climb の動詞の基本的な意味を成り立たせる条件にUPWARD と CLAMBERING の二つの条件があつたように、ここでは(9)に挙げた五つの条件がこの構文の基本形を特徴づけている優先条件ということになる。)では、いつもこれらの条件を全て備えた(7b)のような基本形しか、この構文は許さないのか、というと実はそうではない。このような特殊でめったに見ない、英語の周遍的な構文においてさえも、(9)の条件のいずれかを欠いた形で変種が存在していることがわかる。(ちょうど、climb の場合に二つの条件の一つを欠いても可能は可能であつたが、一つの条件を欠いた分特殊となつてしまったのと同様のことが、構文レベルでも起こっているということになる。)以下、基本形との対比で、それぞれの変種の存在する割合を数値で示しながら、変種の有り様を確認する。

3.1. 仮定法：(9a)について

問題の構文の補文が仮定法か見てみる。BoE の検索結果は、(10)である。

(10) 'd/would rather S	473	(100%)
仮定法過去	348	(74%)
仮定法現在	77	(16%)
仮定法過去完了	40	(8%)
直説法現在	8	(2%)

473例のうち仮定法過去が最も多く348例、全体の74%を占める。仮定法現在の例が次に多く、その数は77例で、全体の16%を占める。仮定法現在77例のうち、実は、助動詞 should を伴う例は1例しか

ない。その例が(11)である。他の76例は、shouldを伴わない、動詞の原形の形が用いられている。

- (11) Everyone concerned would rather the bowls **should** sell rather than the Association be left with a fine gallery of unsold pieces.

<brmags/ N0000000374>

次に多いのが、仮定法過去完了で、その数は、40例で、全体の8%を占める。よって、仮定法は全て合わせると、全体の98%を占める。思いがけないことに、仮定法ではなく、(12)のような直説法現在の例が、ごく僅かながら存在する。

- (12) I would rather BMW **is** slim and dangerous.

<guard/ N7000950314>

(12)でisというところがポイントである。Wereやwasにはなっていない。つまり、仮定法ではなく直説法である。ただし、(12)のような例は僅か8例で、全体の2%を占めるにすぎない。

以上より、仮定法という基本的な特徴をもつ基本形を中心に、直説法現在といった特徴を持つ変種が僅かながら存在していることを確認した。

3.2. would/had+rather/sooner : (9b)について

'd/would rather が直接その後節を従えている構文を問題にしているわけだが、そこで用いられている、'd/would rather という表現と意味的に非常に近い表現として、had rather, would sooner, had sooner が考えられるが、果たしてこれらの表現は、'd/would rather と同様に節を直接その後節に従えることができるのであろうか。BoEを検索すると(13)の結果が得られる。

(13)	'd/would rather S	473
	'd/would sooner S	17
	had rather S	1
	had sooner S	0

(13)より、'd/would rather が節を従える例が473例あるのに対し、'd/would sooner が節を従える例が17例と稀で、had rather が節を従える例は僅かに1例((14)の1例だけである)、had sooner が節を従える例となると皆無であることがわかる。

- (14) I **had rather** you go without hose," said she,

looking again upon me, `than that you should forbear drinking in my poor house.

<brmags/ N 0000000046>

ここでもまた、'd/would rather という基本的特徴をもつ基本形を中心に、その特徴を欠いた'd/would sooner や had rather といった表現を持つ変種が僅かながら存在していることを確認したことになる。

3.3. 補文標識 that の有無 : (9c)について

先程見た(13)の中で、補文標識 that が使われている例の数は、(15)のようになる。

(15)	'd/would rather that S	30/473	(6%)
	'd/would sooner that S	0/17	
	had rather that S	0/1	
	had sooner that S	0/0	

(15)より、'd/would が節を伴う473例のうちで、補文標識 that を伴うものは、30例含まれているにすぎなく、その6%を占めるにすぎないことがわかる。また、それ以外の表現が節を伴った時には、補文標識 that を伴う例は、皆無であることがわかる。

したがって、ここでもまた、補文標識 that を伴わないという基本的特徴をもった基本形の他に、その基本的特徴を欠いた形の変種が僅かながら存在していることを確認したことになる。

3.4. 主格対目的格 : (9d)について

『英語語法大事典・第3集』(p.64)の質問者は、(16)の例文を示し、you が主格かどうかという貴重な質問をしている。

- (16) I'd sooner *you* stay down here and die in peace.

(16)では、you であるため、主格と目的格の形態が同一であり、質問者のような疑問が生じる。このような例とは別に、BoEには、明らかに目的格が補文の主語の位置に使われている例が僅かではあるが、10例存在する。

(17)	'd/would rather S	473	(100%)
	主格	463	(98%)
	目的格	10	(2%)

そのうちの1例を(18)に挙げておく。

- (18) I'd rather **him** have stayed there because I agree

with some of his views.

<bbc/S1000901101>

したがって、ここでもまた、補文の主語は主格であるという基本的特徴をもった基本形を中心に、その特徴を欠いた変種が僅かに存在していることを確認したことになる。

3.5. 異なった主語対同じ主語： (9e)について

Thomson and Martinet (1986: 258-260)は、問題の構文に関し、主節の主語と補文の主語が異なるという見解を示している。もし、それが同一であれば、*would rather*は敢えて節を従えず、*I'd rather drink wine*のように原形不定詞の動詞句を従えればすむからである。しかしながら、小西 (1964: 22)が、説明の都合上、偶然に用いた *I would rather I went*. というような、主節の主語と補文の主語とが同一であるような文は全く存在しないかという点と、BoE に含まれる問題の構文 473 例中、ほとんど全ての例が、主節の主語と補文の主語が異なるが、(19)に示したように、僅か7例であるが、両者の主語が同じと考えられる例がある。

(19) 'd/would rather S	473 (100%)
異なった主語	466 (99%)
同一の主語	7 (1%)

そのうちの1例を(20)に挙げておく。

- (20) You mean **you** would rather **you** were coming back to Great Glen and not Yorvik?" she asked, already afraid to hear the answer.

<brbooks/B0000001162>

ここでもまた、主節の主語と補文の主語が異なるという基本的な特徴を持った基本形を中心に、その特徴を欠いた変種が僅かに存在していることを確認したことになる。

以上、3節では、*'d rather* が文を直接従えるという英語の非常に周延的な構文を取り上げ、そこにまでも基本形と変種があることを見ることで、基本形と変種を同時に許す優先規則体系が言語にとって本質的なものであることを確認した。

4. 挿入節としての用法

3.3節の(15)で見たように、この構文では、補文標識 *that* を伴わずに使われる方が普通で、(21)のように補文標識を伴う方が稀である。

- (21) I would rather **that** the enterprise be judged on its merits than dismissed because it doesn't address issues **that** someone calls the True Issues of Semantics. (Ray S. Jackendoff, *Semantic Structures*, MIT Press, p.15)

この構文で補文標識 *that* が使われるか使われないかの理由は、もちろん、口語体か文語体かの違いによる点もあるが、ただそれだけの理由ではないことが、(22)の存在によって示唆される。

- (22) What **would you rather** was happening?
(Mouri (2012: 31))

(22)は、問題の構文の主節の部分が、(23)の挿入節である *do you think* と平行的に用いられているものと解される。

- (23) Who **do you think** is the best player?

では、どのようにして(22)のような変種が英文法の中で可能な表現として存在しえているのか。この問いに答えるには、前節と前前節で見た優先規則体系がそもそも文法にどのように生じるのかの一端を探る必要がある。本節では、ある一定の挿入節において、文法における拡張のメカニズムにより、基本形から変種がどのように生じるかを探ることにより、この問いに答えることにする。

ここで少し、問題の構文から離れて、挿入節の具体例をみる。

- (24) 'Well, I was driving up to the house at about the right time, it seems. And they've been checking up on things, and it seems that I took too much time between the lodge and the house – time enough, **the implication is**, to leave the car, run round the house, go in through the side door, shoot Christian and rush out and back to the car again.' (Agatha Christie, *They Do It With Mirrors*, Fontana, pp.113-114)

(24)において着目すべきは、ハイフンの後、*time* を *enough to* の不定詞が後置修飾しているが、その *enough* と *to* の間に割って入っている、*the implication*

is という表現である。何故、この表現がこの位置に出現可能であるのか。ここで、(25)を観察する。

(25) The implication is that the theory is inadequate.

(25)は、多義的な文であり、一つの解釈は「含意はその理論が妥当ではないということである。」という解釈であり、もう一つの解釈は「含みとしてはまあ、その理論は妥当ではない。」という解釈である。文の意味が、話者の心的な態度を示すモダリティと、論理的な中核的命題とからなるとすると、前者の解釈の下では、The implication is は論理的な中核命題の一部に組み込まれていると考えられるが、後者の解釈の下では、The implication is はモダリティの部分にあたり、意味が軽い。よって、後者の解釈の下での The implication is の部分は意味の軽い挿入節になりうる。the implication is がある種の挿入節となり、その後、文副詞のようなものとして認識され、文副詞は焦点化された要素であれば、文に直接支配された位置ではなくても、その要素と隣接して生起することは可能であるので、そのような位置へと、問題の挿入節も分布を拡張させていき、焦点化された to 不定詞と結びついて、enough と to の間に文副詞として生じたものが、(24)の the implication is であると説明できる。

(7b)の I'd rather you didn't もやって欲しくないなあ、と解釈され、I'd rather の部分は「なあ」に相当し、意味が非常に軽い。それゆえ、挿入節になりうると考えられる。(7b)の I'd rather の部分は意味的に非常に軽く、それ故、you didn't の方がむしろ主節的な資格を帯びるため、従属節を示す機能を担った that という補文標識は現れない方がむしろ自然である。これが、3.3 節の(15)で見たように、この構文において、補文標識 that を伴わずに使われる方が普通で、(21)のように補文標識を伴う方が稀である理由の一つであると考えられる。なお、Mouri (2012)が指摘した(22)の貴重な事例は、you would rather が一端、挿入節として確立した後に、挿入節は一般に自らも疑問形としての形をとって(但し、would you rather という疑問形になった場合は平叙文の形である you would rather とは違って、意味的には軽いにしてもモダリティとはならないことに注意²⁾) 疑問文の内側に生起す

ことが可能であることから、(23)の do you think と平行的に、would you rather の疑問形の形をとって、疑問文の内側に生起したと説明される(挿入節に関するこのような分析に関しては Kijita (1977)、岡田 (1985)、大室 (1984)を参照)。

5. 結論

英語の語の意味にも英語の周辺構文にも典型と非典型が存在する。優先規則体系が言語の意味と形のどちらにも備わっている。優先規則体系は、意味と形の両面において、言語の中核から周辺までくまなく存在している。言語は核から周辺まで多層的にしかも連続的に構成されている。こういった多重的な文法観は伝統文法でも採られており、何も新しいことではない。基本形から変種が出るメカニズムを探るには、ここで行ったような細かな言語事実の観察が必要である。そういう細かな事実観察を通して、基本形から変種を出す法則を抽出し、それを体系化できれば、伝統的な多重的な文法観に科学である言語学から肉付けを行うことができると思われる(梶田 (1984)、八木 (1984)参照)。

注

* 本論文は、日本英語学会第30回大会(2012年11月11日、於：慶応義塾大学)において口頭発表された原稿に加筆、修正を行ったものである。口頭発表当日に貴重な質問とコメントを戴いた中右実先生、千葉修司先生、菅山謙正氏、岩田彩志氏、河野継代氏、佐々木一隆氏に感謝する。なお、口頭発表された原稿は、大室(2000)と大室(2005a)を一部に含め、標題である「意味から形を見る：優先規則体系と文法における拡張のメカニズム」という観点から新たに論じ直したものであることをお断りする。なお、本論文における不備や誤りは全て筆者の責任による。

1. ただし、climb に関するこのような観察を最初に行ったのは、Fillmore (1982)であることが Jackndoff (1990: 290)で断られている(岩田彩志氏の御指摘に基づく)。
2. 河野継代氏の御指摘に基づく。

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**Notes on Subjectivity and Performativity in
English Modals: A Critical Assessment of
Verstraete's (2001) Analysis**

Keisuke Sanada
Sapporo Gakuin University

Keywords:
English modals, subjectivity,
performativity, speaker

1. Introduction

This paper deals with subjectivity and performativity in English modals. In my discussion, I address two important limitations in current literature:

- (1) a. Subjectivity and performativity have been variously defined in the field of linguistics.
- b. The relation between the two notions has rarely been discussed.

In what follows, I give a critical assessment of Verstraete (2001) and go on to propose an alternative argument.

2. Subjectivity and Performativity Prior to Verstraete (2001)

2.1. Lyons' Subjectivity

Lyons' (1977) subjectivity refers to the speaker's "opinion or attitude towards the proposition that the sentence expresses or the situation that the proposition describes" (1977: 452). Consider the subjectivity of *must* in (2).¹

- (2) Alfred *must* be unmarried. (1977: 789)

A subjective interpretation is given when the speaker of (2) makes a conclusion based on his/her own opinion or belief (an epistemic interpretation), or when he/she actually lays an obligation, with his/her own desire, on Alfred to be unmarried (a root interpretation). On the other hand, an objective interpretation is given when the speaker makes a conclusion or assumes an obligation on Alfred's part that depends on some factor(s) external to the speaker.

Lyons' subjectivity has been employed in many studies of English modals, such as Traugott (1989), Traugott and Dasher (2002), Kashino (2002), Leech (2004), and Sawada (2006), to name only a few.

2.2. Performativity in Speech Act Theory

The notion of performativity in speech act theory (Austin 1962; Searle 1969) refers to the state in which a speaker utters a sentence and in doing so carries out some other simultaneous act. For example, in uttering "I name this ship *Queen Elizabeth*" (Austin 1962: 5), the speaker also commits the act that names the ship in question.

Palmer (1990; 2001) applies this view of performativity to the analysis of English modals. Specifically, he claims that epistemic modality is essentially performative because inferences or conclusions expressed by epistemic modals "are actually made by the speaker, at the time of speaking" (Palmer 2001: 33), as exemplified below in (3a). On the other hand, deontic modality is also essentially performative, because by using deontic modals, "a speaker may actually give permission (MAY, CAN), lay an obligation

(MUST) or make a promise or threat (SHALL)” (Palmer 1990: 69). Deontic modality is shown in (3b), where the speaker lays an obligation on the hearer.

- (3) a. Mary *may/will/must* have arrived by now. (Palmer 2001: 33)
b. You *must* keep everything to yourself, be discreet. (Palmer 1990: 73)

3. Verstraete (2001)

Verstraete (2001) finds that Lyons’ subjectivity is difficult to apply to English modals (2001: 1516). He points out that epistemic modality is either subjective or objective in Lyons’ framework, while it is only subjective in Halliday’s (1970) framework, whose definition of subjectivity is virtually the same as Lyons’. Verstraete reasons that this discrepancy reflects the difficulty in consistently applying Lyons’ subjectivity to the analysis of English modals.

In addition, Verstraete opts not to employ what he calls “interactive performativity,” a concept from speech act theory that is “associated with an utterance’s illocutionary force” (2001: 1517). Instead, he focuses on performativity involved in subjective modality, which does not establish “the social interaction between speaker and interlocutor” (2001: 1517).²

3.1. Subjectivity and Modal Performativity

Verstraete defines subjectivity and performativity in his own terms. First, he understands subjectivity as involving “modal performativity”, which in turn is defined as bringing into existence “a particular position of commitment with respect to the

propositional content of the utterance” (2001: 1517).

In Verstraete’s framework, subjective modality involves modal performativity, expressing someone’s particular position of commitment with respect to the propositional content (2001: 1518). Notice that Verstraete is concerned with the perspective of “someone” rather than that of “the speaker,” who is central to Lyons’ subjectivity. Verstraete presents the examples in (4), for example.

- (4) a. The flood of letters *must* have had some impact after all (2001: 1507)
b. You seem to be seeking to destroy yourself in some way, but you *must not* include me in your plan of action (ibid.)

The speaker in (4a) “presents himself as being committed to the status of the proposition as an inevitable conclusion” (Verstraete 2001: 1517), while the speaker in (4b) “presents himself as being committed to the status of the action in question as an undesirable course of action” (ibid.).

In contrast, objective modality, which is non-performative, does not involve any position of commitment with respect to the propositional content (2001: 1518). For example, the speaker in (5a) and (5b) merely describes some existent obligation.

- (5) a. But to reach orbit an object *must* accelerate to a speed of about 17,500 miles per hour (28,000 kilometers per hour, called satellite speed or orbital velocity) in a horizontal direction (2001: 1508)
b. Brake shoes *must* always be renewed

in sets of four (2001: 1521)

Within Verstraete's framework, subjective modality — including epistemic modality — is necessarily modally performative. Objective modality is necessarily not. This model, then, virtually reduces subjectivity to (modal) performativity.

3.2. Applying Modal Performativity: Subjective Modals in Interrogatives and *If* Clauses

One of the aims Verstraete posits for modal performativity is to give a more comprehensive account for behaviors and interpretations of subjective modality in interrogatives and *if* clauses.³ While Lyons (1977) and Hengeveld (1988) argue that subjective modality cannot occur in interrogatives and *if* clauses, Verstraete argues that it can.

First, subjective modality in interrogatives is “oriented towards the *interlocutor* under the influence of interrogation” (2001: 1521, emphasis in the original). For example, the speaker in (6) is asking whether the interlocutor is committed to the deontic necessity in question.

(6) *Must* I leave my platoon, sir? At this moment? (2001: 1521)

Next, subjective modals in *if* clauses “do not express the current speaker's opinion, (...) but echo an opinion that has already been voiced in the preceding discourse” (2001: 1518). In (7), for example, not the speaker's but other people's opinion is echoed.

(7) Well then, the skeptical reader may ask, if only some stories have themes, if those themes *may* be hard to sum up, and if readers will probably disagree in their summations, why bother to state themes? (2001: 1519)

Thus, subjective modality can occur in interrogatives and *if* clauses when the modality expresses a particular position of commitment on the part of someone other than the speaker.⁴

4. A Critical Reassessment of Verstraete

This section critically reassesses five issues with Verstraete.

4.1. Is Lyons' Subjectivity Unnecessary?

Many previous studies of English modals, which are more or less dependent on Lyons' subjectivity, have referred to the semantic and pragmatic differences of *must* and *have to*. The former is subjective in that the speaker's attitude or opinion is involved, while the latter is objective in that no such attitude or opinion is involved. In this regard, one concern is whether the difference in subjectivity of *must* and *have to* can be accounted for under Verstraete's approach.

Consider epistemic *must* and epistemic *have to*, for example (cf. Kashino 2002: Chapter 11). Since both modals are epistemic and therefore subjective under Verstraete's approach, it can be predicted that both modals can occur in interrogatives (with echoic interpretation). This is, however, not the case, according to Sanada (2007). He shows that epistemic *must* more easily occurs in interrogatives than epistemic *have to*. In fact, if epistemic *must* is replaced with *have*

to, the resultant sentence cannot be interpreted epistemically.⁵

- (8) a. *Must* John be a liar?
(Papafragou 2000: 98)
- b. Well, obviously the girl isn't here, so
we'd better look for her on the campus.
— *Must* she be on the campus? She
could have gone to Pete's digs.
(Declerck 1991: 408)

Sanada (2007) attributes this fact to differences between *must* and *have to* predicted by Lyons' subjectivity. Since epistemic *must* expresses the speaker's subjective judgment, the judgment can be doubted if the speaker finds it less evident (2007: 218), as in (8a). Speakers may also doubt judgments pronounced or assumed by others (*ibid.*), as in (8b). On the other hand, since epistemic *have to* expresses the speaker's judgment based on some external factor, the judgment is less likely to be doubted (*ibid.*).

This evidence suggests that Lyons' subjectivity is able to account for certain phenomena that cannot be adequately dealt with under Verstraete's subjectivity.

4.2. Should the Speaker Be Backgrounded?

Verstraete's definition of modal performativity does not foreground the notion of "speaker" as Lyons does. For example, Verstraete notes that in (6) and (7) the position of a person other than the speaker is involved, thereby subjective. However, he adds that the speaker does not commit himself to the propositional content of (6) and (7) (2001: 1520). In this view, the modals in (6) and (7) might well be regarded as

objective. This account is rather confusing, because a modal *can* apparently be analyzed as subjective and objective at the same time.

This confusing account would be eliminated under Lyons' definition of subjectivity. He would consider the modals in (6) and (7) as objective, not subjective, because of the lack of the speaker's commitment. This may be an important theoretical advantage of Lyons' subjectivity over Verstraete's.

4.3. How Should a Position of Commitment Be Identified?

This section illustrates the difficulties of consistently applying Verstraete's modal performativity to actual modals in use. Let us return to the objective deontic *must* we discussed above in (4):

- (4) a. The flood of letters *must* have had
some impact after all
(Verstraete 2001: 1507)
- b. You seem to be seeking to destroy
yourself in some way, but you *must* not
include me in your plan of action
(*ibid.*)

Verstraete argued that *must* in (4) does not involve anyone's particular position of commitment with respect to the propositional content, but I am skeptical of this account, especially given Palmer's (2001) explanation for the modals in (9) below.

- (9) a. You *can* smoke in here
(Palmer 2001: 75)
- b. You *must* take your shoes off when you
enter the temple. (*ibid.*)

In *can* and *must*, the speaker may not be involved: the modals are objective in Palmer as well as Verstraete's sense. At the same time, however, Palmer notes, "there is an implication that the speaker agrees with the permission or obligation" (ibid.). In other words, the modals may be subjective as well.

The above implication can also be applied to *must* in (4): I am inclined to regard the modal also as subjective in this respect. Verstraete's subjectivity is thus shown to be difficult to consistently apply to the actual use of modals. This is why this paper would like to reject Verstraete's framework.

4.4. Is Performativity in Speech Act Theory Useless?

Rejecting Verstraete's framework requires reconsidering the notion of performativity as well. The next issue at hand, then, is whether speech act theory's notion of performativity (Austin 1962; Searle 1969) is useful or not.

Verstraete argued that *must* in (4) is non-performative, which can also be captured by speech act theory. Consider a sincerity condition of a speech act of the order, "S wants H to do A" (Searle 1969: 66), where S, H and A refer to speaker, hearer, and act, respectively. *Must* in (4) deviates from this sincerity condition; in this case, S does not particularly want the propositional content to be realized.

This account implies that the notion of performativity in speech act theory can sufficiently account for characteristics of English modals. We have no need to import the newly created notion of modal performativity.

4.5. Can Subjectivity Be Reduced to Performativity?

As noted in Section 3.1, Verstraete's framework virtually reduces subjectivity to (modal) performativity. This section considers whether or not subjectivity and performativity are in such a relation that one can be reduced to the other.

I argue that subjectivity and performativity should be seen as potentially overlapping yet distinct modal perspectives. In fact, the features [performative / descriptive] and [subjective / objective] can combine to produce four combinations of modal perspective, as in (10) below.

(10) a. PERFORMATIVE AND SUBJECTIVE:

[a teacher speaking to her student]

You *must* speak clearly, dear.

(J. K. Rowling, *Harry Potter and the Chamber of Secrets*)

b. DESCRIPTIVE AND OBJECTIVE:

My girl *has to* be home by midnight – I think it's idiotic. (Lakoff 1972: 925)

c. PERFORMATIVE AND OBJECTIVE:

"The guy ain't on the plane." "He *has to*. He didn't get off."

(Kashino 2002: 131)

d. DESCRIPTIVE AND SUBJECTIVE:

[The speaker is Ruslan Khasbulatov, a Russian economist, and *he* refers to Russian president Boris Yeltsin]

I said he *must* smooth things over, admit his mistakes and so on. I said, let's find a way out of this situation together. (*Corpus of Contemporary American English*)

Must in (10a) is performative because the speaker lays an obligation on the hearer

while speaking. It is subjective because the speaker wants the hearer to speak clearly so that she can hear him better.

Has to in (10b) is descriptive because the speaker merely describes the existence of an obligation. It cannot be subjective, because the speaker does not agree on the obligation, calling it “idiotic.” Rather, the obligation is objective, laid on by someone other than the speaker.

Has to in (10c) is performative because the speaker actually makes a conclusion while speaking. It is objective because the conclusion is based on a fact external to the speaker: the “guy” in question was not seen to get off the plane.

Finally, *must* in (10d) is descriptive because the speaker merely relates an obligation that he laid in the past. It is subjective because the speaker (an economist) hoped the hearer (Yeltsin) would realize and act on the propositional content.

Modals in (10) thus suggest that neither subjectivity nor performativity is reducible to the other: Both are key dimensions of modality.

5. Conclusion

The argument of this paper is summarized as follows. First, in response to (1a), the subjectivity and performativity of English modals is accounted for more comprehensively by Lyons’ subjectivity and speech act theory’s performativity than by Verstraete’s subjectivity. Second, to answer (1b), subjectivity and performativity should be viewed separately, rather than reducing one to the other.

Of course, the scope of this paper is subject to the usual constraints on space and

time. The applicability of the present perspective to analyses of each modal expression remain to be investigated in future research.⁶

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Footnotes

¹ In the following examples, italics are by the present author.

² This interactive performativity may cover deontic modality but not epistemic modality. This may also account for why Verstraete avoids interactive performativity.

³ Modals in past tense sentences are also included in the analysis, but space prevents their treatment here.

⁴ Verstraete’s emphasis on the role of subjectivity in the syntactic behavior of modals is questioned by Timotijevic (2009: 114).

⁵ For epistemic modals and interrogatives, see also Kashino (2012: Chapter 5).

⁶ Sanada (2012) examined the subjectivity (in Lyons’ sense) of deontic *mo(o)t* in Middle English and of deontic *must* in Early Modern English, Late Modern English, and Present-Day English.

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A Unified Analysis of Expletives and *Do*-support*

Motoki Sato
Tohoku University

Keywords: expletive, *do*-support, British *do*,
phase, edge feature

1. Introduction

This paper provides a unified analysis of semantically vacuous elements such as expletives and *do*-support within the Phase Theory (Chomsky 2000 and subsequent work).

Chomsky (2000) proposed that phase heads may have an EPP-feature to trigger optional operations only if they have an effect on outcome. In Chomsky (2007, 2008), this feature is called Edge Feature (EF). On the basis of the original idea about EF, I propose that EFs on phase heads trigger External Merge of semantically vacuous elements such as expletives. Given the standard assumption that CP and *v*P are phases, we expect that semantically vacuous elements are first merged to their phase edges. In other words, some of them are merged to the specifier of CP or *v*P and the others are head-adjoined to their phase heads.

This paper is organized as follows. Section 2 outlines theoretical background and then presents my proposal. Section 3 shows

that subject expletives are first merged to [Spec, *v*P], instead of [Spec, TP]. Sections 4 and 5 argue that dummy elements are first merged to the phase edge of CP, as well. Section 6 deals with the dummy *do*, showing that it is adjoined to phase heads. Section 7 concludes this paper.

2. The Phase Theory

2.1. Theoretical Background

Current minimalist work advanced by Chomsky (2007, 2008) assumes that the syntactic structure is built by a single operation, Merge, and the syntactic derivation is composed of a number of smaller units, called phases, which are identified with the categories CP and transitive *v*P. The operation Merge is implemented by EFs that are regarded as a property of all Lexical Items. In addition, EFs on phase heads trigger the Internal Merge. The concept of the EF is not new. A version of EF was already assumed by Chomsky (2000), which was called EPP feature as in (1).

- (1) The head H of phase Ph may be assigned an EPP-feature.

(Chomsky (2000: 109))

Chomsky (2000) suggested that phase heads may have an EPP feature only if optional operations have an effect on outcome. In this way, a version of EF on a phase head triggers the Internal Merge to its phase edge.

2.2. The Proposal

This paper argues that EFs on phase heads trigger not only the Internal Merge, but also the External Merge, only if the operation has an effect on outcome.

I propose that EFs on phase heads trigger the External Merge of semantically vacuous elements. Although expletives are

semantically vacuous, they have an effect on the quantificational scope. In addition, the dummy auxiliary *do* has an effect on the polarity of a sentence. Therefore, it is plausible to assume that the External Merge of the dummy elements is implemented by EFs on phase heads.

If EFs on phase heads implement the External Merge of the dummy elements, they are merged to the phase edge. In other words, semantically vacuous elements are first head-adjoined to phase heads or they are first merged to their specifiers. Given the standard assumption that CP and *v*P are phases, we expect that dummy elements are observed in their phase edges. In what follows, we see that this prediction is correct and that this analysis can deal with semantically vacuous element in a uniform way within the Phase Theory.

3. The Subject Expletives

This section shows that the subject expletives *there* and *it* are first merged to the phase edge of *v*P.

3.1. The Expletive *There*

It is traditionally assumed that the expletive *there* is inserted to [Spec, TP] and this analysis remains the default assumption in minimalist analysis. However, there are two good reasons to assume that *there* is inserted to a lower position than [Spec, TP].

First, the expletive *there* can appear in a small clause lacking the TP projection. Felser (1998, 1999) argued that perception verbs take VP as their complements. One argument comes from the modification of temporal adverbs, which associate to the TP domain. Consider the following example:

- (2) ? I saw them recently paint the house.
(Felser (1998: 359))

In (2), the adverb *recently* cannot modify the small clause complement of the perception verb. Even if it appears within the small clause, it must modify the matrix clause. This suggests that the small clause complement of a perception verb lacks the TP projection.

If this is the case, the standard analysis predicts that *there* cannot occur within the small clause complement of the perception verb. However, *there* may appear within the small clause complement of the perception verb as follows:

- (3) We heard there begin/beginning to be a knocking sound. (Felser (1999: 167))

Thus, (3) provides us evidence that the expletive is first inserted to a lower position than [Spec, TP].

Second, there is a blocking effect. It is well-known that *there*-insertion is compatible with certain unaccusative verbs,¹ while it is incompatible with transitive verbs in English. This contrast is illustrated in (4).

- (4) a.* There ate a man an orange.
(Vikner (1995: 198))

- b. There has remained some dissatisfaction.

(Radford (2009: 316))

This contrast suggests that the external argument and *there* compete for the same position. In transitive verbs, the external argument is introduced to [Spec, *v*P] as in (5).

- (5) Transitive verb
[_{vP} DP [_v V [_{VP} V DP]]]

On the other hand, unaccusative verbs have no external argument. Assuming that unaccusative and passive *v*P are phases (Legate 2003), unaccusative verbs have the following structure:

(6) Unaccusative verb

[_{VP} v [_{VP} V DP]]

Given these structures, we can see that the insertion of *there* is blocked by the external argument that occupies [Spec, vP]. In (4a), the external argument has already merged to [Spec, vP], blocking the insertion of *there*. In contrast, unaccusative verbs have no external argument. Since the specifier of vP is nonthematic in unaccusative verbs, *there* can be merged to [Spec, vP] in (4b). Hence, the EF on the phase head v can trigger the External Merge of the expletive *there*. If this option is selected, *there* is merged to [Spec, vP] and then rises to [Spec, TP] as in (7).

(7) [_{TP} There_i has [_{vP} t_i [_{VP} remained some dissatisfaction]]].

If *there* is not merged to [Spec, vP], the DP *some dissatisfaction* moves through [Spec, vP] to [Spec, TP] as in (8).

(8) [_{TP} Some dissatisfaction_i has [_{vP} t'_i [_{VP} remained t_i]]].

Therefore, this blocking effect provides us another argument for *there*-insertion to [Spec, vP].

3.2. The Subject Expletive *It*

The expletive *it* appears in the subject position, as well.

(9) It is said that we have taken bribes.
(Radford (2009: 290))

Although the subject expletive *it* occupies [Spec, TP] in (9), *it* can appear in a small clause lacking TP projection. Now, let us consider a small clause complement of the causative *have*.

Ritter and Rosen (1993) argued that causative *have* takes a bare VP complement whose subject is realized inside its maximal projection as in (10).

(10) [_{V'} have [_{VP=(vP)} Subj [_{V'=(v')} V ...
(Ritter and Rosen (1993: 535))

Indeed, the subject expletive *it* appears within the small clause as follows:

(11) I won't have it said that he was taking bribes.
(Radford (2009: 293))

Given the structure of (10), example (11) can be analyzed as (12).

(12) I won't have [_{vP} it [_{v'} said [_{CP} that he was taking bribes]]].

In (12), *it* occupies [Spec, vP]. Thus, my analysis is supported by not only the expletive *there*, but also the expletive *it*. These dummy elements are first merged to the phase edge of vP.

In the next section, we will see that semantically vacuous elements are also merged to the phase edge of CP.

4. The Object Expletive *It*

The expletive *it* occurs not only in the subject position, but also in the object position as in (13).

(13) I just knew it that Mary would fire John today.
(Stroik (1996: 239))

As shown above, *it* is semantically vacuous and its semantic content is expressed by *that*-clause. Since the expletive itself does not receive its thematic role, it is problematic to assume that the lexical verb directly selects the expletive *it* as its object. One way to resolve this problem is to introduce the expletive *it* to the nonthematic position, the specifier of CP, as in (14).²

(14) I just knew [_{CP} it [_{C'} that Mary would fire John today]]. (Stroik (1996: 239))

Indeed, there is good reason to believe that the object expletive *it* occupies [Spec, CP].

While the subject expletive *it* can co-occur with *wh*-phrase that occupies [Spec,

CP] as in (15), the object expletive *it* cannot as in (16).

- (15) a. It is well known that Lou likes Sam.
 b. It is well known who Lou likes.

(Stroik (1996: 244))

- (16) a. I just knew where Mary would fire John.
 b.* I just knew it where Mary would fire John.

(Stroik (1996: 239))

Although the object expletive *it* cannot co-occur with *wh*-phrases that occupy [Spec, CP], it can co-occur with the overt complementizers *that*, *for* and *if* as in (17).

- (17) a. I just knew it that Mary would fire John today. (Stroik (1996: 239))
 b. I dislike it for him to be so cruel. (Postal and Pullum (1988: 642))
 c. I would prefer it if Kim were not informed. (Postal and Pullum (1988: 649))

Thus, it is plausible that the object expletive *it* is merged to [Spec, CP].

5. Transitive Expletive Construction

A subset of Germanic languages has Transitive Expletive Constructions (TECs). The following example is from Icelandic.

- (18) það klaruðu margar mýs ostinn
 there finished many mice the-cheese
 alveg.
 completely
 ‘There finished many mice completely the cheese.’

(Alexiadou and Anagnostopoulou (2001: 213)) Icelandic is a symmetric verb second (V2) language and allows Object Shift of weak pronominals as well as full DPs. Now, let us assume, following the standard analysis, that V2 involves V-to-C movement and that the

shifted object adjoins to *vP*. Given these standard assumptions, the finite verb *klaruðu* ‘finished’ occupies the C-head and the object *ostinn* ‘the cheese’ adjoins to *vP*, preceding the manner adverb *alveg* ‘completely’ as in (19).

- (19) [_{CP} það klaruðu_j [_{TP} margar mýs_i
 there finished many mice
 [_{VP} ostinn_k [_{VP} alveg [_{VP} t_j t_k]]]]]].
 the-cheese completely

Since the associate DP has already filled [Spec, TP], we expect that the Icelandic expletive *það* ‘there’ fills [Spec, CP]. This expectation is supported by the following examples.

- (20) a. það hefur komið strákur.
 There is come boy
 ‘There came a boy.’
 b. Í gær hefur (*það) komið
 Yesterday is (there) come
 strákur.
 boy.
 ‘Yesterday, there came a boy.’

(Vikner (1995: 185))

In (20a), the expletive appears in [Spec, CP]. However, if [Spec, CP] is filled by the adverb as in (20b), the expletive cannot appear in [Spec, TP]. Thus, the Icelandic expletive *það* ‘there’ is considered as a CP-expletive. Indeed, CP-expletives are widely attested in Germanic languages, which have TECs.³ Therefore, Germanic languages provide pieces of evidence for the proposed analysis.

6. Pleonastic *Do*

This section shows that semantically vacuous elements are inserted to the phase heads C and *v* in some cases.

6.1. *Do*-Support

English has the special auxiliary *do* to form questions as in (21).

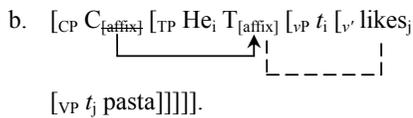
(21) Does he like pasta?

(Radford (2009: 168))

The standard analysis assumes that the dummy auxiliary *do* is directly inserted to T to support the Tense Affix. In contrast, I claim that it is inserted to the phase head C.

Generally, *do*-support is applied when the adjacency relation between T and V is broken down. Let us assume, following Halle and Marantz (1993) and Bobaljik (1994), that the inflectional affixes and verbal heads merge under adjacency at PF. First of all, consider the declaratives.

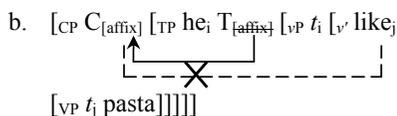
(22) a. He likes pasta.



In (22), the inflectional affix is passed to T from C by the feature inheritance mechanism (Chomsky 2007, 2008). If the inflectional affix is inherited by T, it can merge with the main verb under the adjacency at PF. At PF, the trace of the subject does not interrupt the adjacency relation. Thus, in declaratives, the main verb can merge with an inflectional affix in situ.

In interrogatives, however, the adjacency is disrupted by a subject once the inflectional affix moves to C from T. This is illustrated in (23).

(23) a. Does he like pasta?



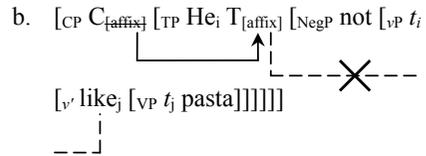
In (24), the subject *he* intervenes between the inflectional affix in C and the main verb on *v*. To support the inflectional affix in C, the dummy auxiliary *do* needs to be inserted to C as in (24).

(24) $[_{CP} [_{C'} Does_{[affix]} [_{TP} he like pasta]]]$?

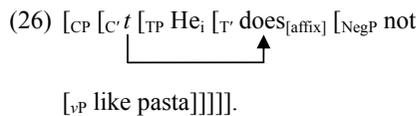
Since the dummy auxiliary *do* is directly head-adjoined to the phase edge of CP, this also supports the proposed analysis.

The adjacency is disrupted in negatives as well.

(25) a. He doesn't like pasta.



In (25), the negative *not* intervenes between the inflectional affix in T and the main verb on *v* at PF. To support the inflectional affix, the dummy auxiliary *do* that is inserted to C is lowered to T via the feature inheritance mechanism.



This lowering operation is applied only when there is no auxiliary in T. If some auxiliary occupies T, the dummy auxiliary *do* is not inserted to the derivation. Hence, this analysis can capture the last resort effects.

6.2. British *Do*

British English has a special form of *do*, which is called British *do*. Although British *do* is an optional element, its occurrence is restricted to a certain environment. It only appears in VP-ellipsis as in (27).

(27) a. Luis will run the race and Nana will (do).

b.* Luis will run the race and Nana will do run the race, too.

(Aelbrecht (2010: 194))

This restriction suggests that British *do* and the main verb *run* compete for the same position. In other words, the insertion of *do* is blocked by the main verb on *v*.

First, let us consider (27b). If VP-ellipsis is not applied, the main verb *run* rises to *v* at PF, blocking the insertion of *do* as in (28).

- (28) Luis will run the race and Nana_i will
 $[_{VP} t_i [_V \text{run}] [_{VP} t_j \text{the race}]]$, too.
 \uparrow
 **do*-insertion

Hence, (27b) is ruled out. On the other hand, if VP-ellipsis is applied as in (27a), there is a position for introducing the dummy *do*. Thus, the dummy *do* can be inserted to the phase head *v* as in (29).

- (29) Luis will run the race and Nana_i will
 $[_{VP} t_i [_V (\text{do})] [_{VP} \text{run the race}]]$.
 \uparrow
 OK *do*-insertion

In this way, British *do* is head-adjoined to the phase head *v* and this analysis can account for the distribution of British *do*.

7. Conclusion

This paper has provided a uniform analysis of semantically vacuous elements. I have proposed that these dummy elements are introduced by EFs on phase heads. This analysis has predicted that semantically vacuous elements are first merged to the phase edge of CP and *v*P. Indeed, this prediction has been supported by the English expletives *there* and *it* and the Icelandic expletive *það* ‘there’. Moreover, we have seen that the dummy *do* is adjoined to the phase heads C and *v*. Consequently, this analysis can deal with the dummy elements in a uniform way within the Phase Theory.

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FOOTNOTES

¹ *There*-insertion cannot be applied to the unaccusative verb that denotes the change of state.

- (i) * There melted a block of ice in the front yard. (Deal (2009: 286))

Alexiadou and Schäfer (2008) suggest that [Spec, *v*P] is filled with the internal argument of the change of state verb. I will leave open the internal structural of the unaccusative verb.

² Satoshi Oku pointed out that the expletive *it* has the case feature. Thus, *it* is assumed to move to [Spec, VP] from [Spec, CP] to check the case feature of *it*. To be precise, (13) can be analyzed as in (i).

- (i) I just $[_{VP} \text{knew}] [_{VP} \text{it}] [_V t_i] [_{CP} t_i] [_C \text{that Mary would fire John today}]]$.

See Stroik (1996) for an argument for the movement of *it*.

³ See Vikner (1995) for the detailed description of them.

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Gerunds in Phase Theory

Sho Shimokariya

Graduate School of Kyushu University

Keywords: Gerunds, Tense, Case, Phase Theory

1. Introduction

There are some types of gerundive clauses in English which differ depending on the forms of their subjects. In this paper, I will be especially concerned with the one known as ‘accusative with gerund’ construction (henceforth Acc-gerund). Interestingly, it behaves both similarly and differently from clauses. To be more specific, it resembles clauses in that it can be modified by VP or sentential adverbs but not by adjectives as in (1), while it differs from regular clauses in that it has to appear in the Case position as in (2).

(1) a. [John quickly(/*quick) leaving] surprised everybody.

b. [Mary probably being responsible for the accident] was considered by the DA.

(Pires 2006: 17, 18)

(2) a. Mary talked about [him moving out].

b. *It was expected [Frank reading this novel].

(Pires 2006: 21)

The aim of this paper is to explore the syntactic structure of the Acc-gerund construction within phase theory, and thereby account for its idiosyncratic properties. In concrete terms, it is proposed that the construction should project up to CP, whose Tense head bears a defective tense feature; consequently it does not form a phase. This structure will shed new light on the

dual-nature of the Acc-gerund, under a derivation system suggested by Pesetsky and Torrego (henceforth P&T) (2001, 2004).

It is also argued that a gerund without an explicit subject (what is called PRO with gerund, henceforth PRO-gerund) should be viewed as a subtype of the Acc-gerund, and, on the other hand, that a gerund with a genitive subject (henceforth Gen-gerund) should be treated differently, namely as a DP.

2. Previous Analysis

Pires (2001, 2006, 2007), replicating the Case-transmission analysis of Reuland (1983), discusses the mysterious properties of the Acc-gerund within the Minimalist framework and claims that its maximal projection should be TP. The analysis, however, is not theoretically preferable because it stipulates special types of features on T (an uninterpretable defective ϕ feature (def- $u\phi$) and an uninterpretable Case feature (u Case)), as well as a counter-cyclic derivation mechanism. Added to this, there seems to be no compelling reason to assume the Acc-gerund to be TP when we consider the following examples.

(3) a. What I’ll try and arrange is [_{CP} for you to see a specialist].

b. *What we hadn’t intended was [_{TP} you to get hurt].

c. What she prefers is [_{Ger} him swimming in this perilous river].

(Radford 2004: 107)

(4) a. *We didn’t intend [_{TP} you to get hurt] or [_{CP} for him to hurt you].

(Radford 2004: 108)

b. (?)What I really expect is [_{CP} for John to sing Let It Be] and [_{Ger} Paul composing new songs].

c. (?) [_{Ger} Mary baking a birthday cake] and [_{CP} that John prepared for the birthday party] made Tom happy.

As is demonstrated in (3a, b), CP can be focalized in the pseudo-cleft sentence, whereas TP cannot. Notice here that (3c) is also grammatical, similar to (3a), so that the Acc-gerund is identified to be a kind of CP. This view is further supported in tandem with the contrast shown in (4); the Acc-gerund can be coordinated with finite/infinite CP as in (4b, c), while TP cannot as in (4a). I therefore conclude that the Acc-gerund should project up to CP.

3. Proposal

3.1 Tense of the Acc-gerund and Its Phase-hood

Admitting that the Acc-gerund is a CP, what makes it different from other clauses? These differences may be attributed to the imperfection of Tense within the clause.

In the Acc-gerund, the tense suffix does not attach to the verbs, nor do modal auxiliaries appear. These properties, interestingly, can also be seen in what is called ‘mad magazine sentence’ as in (5).

- (5) a. What! Her call me up?! Never.
 b. *Him gets a job?!
 c. *Her **might(/will)** call me up?!

(Akmajian 1984: 3)

Here in (5a), the subject of the sentence apparently surfaces bearing accusative Case. (5b) and (5c) illustrate that verbs may not be inflected and that modal auxiliaries are not allowed respectively. According to Akmajian (1984), these syntactic properties are due to the absence of Tense within the sentence, and he maintains that the “accusative” subject in this construction is in fact not the accusative one; the subject carries the “default Case,” which is widely adopted in studies of languages. This Case comes up in non-Case positions and its form in English is assumed to coincide with the accusative Case, with supporting evidence for this position coming from language acquisition, Specific Language Impairment and so on. In the present analysis, I

propose in conformity with Minimalism that nominals occurring with the default Case have no uninterpretable Case feature to be checked; they only have an interpretable ϕ feature ($i\phi$). Hence they are allowed only where there is no element capable of assigning Case.

Returning now to the Acc-gerund, one can safely state that the subject of this construction also carries the default Case when we consider its similarity to the mad magazine sentences. But, it must be noted that the construction definitely has the Tense head from the facts in (1a), which involves the sentential adverb, and the following example in (6), which involves a temporal adverb.

- (6) Mary worried yesterday about Paul coming to dinner tonight. (Pires 2006: 25)

Thus I claim that the Acc-gerund projects up to CP, whose Tense head is unable to check the uninterpretable Case feature of the subject. In this light, the feature of the head responsible for Case-checking is supposed to be defective.

I will further develop this view on the basis of Kanno (2008), who insists that it is necessary for a CP to have both the Agree feature and the Tense feature perfectly in order to form a phase.

- (7) The phasehood of CPs is determined by the combination of an Agree feature and a Tense feature; if a CP possesses both Agree and Tense features, it is a phase; if a CP does not have one or both of the two features, it is not a phase. (Kanno 2008: 24)

It follows from this that the Acc-gerund is not a phase, given its defectiveness of Tense. The examples below will serve as corroborating evidence for its non-phasehood.

- (8) a. That everyone is taller than himself is a contradiction.
 b. *?Everyone being taller than himself is a contradiction.

(Pires 2001: 23)

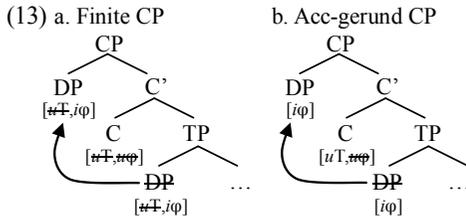
the Acc-gerund must appear in the Case position; there is no choice but to resort to a Case-assigning element external to the clause.

4. Analysis

It was observed in the preceding section that the Acc-gerund forms a CP structure similar to the finite clause, except for its defectiveness of T. Such a difference reflects idiosyncratic properties of it including non-phasehood. Also, the features of elements relevant to our purpose must be recalled here;

- (12) $C_{[uT, u\phi]}, T_{(Fin)[iT, u\phi]}, T_{(Ger)[def-iT, u\phi]}, DP_{[uT, i\phi]/[i\phi]}$

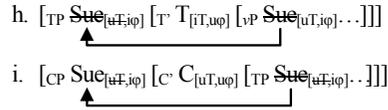
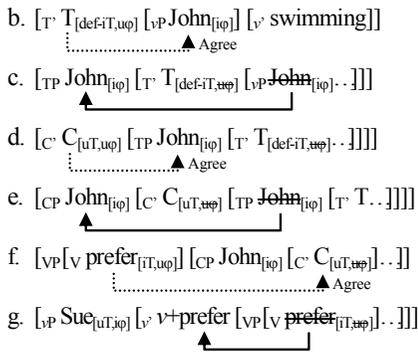
Concerning the distinction between the Acc-gerund and the finite clause, let us reconfirm their derivations as represented in (13).



As is clear from the above tree diagrams, the finite clause is ‘self-sufficient’ with regard to uT s, whereas the uT on C remains unchecked within the clause in the Acc-gerund.

With these points in mind, for the moment we shall focus on how the Acc-gerund is derived.

- (14)a. Sue prefers John swimming.



The derivation of (14a) proceeds in the following manner. To begin with, as is shown in (14b), the default subject ‘John’ bearing $i\phi$ is merged with spec- vP . This is followed by the merger of gerundive T, which has $[def-iT, u\phi]$, triggering Agree with the subject. As a result, ‘John’ is raised to spec-TP, as in (14c). After forming TP, C bearing $[uT, u\phi]$ is introduced to the derivation in (14d), and it then enters into Agree relation with ‘John’ only to check its own $u\phi$, as in (14e). (14f) represents the stage where the main verb ‘prefer’ merges to the whole Acc-gerund CP. Here, the verb Agrees with C within the gerundive clause to check the uT on C. From this point on, the derivational stages presented in (14g), (14h), and (14i) will fall in line with finite clauses. First, the subject of the main clause ‘Sue’ is merged to the specifier position of the main v in order to receive the external θ -role of it. The main T afterwards merges with the completed vP and it probes ‘Sue’. Consequently, the uT feature of ‘Sue’ is valued. Finally, it appropriately checks off the $[uT, u\phi]$ features of the main C that is merged with TP.

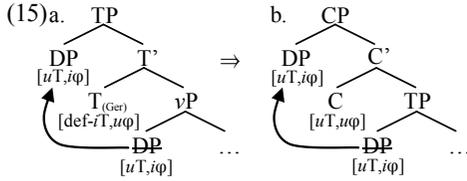
Based on the argument thus far, the next section deals with the other two gerunds, namely the PRO-gerund and the Gen-gerund.

5. The Other Gerunds

5.1 PRO-gerund

As regards the PRO-gerund, we are to stand in the same footing as Pires (2006) taking the spirit of the Movement Theory of Control elaborated by Hornstein (2001) and his subsequent works. To put it more precisely, the present paper attempts to interpret the PRO-gerund as the identical construction to the Acc-gerund in essence, and the sole difference is the feature the gerundive subject

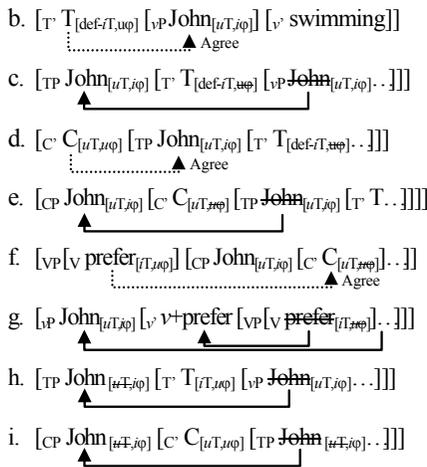
has; in the former case, the subject is a normal DP carrying $[uT, i\phi]$ features, and in the latter, a default DP carrying only $[i\phi]$. Let us here examine the PRO-gerund.



The way (15) is derived is quite similar to what was argued in (11) other than the uT remaining on the subject DP. Therefore, provided that the normal DP has been introduced in the gerundive derivation, there exist two uT s to be valued by some elements outside the clause; hence it is necessary for the PRO-gerund as a whole to occur in the Case position and for the subject to ‘escape’ from the clause.

We are now able to see how the derivation of (16a) converges.

(16)a. John prefers swimming.



As stated above, except for a uT on the subject DP internal to the PRO-gerund, the derivation of (16a) proceeds in an analogous way to that of the Acc-gerund, by the stage the main verb is introduced in (16f). The subsequent operations to this differ from the case in the

Acc-gerund in that, in (16f), there is no candidate for the external θ -role of the main v in the numeration. That being so, *John* is raised to the main spec- vP in order for the θ -role to be exhausted. The following steps shown in (16g) to (16i) again overlap with those of the Acc-gerund as well as finite clauses, so I will leave out the illustration for want of space.

5.2 Gen-gerund

With respect to the Gen-gerund, I argue that it has a DP structure, distinct from the two gerunds discussed so far. This idea is in conformity with the earlier work that Abney (1987) has advanced, which will be slightly revised from the empirical point of view. Here is the tentative version of the structure of the gerund in question.

(17) $[_{DP} \text{John}]_{DP}$'s $[_{NP} \text{-ing}]_{VP}$ $[_{VP} \text{destroy}]_{DP}$ $[_{DP} \text{the spaceship}]_{DP}$]]]]]
The point of (17) is outlined as follows; the suffix *-ing* nominalizes the VP initially and the NP is afterwards headed by the possessive D.

As a beginning, we shall look more carefully into what is common between the Acc-gerund and the Gen-gerund, and what is not, so as to make it clear that they actually have a different status.

(18) John('s) quickly leaving surprised everybody.
(Pires 2006: 17)

(19)a. Mary talked about John('s) moving out.
b. *It was expected Frank('s) reading this novel.
(Pires 2006: 21)

In (18), it can be seen that both gerunds have internal verb structure. Also in (19), one can see that they have to appear in Case positions.

Notice, in the meantime, that below are examples suggesting that the natures of the two gerunds conflict with each other.

(20) Mary(*'s) probably being responsible for the accident was considered by the DA.
(Pires 2006: 18)

(21) I wouldn't count on it(*'s) raining tomorrow.
(Reuland 1983: 109)

- (22)a. [John's coming] and [Mary's leaving]
bother/(*bothers) me.
 b. [John's arrival] and [Mary's departure]
bother/(*bothers) me.
 c. [John coming] and [Mary leaving]
bothers/(*bother) me.
 d. [That John came] and [(that) Mary left]
bothers/(*bother) me.

Facts in (20) and (21) imply that the Gen-gerund is not endowed with the clausal nature. What is more, it can safely be said, from the facts seen in (22), that the Gen-gerund is akin to DP in the ϕ agreement, whereas the Acc-gerund is close to the finite clause. Taking those things into consideration, the two gerunds at hand may well be analyzed distinctively.

Now that the Gen-gerund has turned out to project up to DP, what is its internal structure like? The example in (23), which demonstrates that the construction cannot be modified by an adjective, is in fact the key to solving the problem; there is no NP projection.

- (23)*John's deep explaining it satisfied us.

Viewed in this light, the syntactic structure of the Gen-gerund can be described as below.

- (24) [_{DP} DP [_{D'} D [_{VP} $\overline{\text{DP}}$ [_{v'} v [_{VP} V [DP]]]]]]

We will further pursue the prospect of its forming a phase: it is often pointed out in the recent Minimalist Program that DP should also be a phase considering the parallelism between CP and DP. Examine the following comparison.

- (25)a. That everyone is taller than himself is a contradiction. (=8a)
 b. Everyone's being taller than himself is a contradiction.
 c. *?Everyone being taller than himself is a contradiction. (=8b)

(Pires 2001: 23)

Recall our earlier examples repeated in (25) about which Pires maintains that their grammaticality

status reflect their phasehood. If this is on the right track, the Gen-gerundive construction is expected to form a phase, as well as finite clauses.

To sum up what has been argued in this section, the Acc-gerund has a CP structure that is not a phase while the Gen-gerund has a vP-DP structure that is a phase. This idea is indeed reinforced by the fact that *wh*-movement out of the Gen-gerund is forbidden, in contrast with the case in Acc-gerund as in (26).

- (26) Who_i did you defend Bill(*'s) inviting t_i ?
 (Pires 2006: 18)

The reason why the Gen-gerund does not allow a *wh*-element to go out can be illustrated in parallel with an example in (27), where the DP is thought to be a phase. Let us now examine the reasoning with reference to the structures in (28) relevant to our discussion.

- (27)*Who_i did you see John's picture of t_i ?
 (Masutomi 2012: 168)

- (28)a. [_{DP} John's [_{D'} D] [_{VP} picture of t_{who}]]
 b. [_{DP} Bill's [_{D'} D] [_{VP} inviting t_{who}]]
 c. [_{VP} defend [_{CP} Bill [_{C'} C] ... [_{VP} inviting t_{who}]]]
 (Masutomi 2012: 168)

In (28a), showing the structure of (27), the *wh*-element has to step into spec-DP before going to the main C for its phasehood. This is, however, prohibited because the specifier position has been already occupied by *John*, which will lead the derivation to crash. This is also true of the Gen-gerundive case in (28b); *Bill* in the spec-DP again prevents the *wh*-element from being raised. Contrary to these examples, there is no need for the *wh*-element to drop in on spec-CP in the Acc-gerund case in (28c), because it does not form a phase. As a result, the *wh*-element can properly be raised to the main clause, so that a grammatical sentence will be produced.

6. Conclusion

In this paper, it has been revealed that an analysis of the Acc-gerund assuming TP structure is implausible, and in light of empirical evidence I have proposed that the construction is actually CP. Thinking in this way can help us readily understand its affinity with other canonical clauses. Besides, given that the Tense feature of the T in the relevant clause must be defective in that it is incompetent for checking Case, the peculiar properties to the Acc-gerund will also be made clear. In the first place, owing to the defectiveness of Tense, there is a possibility of the subject occurring without *u*T, which is equivalent to the traditional Case feature, within the clause. If there arises a standard subject with *u*T, it then moves out of the gerundive clause in order to get valued: the case the PRO-gerund is yielded. Secondly, because the defective Tense leaves the *u*T on C unvalued, the Acc/PRO-gerunds are inevitably restricted to appear only in the Case position so that they can be checked off.

Finally, we have reached the conclusion that the Acc-gerund does not form a phase due to the absence of perfect Tense; accordingly it is allowed to extract *wh*-elements from inside the clause. Gen-gerund, on the other hand, has a DP-*v*P structure which forms a phase. It is thus impossible to extract *wh*-elements out of the clause, in contrast with the Acc-gerund.

* My deepest appreciation goes to Professor Nishioka whose comments and suggestions were of inestimable value for my study. I am also indebted to Dr. Larson-Hall for her kind help in proof reading. The responsibility of any errors is of course mine.

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The Licensing Condition for Experiencer *Have**

Shiro Takeuchi
University of Tsukuba

Keywords: experiencer *have*, existential *have*, *-self* form, logophor, conceptual relation

1. Introduction

This paper deals with the licensing condition for experiencer *have* (EH for short), as exemplified in (1):

- (1) a. She_i had [her_i camera confiscated by the police]. (Washio (1997: 51))
b. John_i had [his_i car break down]. (Inoue (1995: 73))

In an instance of EH, the subject referent is thought of as affected by the occurrence of an event denoted by the elements following *have*. For convenience, I call the elements following *have* (i.e. those bracketed in (1), (2), and (3)) complements to *have*.

It has been pointed out by several previous studies (e.g. Brugman (1988)) that it is often the case with EH that there is an element coreferential with the subject in the complement. It is *her* in (1a) and *his* in (1b). In addition, it is also well known that there are examples interpreted as instances of EH despite the absence of any coindexed element in the complement, as exemplified in (2):

- (2) Poor Mr. Chips. He had [students walk out of class] today. (Harley (1997: 78))

In (2), no element coreferential with the subject appears in the complement; nevertheless, sentence (2) admits the experiencer reading.

On the other hand, sentence (3) has in its complement an element which refers to an entity different from that of the subject, and has only the causative reading.

- (3) We_i had [her_i camera confiscated by the police]. (Washio (1997: 51))

In sum, in order for the experiencer reading to be licensed, there has to be a relation of identity between the subject and an element in the complement. This relation can be explicit, as in (1), and inexplicit, as in (2). Up to this point, there is no controversy in previous studies. Previous studies are divided into the studies that regard this relation as conceptual¹ (Belvin (1993), Belvin and den Dikken (1997), Nakau (1991, 1998), Washio (1997) etc.), and those that regard it as syntactic (Harley (1997), Ritter and Rosen (1997)). The claims by these studies will be investigated in section 2.

This paper aims at examining the validity of these two positions, and shows that the conceptual relation between the subject and the complement is one of the necessary conditions for licensing EH. In order to argue for this claim, this paper presents some pieces of evidence that are not discussed in the previous studies.

For convenience, let us show here two diagnostics for distinguishing the experiencer and causative readings (cf. Inoue (1995)). For example, an instance of EH in (1a) can be expressed in the form *What happened to...was that...*, as illustrated in (4a); an instance of causative *have* in (3) cannot, as illustrated in (4b). On the other hand, an instance of EH cannot be expressed in the form *What...did was that...*, as illustrated in (5a); an instance of causative *have* can, as illustrated in (5b).

- (4) a. What happened to her_i was that she_i had her_i camera confiscated by the police.
b. *What happened to us_i was that we_i had her_i camera confiscated by the police.
(5) a. *What she_i did was that she_i had her_i camera confiscated by the police.
b. What we_i did was that we_i had her_i camera confiscated by the police.

These diagnostics will be of importance in section 3.

2. Previous Studies

In this section, I overview previous studies that consider the relation between the subject and the complement in EH conceptual, and those that consider it syntactic.

2.1. Conceptual Relation between the Subject and the Complement in EH

The claims by the previous studies (Belvin (1993), Belvin and den Dikken (1997), Nakau (1991, 1998), Washio (1997) etc.) that regard as conceptual the identity relation between the subject and the complement in EH are essentially the same, and can be summarized as follows:

- (6) EH is licensed when the subject-complement relation of identity is made clear by the context.

In (1), a pronoun coreferential with the subject referent appears in the complement, and thus the relation of identity is formally guaranteed. In order for sentence (2), where there is no element coreferential with the subject referent, to be licensed as an instance of EH, the speaker or the hearer has to understand that *class* belongs to the subject referent. In this case, it is not obligatory that an element coreferential with the subject referent should appear in the complement in order for EH to be licensed.

2.2. Syntactic Binding Relation between the Subject and the Complement in EH

Harley (1997) argues against the claim just mentioned in subsection 2.1, and argues that there must be a syntactic binding relation between the subject and the complement in EH.

Following Ritter and Rosen (1997), Harley posits a null pronoun which refers back to the subject referent in examples where no element coreferential with the subject appears. The examples by Ritter and Rosen (1997: 315) are shown below:

- (7) a. John_i had the students walk out of his_i class.
 b. John_i had the students walk out of pro_i class today.

In (7a), a pronoun coreferential with the subject

referent appears in the complement; in (7b), Ritter and Rosen posit a null pronoun in the complement. Harley thus assumes a null pronoun in the complement of sentence (2), as shown in (8):

- (8) Poor Mr. Chips. He_i had students walk out of pro_i class today.

In (8), the subject binds the null pronoun in the complement.

Harley claims this syntactic relation between the subject and the complement in EH on the basis of the interpretation of *have* sentences in which a *-self* form is the coindexed element, as in (9b) and (10). She argues that sentence (9a) admits both the experiencer and causative readings, and that sentences (9b) and (10) admit only the causative reading.

- (9) a. Asterix_i had goat's milk spilled on him_i.
 b. Asterix_i had goat's milk spilled on himself_i.
 (10) Bill_i had Hillary insult {*himself/*Al* and himself_i} in public.

(Harley (1997: 79-81, with slight modifications)) She further generalizes that *have* sentences where a *-self* form appears in their complement admit only the causative reading.

As for the *-self* forms appearing in sentences (9b) and (10), Harley follows Reinhart and Reuland (1993), and assumes that the *-self* forms in (9b) and (10) are logophors. Reinhart and Reuland (1993) call the following *-self* forms logophors: those that appear in adjunct position, as in (9b), and those that appear in object position and are coordinated, as in (10) and (11).

- (11) Max_i boasted that the queen invited {*himself_i /Lucie and himself_i} for a drink.

(Reinhart and Reuland (1993: 670)) In (10), a *-self* form is conjoined with *Al*, and in (11), it is conjoined with *Lucie*, respectively.

Harley argues that the sentences in (9b) and (10) constitute counterexamples to the claim that EH is licensed when the subject-complement relation of identity is understood in context. The reason for

her argument is that the coreference between a logophor and its antecedent is particularly salient, and yet the only interpretation available for the sentences in (9b) and (10) is the causative, not experiencer, interpretation. She claims, therefore, that in order for EH to be licensed, the subject has to syntactically bind a pronoun, null or overt, in the complement.

Furthermore, she claims that the same syntactic binding condition also applies to existential *have*, as exemplified in (12):

(12) The oak tree had a nest on {it/*itself}.

(Harley (1997: 84, with slight modifications))
As is clear in (12), while a pronoun can occur in the complement of existential *have* sentences, a *-self* form cannot. On the basis of this observation, she claims that experiencer *have* parallels existential *have*, in that they both require a syntactic element coreferential with the subject in their complement. As we saw in the example in (7b), Ritter and Rosen (1997) posit a null pronoun in the complement of experiencer *have*. They do so in order to account for both experiencer *have* and existential *have* in a unified way too.

We will deal with existential *have* in detail in subsections 4.4.2 and 5.2. In the sections that follow, we examine Harley's claim in detail.

3. Fact

First, let us observe a fact concerning the sentence in (10), which, according to Harley, admits only the causative reading. Recall that this sentence is one of the bases for Harley claiming the syntactic binding relation between the subject and the complement in EH. Importantly, this sentence only admits the causative reading even when a pronoun, not a *-self* form, appears in the complement. This fact is made clear in the following diagnostic:

- (13) a. * What happened to Bill_i was that he_i had Hillary insult him_i in public.
b. What Bill_i did was that he_i had Hillary

insult him_i in public.

That is, the sentence in (10) does not serve as evidence for disclaiming the conceptual relation of identity between the subject and the complement in EH.

Due to limitation of space and time, I leave for future research clarifying the reason why sentence (10) has only the causative reading.

4. Revisiting *-Self* forms in Harley (1997) and Reinhart and Reuland (1993)

In this section, we revisit *-self* forms discussed in Harley (1997) and Reinhart and Reuland (1993), accounting for the fact that sentence (9b) admits only the causative reading, and that a *-self* form cannot appear in existential *have* like that in (12).

First and foremost, let us point out the following point: strictly speaking, the *-self* forms that we are concerned with here are not logophors. Reinhart and Reuland (1993: 673) use the term in a sense that departs from the way the term was originally used. They themselves admit it, and Baker (1995: 65 footnote 1) also acknowledges it.

4.1. The Emphatic/Contrastive Use of *-Self* Forms

The *-self* forms that appear in the sentences in (10) and (11) are considered as intensives (Baker (1995)). Baker notes that intensives are appropriate only in contexts where emphasis or contrast is desired. As is clear in the sentences in (10) and (11), the use of *-self* forms is licensed in contexts in which they are coordinated with other entities. Two entities are coordinated, and thus focused relative to entities that are not made explicit; as a result, the two entities are intensified. We call this use of *-self* forms the emphatic/contrastive use.

-Self forms of the emphatic/contrastive use are also observed in the sentences in (14), and (15):

- (14) The queen invited {me/*myself/both Max and myself} for tea.

(Reinhart and Reuland (1993: 675))

- (15) a. This paper was written by Ann and

myself.

b. ?? This paper was written by myself.

(Ross (1970: 228))

In (14), for example, while *myself* cannot appear solely, it can when coordinated with another entity with the help of *both*. Similar remarks apply to the sentences in (15). From these observations, it seems safe to say that *-self* forms do not occur solely in (10) and (11), because they do not function as intensives easily when they appear solely.

4.2. The Viewpoint Use of *-Self* Forms

In this subsection, we examine the viewpoint use of *-self* forms, which, Hirose (2009) assumes, has been extended from the emphatic/contrastive use. The discussion in this subsection provides an explanation for the fact that sentence (9b) only admits the causative reading, and for the fact that *-self* forms cannot occur in existential *have*, as exemplified in (12).

4.2.1. Extension from Emphatic to Viewpoint

Hirose (2009) argues that the *-self* form extends from the emphatic/contrastive use to the viewpoint use through the process of exclusion of others. He claims that when the speaker pays attention exclusively to the referent of a *-self* form, it will be possible for the speaker to identify with it emotionally and project himself onto it. As a result, the speaker takes the point of view of the antecedent of a *-self* form, the use of which is called the viewpoint use of *-self* forms.

As is well known, when *themselves* is used in (16), the referents of *the children* are placed behind the referents of *the adults*; on the other hand, when *them* is used, there are two interpretations available: the one just mentioned, and the one where the referents of *the children* are hidden from the person viewing the picture.

(16) The adults_i in the picture are facing away from us, with the children placed behind {themselves_i; /them_i}. (Cantrall (1974: 146))

(17) The house_i in the picture is facing away from us, with an elm tree behind {it_i/*itself_i}.

(Cantrall (1974: 147))

It is also known that in (17), where the subject referent is inanimate, the viewpoint use of *itself* is unacceptable, because it is difficult for the speaker to take the point of view of inanimate entities.

Let us get back to the discussion on the *have* constructions. A *-self* form of the viewpoint use can appear in the complement of *have* sentences too, which is confirmed by the following contrasts:

(18) a. John_i is happy that Anne has {come/??gone} so far to see himself_i.

(Levinson (2000: 321))

b. John_i had Mary {come/*go} to visit Tom and himself_i.

Sentence (18a) is depicted from the point of view of *John*, the antecedent of the *-self* form. In this case, only *come* co-occurs with the *-self* form. When a *-self* form appears in the complement of sentence (18b), only *come* occurs too. This fact thereby indicates that the *-self* form in (18b) functions as an instance of the viewpoint use. Furthermore, the *-self* form in (18b) serves also as an instance of the emphatic/contrastive use, because it occurs in an environment where it is coordinated with another entity. Given the claim by Hirose, which we saw at the beginning of this subsection, it is no surprise that the *-self* form in (18b) functions as an instance of both the emphatic/contrastive and viewpoint uses.

4.2.2. The Viewpoint Use of *-Self* Forms and the Will of the Antecedent

Given that the *-self* form in sentence (9b), repeated here as (19), is an instance of the viewpoint use, it naturally follows that this sentence admits only the causative reading.

(19) Asterix_i had goat's milk spilled on himself_i.

In order to examine the validity of this assumption, let us first observe the claims by Cantrall (1974) and Kuno (1987).

Cantrall (1974: 158) argues that the appropriateness of the sentences in (20) rises, as the chance that the verb requires the referent of its subject to have a will increases.

- (20) a. ?* Halley's comet_i has a glowing tail behind itself_i.
 b. ?? Halley's comet_i leaves a glowing tail behind itself_i.
 c. ? Halley's comet_i spreads a glowing tail behind itself_i.
 d. Halley's comet_i spreads its glowing tail behind itself_i.

That is, the antecedent of an instance of the viewpoint use of *-self* forms is considered to have a will.

The observation by Kuno (1987: 153) also confirms the claim made by Cantrall. Consider (21):

- (21) a. John_i pulled the blanket over him_i.
 b. John_i pulled the blanket over himself_i.

He notes that sentence (21b) implies that the subject referent tried to cover himself up with the blanket in order to hide under it, while sentence (21a) has no such implication.

This observation readily accounts for the fact that the only reading available in (19) is causative. Given that the *-self* form in (19) is an instance of the viewpoint use, the subject referent in (19) is considered to have a will, as those in (20d) and (21b). Then it will be reasonable to assume that in (19), the subject reference himself caused the event of spilling some milk on him to happen. This interpretation is that of the causative reading, not that of the experiencer reading.³

Furthermore, the variability in judgments on the appropriateness of sentence (19) is also accounted for. As we saw before, when a *-self* form of the viewpoint use is used in a sentence, the sentence is described from the point of view of the antecedent of the *-self* form, not the speaker; in other words, the speaker has to make an effort at taking the point of view of the antecedent. It follows from this assumption that the speaker who

(unconsciously) does not make this effort judges the sentence to be ungrammatical.

The discussion so far also explains the fact that no *-self* form appears in the complement of existential *have*. When a *-self* form is used as an intensive, it has to be coordinated with a different entity, as in (10), (11), (14), and (15). In existential *have*, this coordination in the complement is impossible in principle, because an entity whose referent is different from that of the subject cannot occur in the complement, as illustrated in (22).

- (22) The table_i has a book on {it_i/*itself_i/*the desk_j/*the desk_j and itself_i}. (cf. (12))

In addition, the subject referent in (12) and (22) is inanimate, therefore a *-self* form of the viewpoint use cannot occur either, as in (17) and (20a).

Here is a brief summary of sections 3 and 4: The discussion on the interpretation of *-self* forms appearing in the complement of *have* sentences cannot determine a necessary condition for licensing either experiencer *have* or existential *have*.

5. The Conceptual Relation between the Subject and the Complement

In this section, I argue for the conceptual relation between the subject and the complement in both experiencer *have* and existential *have*.

5.1. Experiencer *Have*

In this subsection, I present some pieces of evidence for regarding the relation between the subject and the complement of EH as conceptual.

Sentence (23a) supports the view that the relation of identity between the subject and the complement in EH is conceptual.

- (23) a. I have Mary sick in bed.

- b. * I_i have Mary sick in bed on me_i.

As pointed out by several previous studies (e.g. Belvin and den Dikken (1997), Nakau (1998)), sentences like that in (23a) are licensed as instances of EH only when the marital or parental relation between *I* and *Mary* is understood. In addition, a

pronoun coreferential with the subject referent cannot occur in the complement, as illustrated by (23b).

As we saw in subsection 2.2.2, in the syntactic position where Ritter and Rosen (1997) and Harley (1997) posit a null pronoun coreferential with the subject, a pronoun can in fact appear overtly. The fact illustrated in (23b) that a pronoun which corefers with the subject cannot occur in the complement makes the claim by Ritter and Rosen and Harley unpersuasive.

Next, we investigate cases where the appropriateness of a sentence changes according to the context in which the sentence appears. The observation by Belvin and den Dikken (1997) is of importance. They note that sentence (24a) is difficult to understand as EH without any context given. They continue to say, however, that if the pragmatic context were set up right, sentence (24b), which is similar to sentence (24a), could in fact admit the experiencer reading. They say that if the speaker and his/her family live across the road from a prison, he/she readily can utter sentence (24b) to someone from out of town.

- (24) a. * John had the murderer escape from prison yesterday.
b. We had a murderer escape from prison yesterday.

(Belvin and den Dikken (1997: 172-3))

The examples in (23) and (24) suggest that it is the conceptual relation between the subject and the complement, rather than the syntactic one, that is a necessary condition for licensing EH.

5.2. Existential *Have*

Last not but least, I present one piece of evidence that further supports the claim that the link between the subject and the complement of EH is conceptual. What is at issue here is that many previous studies have dealt with experiencer *have* and existential *have* in a parallel fashion, regardless of whether they consider the link conceptual or

syntactic. The reason for this is that existential *have* also requires an element coreferential with the subject in its complement. Sentence (25) is an example of existential *have*.

- (25) The table_i has a book on it_i. (cf. (12))

As we saw in section 2.2, Harley (1997) too assumes this position.

Here, I take up a sentence of the type exemplified in (26).

- (26) We have a lot of coyotes around here.

As Langacker (1995: 73) points out, the subject in (26) refers generically to people living in the area denoted by the adverbial phrase.

Especially important to our discussion here are the following two points: one is that there is no formal correspondence between the subject *we* and the adverbial phrase *around here*, and the other is that when the subject and the adverbial phrase do not correspond to each other conceptually, the sentence is not licensed as existential *have*. Observe (27):

- (27)*We (=Americans) have a lot of coyotes around here (=in Japan).

In (27), the subject and the adverbial phrase respectively denote Americans and Japan; hence no conceptual relation between the two. This fact indicates that the relation between the subject and the complement in existential *have* is conceptual, and suggests that the relation in experiencer *have* is also conceptual.

6. Conclusion

This paper has argued for the conceptual relation between the subject and the complement in EH as a necessary condition for licensing EH. It has also shown that this condition applies to existential *have* as well.

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Notes

¹ In this paper, the term conceptual relation denotes a relation that is semantic and/or pragmatic.

² Harley herself does not mention the variability in judgments of the sentence in (19).

³ One informant says that in (19), it is better to use the verb *pour*. This insight confirms that sentence (19) admits only the causative reading, because it is difficult to imagine a context in which one makes some milk spilled on him on purpose.

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Move without Agree

Yuta Tatsumi
Osaka University

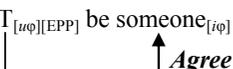
Keywords: Move, Agree, the EPP feature,
semantic features

1. INTRODUCTION

Within the Minimalist Program, researchers attempt to minimize the computational mechanisms. Under such considerations, Chomsky (2000, 2001) argues that Move is composed of Merge and Agree. However, his analysis faces some empirical problems. Thus, in this paper I argue that Move does not need to include Agree as its subpart and propose that semantic features of a moved phrase can be a driving force of movement.

2. AGREE + EPP = MOVE?

In this section, I briefly review Chomsky's analysis of Move. His argument is concerned with the following sentences.

- (1) a. There is someone in the garden.
 b. Someone is in the garden.
 c. $T_{[u\phi][EPP]}$ be someone_[i\phi] in the garden


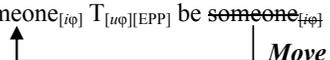
Chomsky (2000, 2001) assumes that the ϕ -features on T in both (1a) and (1b) would be checked via Agree when the derivation reaches the stage in (1c). Agree is a syntactic feature-checking operation and defined as follows.

- (2) The erasure of uninterpretable features of probe and goal is the operation we called *Agree*. (Chomsky (2000: 122))

The relationship between a probe and a goal is subject to the following conditions.

- (3) a. Matching is feature identity.
 b. D(P) is the sister of P.
 c. Locality reduces to “closest c-command.”
 (Chomsky (2000: 122))

In (1c), T contains the uninterpretable ϕ -features, and they activate T as a probe. T searches its complement domain, and agrees with its matching goal. The next step is to erase the EPP feature on T. There are two possibilities. Given the lexical array with *there*, the expletive is directly merged in Spec,TP, so that the EPP feature on T is satisfied, as in (4a). If the lexical array does not contain *there*, the noun phrase *someone* is moved to Spec,TP in order to satisfy the EPP feature on T, as in (4b).

- (4) a. There $T_{[u\phi][EPP]}$ be someone_[i\phi] ...
 b. someone_[i\phi] $T_{[u\phi][EPP]}$ be someone_[i\phi] ...


It is important to note that the EPP feature itself cannot function as a probe, because its uninterpretable counterpart does not exist by definition. Chomsky (2001) also mentions this point as follows; “the EPP-feature is not sufficient to identify a target.” (p. 42) Thus, under Chomsky's theory of Move, we reach the following conclusions.

- (5) a. A probe can trigger Move only when it contains the EPP feature.

- b. The EPP feature always piggybacks on another Agree relations.

These conclusions mean that Move is a parasitic operation in the sense that its driving force (i.e. the EPP feature) must be combined with another feature-checking relation. In other words, Move includes Agree as its subpart. In the next section, I will show that this type of analysis faces some empirical problems.

3. PROBLEMS

3.1. ELLIPSIS

Bošković (2007) provides evidence against the assumption that Move includes Agree. Consider the following examples.

(6) Saito and Murasugi (1990)

- a. John met someone but I don't know
 [_{CP}who_i [_C C ~~John met~~ _{t_i}]]
- b. *John believes C/that Peter met someone
 but I don't think [_{CP} [_C C/that ~~Peter met~~
~~someone~~]]

Saito and Murasugi (1990) argues that functional heads can license ellipsis of their complement only when they undergo specifier-head agreement (SHA). In (6a), the head of the embedded CP undergoes SHA, and then licenses ellipsis of its complement. On the other hand, SHA does not take place in the intermediate CP in (6b), thus ellipsis is not allowed in this case.

Keeping this contrast in mind, let us consider the following example.

(7) * John met someone but I don't know who,
 Peter said [_{CP} _{t_i} [_C C/that ~~John met~~ _{t_i}]]
 (Bošković (1997: 179))

The ungrammaticality of (7) shows that intermediate Cs in successive-cyclic *wh*-movement cannot license ellipsis of its complement. However, under Chomsky's theory, Move always includes Agree, and the ungrammaticality of (7) is not predicted. Thus, the example (7) can be taken as evidence against Chomsky's view of movement.

3.2. SUBJECT-VERB AGREEMENT

Another problem is concerned with subject-verb agreement phenomena. It is well known that there is a choice in some varieties of English, in particular British English. As shown in (8), certain nouns in British English can take either singular or plural agreement.

(8) British English

- a. The Government is ruining this country.
 b. The Government are ruining this country.
 (Sauerland and Elbourne (2002: 288))

Although it is not clear how we should characterize such nouns (Depraetere 2003), I call them collective nouns in this paper.

The important point here is that when a collective noun is the associate of an expletive *there*, plural agreement is not available, as shown in (9).

(9) British English

- a. A committee was holding a meeting
 in here.
 b. There was a committee holding
 a meeting in here.
 c. A committee were holding a meeting
 in here.
 d. * There were a committee holding
 a meeting in here.
 (Sauerland and Elbourne (2002: 292))

According to Chomsky’s theory, subject-verb agreement takes place in every sentence in (9) in the same way. Thus, the contrast between (9c) and (9d) is not predicted under his analysis. This is another problem for the assumption that Move includes Agree.

4. PROPOSAL

All problems discussed above arise from the assumption that Move includes Agree as its subpart. Thus, instead of Chomsky’s analysis, I propose that a phrase can move without Agree, in order to satisfy its own requirement. This means that movement can be greedy in the sense that a moved phrase itself has reason to move. My proposal is based on Bošković’s (2007) analysis of movement. So let us review his analysis briefly.

Bošković (2007) proposes that an uninterpretable feature itself can be a driving force of movement. Consider the following derivation.

- (10) a. $[_{XP} [_{X'} X \dots Y_{[iF][uK]} \dots]$
 b. $[_{XP} Y_{[iF][uK]} [_{X'} X \dots t_Y \dots]]$
 c. $W_{[uF][iK]} [_{XP} Y_{[iF][uK]} [_{X'} X \dots t_Y \dots]]$
 d. $[_{WP} Y_{[iF][uK]} [_{W'} W_{[uF][iK]} [_{XP} t_Y [_{X'} \dots]]]]$
 (X, W = Phase head)

He assumes that the uninterpretable feature of Y can be checked and deleted if and only if Y c-commands its matching goal. Thus, in (10b) Y moves to Spec,XP because leaving the uninterpretable feature leads the derivation to crash. After W is merged in Spec,XP, Y moves to the Spec,WP. In this position, Y c-commands W, and then Y identifies its matching goal.

Of importance here is that there is no Agree relation between X and Y in the derivation (10).

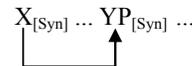
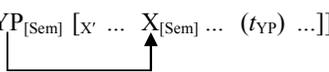
Thus, Move does not include Agree as its subpart under this analysis.

Bošković’s analysis, however, cannot be simply extended to the examples of subject-verb agreement like (9). In particular, his analysis cannot account for the ungrammaticality of (9d). Therefore, I modify Bošković’s analysis by assuming that instead of uninterpretable features, semantic features can be a driving force of movement.

Although it is standardly assumed that mechanisms in narrow syntax can utilize only syntactic features, it is difficult to draw a clear distinction between syntactic features and semantic ones, as Chomsky notes (2001: 10). Thus, adopting Mihara’s (2004) proposal, I assume that semantic features also are accessible within narrow syntax.

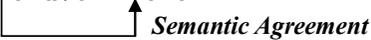
Mihara (2004) assumes that direction of a feature-checking is relativized in terms of its type of feature, as shown in (11).

(11) *Relativized feature-checking*

- a. $[_{XP} \dots X_{[Syn]} \dots YP_{[Syn]} \dots]$

 b. $[_{XP} YP_{[Sem]} [_{X'} \dots X_{[Sem]} \dots (t_{YP}) \dots]]$


If X has a syntactic feature, it acts as a probe like an ordinary case of Agree, as in (11a). On the other hand, when a semantic feature on Y needs to be checked, a probe is the maximal projection YP, and a matching goal is X. In this case, the direction of Agree is reversed as in (11b).

Combining these mechanisms mentioned above, I propose that semantic features of a moved phrase can be a driving force of movement. The schematic representation is illustrated as in (12).

- (12) a. [XP [X' X ... YP_{[sem][syn]} ...]
 b. [XP YP_{[sem][syn]} [X' X ... t_{YP} ...]]
 c. W_[sem] [XP YP_{[sem][syn]} [X' X ... t_{YP} ...]]
 d. [WP YP_{[sem][syn]} [W' W_[sem] [XP t_{YP} [X' ...]]]
- 

Note that in the derivation (12) there is no Agree relation between X and YP because X does not include a matching semantic feature.

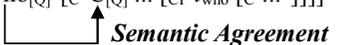
Under the proposed analysis of Move, the problematic examples for Chomsky's analysis can be accounted for in a straightforward way.

4.1. ELLIPSIS

Let us return to the following example of ellipsis.

- (13) * John met someone but I don't know who,
 Peter said [CP t_i [C' C/that John met t_i]]

Recall that the ungrammaticality of (13) is problematic because under Chomsky's theory of movement, every instance of Move must include Agree, and it is expected that C in (13) licenses ellipsis of its complement, contrary to the fact. However, under my proposal, the ungrammaticality of (13) is not surprising at all. The relevant portion of the derivation is represented in (14).

- (14) a. C/that [TP John met who_[Q]]
 b. [CP who_[Q] [C' C/that [TP John met t_{who}]]]
 c. [CP who_[Q] [C' C_[Q] ... [CP t_{who} [C' ...]]]]
- 

Suppose that *wh*-phrases contain a semantic feature which decides a type of sentence (e.g. declarative, interrogative, exclamation, and so on). As shown in (14a) the *wh*-phrase *what*

undergoes *wh*-movement due to its semantic feature [Q]. However, because the head of the intermediate CP does not include the matching semantic feature, *what* does not enter into an Agree relation in (14b). When the *wh*-phrase reaches the higher Spec,CP as in (14c), semantic agreement takes place here. Since the intermediate C does not undergo SHA in (14), the fact that the intermediate C does not license ellipsis of its complement is correctly predicted.

4.2. SUBJECT-VERB AGREEMENT

The examples of subject-verb agreement also receive an unified account under the proposed analysis. The relevant examples are repeated here as (15).

- (15) a. A committee were holding a meeting
 in here.
 b.*There were a committee holding
 a meeting in here.

It is important to note that ϕ -feature realization of collective nouns is dependent on the reference. It is argued in the literature that the singular form tends to be used when a speaker considers the set of referents as a single unit. On the other hand, the plural form indicates that a speaker focuses on the individuals that make up a group. I assume that such variations of reference are a reflection of certain semantic features. Although there are some possibilities of formalization of the semantic feature in question, I refer to it as the Mereology feature, adopting the term proposed by Sauerland and Elbourne (2002). The Mereology feature is defined as follows.

- (16) The other feature we will call *Mereology*. It indicates whether or not the entity under discussion is being conceived of as consisting of more than one member. (Sauerland and Elbourne (2002: 291))

Now, let us consider the contrast in (15). The relevant portion of the derivation is represented below.

- (17) a. $T_{[Mer]} [a\ committee_{[Mer]}] be\ holding\ \dots$

 b. $[a\ committee_{[Mer]}] T_{[Mer]} be\ holding\ \dots$


If the associate moves to Spec,TP as in (17b), the Mereology feature on the associate agrees with T. Thus, the head of TP results in a plural form. On the other hand, if the associate remains in its original position, the head of TP cannot be realized as the plural agreement because the associate does not c-command its matching goal. Instead, T takes a singular form. This is because T agrees with the associate in terms of its syntactic feature before the movement of the associate takes place. Thus, the contrast in (15) receives a straightforward account.

It is worth noting that when an associate is two conjoined noun phrases as in (18), the sentence behaves like collective nouns.

- (18) a. A man and a woman are in the house.
 b.*There are a man and a woman in the house. (Bošković (1997: 87))

It seems possible to apply my proposal to this type of sentence. Suppose that a head of the conjunctive phrase contains the Mereology feature. The contrast in (18) also receives a

similar account, as shown in (19).

- (19) a. $T_{[Mer]} be\ [\&P\ NP\ and_{[Mer]} NP] in\ the\ house$

 b. $[\&P\ NP\ and_{[Mer]} NP] T_{[Mer]} be\ t\ in\ the\ house$


5. IMPLICATIONS

The proposed analysis of movement has some theoretical implications. In this section, I briefly discuss two of them.

5.1. SHORT DISTANCE SCRAMBLING

The first example is concerned with short distance scrambling in Japanese as in (20b).

- (20) a. Taro-ga hon-o kat-ta.
 Taro-NOM book-ACC buy-PAST
 ‘Taro bought a book.’
 b. hon-o_i Taro-ga *t_i* kat-ta.
 book-ACC Taro-NOM buy-PAST

It appears that there is no difference between (20a) and (20b) in their logical meaning. However, it is argued that scrambling like (20b) changes the informational focus (Ishihara 2000). Consider the following examples.

- (21) What did Taro buy?
 a. Taro-ga hon-o kat-ta no
 b. # hon-o_i Taro-ga *t_i* kat-ta no

When the object is scrambled over the subject as in (21b), the resulting sentence is not felicitous as the answer for the question. The contrast in (21) may show that a certain type of scrambling affects the informational focus.

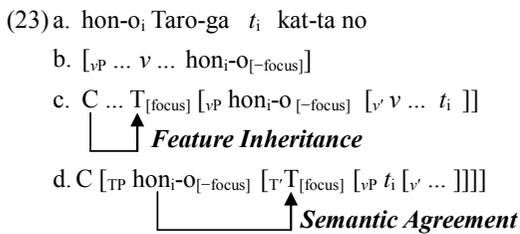
Under my proposed analysis, this type of contrast can be accounted for by assuming that some instances of Japanese scrambling are

triggered by informational features on a moved phrase. For the expository purposes, I adopt Miyagawa’s topic/focus division as the relevant semantic feature.

(22) Topic/Focus

The default feature for topic/focus is
 –focus (topic). (Miyagawa (2010: 86))

The short distance scrambling in (20b) may be motivated by the semantic feature of the scrambled phrase. The derivation is summarized below.



5.2. EXCEPTIONAL CASE-MARKING CONSTRUCTION

The other implication is related to the Exceptional Case-Marking (ECM) construction in Japanese. Hiraiwa (2001) provides the following examples to support the argument that in Japanese ECM construction, the movement of an embedded subject is optional.

(24) John-ga [_{CP} sono sigoto-ni_i Mary-ga/o
 John-NOM the job-DAT Mary-NOM/ACC
 t_i muite-na-i to] omot-ta.
 suitable-NEG-PRES C think-PAST
 ‘John considered that Mary is not suitable for the job.’

Hiraiwa (2001) concludes that it is possible for a probe *v* of the matrix verb to establish a long-distance Agree relation with an embedded

subject because the embedded subject in (24b) is marked with the accusative marker *o*, ignoring the intervening element. However, as pointed out by Kuno (2007), the following example weakens Hiraiwa’s argument.

(25) John-ga sono sigoto-ni orokanimo
 John-NOM the job-DAT stupidly
 Mary-o muite-na-i to omot-ta.
 Mary-ACC suitable-NEG-PRES Cthink-PAST
 ‘John stupidly considered that Mary is not suitable for the job.’ (Kuno 2007:93)

Hiraiwa’s argument is based on the assumption that an intervening element remains in the embedded clause. However, in (25) the intervening element moves over the matrix adverbial *orokanimo*. What if we utilize an unambiguously embedded element as an intervener? The *wh*-adjunct *naze* may be a possible candidate, according to the CP-Modifier Hypothesis proposed by Ko (2005). Consider the following examples.

(26) a. Hanako-wa Taro-ga/o naze
 Hanako-TOP Taro-NOM/ACC why
 baka-nano ka kangae-ta.
 stupid-COP Q consider-PAST
 ‘Hanako wondered why Taro is stupid.’
 b. Hanako-wa naze Taro-ga/*o
 Hanako-TOP why Taro-NOM/ACC
 baka-nano ka kangae-ta.
 stupid Q consider-PAST

Note that when an embedded subject remains below the *wh*-adjunct *naze*, the embedded subject cannot be marked with an accusative Case, as shown in (26b). This fact may indicate that there is an obligatory movement in Japanese ECM construction. The next

question, then, is how this movement is triggered. Note that syntactic features seem not to be a possible candidate because embedded subjects can satisfy all syntactic requirements within the embedded clause. Although I leave further discussion of these matters for future work, it seems possible to assume that the movement in question is triggered by a certain semantic feature (for some interpretive properties of Japanese ECM construction, see Mihara (2004)).

6. CONCLUSION

In this paper, I have argued that Move does not need to include Agree as its subpart and proposed that semantic features of a moved phrase can be a driving force of movement. Although there is much more to be said about the formalization of semantic features, I leave this issue for future research.

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An Agree-based Analysis of the Internal Reading of *Different* and RNR Structures

Shigeo Tonoike

Aoyama Gakuin University

Keywords: (sentence-)internal reading, Probe-Goal, Agree, Sideward Movement, Overt QR

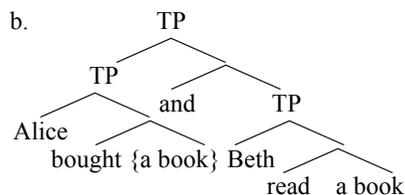
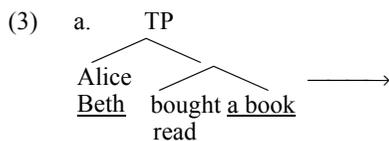
1. INTRODUCTION

The purpose of this paper is two fold. On the one hand it will be shown that a (sentence-)internal reading of relational adjectives such as *different* and *same*, exemplified in (1) from Carlson (1987) below, is best captured by probe-goal agreement rather than scope-based licensing.

- (1) a. Bob and Alice attend different classes.
 b. Different cats chased the two parakeets.

On the other hand, it will be shown that Right Node Raising (RNR) structures like (2), are best analyzed as uniformly involving a multi-layered structure with a shared constituent undergoing Sideward Movement applying to (3a), where the subject and the verb nodes are doubly filled, to give (3b).

- (2) Alice bought and Beth read, a book.



Sideward Movement takes the underscored structure, merges *and* to it and right-adjoin it to the original structure. Notice that the meaning of the shared constituent represented as {a book} remains in situ.

1.1. INTERNAL READING

Noting that an internal reading, where *different* is interpreted distributively within the sentence, is available for (1) but not in (4) below, Carlson (1987) offers a tentative proposal that "the licensing NP [i.e., the plural NP] must appear within the same "scope domain" as the dependent expression [i.e., expression containing *different/same*]." (Here and later * indicates the unavailability of an internal reading. Carlson in fact gives double question marks to (6) to indicate the deviancy of their internal readings.)

- (4) a. *The two gorillas saw [a woman who fed different men].
 b. *The men wanted to see [Jill's pictures of different dogs].

Sabbagh (2007: 270-271) echoes Carlson's observation when he makes the following statement about relational adjectives, which will be referred to as Wide Scope Condition (WSC).

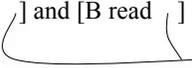
- (5) ...the relational elements must have a plural NP or conjunct of VP or TP in

their scope to be interpreted distributively.

1.2. RIGHT NODE RAISING

Barros and Vicente (2011) claim that proper treatment of RNR constructions requires both ellipsis in (6) and multidomination in (7), where *A* and *B* stand for *Alice* and *Beth*, respectively.

(6) A bought ~~a book~~] and [B read a book]

(7) [A bought] and [B read]
 a book

They adopt Bachrach and Katzir's (2007a,b) multidomination analysis, which includes Sabbagh's WSC in (5) as its crucial part, though they do not accept his across-the-board movement approach.

In what follows I will show that WSC is factually wrong and that RNR structures can be uniformly derived as illustrated in (3).

2. WSC RECONSIDERED

Consider the following examples from Carlson (1987).

(8) a. Mike and Bob think that different explorers discovered America.

b. It seems to Fred and Susan that different colors are emanating from the same piece of velvet.

(9) a. ??Different students think that America was discovered by those two famous explorers.

b. ??It seems to different people that those two colors are emanating from these pieces of cloth.

In (8) the licensing NPs are not in the scope of the dependent expressions, violating WSC, yet

they receive an internal reading. In (9), on the other hand, the licensing NPs are in the scope domain of the dependent expressions, satisfying WSC, and yet an internal reading is not available for them as indicated by the double question marks, which Carlson uses to indicate semantic deviance. (Carlson admits that his scope account does not cover this and that he does not have an account for this fact.)

That the licensing NPs asymmetrically c-command, hence not within the scope domain of, the dependent expressions in (8) is confirmed by the fact that (10a,b) allow the some>every interpretations, but not the every>some interpretation.

(10) a. Somebody thinks that everybody loves Mary.

b. It seems to somebody that everybody loves Mary

Furthermore, (11a) does not allow the reverse scope interpretation (Bruening's (2001) frozen scope), yet (11b) allows an internal reading despite the fact that *each child* is not within the scope of *a different doll*.

(11) a. I gave a child each doll.

b. I gave each child a different doll.

Thus, clearly WSC does not even come close to capturing the structural conditions that license internal readings.

3. AGREE-BASED ACCOUNT

The correct descriptive generalizations that emerge from (1), (8) and (9) are summarized below.

(12) a. When a relational adjective and a plurality occur in the same clause,

- order does not matter (1).
- b. When they are separated by a clause boundary, the plurality must c-command the adjective (8).
 - c. If the relationship is reversed (i.e., if the adjective is in the main clause and the plurality is in the complement clause), no internal reading obtains (9).

In order to capture these descriptive generalizations, I propose an analysis outlined below.

- (13) a. Relational adjectives have a feature value [+distributive], which needs to be assigned to an appropriate plurality.
- b. The value [+distributive] is transmitted to a phase head by Agree.
- c. A phase head with [+distributive] acts as a probe and searches for a closest plurality.
- d. If it finds one in its c-command domain, it assigns the value [+distributive] to the plurality by Agree.

A couple of sample derivations may be in order. Consider (14) and (15), adapted from Carlson. ([+distributive] is abbreviated as [+d] and *B&A* stands for *Bob and Alice*.)

- (14) [B&A v* [attend different classes]]
 [+d] ← [+d] ← [+d]
- (15) [Different cats v* [chased the 2 rats]]
 [+d] → [+d] → [+d]

In (14), v* picks up [+d] on *different classes* and assigns it to *B&A* by Agree. In (15), v* picks up [+d] on *different cats* upon Merge and assigns it to *the 2 rats* by Agree. This captures the internal readings.

Consider a bit more complicated examples in (16), again adapted from Carlson. (*M&B* stands for *Mike and Bob* and *F&S* for *Fred and Susan*.)

- (16) a. M&B think that different explorers discovered America.
- b. It seems to F&S that different colors are emanating from the same cloth.

In both examples, there is no plurality in the complement clause to which [+d] on *different* can be assigned. But the complementizer *that* as a phase head can pick up [+d] by Agree, which can further be picked up by the matrix v/v* and assigned to the pluralities *M&B* and *F&S*, resulting in the desired internal readings across a clause boundary.

Now let us see how (9a,b) fail to receive an internal reading. At some stage of their derivation, they contain the following substructures.

- (17) [different students v* [think [that
 [...~~those two~~...]]]
- (18) [v [to different people] seems [that
 [...~~those two~~...]]]

By the time [+d] on *different* enters the derivation the complement TPs containing the pluralities, namely *those two famous explorer/colors*, have undergone Transfer indicated by ~~strikeout~~. There is no other

constituent.

- (41) Transfer is suspended if linearization is blocked by a shared constituent. (This makes a deeply embedded element visible to Agree if it is a shared constituent blocking Transfer.)
- (42) Rightward adjunction operation (Overt QR) can raise an element in the right edge of a phrase, thereby widening its scope.
- (43) Coordinate structures starts out as multiply filled structures and undergo Linearization.

The proposed Linearization approach to RNR has two things in common with the multidomination approach of Bachrach and Katzir (2007a,b) and Barros and Vicente (2011), namely, multiply filled structure and delayed spell out. However, the two approaches differ crucially in the final LF representations. The multidomination approach holds that multidomination persists at LF representations, whereas the Linearization approach holds that at the interfaces, particularly at LF, multidomination/multiply filled structure is eliminated, thereby simplifying interface representations.

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Main Stress Assignment in English Words*

Eiji Yamada
Fukuoka University

Keywords: Main Stress, Subsidiary Stress, Rule,
Positional Function Theory, English Words

0. Introduction

0.1. Aim

In this paper, I will attempt to account for the main stress assignment in English words within the framework of “Positional Function Theory.”

0.2. Outline

The organization of the paper will be as follows: After this “Introduction,” I will discuss “Previous Studies” on this subject, followed by a brief explanation of “Positional Function Theory” and its treatment of “Main Stress Assignment.” The paper will end with a “Summary” and “Conclusions.”

1. Previous Studies

Accounts for the subsidiary stress assignment mechanism of words in English have been relatively less successful in the history of generative phonology compared with the more successful treatment of primary (i.e. main) stress assignment initiated by Chomsky and Halle (1968), followed by Liberman and Prince (1977), Hayes (1980), Halle and Vergnaud (1987), Halle and Kenstowicz (1991), and Idsardi (1992), among others. In this context, after a number of unsatisfactory

attempts to explain the mechanism in Hammond (1999) and Pater (1995, 2000), a new analysis of subsidiary stress assignment has recently been put forward in Yamada (2010).

2. Positional Function Theory

Yamada (2010) postulates that the subsidiary stress rule for words in American English is composed of sixteen “Positional Functions,” and that the seemingly complicated subsidiary stress assignment can be reduced to the combination and relation of these Positional Functions shown in (1):

(1) 16 Positional Functions:

- a. *Farness (F)* $f(x) = *$
- b. *Heaviness (H)* $h(x) = +$
- c. *Trace (T)* $t(x) = +$
- d. *Binarity (B)* $b(x) = +$
- e. *Rhythm (R)* $r(x) = +*$
- f. *Alveolar Consonant Sequence (ACS)*
 $acs(x) = *$
- g. *Velar-Alveolar Sequence (VAS)*
 $vas(x) = *$
- h. *Bare Nucleus Avoidance (BNA)*
 $bna(x) = -$
- i. *Edge Exemption I (EE-I)*
 $eeI(x) = *$, accompanied by $b(x) = +$
- j. *Edge Exemption II (EE-II)*
 $eeII(x) = *$
- k. *Double Stop (DS)* $ds(x) = *$
- l. *Category Selection (CS)* $cs(x) = *$
- m. *Free Binarity (FB)* $fb(x) = +$
- n. *Rhythmic Adjustment (RA)* $ra(x) = *$
- o. *Stress Reduction (SR)*
 $sr(x) = -$ (or $-*$)
- p. *Sole Stress Resistance (SSR)*
 $ssr(x) = @$

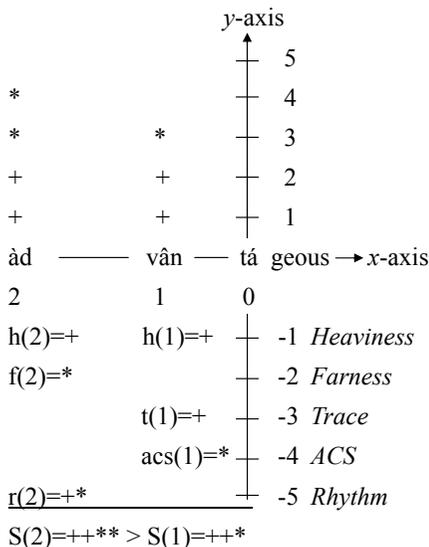
where, for example, *Farness* (1a) is one of the Functions. The formula for each Function is

shown to the right of the Function, i.e. “ $f(x) = *$ ” for *Farness*, “ $h(x) = +$ ” for *Heaviness*, and so forth. For detailed definitions of these Functions, refer to Yamada (2010).

Now, let us look at how these Positional Functions can account for the subsidiary stress assignment of the adjective *advantageous* (2310) for instance, derived from the noun *advantage* (010). Note here that in this and subsequent discussions, stress values are shown by numerals in parenthesis or accent marks: “tertiary” stress is marked by “3” or a circumflex accent, “secondary” stress by “2” or a “grave” accent, and “primary” stress by “1” or an “acute” accent.

In the case of *advantageous* in (2), five Positional Functions, *Heaviness*, *Farness*, *Trace*, *ACS*, and *Rhythm*, are triggered in six positions on the “stress computational plane”:

(2) *advantageous* (2310) (< *advantage* (010))



The area below the x-axis line is the “stress computational plane,” and the area above the line the “stress representation plane.” The stress value is expressed on the vertical y-axis, while the horizontal x-axis shows the word under analysis. The numerals enclosed by parentheses

to the right of the Function indicate the syllable position counted from the position of main stress. The main stress is expressed at $x = 0$.

In this case, five Functions are triggered in six positions according to the conditions for application. Since the syllables *ad* and *van* are heavy, the Positional Function *Heaviness* is triggered under each syllable by means of the formulae $h(2) = +$ and $h(1) = +$. Here the Function *Heaviness* gives a value “+(plus)”. In the case of the syllable *van*, the Positional Function *Trace* is triggered under the syllable, because the main stress is assigned to the syllable of its stem word, *advantage*.

Two further Functions, *ACS* and *Rhythm*, are also triggered in their respective positions; however, because of space limitations I will not discuss these in this paper.

The resulting values are added, and their sum is shown as the value of syllable positions 2 and 1. Finally, these stress values are mapped onto the stress representation plane, giving the desired stress pattern of this word, 2310.

Using these postulated Positional Functions, I have shown in Yamada (2010) that almost all the examples in the previous literature on subsidiary stress can be properly accounted for.

3. Main Stress Assignment

However, one important issue remains unsolved, namely main stress assignment, even if the analysis using these Positional Functions is appropriate for the account of the subsidiary stress assignment mechanism of words in English. In this paper, therefore, we will investigate to what extent Positional Function Theory is applicable to the main stress assignment of words in English.

3.1. Data

Let us cite a few examples, in (3), from the study by Halle and Vergnaud (1987). They proposed their English stress rule mainly on the basis of the data shown here. The so-called extrametrical element is enclosed by angled brackets, and the phonological syllable break is shown by a dot. When there are two or more lexical categories for a given word, the relevant category under consideration is indicated by a subscript capital.

- (3) a. *Cá.na.<da> a.gén.<da> ma.rí.<na>*
tú.<na> hén.<na> a.lú.mi.<num>
co.nún.<drum> (Nouns)
- b. *ò.no.mà.to.póe.<ia>*
Á.pa.là.chi.có.<la> sè.ren.dí.pi.<ty>
Cà.li.fór.ni.<a>
hà.ma.mè.li.dán.the.<mum>
 (Nouns)
- c. *pér.so.<nal> di.a.léc.<tal>*
à.nec.dó.<tal> ví.gi.<lant>
re.púg.<nant> com.plái.<sant>
màg.ná.ni.<mous> mò.mén.<tous>
de.sí.<rous> (Adjectives ending in
 certain suffixes)
- d. *só.li.<d> cér.tai.<n> as.tó.ni.<sh>*
de.tér.mi.<ne> ab.súr.<d>
rò.bús.<f> di.réc.<f> ù.súr.<p>
tòr.mén.<f>_v ca.vór.<f>
su.pré.<me> dis.cré.<te>
i.ná.<ne>_A a.chié.<ve> ca.jó.<le>
ca.róu.<se>_v a.rì.sto.crá.ti.<c>
 (Adjectives and verbs)
- e. *po.líce_N brò.cáde_N ba.róque_N*
ba.záar re.gíme tòu.pée àt.ta.ché
kàn.ga.róo Tè.nne.ssée (Nouns
 with a long vowel in the final
 syllable)

Now let us examine the data in (3a, b). Note here that “main stress falls on the penult if it is heavy, and on the antepenult otherwise.” For

example, in the case of *agénda* on the first line of (3a), the penult *gén* is heavy, so main stress falls on the penult; while in *Cánada* the penult is light, so main stress falls on the antepenult. Furthermore, in (3a, b) “no stress is given to the final syllable.”

3.2. Generalization and Setting

Therefore, the well-known generalization derived from (3a, b) is given in (4):

- (4) Main stress falls on the penult if it is heavy, and on the antepenult otherwise.
 No stress is given to the final syllable.

The principle in (4) is also applied to the words in (3c) ending in certain suffixes. Further, in (3d) main stress is located by the same principle as in (3a, b, c) except that in (3d) “stress is dislocated one syllable toward the end of the word—that is, either to the penultimate or to the final syllable,” if the final consonant in (3d) is not counted (Halle and Vergnaud 1987: 230). In other words, if the final syllable in (3a, b, c) and the final consonant in (3d) are not counted, main stress assignment follows a single principle.

Then, given that this principle does not apply for words with a long vowel in the final syllable as in (3e), we follow Halle and Vergnaud (1987) and postulate Extrametricality in (5) as the setting for our analysis:

- (5) Extrametricality
- The final syllable with a short vowel is not counted in nouns (3a, b) and in certain suffixes (3c).
 - The word-final consonant is not counted in verbs and adjectives (3d).

In addition, I should mention here that main stress is placed on one of the so-called “three windows (i.e. syllables)” counted from the end

of the word, which we term the “Three-Window Principle”:

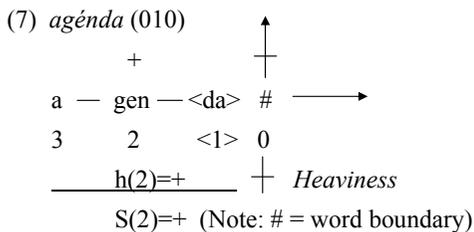
- (6) Three-Window Principle: Main stress is placed on one of the last three windows.

3.3. Positional Functions for Primary Stress Assignment

Given (5) and (6) as our setting, we can proceed to an account of the main stress assignment of words in English within the framework of Positional Function Theory.

3.3.1. Heaviness

The Positional Function that immediately springs to mind is *Heaviness*, which can deal with the main stress in words such as *a.gén.<da>*, *ma.rí.<na>*, *tú.<na>*, *co.nún.<drum>* in (3a), as well as *Cà.li.fór.ni.<a>*, *dì.a.léc.<tal>*, *de.tér.mi.<ne>* in (3b, c, d), as in (7):



In (7) only one Positional Function, *Heaviness*, is triggered in syllable position 2, which accounts for the main stress assignment for this word. Note here that when dealing with main stress, the $x = 0$ line at the intersection of the coordinate axes shows a word boundary rather than the primary stressed position for subsidiary stress treatment.

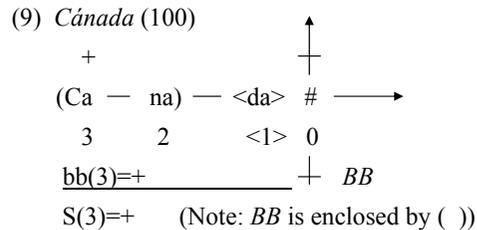
3.3.2. Bounded Binarity for Primary Stress Assignment

The next Positional Function necessary for our purpose will be *Bounded Binarity* in (8), which is newly assumed for primary stress:

(8) Bounded Binarity (BB) for Primary Stress Assignment

In a successive sequence of two light syllables metrically adjacent to the origin (0, 0), an intrinsic Positional Function *Bounded Binarity (BB)* is triggered on the left head of the binary constituent, placing a stress for the binary constituent by the formula $bb(x) = +$.

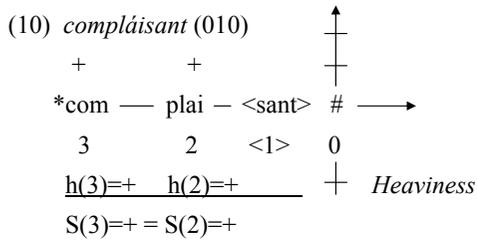
Note here that *Bounded Binarity* differs somewhat from the Positional Function *Binarity (B)* or *Free Binarity (FB)* assumed for subsidiary stress in Yamada (2010). *Bounded Binarity (BB)* is triggered as in (9):



In this case, since there is “a successive sequence of two light syllables metrically adjacent to the origin,” i.e. *ca* and *na*, they are treated as a binary pair to be a bounded binary constituent. Thus, the Positional Function *Bounded Binarity* (8) is triggered on the left head of the binary constituent in the case of English, as shown by the parentheses, (*ca - na*).

3.3.3. Rhythmic Adjustment for Primary Stress Assignment

However, in the case of *complaisant* in (10, and 3c), for example, an incorrect result will be predicted as things stand now, since *Heaviness* is triggered twice:



Thus, we need a device to enhance the stress on syllable 2. This can be accomplished by the following Positional Function newly assumed here for primary stress assignment:

(11) *Rhythmic Adjustment (RA) for Primary Stress Assignment*

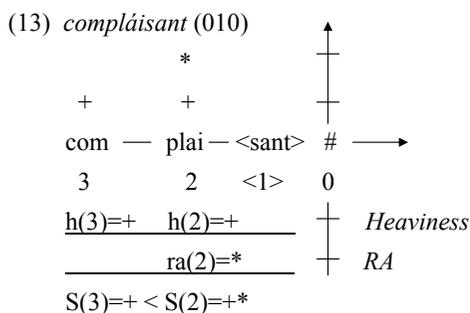
When an even-stressed pattern appears, augment the *rightmost* of the relevant syllables by one, by means of the formula $ra(x) = *$.

Note here that *RA* in (11) also differs somewhat from “*Rhythmic Adjustment (RA) (optional)*” in Yamada (2010) in that the *RA* in (11) is no longer “optional” for primary stress assignment and the position of the head is set in the opposite direction, i.e. *rightmost* in (11) compared with *leftmost* for subsidiary stress of *Rhythmic Adjustment (RA) (optional)* in (12):

(12) *Rhythmic Adjustment (RA) (optional)* in Yamada (2010)

When an even-stressed pattern appears, augment the *leftmost* of the relevant syllables by one, by means of the formula $ra(x) = *$.

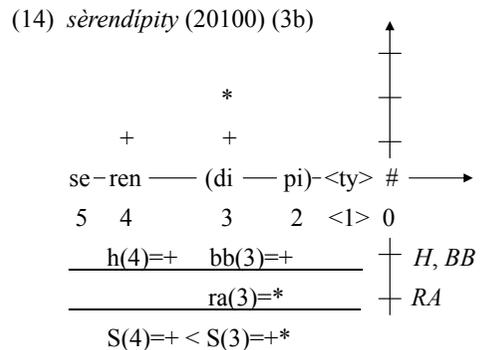
Thus, the stress pattern of *complaisant* is computed as in (13):



In this case, the Positional Function *Rhythmic Adjustment (RA)* is triggered under syllable 2, giving a stress value of one “*” (star). Thus, the sum of the stress values under syllable 2 is “+*”, which is mapped onto the stress plane.

The words for which *RA* is necessary are *sèrendipity* in (3b), *ànecdótal* in (3c), *absúrd*, *ròbúst*, *ùsúrp*, *tòrmént*_v, *discréte* in (3d), and so forth. Analyses of some of these words are shown in (14) to (16).

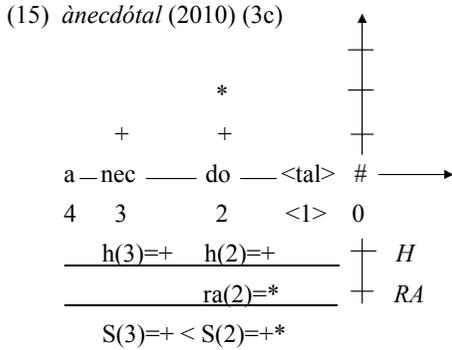
In the case of *sèrendipity* in (14, 3b), *Heaviness* is applied to syllable 4 and *Bounded Binarity* to syllable 3 as in (14):



Thus, *Rhythmic Adjustment* is obligatorily applied to syllable 3, giving the desired main stress.

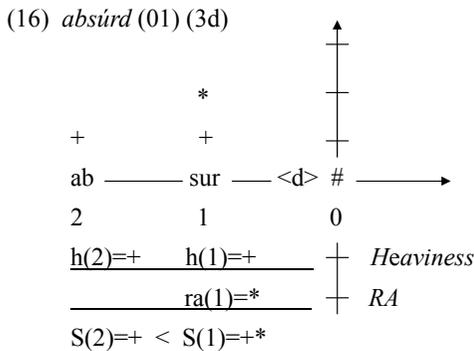
Note here that when *subsidiary* stress assignment is computed by the subsidiary stress assignment rule, all stress values are deleted except for main stress. If this were not the case, the stress on syllable 4, *ren*, would be undeleted when the word underwent subsequent application of the subsidiary stress assignment rule. This would not produce the desired stress pattern of the word, 20100, with subsidiary stress on the first syllable, as shown in the analysis in Yamada (2010: 293). Here we have theory-internal evidence for the existence of an order of application between the main stress rule and the subsidiary stress rule in Positional Function Theory.

In (15, 3c), two *Heaviness* Positional Functions are triggered on syllables 3 and 2, giving equal stress values. Thus, *Rhythmic Adjustment* is obligatorily applied here again to ensure the desired main stress:



Here, too, we have theory-internal evidence for the existence of an ordering relation between the main stress rule and the subsidiary stress rule.

In the case of *absùrd* in (16, 3d), the final consonant is not considered, since it is extrametrical. Two *Heaviness* Functions are applied here, giving the same stress value on syllables 2 and 1. Thus, *Rhythmic Adjustment* is obligatorily applied as well:



The same kind of treatment is applicable to *ròbùst*, *ùsùrp*, *tòrmént_v*, *discrète* in (3d).

4. Summary

In this paper, we have attempted to show how the primary stress assignment of words in English can be accounted for within the

framework of Positional Function Theory put forward in Yamada (2010). For subsidiary stress assignment, sixteen Positional Functions are parametrically set according to Yamada (2010), while for primary (i.e. main) stress assignment only three Positional Functions are necessary with the help of Extrametricality (5) under the Three-Window Principle (6). One of these Positional Functions is *Heaviness*, which is also used for subsidiary stress assignment. The other two are *Bounded Binariness* in (8) and *Rhythmic Adjustment* in (11). Although these are newly assumed for primary stress assignment, they are not unknown, since they are conceptually equivalent to the *Binariness / Free Binariness* and *Rhythmic Adjustment*, respectively, assumed for subsidiary stress assignment. Their differences will be treated as a parametric variance.

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接続詞 *But* の相互行為上の機能について：
中断された語りの再開を指標する場合
(On an Interactional Function of *But*: As a
Marker of the Return to an Abandoned
Story)

安井永子 (Eiko Yasui)
名古屋大学 (Nagoya University)

キーワード：会話分析、相互行為分析、談話
標識、*But*、語り

0. はじめに

本稿は、英語の逆接の接続詞*but*の会話に
おける一機能について考察を試みるもので
ある。接続詞は、会話内では本来の統語的な
用法を離れ、「談話標識 (Discourse marker)」
(Maynard, 1989; Schiffrin, 1987) や
「sequential conjunction」(Mazeland & Huiskes,
2001) として、発話文内の単位ではなく、発
話と発話や連鎖と連鎖を接続し、それらの関
係性を特定する機能を持つと述べている。本
稿では、逆接としての機能を持たず、会話に
おいて中断された語りが再開される前に用
いられる*but*に着目する。

例えば、実際の会話からの以下の抜粋に示
す*but*を見てみよう。これは、MがNとの共通
経験について、別の聞き手に対して語ってい
る場面である(トランスクリプト内の記号に
ついては、注を参照のこと)。

[Dallas Family 2, 33:28, House tour]

26 M: Katie and I took the
27 bikes. You had Mary-

28 Mary was either napping
29 because Mary was so
28 little. And we just went
29 and rode our bikes. And we
30 got a map and it said oh
31 here's the historical so
32 we were driving and oh
33 there's- there's the old
34 captain's house okay
35 that's from the sixteen
36 hun[dred
37 N: [it was the house tour.
38 M: ye:s
39 N: It was like a Quaker house
40 (0.2) something.
41-M: I don't know. **But** we came
42 up to this one house and the
43 door was ope:n and it and
((続く))

ここでMは語りを進めているが、それが32
行目のNの介入によって一時的に中断され
ている。Mは、Nに一度は「yes」と答える
ものの、36行目では「I don't know」と、
それ以上Nの求めている情報に応じるのを
拒否した後、「but」と発し、すぐに語りを再
開している。*But*は逆接や対比を示す接続詞
であるが、ここで用いられている*but*が、直
前の「I don't know」との逆接や対比を示し
ているとするのは不自然である。「I don't
know」はNへの応答という行為であるのに
対し、その後の「but」に続くのは語りとい
う、全く別の活動である。陳述内容を見ても、
「but」の後には「we came up to this one
house」と続いており、「I don't know」と
の逆接的な意味関係は見られない。つまり、
この*but*はその直前と直後の単位を直接的
に接続しているとは考えられず、他に主な働
きがあるように思われる。本稿は、このよう
に、本来の接続詞としては用いられていない
*but*の相互行為上の機能の一つについて検
討する。特に、この例にあるように、会話
において一時的に中断された「語り
(Storytelling)」を、語り手が再開させる
際に使う*but*を分析する。実際、この例だ

けでなく、会話において **but** が語りの再開時に頻繁に用いられていることが本データからも観察されている。本稿の目的は、そのような用法の規則性を探ることにある。

1. 語りの中断と再開

通常、会話では、会話参加者が一人ずつ交互に発話ターンを取って話すという「話者交替システム」(Sacks, Schegloff, & Jefferson, 1974)が作動しており、発話における一つの文が終わる度に、次の話し手へのターンの入れ替わりが可能となる。しかし、自分や他人の経験について語るためには、通常は複数の文から成る長い発話ターンを要するため (Sacks, 1992)、途中で聞き手からの介入を受けることは少なくない。語りの進行中に見られる聞き手の行動には、補足説明を求めたり、語りに沿ったコメントをしたり、理解を示したりなど、語りの進行を促進させる働きをするものがある一方で (串田, 2009)、語りの進行を一時的に中断させてしまうものもある。また、話し手本人が自ら無関係な内容に言及することで、語りが本筋から逸れてしまうこともある。

会話において進行中の活動が滞ってしまったり中断されたりしてしまうと、その活動を再開させることが、進行中の会話における相互行為上の課題として浮上する。ただし、会話の自然な流れ、即ち、談話内の一貫性 (Coherence) の達成のためには、そのまま続きを始めるだけでは不十分であり、中断の原因となった活動と、再開する活動との関係性を聞き手に示す手続きが必要となる。

Jefferson (1972) は、活動の進行中、その活動とは別の活動が別の話し手によって「挿入」され、「脇道連鎖 (Side-sequence)」が開始された後に中断された活動を再開させるには、「継続 (Continuation)」か「復帰

(Resumption)」かのいずれかの形を取ると論じている。継続とは、挿入された連鎖における発話内容を、進行中の活動を補足するものとして取り込む一方で、その連鎖自体は消去した上で、活動を再開することであるのに対し、復帰とは、挿入された連鎖とその内容を、本筋の脱線部分として切り離れた上で、中断された活動を再開することである。

本稿では、**but** が中断された語りの再開の前に用いられる際、脇道連鎖と元の語りとをどのように接続し、どのように語りの再開を可能にしているのか、**but** の前後の連鎖と文脈の関係性に焦点を当てることで、その機能と手続きを明らかにすることを目的とする。

2. 相互行為言語学的アプローチ

本稿は、会話分析の手法を用いて、会話参加者の言語行動が産出される「過程」についての微視的な分析を行う。**But** の前後の単位の意味的關係ではなく、会話において進行中の活動、活動を中断させた挿入連鎖の種類、**but** の後の発話などに着目することが必要となる。従来の語用論的アプローチでは、理想化された話し手の言語行動が、理論的に記述されてきたり、実際の会話文を分析対象としていても、接続詞の前後の意味的内容の關係性にのみ着目されてきたのに対し、本稿では、実際の会話を分析し、研究者が予め立てた想定や理論からではなく、会話の話し手と聞き手自身の視点から相互行為の実際の展開を明らかにしていく。

3. データ

本稿で用いるのは、アメリカ英語による自然発生会話の約5時間分のビデオ収録データである。収録は全て北米で行われ、参加者は全員、英語の母語話者である。収録において、参加者たちには一つのテーブルを囲んで

座ってもらい、特に指示のないまま自由に会話に従事してもらった。

4. 分析

Jefferson (1972)は、進行中の活動を中断させ、脇道連鎖を開始させるのは、聞き手によって修復 (repair) (Schegloff, Jefferson, & Sacks, 1977) の開始が促される場合や、競合する他の活動が開始される場合であると論じている。そこで、本稿では、(1) 聞き手が修復の開始を促すことで語りが中断される場合、(2) 聞き手が競合する活動を開始することで語りが中断される場合、(3) 話し手自身が競合する活動を開始することで語りが中断される場合、の3つのケースについて検討する。

4.1. 修復の開始によって語りの中断が起こるとき

まず初めに、語りの途中で聞き手が修復を促すことで中断された語りが、**but** が用いられた後に再開される例を検討する。以下は、Niece (N) が、Daughter (D)と一緒にその朝見たテレビ番組の内容について語り始める場面である。

[事例 1]

[Dallas Family 3, 23:31, Chupacabra]

5 N: =Oh they were talking (.) yeah
6 I was watching that (0.5)
7 this morning with Macy
8 and they were (0.2) talking
9 about the chupacabra?
10 (0.6)
11 S: Chupa-thingy?
12 N: (0.3) yeah an[d it means
13→F: [A what?
14 S: °chupa[thingy°
15 N: [the chupacabra?(0.2)
16 It's in Mexico? ((looks at F))
17 It's like a: (0.2) it's it's
18 ei a:(0.2) ((looks at M))
19 D: Kills goats,
20 [plus taking out their blood
21 N: [It kills goats (0.2) it sucks

22 their blood (.) ·hh And it's a=
23 F: =It's a paras[ite?
24 G: [Like a Dracula
25 N: (0.2) Ye[ah.
26 M: [It's a- it's a
27 parasite?
28 N: (0.2) No (.) well=
29 S: =It's a lizar[d
30 N: [For a long
31 time they didn't know what
32 it was and they (.) came up with
33 this usually like
34 alien-looking thing because
35 they thought it was like
36 the boogiemán you know? like
37 that had the boogie man?
38 all of the (0.2) you know
39 women who had children would
40 say ¡uh ¡uhh ¡like the
41 chpa;cabra will get you,
42 it's like a big, (.)
43 [kind of fairy tale thing there
44 M: [hm
45 N: but it's actually true
46 haha[h so ·hh
47 M: [hm
48 N: it's a little different.
49→ **But** there's lik- what was it
50 Macy? Was it like a
51 beetle-looking thing?
52 D: Yeah and (0.3) yea- other
53 farmers would go out (.) in
54 the morning and by then lots
55 of goats just sitting there
56 dead.
((Story continues))

ここでは、語りを開始した Niece が、話題となる「Chupacabra」という生物を9行目で挙げることで修復が促されている。Niece は「Chupacabra」と発する際、語尾のイントネーションを上げ、聞き手がそれを認識できるかどうか確かめている (“Try-marking” (Sacks & Schegloff, 1979))。それに対し、Son (S)はそれを認識できることを示すが(11行目)、Father (F)は「A what?」と発し、修復の開始を促している(13行目)。そこで Niece は15行目と16行目で修復すべき部分を確認し、Father の知識の度合いを確かめることを試みた後、17行目より、Daughter の助けを借りながら Chupacabra が何であるかの説明を始める。Niece の説明は、Father (23行目)

と Mother (M) (26, 27 行目) の「It's a parasite?」により、更に拡張されることになる。Niece は 30 行目より新たに詳細を加え、Chupacabra にまつわる「おとぎ話」について説明するが（「It's like a big kind of fairy tale thing there」）、45 行目から 48 行目に渡り、「but it's actually true, so it's a little different.」と、それが実はおとぎ話ではなく真実であると述べて Chupacabra についての説明を終わらせ、49 行目で「But」と発している。その後、語りの内容を共有する Daughter に、テレビ番組の内容について確かめていることから、Niece がテレビ番組の内容についての語りへと戻ったことが示されている。つまり、ここで使われている but は、語りの進行を中断させた「脇道連鎖」と、その後再開された「語り」とを接続しているのである。

ここで、Father と Mother が、Chupacabra が何であるか理解したということを示していないのにも関わらず、Niece がその説明を終わらせ、その後直ぐに語りに戻っていることに着目したい。聞き手が理解を表示していないということは、Niece の説明がまだ十分でなかった可能性を示している。Niece が自らの説明を不十分な形で終わらせたのは、それが語りの本筋から外れてしまったためだと考えられ、Niece は but によってその後方向転換を行うということを示していると考えられる。また、本来は元の活動に戻るのに適切でない場所で Niece が語りに戻ることに志向していることは、つまり、活動の再開に問題がある「復帰」の形で再開が行われていることを示している。ここでの but は、直前に行われたこととは異なることが次に起こることを予告する働きもしているのである。

ここで、この例を、以下の場合と比較してみたい。

[事例 2]

[Dallas Family 3, 27:53, Anatomy teacher]

6 N: =In high school I was in
7 anatomy class in high
8 school, >it was really cool<
9 it was a real sma[ll class
10→F: [Is it
11 (demanded having) an
12 anatomy class in high
13 school?=
14 N: =Mm ↑hmm yeah
15 we were about to dissect
16 cats and f[ro- everything
17 S: [ah bhh
18 N: like it was really neat.
19 S: ↑Hi: Henry((to the dog))
20 (0.2)
21 M: °You can't eat
22 a[ny of these°((to the dog))
23→N: [**And** uhm=
24 F: =Yeah?
25 N: he was a real like a
26 sacra[stic (0.3)

ここでは、高校の時の解剖学の担当教員についての語りを開始した Niece に対し、高校で解剖学の授業が行われることに疑問を感じた Father が修復を求めることにより、語りの進行が一時滞っている。しかし、14 行目から、Niece が実際に解剖学の授業が行われていたと説明することで修復が完結されるため、Niece はその後即座に「And uhm」(23 行目)と発し、語りの再開を示している。つまり、ここでは、事例 1 の場合とは異なり、修復の連鎖が拡張されたり、話題が本筋から外れたりすることがないため、語り手は And を用いて、問題なく語り「継続」できることを示しているのである。

このように、修復の開始が聞き手により促されることで語りの中断が起こり、それが再開される際、語りの焦点にズレが生じる場合にのみ but が用いられていることが観察された。But は、直前に述べられたこととは別のことが次にくることを指標し、次に語り手が本

筋へ戻ることを可能にするのである。

4.2. 聞き手による競合する活動によって語りの中断が起こるとき

次に、聞き手が、進行中の会話と競合する活動を開始することで、語りの中断が起こる場面を検討する。以下は、Mother (M)がNiece (N)と一緒に経験した出来事について、Father (F)に向けて語っている場面である。Motherが、Niece (26行目の“Katie”)と自転車で有名な古民家をまわったときの様子を描写している途中で、共有する経験を持つNieceが、Motherの語りを一時中断させている。

[事例3]

[Dallas Family 2, 33:28, House tour]

26 M: Katie and I took the bikes.
27 You had Mary-
28 Mary was either napping
29 because Mary was so little.
28 And we just went and rode
29 our bikes. And we got a map and
30 it said oh here's the
31 historical- so
32 we were driving and oh
33 there's- there's the old
34 captain's house okay
35 that's from the sixteen
36 hu[ndred
37-N: [It was the house tour.
38 M: Ye:s= ((looks at N))
39 N: =I- it was like a Quaker house
40 (0.2) ((turns to M)) something.
41-M: I ↓don't know. >But< we came
42 up to this one house and the
43 door was ope:n and it
((Story continues))

ここでは、Motherの語りの進行中、37行目と39-40行目でNieceが介入している。37行目でNieceがMotherに視線を向けて「It was the house tour」と言い、Motherがそれまでに語った内容に補足をする、MotherはNieceに視線を向けて語りを中断し、「Yes」(38行目)と応じている。更にNieceは、聞き手であるFatherに一度視線を向けた後、再び視線をMotherに戻しながら、「It was a Quaker house

something」と、彼らが行った自転車ツアーの名称について、Motherと確認し合うことに志向するが(39、40行目)、Motherはそれに対し、「I don't know」(41行目)と答えるにとどめ、Nieceが開始した活動へのそれ以上の参与を拒否している。それにより、Nieceが追求しようとした名称は、Motherの語りの進行には必要ないということが示されている。その後、Motherは「But」と発し、「We came up to this one house」と語りを先に進め、中断していた語りに戻ったことを示しているのである。

このように、この例では、進行中の語りを中断させた活動が、進行中の語りの焦点からはずれたものであることが語り手によって明示された後にbutが用いられていた。Butはすなわち、焦点のズレからの軌道修正を予告し、直後に語りを再開させることを可能にしていると考えられる。

4.3. 話し手の競合する活動によって語りの中断が起こるとき

最後に、聞き手ではなく、語り手本人が語りの本筋から逸れてしまった後に語りを再開させる場面を検討する。以下の事例4では、Pが中華料理店でメニューにある料理がどのようなものかわからず、何を注文していいか迷ったというエピソードについての語りを行っている場面である。

[事例4]

[American Friends Talk, 36:19, Chinese Food Restaurant 2]

46 P: No but (0.2) we went (0.4)
47 and ah: (0.6) d(hh)idn't know
48 how to order,
49 I was like >↑how the hell do you
50 know what this stuff ↑i:s<
51 S: heh[h
52 P: [you kn↓ow ↓like (0.3)
53 it doesn't have any
54 description at all it's jus==

55 S: =right
 56 P: a- names
 57 (.)
 58 S: Yeah h[hah hah
 59 P: [you know (.) orange (0.3)
 60 chicken I know it has chi↑cken
 61 (0.2)
 62 S: ·hhh
 63 P: [or something
 64→S: [you know it either has
 65 oranges in it or
 66 orange ↑colored=
 67 P: =yeah [but you know
 68 S: [hah hah
 69→P: you don't know if it's really
 70 chicken [either you know
 71 L: [·hhhHA
 72 S: hah ha[h hah
 73 P: [you- think it's
 74 probably a cat
 75 L: ·hhha[ha hahaha
 76 P: [or ·hh people=
 77 S: =r(h)ight heh [heh
 78→P: [**But.** (0.2) **but**
 79 I was there and I was like
 80 L: [·hheh
 81 P: [what the hell is this stuff
 82 and he was like
 83 you don't know?
 ((Story continues))

ここでは、語り手の P 自身が、「Orange chicken」という料理名をただけでは、それがどのような料理であるかわからないということを描写する中で、64 行目から S が「You know if either has oranges in it or orange colored.」と介入をすることで、P の語りが中断される。S の発話に対し、P は 69-70 行目で、「You don't know if it's really chicken either you know?」と返した後、鶏肉ではなく猫の肉かもしれないし、人肉かもしれない、と述べ、聞き手の S と L の笑いを誘っている。P が導入したこの冗談により、語りは滞ることになるが、その後すぐに P は「But」と発し、「But I was there and I was like what the hell is this stuff」(78、79、81 行目)と述べ、語りを再開させている。ここで P は、語りが中断される前と類似した発話を繰り返すことで、語りが中断された地点に戻ったことを指標している(語りの中

断直前の 46-50 行目で、P は「But we went and ah didn't how to order, I't know how to order, I was like how the hell do you know what this stuff is?」と述べている)。

この事例では、語り手自らが冗談を導入し、話題の焦点にズレが生じた後に語り手が語りを再開させる際に、but が用いられていた。But によって軌道修正が必要であることが示されることにより、語りの再開が「復帰」の形で行われることが指標されるのである。

5. まとめ

本稿では、中断された語りの再開時に用いられる but の機能について検討した。本データでは、進行中の語りを中断させた脇道連鎖において、話題の焦点が語りの本筋から逸れた場合に but が語りの再開前に用いられていたことが観察された。つまり but は、脇道連鎖の終わりを示すだけでなく、直前の発話からの方向転換が次に起こることを予告することで、脇道連鎖と再開される語りの連鎖との接続を可能にすると考えられる。更に、but により、脇道連鎖内で焦点のズレが起こったことが後から示されるため、直前の内容が本筋からの「脱線」であったことが、語りの再開前に示されることになる。すなわち、中断された語りが「継続」でなく「復帰」の形で再開されるということが明らかになるのである。ここで重要なのは、本筋からの脱線となる内容が挿入されたことが、語りの再開を復帰の形にするということではなく、but を用いて復帰の形で語りを再開させることで、遡及的に、その直前の脇道連鎖内で、本筋からの脱線が起こったことが示されているという点であろう。語り手は、進行中の発話ターン間や連鎖間との関係性をそのつど示しながら、語りを進行させているのである。

また、語り手は中断される直前の発話内容

を繰り返すことで、中断されるちょうど前の地点に戻ったことを示していたことも観察された。そうすることで、脇道連鎖を切り離し、中断される直前の語りの連鎖と、再開後の連鎖とを直接つなげる作業を行っていたと考えられる。

以上のように、中断された語りの再開における *but* の働きを分析することで、会話中の語りの辿る軌跡は、予め語り手によって決められるものではなく、語り手と聞き手との相互行為の中で形作られていることが明らかになった。進行中の語りに対して協力的な行為と競合的な行為それぞれに対し、そのつど語り手は別々の手段（継続と復帰）を用いて語りを組み立てているのである。

本稿では、ある言語リソースの相互行為上の機能を解明するためには、それがどのような活動と環境において、どの連鎖位置で用いられ、どのような行為を遂行しているか、ということに焦点を当てる必要があることが示された。その前後の発話内容の関係性のみだけでなく、その前後の連鎖の関係性やそれによって解決される相互行為上の問題にも着目することで、会話という大きな枠組みの中でのその役割を探ることができると考えられる。

(注)

会話データの文字化にあたっては、Jefferson によるCA のトランスクリプション規則に従った。使用した記号の意味は以下の通りである。

: 直前の音の引き延ばしとその長さ

(数字) 沈黙の長さ (秒数)

.hh 吸気音とその長さ

hh 呼気音とその長さ

(h) 笑い声

[発話の重なりの開始

] 発話の重なりの終了

= 繋がれた二つの発話が隙間なくつながっている

. 語尾の下降

° 文字° 相対的に小さい声での発話

文字 相対的に大きい声での発話

- 直前の音が中断されている

>文字< 相対的に速く発されている

((文字)) 身体動作の描写

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**Deletion Phenomena
in the Minimalist Program**

Taichi Nakamura (Tohoku University),
Kensuke Takita (Mie University),
Hiroko Kimura (Tohoku University),
Nobu Goto (Mie University)

Keywords: Minimalism, syntactic identity,
antecedent-contained sluicing, movement, Cyclic
Spell-Out

1. Introduction

This workshop was planned with an aim to bring new insight both into the phenomena and into the framework to address the following two long-standing issues: (1) To what extent are syntactic identity conditions involved in deletion? (2) How is a deletion site licensed in the syntax? With respect to (1), it has been customary to assume since Ross (1969) that the deleted constituent must be identical to the antecedent not only semantically but also syntactically. On the other hand, with respect to (2), it has standardly been claimed since Lobeck (1990) that a deletion site must be the complement of a functional head that agrees with its specifier. The previous approaches seem to be on the right track, but the issues are not completely settled. Since Merchant (2001) develops a theory which allows deletion to be licensed even when the antecedent and the deleted constituent have different syntactic structures, there has been a lot of controversy about the nature of identity conditions. Likewise, since Chomsky (1993) proposes the Minimalist Program for linguistic theory which eliminates the Spec-Head Agreement, the problem of licensing has also remained unclear. For these reasons, it is significant to

examine the deletion phenomena from various Minimalist points of view, and attempt to provide a principled account for the phenomena. Thus, this workshop brought together four articles.

2. Voice Mismatches in Ellipsis (Taichi Nakamura)

This article, referring to recent studies of voice and category mismatches conducted by Merchant (2008) and Tanaka (2011a), critically examines whether deletion is sensitive to identity conditions. Merchant proposes that VP-Deletion, Pseudogapping, and Sluicing are all sensitive to voice mismatches, while Tanaka claims that VP-Deletion and Sluicing are sensitive to category mismatches. Contra their claims, this article argues, building on the work of Nakamura (to appear), that deletion is sensitive neither to voice mismatches nor to category mismatches. The article shows that the relevant counter-examples are spotted sporadically through a careful examination of the relevant phenomena. The new findings of this article will pose a serious problem to the analyses that assume syntactic identity conditions.

3. Voice-Mismatches under Antecedent-Contained Sluicing (Kensuke Takita)

This article also concerns identity conditions. By examining Antecedent-Contained Sluicing (ACS) discussed by Yoshida (2010) and Tanaka (2011b), this article maintains the idea that deletion should be subject to syntactic identity conditions. From a cross-linguistic perspective, the article provides novel observations that cannot be accounted for by the previous analyses: (i) ACS is possible in German and Russian and (ii) ACS does not tolerate voice mismatches. Assuming that deletion can take place in the course of derivation, this article argues that ACS is derived via a process of late Merger, which is independently motivated by Lebeaux (1988). The new findings of this article too will cause a stir in the study of the problem of identification.

4. Identity in Ellipsis (Hiroko Kimura)

This article develops a novel account for (Multiple) Sluicing and preposition stranding under Sluicing. Assuming with den Dikken, Meinunger and Wilder (2000) that ellipsis eliminates recoverable elements except a focused phrase inside TP, this article argues that (Multiple) Sluicing is derived without assuming overt *wh*-movement out of a deletion site, TP. As immediate consequences of the non-movement analysis, this article argues that the following facts are straightforwardly explained: *the hell* is incompatible with a remnant *wh*-phrase in Sluicing; Multiple Sluicing is island insensitive; In Multiple Sluicing, Swiping occurs only in the first remnant.

5. Deletion by Phase (Nobu Goto)

This article also concentrates on the problem of licensing, particularly in terms of Cyclic Spell-Out (Chomsky 2000). This article puts forward the hypothesis that a deletion site is licensed phase by phase, and argues that an elliptical part is nothing but a result of deletion by phase. Examining Gapping as an example, the article demonstrates that it is derivable without appealing to movement of remnants that has long been assumed in the literature. The proposed analysis is remarkable in that word-order problems left by Johnson (2009) and locality effects reported by Neijt (1979) are explained. Any approaches that assume remnant movement will invite closer scrutiny from the hypothesis.

6. Concluding Remarks

The four articles introduced a breath of fresh air into the old issues. Since their efforts bear fruit under Minimalism, it is important to note that Minimalism plays a rather significant role in linguistic exploration. Our empirical and theoretical consequences were appreciated in terms of their explanatory force and descriptive coverage.

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**On Merge-Based Generative Procedures:
Maximizing Minimum Machinery**

Masayuki Oishi (Tohoku Gakuin University)

Masanobu Sorida (Sophia University)

Hisatsugu Kitahara (Keio University)

Keywords: minimalist syntax, bare phrase structure,
Merge, labeling algorithm, efficient computation

1. Introduction

The minimalist program seeks to approach the problem of determining the character of the faculty of language (FL) from bottom up, asking how close the third factor principles come to providing an optimal solution to the interface conditions (Chomsky 2007, 2008). To the extent that an optimal solution obtains, FL is something like a “perfect system,” meeting the interface conditions in a way satisfying third factor principles. The strong minimalist thesis SMT takes FL to be a perfect solution to the interface conditions in this sense (Chomsky 1993, 1995a, b).

Advancing the bottom-up approach under SMT, we would like to explore the possibility that UG provides no machinery beyond what is needed to meet the interface conditions in a way that satisfies third factor principles. Specifically, we ask (i) what is minimum machinery, implemented for generative procedures, and (ii) how such minimum machinery, provided by UG and constrained by third factor principles, can generate structures for I-languages attained, assuming that they can differ.

Questions of this kind may turn out to be premature, or even wrongly formulated, but do arise

in the minimalist program. In this workshop, we attempt to see how far we can succeed in answering them.

2. Merge X and Y, and Z (Masayuki Oishi)

Oishi begins with the conceptual consideration of the unboundedly hierarchic set structures that the simplest Merge amounts to generating, in terms of its formal properties. Then it is discussed how the “label-centricity” is realized when an SO with binary members (SOs) is further merged with a third SO, showing that the coordinate structure with three conjuncts, which inevitably requires certain stipulations in the other systems, falls within the simplest Merge. The discussion also refers to some asymmetries in anaphora and Internal Merge between two conjuncts, suggesting that the asymmetries might be rendered outside of the narrow syntax. Furthermore a question is raised whether the so-called set-/pair-Merge distinction, if any, is amenable to sustain.

3. Unambiguous labeling and the EPP (Masanobu Sorida)

Sorida attempts to extend Chomsky’s (2012) labeling approach to the EPP to some apparently problematic cases where the complement *n*P of V is forced to raise (i.e., passive and unaccusative constructions). He suggests an interface condition which holds that the label of each syntactic object must be unambiguously determined (the principle of unambiguous labeling) and shows that the principle naturally derives the raising. He also discusses some consequences of the principle concerning VP-internal word order.

4. How can a Merge-based efficiency-compliant mechanism deal with a ‘head-initial vs. head-final’ variation? (Hisatsugu Kitahara)

In the government-biding framework, language

variation was captured by parameterization of the principles (Chomsky 1981). For example, the head-parameter – head-initial vs. head-final – was implemented to distinguish two types of languages, e.g. English and Japanese. But it was not clear why such principles were parameterized in the way they were. Assuming Merge to be formulated in the simplest form (Chomsky 2007, 2008, 2012), Kitahara argues that the observed typological difference is reducible to independently motivated morpho-lexical cross-linguistic variation in the lexicon, while keeping a Merge-based efficiency-compliant mechanism intact.

5. Summary

In this workshop, adopting simplest Merge and minimal search as part of minimum machinery (implemented for generative procedures), we demonstrate that such machinery, conforming to the third factor principles, can generate the empirically desirable aspects of the phrase structures (e.g., coordination, passive, and head-initial vs. head-final variation). We find these preliminary results intriguing and promising, but as usual, they reveal new and interesting questions for future research.

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**Application of Conceptual Metaphor
Theory to real world issues**

Kazuko Shinohara (Tokyo University of
Agriculture and Technology),
Joseph Grady (Cultural Logic, LLC),
Kojiro Nabeshima (Kansai University),
Yoshihiro Matsunaka (Tokyo Polytechnic
University)

Keywords: conceptual metaphor, real world
issues, reasoning, communication, effect

1. Introduction

In this workshop, we discuss the possibilities and the effects of applying Conceptual Metaphor Theory (Lakoff and Johnson 1980, 1999) to real world issues, focusing on case studies and practice. Conceptual Metaphor Theory claims that conceptual metaphors can shape our everyday thinking and reasoning through their cognitive mechanism of conceptual mappings. If this claim is valid, it will lead to the idea that metaphors may actually affect our thinking when we are dealing with social problems. Some previous studies address this issue and demonstrate that metaphors actually influence our thinking in dealing with social problems (Lakoff 2002, Charteris-Black 2004, Thibodeau and Boroditsky 2011), but there have been a very limited number of such studies in Japan. In this workshop, we introduce some of these previous studies and share with the audience some case studies and

instances of practice, whereby we look into the possibilities of research into the issue.

To attain this goal, we have invited Dr. Joseph Grady as our featured speaker. He is known for his Primary Metaphor Theory in cognitive linguistics (Grady 1997), and is one of the founders of Cultural Logic, LLC, consulting office in the USA, where he is applying the study of conceptual metaphors to social issues. His research includes, for instance, people's understanding of scientific and technological concepts, social and economic systems like the food industry, and so forth. His talk in our workshop focuses on the effects of metaphor on people's understanding of global warming. In addition to the featured talk, two other presentations introduce case studies and examples of applying Conceptual Metaphor Theory to other real world issues. The following sections are summaries of the talks.

2. Presentation 1

KJ. Nabeshima talked on "Metaphor and Politics." After discussing various political metaphors in Japanese, he presented IARPA Metaphor project. The Intelligence Advanced Research Projects Activity (IARPA) is a United States research agency under the Director of National Intelligence's responsibility. In January 2008, Lisa Porter, an administrator at NASA with experience at DARPA, was appointed director of the activity formed in 2006. The Metaphor Program exploits the fact that metaphors are pervasive in everyday talk and reveal the underlying beliefs and worldviews of members of a culture. In the first phase of the two-phase program, performers will develop automated tools and techniques for

recognizing, defining and categorizing linguistic metaphors associated with target concepts and found in large amounts of native-language text.

3. Presentation 2

Yoshihiro Matsunaka and Kazuko Shinohara reported their study “The influence of conceptual metaphor on reasoning and attitudes: an empirical study of Japanese metaphors.” They introduced Thibodeau and Boroditsky’s (2011) experiments on the effect of metaphor on reasoning, and then reported their three experiments. The first experiment replicated the method and results of Thibodeau and Boroditsky’s experiment. The second experiment applied the method to the domain of primary education, confirming the influence of metaphor on people’s reasoning. The last one tested whether the effect would be persevered even for people’s attitudes or values, which obtained no significant differences. They conclude that the effect of metaphor may be stronger on frame-based inferences than on attitudes or values.

4. Presentation 3

Joseph Grady talked about “Metaphor in communicating public interest issues.” He introduced research questions and methods employed by Cultural Logic, which focus on the cognitive/cultural models that shape people’s thinking, taking examples of metaphorical understanding of government as public structures, global warming as caused by blanket of CO₂ covering the earth and trapping in heat, ripple effect of arts on communities, etc. Effective metaphors should be easily understood, have clear, familiar mappings, and appropriate entailments. Other

important considerations are reification, vividness, and treating the mapping as established (career of metaphor). Finding out effective metaphors is not easily done, and requires a lot of testing.

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エスノグラフィー・エスノメソドロジー
と日英語会話

(Ethnography and Ethnomethodology:
Studying Conversations in Japanese and
English)

砂川千穂(Chiho Sunakawa)
テキサス大学研究員(The University of Texas
at Austin)

武黒麻紀子(Makiko Takekuro)
早稲田大学(Waseda University)

古川敏明(Toshiaki Furukawa)
大阪大学(Osaka University)

安井永子(Eiko Yasui)
名古屋大学(Nagoya University)

キーワード：会話の民族誌、会話分析、
談話分析、フィールドワーク

1. はじめに

本ワークショップの目的は、エスノの視点、すなわち会話の参加者の視点に立つアプローチを通じ、人々の世界観や価値観が言葉の使用にどのように表象されるかを総合的に理解することにあった。各発表者は、言語学的、人類学的手法を用いて「相手」の立場から、様々な場面の日英語会話を分析した。話された言葉やそれに伴うジェスチャーなどの身体動作のみならず、話者が位置する空間的特徴、媒体の役割、場所の物理的特徴、文化的知識などをも、相互行為上の公的な資源ととらえ、話者がどのようにその資源を利用して相互行為を紡ぎ出すのかを分析した。各発表の要旨は以下の通りである。

2. 「言語・インターアクション・文化：石垣島の事例より」（武黒麻紀子 早稲田大学）

武黒の発表では、相互行為をそれにかかわる人間の社会関係や人間を取り巻く生活環境中心の視点に立って考えることを目的とし、日常のさまざまな出来事（言語コミュニケーションや事件、歴史など）をいかに包括的にとらえそこから何を見出すかという大きなリサーチクエスチョンを掲げた。沖縄県石垣島のフィールドワークで収集したデータをもとに、相互行為に出てくる言語やジェスチャーがいかに人々の暮らす地域社会や地理的また文化的な環境とかかわっているのか分析を試みた。特に注目したのは、環境や参加者同士が一体化しているように見られる現象（島人と移住者が空間表現の際に両者とも相手の視点を取り入れそれぞれの経験が潜在的に共有されている言語使用例、環境との一体化という position taking を語ったインタビュー例、家族が同時に同じ姿勢・ジェスチャー動作をする例）で、それを PAL (Practice Approach to Language) の考え方を念頭に議論した。

2. 「英語とハワイ語の混淆コード：ラジオ番組におけるハワイ先住民の言語実践」（古川敏明 大阪大学）

オーストロネシア語族ポリネシア諸語に属すハワイ語については、これまで文法構造や再活性化運動に関する研究が中心だった。先行研究の知見を発展させるため、近年、ハワイ語にとって比較的新しい使用領域における言語使用に関する研究を行う必要性が高まっている。本発表は会話分析的アプローチを用い、聴覚及び視覚メディアにおけるハワイ語を含む多言語データを分析した。分析した会話は (1)1970年代から80年代にかけて放送されていたハワイ語ラジオ番組の録音、(2)1970年代後半に先住民言語文化の記録を目的として実施されたインタビュー録画、(3)2000年代にテレビで中継放送されたフラ競技会のインタミッション中の相互行為であり、ハワイ語、英語、ハワイ・クレオール の混淆コードによって行われる一群の会話データからの抜粋である。(1)の会話は主にハワイ語だけで展開し、(2)と(3)の会話は主に英語で展開し、

語及び句レベルでハワイ語への切り替え現象が観察された。しかし、これらは異なる言説行為ではなく、どちらも「ハワイ語を話し、先住民として話す」一連の行為の多面性と複層性を示すものである。

3. 「日常会話における「語り」の開始 手続き：相互行為分析の視点から」 (安井永子 名古屋大学)

本研究は、日常会話において、話し手が自分や他人の経験について「語り」をする場面を検討し、その開始について、会話内での語りの埋め込み位置、語りが起こる連鎖環境、語りによって達成される行為との関連から探るものである。談話研究の多くが、語り手の発話のみに着目し、語りの内容やその「全体構造」を分析してきたのに対し、本研究は会話分析の手法で自然会話における語り場面を分析し、語り手と聞き手の相互行為を通じて語りが生み出される「過程」の解明を目的としている。本データからは、直前の話し手への支持や理解を表わすために語りが行われる場合、ターンを取った話し手は直前の発話への直接の反応を示し、聞き手の注意を直前の会話に向けさせることで、それと連続したつながり(Conjunction)のある語りの開始を予告することが観察された。また一方で、直前の会話とは直接関係はないが、進行中の会話から想起されたことについて語る場合には、新たな参与枠組みを明示するなどし、聞き手の注意を後続の会話に向けさせることで、直前の会話からの分離・ズレ(Disjunction)が予告されていた。語りの開始を試みる話し手は、語りが進行中の会話とどのような関係にあり、どのような行為を達成するかを事前に示すことで、語りの開始が可能となる状況を作り出しているのである。

4. 「遠隔コミュニケーションのエスノグラフィー：日米の国境を越えた家族会話」 (砂川千穂 テキサス大学研究員)

言語人類学のアプローチを用いた研究では、「日常会話」が焦点になることが多い。これは何気ない日常性のなかに、パ

ターンを見だし、その規則性にみられる文化的意味を考察することで、文化と言語の関係を明らかにしていくことが可能になるからである。この日常会話が行われる場所は、参加者が共存する区切られた空間で行われることが多く、したがって、言語人類学の研究のもとになるデータは同空間にある対面場面で録音・録画されることが多い。ところが、インターネットやコンピュータ等、コミュニケーション・テクノロジーの発展により、「日常会話」はますます同一空間の区切りを超え、異空間の領域まで幅をのびてきているといえる。本研究ではこの店に留意し、テクノロジーを介した遠隔コミュニケーションがどのように日本人家族の日常生活の一部になっているのかを考察した。日本人家族(米国)とその親戚(日本)のウェブカメラを通じた世代間家族会話を分析しながら、ウェブカメラがコミュニケーションの資源になっていることを考察した。また、日本人の文化的・経験的知識の一つである、「親孝行」の概念が遠隔コミュニケーション空間の中で(再)構築される様子も分析した。

<Workshop Report>

評価の意味から見る談話 談話から見る評価の意味

Discourse and evaluative meaning

浜田 啓志 (Takashi HAMADA)*

野中 大輔 (Daisuke NONAKA)*

上野 良子 (Ryoko UENO)*

梅津 直子 (Naoko UMETSU)*

*(慶應義塾大学大学院)

キーワード： 評価の意味、談話、コーパス

1. はじめに

本ワークショップの研究対象「評価の意味」とは、モノ(entity)や命題(proposition)に対する話し手や書き手の態度、姿勢、視点、感情などを包括する現象(Thompson and Hunston 2000)である。従来の意味論では、指示の意味に主たる関心があり、評価の意味はモダリティを除き周辺的な現象であるとみなされがちであった。しかし、Labov (1972)の研究は、(1) 評価を伝えるために用いられる言語形式があること、(2) 談話においてはむしろ評価の意味こそが重要になりうることを示している。つまり、話し手は単に話の内容を理解してほしいだけでなく、その評価に同意・共感してほしいがために物事を語るのである。また、近年のコーパス言語学(e.g. Sinclair 2004, Stubbs 2001)は、大規模コーパスにおけるコロケーションや構文の分布の偏りをもとに、評価の意味が当該言語の話者に幅広く共有されていることを明らかにしつつある。これらの知見を踏まえ、特定の言語形式がもつ評価の意味の性質をコーパスによる量的証拠から探る研究と、特定の会話データからどのような形式が評価を伝達

する手段として機能するかを探る研究を行った。

2. 「否定表現にみる評価の意味」(浜田 啓志)

否定接頭辞 *un-* と「可能」などのモダリティと結びつく接尾辞 *-able* の両方を伴う形容詞 *unreadable* と、これに構成的に対応する肯定形容詞 *readable* の評価の意味にまつわる反意関係は、(1) *-able* が表す評価の意味の種類 (2) 読むというプロセスの中で特に焦点化される(評価される)ステップ (3) 読む行為が及ぶ対象物という 3 つの変項がどのように組み合わせられるかで変動する。(1) では *easiness* と *worthiness* (2) では「見る」段階と「理解する」段階 (3) では本、そこに書かれた文字、人間の表情などが変数となり、その組み合わせが両形容詞を結ぶ反意関係の中でどの部分が評価の意味を喚起するのかに影響を与えている。例えば、*easiness*、「理解」、「人間の表情」が組み合わせる対立軸では、*readable* な状態をゼロとしたマイナス方向でのみ評価の意味が展開される。このため、当該の意味で肯定的な意味を持った *readable* は生じづらい。

3. 場所格交替動詞に見られる評価の意味：大規模コーパスを用いて(野中 大輔)

英語の *load* や *spray* といった動詞は、ほぼ同一の内容を二通りの構文で表現することができる(移動物目的語構文 *John loaded hay on the wagon.* と場所目的語構文 *John loaded the wagon with hay.*; cf. Pinker 1989)。この現象は場所格交替と呼ばれている。本発表では事例研究として動詞 *load* を取り上げ、British National Corpus(BNC) の調査をもとに、*load* における場所目的語構文が評価の意味を伝達する手段として用いられることを主張した。BNC における移動物および場所の名詞の分布から、移動物目的語構文は中立的な積み込みを表すのに対して、場所目的語構文は、

本来あるべきもの、あるいは望ましい/望ましくないものの積み込みを表す傾向があることを明らかにした。また、場所目的語構文は形容詞的受動文で用いられやすく、その場合は比喩的な用法が多く評価の意味がより強化されることが確認された。本発表で主張する *load* の場所目的語構文の評価的意味は、構文選択の動機づけとして機能するとともに、談話の結束性にも貢献していると考えられる。

4. ハワイクレオール英語の談話における評価的意味 (上野 良子)

ほめとその反応という観点からハワイクレオール英語の談話分析を行った。ハワイクレオール英語・標準アメリカ英語それぞれの談話におけるほめへの反応を Lee (1990) の先行研究に倣い6つ (Acceptance, Acceptance with Amendment, No Acknowledgement, Denial, Defensive, Denial with Acceptance) に分類したところ、標準アメリカ英語に比べハワイクレオール英語では Denial の反応が多いことが特徴として浮かび上がった。相手のほめに対して *Nah! / Stop it! / Shut up, hah?* といった反応が多く見られるのである。しかし、その後の談話の隣接ペアをみていくとこれらの反応から談話ではしばしば笑いが引き出されている。すなわち、標準アメリカ英語における Denial のサインは、ハワイクレオール英語では肯定的な評価的意味を持つのである。否定的表現が会話参加者の結束を生み出すというこの特徴は当該言語がコミュニティの意識の強い *cultural script* を持っていることを示唆しており、更に、2変種間で形式や機能が異なっても同じ評価を持つ可能性を提示してくれる。

5. アメリカ英語の “girltalk” にみられる評価的意味 (梅津 直子)

女性の発話のプロソディにどのように評

価的意味が表れるのか、聞き手がどのように話し手のプロソディに反応するのかを考察した。分析の対象は、米のリアリティドラマ *The Hills* の *girltalk* とした。*girltalk* とは、参加者が10代後半から20代の女性が2名で、報告を聞く形になっている談話と定義した。分析の結果、米語における *girltalk* では、話し手は聞き手にプロソディを用いて話題に対する肯定的または否定的な評価的意味を示すことが明らかになった。それは、話題そのものに内在するものというより、話し手が談話中で聞き手に伝えたいものである。肯定的な評価的意味を付与する場合には高ピッチで抑揚のある音調、否定的な評価的意味を付与する場合には低ピッチで平板な音調であった。聞き手は、その評価的意味を理解した上でそれに共感していることを示すため、同じプロソディを用いて反応することで談話の一貫性を築いていた。

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<Workshop Report>

**Function としての文法格：新しい「格」
の理論に向けて**
**(Case as a Function: Proposals for New
Case Theory)**

一田小友希 (Koyuki Ichida)

関西学院大学大学院

(Kwansei Gakuin University)

平崎永里子 (Eriko Hirasaki)

関西学院大学大学院

(Kwansei Gakuin University)

竹内肇 (Hajime Takeuchi)

関西学院大学大学院

(Kwansei Gakuin University)

キーワード：格理論，例外的格付与構文，
構造格，不適格移動

0. はじめに

古来から近世までの伝統的文法論においては、名詞句が音韻形態的に表示する「格」とは、その名詞句の節中で担う文法関係と、その名詞句と述語の間の意味役割関係という2つの関係を仲介する物であると考えられていた (cf. Ura 2001)。しかし、「格」が重要な役割を果たしていた GB 理論更には現行のミニマリスト理論においても、名詞句の音韻形態的表示の認可条件だけが理論化されているのみであり (cf. Chomsky 1981)、古来より認められていた「格」の概念が十分捉えきれているとは言えない。実際、「格」を文法関係と意味関係を仲介する function であると捉える視点を欠くこと

で、説明が非常に困難となるデータが多数存在している。そこで、本ワークショップでは、そのようなデータを例示するという経験的な目標と、上述のような視点を「格」の理論として理論化するにはどのようなやり方が可能であるかを探るといふ理論的な目標、の2つを達成することを目指した。

1. 格の意味的な貢献とその帰結 (平崎永里子)

本発表では、従来の生成文法における格の理論的扱いの経験的不備を指摘し、その不備を補った格の体系が理論的にも妥当であると示した。具体的には、格が意味解釈に貢献可能な理論の構築が必要である事を踏まえ、従来の理論において想定されている PF において読み取られる形態の格素性と独立に、意味概念に関する格素性が存在し、LF においても格素性の読み取りが行われていると主張した。本主張により、英語の ECM 構文において ECM 主語が主節の動詞から対格を付与されるために必要とする顕在的移動を虚辞 *there* が行うと非文になるという、従来の理論では説明を与え難かった事実を適切に捉える事を可能となる。更に、本主張により *allege* タイプの動詞や *assure* を含む二重目的語 ECM 構文等、従来の格理論にとって問題となる構文にも統一的な説明を与えられる可能性がある事を示した。本発表の理論の方向性は、意味解釈に格が影響を与える現象を統一的に捉える事を可能とする事に繋がる。

2. 格の具現とその統語メカニズムの提案 (一田小友希)

本発表では、はじめに格の具現についてそのメカニズムを提案し、それを用いて *there* 構文における *wh* 句移動の可否に関する不均衡や *to* 不定詞節の主語のふるまいについて説明できることを示した。格とは、DP がその生起位置によって取る形態のことを指すが、従来の扱われ方では、構造によってその DP が格を表示するかどうかを決められると考えられてきた。しかし、格とは DP の「形」を表すものであり音でもって表現する手段なので、単に構造によって認可するだけでは不十分であり、音に関する *check* が必要であると考え、*Case license* には *Case assignment* と *Case realization* とのふたつの操作が必要だと提案した。その上で、一見 *Case assignment* には問題がないように見える例文も *Case realization* が正しく行われていないと説明することによってその非文法性を捉えられる現象を説明した。

3. Improper Movement and Split Case Valuation (竹内肇)

本発表では、理論言語学における例外的格付与構文や主格目的語構文などの文法格に関する一連の観察に基づいて、Chomsky (2007, 2008) において提案される一致と同時に引き起こされる位相主要部の指定部への移動を格を認可するために必要不可欠な移動と定義し、その移動は文法格が解釈される音声部門のインターフェイスからの要請で引き起こされることを主張した。したがって、本発表において文法格は一致のみではなく、それによって引き起こされる位相指定部への移動を加えた二つの操作によって認可されることになる。さらに、

この文法格の認可条件は不適格移動の分析をより厳密に派生的な分析にすることができると主張した。Epstein and Obata (2008) では不適格移動は名詞句が持つ解釈不可能な格素性が、照合されることなく音声部門に送られることに帰着されているが、本発表の分析においては、格素性を仮定することなく格の認可条件が満たされないことに非文法性が帰着されることを主張した。

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[II]

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Process, Telicity, and Event Cancellability in Japanese: A Questionnaire Study

Natsuno Aoki and Kentaro Nakatani
Konan University

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1. INTRODUCTION

In the literature on aspect, it is typical to distinguish between telic and atelic predicates in terms of whether or not the event denoted by the predicate progresses towards a goal. For example, the predicate *open the window* is considered telic because the denoted activity of opening the window progresses towards a target state, namely, the state of the window being open, whereas a simple predicate like *walk* is atelic because no goal is linguistically specified. In English, if a telic event is linguistically asserted, negating it leads to grammatical unacceptability. Consider now the following examples (from Tsujimura (2003: 394)):

- (1) *I opened the window, but it didn't open
because it was rusty.
- (2) *I moved the desk, but it didn't move
because it was too heavy.

In the first half of example (1), it is asserted that the window was opened, but in the latter half, this is negated. Even though the failure of the telic event is contextually supported by the following *because* clause, this example is considered unacceptable. The same applies to the example in (2).

By contrast, it is pointed out in the litera-

ture (Ikegami (1985), Kageyama (1996), Miyajima (1985), Tsujimura (2003), etc.) that predicates denoting telic events in Japanese can often be cancelled, as exemplified by the sentences in (3) and (4) (Tsujimura (2003: 393)):

- (3) *mado-o ake-ta kedo,*
window-Acc open(TR)-Past although
sabituite-ite aka-nakat-ta.
being_rusty open(INTR)-Neg-Past
'I opened the window, but it did not open
because it was rusty.'
- (4) *tsukue-o ugokasi-ta ga*
desk-Acc move(TR)-Past although
omosugi-te ugoka-nakat-ta.
being_too_heavy move(INTR)-Neg-Past
'I moved the desk, but it did not move be-
cause it was too heavy.'

To account for this fact, Tsujimura (2003) argues (i) that the telicity in these Japanese examples is not lexically encoded and (ii) that the telic interpretation derives instead from conversational implicature. It is accepted independently that inferences invoked by implicature can be cancelled; Tsujimura thus invokes this strategy rather than lexical encoding for Japanese.

In this paper, we examine Tsujimura's hypothesis through a questionnaire study. The results of which suggest that Tsujimura's hypothesis is not quite correct. We argue instead that the telicity in Tsujimura's examples is actually lexically encoded, and that telicity cancellability in Japanese depends (at least partly) on the strength of the process component in the event denoted by the predicate.

In order to clarify our claims, it is useful to introduce two other types of 'telic predicate' that can be compared with Tsujimura's examples with respect to telicity. The first type is what we shall refer to as *fake telic predicates*. Consider

the following examples:

(5) *kare-wa te-o arat-ta.*

he-Top hands-Acc wash-Past

‘He washed his hands.’

(6) *kare-wa kyattyaa-ni booru-o nage-ta.*

he-Top catcher-Dat ball-Acc throw-Past

‘He threw the ball to the catcher.’

Both predicates in (5) and (6) appear to denote a process of activity and a result state. In *te-o aratta* ‘washed his hands’ in (5), the washing activity precedes the state (having clean hands), while in (6) *kyattyaa-ni booru-o nage-ta* ‘threw the ball to the catcher’, the throwing activity is naturally interpreted as being followed by the state of ball’s being in the catcher’s glove. Although these results are understood to be true in a normal context, they could be false: (5) can be truly asserted even if the hands remained dirty after the washing activity. Actually these sentences are easily cancellable even in English (Bouillon and Bussa.(2001)). Thus, an English sentence like *he washed his hands, but his hands remained dirty* is perfectly acceptable. We call these kind of predicates *fake telic predicates*.¹

The telicity in fake telic predicates is obviously conversationally implicated. If Tsujimura’s assumption is on the right track, her examples should behave like fake telic predicates. We tested this prediction using a questionnaire, the results of which will be discussed shortly.

We also examined whether Tsujimura’s predicates behave differently from a second kind of telic predicate, namely *typical achievement predicates*. The difference between Tsujimura’s predicates and typical achievements seems to be that the former involve process components, while the latter do not. The following sentence in (7) describes a typical achievement:

(7) *ueetoresu-ga gurasu-ni mizu-o*

waitress-Nom glass-Dat water-Acc

(*3-pun) *mitasi-ta.*

(*for 3 minutes) fill-Past.

‘The waitress filled the glass with water

(*for 3 minutes).’

In (7), the state of the glass filled with water is linguistically entailed, while the event lacks a lexically encoded process component, as indicated by the incompatibility with a durative adverbial like *for 3 minutes*. We predict that event cancellation is unacceptable for typical achievements, because if the telicity in this type of predicate is cancelled, then no part of the previous assertion will remain intact. Therefore, this type of predicate cannot be asserted and cancelled at the same time—it would induce a sheer contradiction. This leads to our hypothesis that telicity cancellation is possible to the extent that the inferred process component is strong.² Unlike typical achievements, however, Tsujimura’s examples do seem to contain process components. For example:

(8) *yaoyasan-ga suika-o*

greengrocer-Nom watermelon-Acc

3-pun *hiyasi-ta.*

3-minutes cool-Past.

‘The greengrocer cooled the watermelon for three minutes.’

In (8), a cooling activity is involved as well as a result, as evidenced from its compatibility with a durative adverbial. In such a case, the telic event is cancellable in Japanese because the process component is still asserted even when the result state is negated.³

If our hypothesis is on the right track, it is predicted that the same verb will induce different acceptability judgments depending on the choice of direct objects, because the direct objects may affect the aspectual properties of the predicate in so far as having direct objects

denoting concrete entities would induce activities with concrete processes, compared with having abstract direct objects. For example:

- (9) *riidaa-ga minna-no iken-o*
 leader-Nom everyone-Gen opinion-Acc
matome-ta-ga, kekkyoku
 put_together-Past although, in_the_end
matomara-nakat-ta.
 be_settled-Neg-Past.
 ‘The leader put together everyone’s opinion, but failed in the end.’

- (10) *?riidaa-ga sono-syoodan-o*
 leader-Nom the_business_deal-Acc
matome-ta-ga, kekkyoku
 put_together-Past although, in_the_end
matomara-nakat-ta.
 be_settled-Neg-Past.
 ‘The leader achieved the business deal, but failed in the end.’

Both (9) and (10) contain the same verb *matometa* ‘put together’ with different objects, *minna-no iken* ‘everyone’s opinion’, and *sono-syoodan* ‘the business deal’, respectively. These sentences are thus identical except for the choice of direct objects. However, intuitively, the acceptability of (10) is degraded compared with (9). The difference in acceptability judgments between (9) and (10), if any, may reflect the difference in the strength of the inferred process component stemming from the choice of different objects: it is easier to infer a concrete activity in specific time and place in (9) than in (10). This idea is supported by the difference in the acceptability of the insertion of a temporal durative adverb *itizikan-ni watatte* ‘spanning for an hour’:

- (9′) *riidaa-ga minna-no-iken-o iti-jikan-ni*
watat-te matometa.
 ‘The leader put together everyone’s opinion for an hour.’

- (10′) *?riidaa-ga syoodan-o iti-jikan-ni*
watat-te matometa.

Thus we can conclude in this case that even though both sentences contain the same verb *matometa*, it is the selection of the direct object that determines whether the whole predicate is interpreted as an accomplishment or an achievement (cf. Vendler (1957), Dowty (1979)). We can use this type of contrast to test the hypothesis on the correlation between the strength of the inferred process component and the acceptability of telicity cancellation.

In summary, we would like to address the following questions:

1. If the telicity in Japanese is only conversationally implicated as Tsujimura (2003) argues, are Tsujimura’s examples judged in the same way as fake telic examples?
2. What about the telicity of typical achievement predicates?
3. Is it the case, as we have claimed, that the strength of the process component is one of the major factors in determining the acceptability of cancellation?
4. If so, does the choice of direct object influence the cancellability to the extent that it induces concrete activities?

In the following section we report the results of a questionnaire study on the above issues.

2. QUESTIONNAIRE STUDY

2.1. Method

2.1.1. Materials

41 test sentences were prepared. All of them consisted of two conjuncts, where the second conjunct always contained a predicate cancelling the result event denoted or inferred in the first half.

The main materials included the following types of predicates: Tsujimura’s predicates, fake

telic predicates, typical achievements, and predicates with varied objects.

In order to preclude the possibility of idiomatic or metaphoric interpretation by putting the two verbs next to each other (e.g., *aitu-wa korosi-te-mo sina-nai* ‘He wouldn’t die even if he is killed.’ = ‘He is a really tough guy.’), we put at least one word between the two verbs.

Tsujimura’s Predicates

The item list included the most representative of Tsujimura’s predicates, seven items in total:

(11) **hiyasita ‘cooled’**

*yaoya-san-ga suika-o hiyasita-ga,
kion-ga takaku-te hie-nakat-ta.*

‘The greengrocer cooled the watermelon, but it was not cooled because of the high temperature.’

(12) **moyasita ‘burnt’**

*oboosan-ga otiba-o moyasita-ga,
simette-ite moe-nakat-ta.*

‘The monk burnt the fallen leaves, but they didn’t burn because they were wet.’

(13) **tokasita ‘melted’**

*baatendaa-ga koori-o tokasita ga
reibou-ga kiki-sugi-te-ite toke-nakat-ta.*

‘The bartender melted ice, but it did not melt because the air-conditioning worked too well.’

(14) Other Tsujimura predicates used: **ireta ‘put into’, aketa ‘opened’, ugokasita ‘moved’, kawakasita ‘dried’**

Fake Telic Predicates

A set of five fake telic predicates were also included:

(15) **aratta ‘washed’**

*kare-wa te-o aratta ga
te-wa kirei-ni nara-nakat-ta.*

‘He washed his hands, but it was not cleaned.’

(16) **nageta ‘threw’**

*otoko-wa tooku-ni iru hito-ni ball-o
nageta ga, ball-wa todoka-nakat-ta.*

‘The man threw the ball to the person in the distance, but it didn’t reach her.’

(17) **okutta ‘sent’**

*kare-wa tegami-o okut-ta ga,
tegami-wa aite-ni todoka-nakat-ta.*

‘He sent the letter, it didn’t reach to the recipient.’

(18) Other fake telic predicates used: **kyuukousita ‘hurried’, sosoida ‘poured’**

Typical Achievements

Third, we included five items containing typical achievement predicates as in(19)–(21):

(19) **kireinisita ‘cleaned’**

*kaseehu-ga heya-o kireeni-sita-ga,
heya-wa tirakatta-mama-datta.*

‘The maid cleaned the room, but it remained disorderly.’

(20) **mitasita ‘filled’**

*weetoresu-ga gurasu-ni mizu-o mitasita-ga,
hanbun-sika haira-nakat-ta.*

‘The waitress filled the glass with water, but it was poured no more than half of the glass’

(21) Other predicates used: **oeta ‘finished’; nokosita ‘left’; kita ‘came’**

Predicates with Varied Direct Objects

Finally, we included sentence pairs where the verbs were kept constant while the direct objects were varied in such a way that one of the pair denoted a more concrete activity and the other a more abstract activity.

(22) **matometa ‘put together’**

(see (9) and (10))

(23) **toita ‘solved’**

a. *zyukensee-ga sono rensyuumondai-o
toita-ga, kekkyoku toke-nakat-ta.*

‘The student solved the exercise, but failed in the end.’

- b. *kookoosei-ga sono nanmon-o toita-ga, kekkyoku toke-nakat-ta.*
 ‘The high school student solved the hard problem, but failed in the end.’
- c. *kanozyo-wa karesi-no gokai-o toita-ga, kekkyoku toke-nakat-ta.*
 ‘She resolved her boyfriend’s misunderstanding, but failed in the end.’

Regarding (23), it seemed to us that solving an exercise is more naturally associated with a concrete activity with specific duration than resolving someone’s misunderstanding, so our prediction was that the cancellation in (23a) and (23b) should be more acceptable than the cancellation in (23c). We also considered that solving a hard problem to be more result-oriented than solving an exercise, leading to the lowered acceptability of the former sentence compared with the latter.

(24) *moyasita ‘burnt’*

- a. =(12) *otiba-o moyasita ‘burnt fallen leaves.’*
- b. *kookookyuuzi-ga toosi-o moyasita-ga, kimoti-ga meit-te toosi-wa moe-nakat-ta.*
 ‘The high school baseball player burnt his fighting spirit (=raised his spirits) but failed because he was feeling depressed.’

In the above example, *otiba-o moyasita ‘burnt leaves’* is associated with a concrete activity, while *toosi-o moyasita ‘burnt his fighting spirit (=raised his spirits)’* represents an abstract psychological state. We thus predicted that *otiba-o moyasita ‘burnt leaves’* was more cancelable than *toosi-o moyasita ‘raised his spirits’*.

Our study included some other materials that cannot be detailed in this paper due to space limitation; see Aoki and Nakatani (to appear) for the full list of materials. In the results section, we limit attention to the materials shown above.

2.1.2. Participants and Procedure

The participants were 70 native speakers of Japanese at Konan University. Most of them were undergraduates; some were graduate students.

Participants were handed out an instruction sheet together with three sheets of paper containing the materials. They were asked to judge the naturalness of the sequence in each item on a 5-point scale, by circling one of the 5 numerals on the scale. ‘5’ on the scale corresponded to the most natural, and ‘1’ corresponded to the most unnatural. The participants were instructed to rate each item quickly following their intuitions without undue reflection.

Participants were explicitly instructed in the sheet to rate the naturalness of the connection between the first half and second half, to try to eliminate the possibility that they would judge the sentences on the basis of extraneous factors. The materials were pseudo-randomized in such a way that similar sentences or paired sentences would not appear too close to one another.

2.2. Results and Discussion.

The grand mean score of the 41 items analyzed was 3.1 ($SD=1.5$), the median was 3.0, the lowest mean score by item was 1.1, and the highest mean score by item was 4.8.

2.2.1. Fake Telic, Typical Achievements, and Tsujimura’s Predicates

Fake telic predicates all showed very high cancellability. The mean scores of the fake telic predicates were: *okutta ‘sent’* $M=4.8$ ($SD=0.6$); *nageta ‘threw the ball’* $M=4.8$ (0.6); *kyuukousita ‘hurried to the site’* $M=4.6$ (0.9); *sosoida ‘poured’* $M=4.2$ (1.3); and *aratta ‘washed’* $M=4.1$ (1.1).

By contrast, Tsujimura’s examples were

not rated as high as the fake telic examples. The mean ratings ranged from 2.4 to 3.8: *hiyasita* ‘cooled’ $M=3.8$ (1.3); *ireta* ‘put into’ $M=3.8$ (1.1); *moyasita* ‘burnt’ $M=3.5$ (1.4); *kawakasita* ‘dried’ $M=3.2$ (1.4); *tokasita* ‘melted’ $M=3.0$ (1.3); *aketa* ‘opened’ $M=2.5$ (1.5); *ugokasita* ‘moved’ $M=2.4$ (1.3).

Typical achievements, however, were rated even lower: *kireinisita* ‘cleaned’ $M=2.3$ (1.4); *oeta* ‘finished’ $M=2.3$ (1.4); *mitasita* ‘filled’ $M=1.8$ (1.1); *kita* ‘came’ $M=1.6$ (1.1); *nokosita* ‘left’ $M=1.1$ (0.3).

Figure 1 shows the comparison between these three types of the predicates. Pearson’s χ^2 tests on the pairwise comparisons between the three types all revealed highly significant differences (all χ^2 s > 189, $df=4$, $ps < .001$).

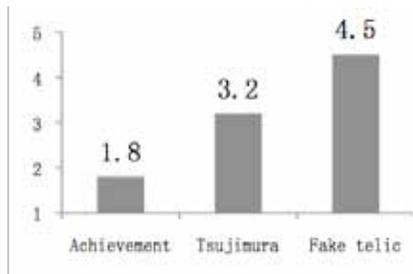


Figure 1 The mean scores of the three types of the “telic predicate”

The contrast between the fake telic predicates and Tsujimura’s predicates cannot be accounted for by the assumption that the telicity in Tsujimura’s predicates are conversationally implicated. However, if we simply assume that the degraded acceptability of Tsujimura’s predicates were due to their lexical telicity, then the contrast with typical achievements cannot be accounted for. By contrast, these results seem to support our hypothesis on telicity and the inferred process component of the denoted event: (i) the telicity in Tsujimura’s predicates is lexically encoded, which leads to significantly degraded acceptability compared to the fake telic predicates, whose telicity is implicated; and

(ii) Tsujimura’s predicates were judged better than typical achievements, because the former induced stronger inferences of the process components in the denoted events.

2.2.2. Varied Direct Objects

Let us now consider the results from the items with varied direct objects. Table 1 summarizes the results from the items presented in 2.1.1. As we predicted, *matometa* ‘put together’ was rated higher with *iken* ‘opinion’ than with *syoodan* ‘business deal’. *toita* ‘solved’ was rated higher with a concrete object *rensyuumondai* ‘exercise’ than with an abstract object *gokai* ‘misunderstanding’; moreover, *rensyuumondai-o toita* ‘solved the exercise’ gained higher scores than *nanmon-o toita* ‘solved the hard problem’, again as expected. Regarding *moyasita* ‘burnt’, this predicate was rated higher with *otiba* ‘fallen leaves’ than *toosi* ‘fighting spirit’. These results show that the choice of direct objects affects the aspectual property of predicates, in such a way that concrete direct objects induce stronger inferences on concrete activity processes, leading to higher cancellability.

matometa	Mean (SD)
<i>iken</i> ‘opinion’	3.3 (1.4)
<i>syoodan</i> ‘business deal’	2.1 (1.4)
$\chi^2=22.8, df=4, p<.001$	
toita	Mean (SD)
<i>rensyuumondai</i> ‘exercise’	3.6 (1.4)
<i>nanmon</i> ‘hard problem’	2.8 (1.4)
<i>gokai</i> ‘misunderstanding’	2.0 (1.1)
<i>rensyuumondai</i> vs. <i>nanmon</i> : $\chi^2=12.5, df=4, p<.05$	
<i>nanmon</i> vs. <i>gokai</i> : $\chi^2=13.5, df=4, p<.01$	
moyasita	Mean (SD)
<i>otiba</i> ‘fallen leaves’	3.5 (1.4)
<i>toosi</i> ‘spirits’	2.1 (1.2)
$\chi^2 = 36.7, df = 4, p < .001$	

Table 1 Mean ratings of the items with varied objects and the results from Person’s χ^2 tests

3. CONCLUSION

On the basis of our study, we conclude that Tsujimura's hypothesis that telicity in Japanese is conversationally implicated was not justified because her examples were not rated as high as the fake telic examples. In addition, her examples were rated higher than typical achievements. Therefore, we conclude (i) that telicity in Japanese is lexically encoded, and (ii) that event cancellation is acceptable to the extent that the inferred process component of the denoted event is strong. This hypothesis was further supported by the results from the items with varied direct objects, where we found that the concreteness of the direct objects positively affect the acceptability of event cancellation.

NOTES

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¹ What we call "fake telic" predicates are simply called TELIC in the Generative Lexicon theory (Pustejovsky 1995), which Bouillon and Bussa (2001) adopts. Their definition of TELIC as a modal, intensional operator is narrower than those widely adopted in the literature of aspect (e.g., Tenny (1989)). Our term "fake telic" is exactly TELIC in this narrower sense.

² A similar point has been suggested by Miyajima (1985: 252). In his questionnaire study, he found that the addition of an activity-oriented manner adverbial would improve the acceptability of event cancellation, and he conjectures that the reason for this is that the addition of the adverbial emphasizes the durativity of the activity.

³ It should be noted that logically speaking, this is still a contradiction: if P&Q are asserted, both P and Q must be true, and thus this assertion would contradict with the proposition that Q is false. The "feeling" that some truth about P&Q=1 is still left even when Q is negated should probably come from

some pragmatic principles, and this is where English and Japanese diverge.

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Three Case Alternation Mysteries in Modern Mongolian

Lina Bao, Hideki Maki, and Megumi Hasebe
Osaka University, Gifu University, and Yokohama
National University

Keywords: accusative, case, genitive, Mongolian,
subject

1. INTRODUCTION

The Maki Group has examined case properties of Modern Mongolian (Mongolian, hereafter). See Maki *et al.* (2010a, b, c). This paper points out three case alternation mysteries in Mongolian, and investigates the mechanisms behind them. We will claim that the mechanisms involved in the mysteries are as follows. First, Universal Grammar in principle allows the accusative subject in limited environments, and that there are further language-particular conditions on the predicates compatible with the accusative subject. Second, the expression *edür tü* ‘day on’ in Mongolian has two functions: (i) *edür* ‘day’ is a noun and a relative head, and (ii) the complex *edür tü* ‘day on’ functions as the head of the adjunct clause. Third, and finally, the argument/adjunct asymmetry with the ‘deep’ genitive subject in Mongolian suggests feature agreement between the PP resumptive pronoun and the relative head noun.

The organization of this paper is as follows. Section 2 reviews the case marker system in Mongolian as a background to the subsequent sections. Section 3 provides the three case marker alternations in Mongolian. Section 4 elucidates the

mechanisms behind the mysteries. Finally, Section 5 concludes this paper.

2. BACKGROUND

We will provide the case marker system in Mongolian as the background to the subsequent sections. In Mongolian, the nominative case marker is always null, which is to be represented as $-\emptyset$, the accusative case marker has three variants $-\emptyset$, $-i$, and $-gi$, and the genitive case marker has three variants $-un$, $-nu$, and $-in$. The choice between $-\emptyset$ on the one hand, and $-i$ and $-gi$ on the other, for the accusative case marker, depends on the definiteness/specificity of the object NP. To be precise, NPs are obligatorily marked with $-i/-gi$ when they are definite/specific, while they are optionally marked with $-i/-gi$ when they are indefinite/unspecific, as shown in (1a-b).

- (1) a. *Bayatur- \emptyset öcügedür tere*
Bagatur-Nom yesterday the
almurad $-\emptyset$ / $-i$ ide-jei.*
apple-Acc/-Acc eat-past.CON
‘Bagatur ate the apple yesterday.’
- b. *Bayatur- \emptyset öcügedür almurad- \emptyset / $-i$*
Bagatur-Nom yesterday apple-Acc/-Acc
ide-jei.
eat-past.CON
‘Bagatur ate an apple yesterday.’

For the variants in the genitive case marker, this kind of correlation between the forms and the meanings does not hold, and the choice among the three variants simply depends on the quality of the preceding vowel.

With this background established, we will examine three case alternation mysteries in Mongolian in the next section.

3. THREE MYSTERIES

3.1. THE FIRST MYSTERY

The first mystery is as follows. As Maki *et al.* (2010a) and Bao (2011) show, there are cases in

which the accusative subject is systematically allowed in Mongolian. Maki *et al.* (2010a) found that the generalization about the distribution of accusative subjects in Mongolian was (2).

(2) *Generalization about the Distribution of the Accusative Subject in Mongolian*

The accusative subject may appear in adjunct clauses whose heads are not genuinely nominal in nature. Therefore, the accusative subject may appear in temporal, conditional, and reason clauses, but not clauses adjacent to overt nominal heads.

The relevant examples are shown below. First, while it is disallowed in the matrix clause, the accusative subject is allowed in a temporal clause, as shown in (3a-b).

- (3) a. *Yayaru-ber Ulayan-ø/*-i*
 hastily Ulagan-Nom/-Acc
almurad-ø ide-jei.
 apple-Acc eat-past.CON
 ‘Ulagan ate an apple hastily.’
- b. *Yayaru-ber Ulayan-ø/i almurad-ø*
 hastily Ulagan-Nom/-Acc apple-Acc
ide-gsen-nü daraya,
 eat-past.ADN-Gen after
Bayatur-ø jurji-ø ide-jei.
 Bagatur-Nom orange-Acc eat-past.CON
 ‘After Ulagan had eaten an apple hastily,
 Bagatur ate an orange.’

Second, while it is impossible in the matrix clause, the accusative subject is possible in a conditional clause, as shown in (4a-b).

- (4) a. *Quyar čag-un daraya*
 two hour-Gen after
Ulayan-ø/-i ende ire-jei.*
 Ulagan-Nom/-Acc here come-past.CON
 ‘Ulagan came here in two hours.’
- b. *Quyar čag-un daraya Ulayan-ø/i*
 two hour-Gen after Ulagan-Nom/-Acc
ende ire-bel, бүгүдегер-ø yacıydana.

here come-if everyone-Nom trouble
 ‘If Ulagan comes here in two hours,
 everybody will be in trouble.’

Third, while it is not permitted in the matrix clause, the accusative subject is allowed in a reason clause, as shown in (5a-b).

- (5) a. *Öcügedür Ulayan-ø/*-i*
 yesterday Ulagan-Nom/-Acc
suryayuli-du ire-gsen ügüi.
 school-to come-past.ADN not
 ‘Ulagan did not come to school
 yesterday.’
- b. *Öcügedür Ulayan-ø/i*
 yesterday Ulagan-Nom/-Acc
suryayuli-du ire-gsen ügüi
 school-to come-past.ADN not
učir-ece, бүгүдегер-ø
 because everyone-Nom
sedkil joba-jai.
 heart worry-past.CON
 ‘Because Ulagan did not come to school
 yesterday, everybody was worried.’

However, the predicate must not be an adjective, as shown in (6).

- (6) *Urusyal-ø/*-i түрген uçir-ece ene yol*
 stream-Nom/-Acc fast because this river
ayumar baina.
 danger be
 ‘Because it runs fast, the river is dangerous.’

(6) contains a reason clause. The predicate in the adjunct clause is an adjective, and the example is ungrammatical with the accusative subject.

Therefore, the first mystery is the fact that in Mongolian, the accusative subject cannot co-occur with adjectives, while it can with verbs, in adjunct clauses whose heads are not genuinely nominal in nature.

3.2. THE SECOND MYSTERY

Let us turn to the second mystery. Mongolian shows

case alternation among three candidates in some cases, but only between two candidates in others. (7) shows the former, while (8)-(9) show the latter.

- (7) *Yayaru ber Ulayan-ø/-i/-nu*
 hastily Ulagan-Nom/-Acc/-Gen
surayyuli-du ire-gsen edür tü, ...
 school-to come-past.ADN day on
 ‘On the day when Ulagan came to school
 hastily, ...’
 (Nom, Acc, and Gen are OK.)
- (8) *öcügedür Ulayan-ø/*-i/-nu*
 yesterday Ulagan-Nom/-Acc/-Gen
ungsi-ysan nom
 read-past.ADN book
 ‘the book which Ulagan read yesterday’
 (Nom and Gen are OK, but Acc is not.)
- (9) *Öcügedür Ulayan-ø/-i/*-nu*
 yesterday Ulagan-Nom/-Acc/-Gen
surayyuli-du ire-gsen uçir-ece, ...
 school-to come-past.ADN because
 ‘Because Ulagan came to school
 yesterday, ...’
 (Nom and Acc are OK, but Gen is not.)

3.3. THE THIRD MYSTERY

Let us finally turn to the third mystery. In Mongolian, the “deep genitive,” originally observed by Maki *et al.* (2010b), shows an argument/adjunct asymmetry, as shown by the contrast between (10) and (11).

- (10) *Bi-ø öcügedür Ulayan-ø/-nu*
 I-Nom yesterday Ulagan-Nom/-Gen
e_i bici-gsen geju bodu-ysan
 write-past.ADN that think-past.ADN
 nom_i
 book
 ‘the book which I thought that Ulagan
 wrote yesterday’
- (11) *Bi-ø yayaru ber Ulayan-ø/*-nu*
 I-Nom hastily Ulagan-Nom/-Gen
e_i ire-gsen geju bodu-ysan

come-past.ADN that think-past.ADN
 edür,
 day
 ‘the day when I thought that Ulagan came
 hastily’

4. THE MECHANISMS BEHIND THE MYSTERIES

In the following, we will consider the mechanisms behind these mysteries.

4.1. THE FIRST MYSTERY

Let us start with the first mystery. Maki *et al.* (2010) report that one construction in Old Japanese allows the accusative subject. Consider the examples in (12)-(14).

- (12) *Se-o haya-mi iwa-ni*
 river-Acc fast-because rock-by
sekaruru tatsutagawa-no ware-temo
 separated River Tatsuta-Gen separated-but
sue-ni awan to-zo omoo.
 last-at merge that-EMPH think
 ‘Because it runs fast, the stream of River
 Tatsuta is separated by rocks. However, I
 do think that it will merge into one at the
 end.’
 (Sutokuin (1119-1164) in *Hyakuninsshu*
 (early 13th century to early 14th century)
 translated into modern Japanese by
 Ariyoshi (1983))
- (13) *Aki-no ta-no*
 autumn-Gen rice field-Gen
kariho-no io-no toma-o
 temporary-Gen cabin-Gen roof-Acc
ara-mi, ...
 large mesh-because
 ‘In the harvest of autumn rice field,
 because the roof of the temporary cabin
 has large mesh, ...’
 (Tenji Tennō (626-671) in *Hyakuninsshu*

(early 13th century to early 14th century) translated into modern Japanese by Ariyoshi (1983))

- (14) Ike-ni sumu na-o
 pond-in live name-Acc
 oshidori-no mizu-o
 mandarin duck-Gen water-Acc
 asa-mi kakuru to
 shallow-because hide that
 sure-do araware-ni-keri.
 do-but appear-to-PERF
 ‘Although they tried to hide, mandarin
 ducks which live in the pond have
 appeared, because the pond is shallow.’
 (unknown reader in *Kokinwakashu* edited
 by Kino Tsurayuki et al (905) translated
 into modern Japanese by Takada (2009))

In (12)-(14), the accusative subject appears in reason clauses headed by *mi* ‘because’ and the predicates are all adjectives. Note that no example with the accusative subject in matrix clauses has been attested yet, or no example with the accusative subject has been found whose predicate is non-stative. Therefore, (12)-(14) indicate that Old Japanese and Mongolian show a complementary distribution regarding the types of predicates in the accusative subject constriction.

Therefore, the examples from Mongolian and Old Japanese seem to suggest that Universal Grammar in principle allows the accusative subject in limited environments, and that there are further language-particular conditions on the predicates compatible with the accusative subject.

Of course, how these particular languages have acquired these particular conditions still remains a mystery, which we will leave for future research.

4.2. THE SECOND MYSTERY

Next, let us consider the second mystery. (8) indicates that accusative subject is not permitted in a

relative clause, and (9) shows that genitive subject is disallowed in an adjunct clause whose head is not nominal. However, (7), which seems to be a relative clause, allows subjects with any of the three case markers. Since the relative clause is headed by a nominal expression, the prediction is that accusative subject should not be allowed. However, a closer examination of relative clauses headed by a time expression reveals that accusative subject is impossible. Consider the example in (15).

- (15) Bi-ø yayaru ber Ulagan-ø/*-i/-nu
 I-Nom hastily Ulagan-Nom/-Acc/-Gen
 suryayuli-du ire-gsen edür-i
 school-to come-past.ADN day-Acc
 çegejilejü-baina.
 remember-be
 ‘I remember the day when Ulagan came to
 school hastily.’

In (15), the head noun of the relative clause is *edür* ‘day,’ and the NP is an argument of the verb *çegezilezu-baina* ‘remember-be.’ Therefore, in this case, the head noun is truly a nominal element, so that accusative subject inside the relative clause is disallowed.

If this is correct, in the example in (7), the expression *edür tü* ‘day on’ should not be syntactically uniform. Rather, *edür tü* ‘day on’ should have two functions: (i) *edür* ‘day’ is a noun and a relative head, and (ii) the complex *edür tü* ‘day on’ functions as the head of the adjunct clause. When it is a noun, the subject *Ulagan* can be marked with the nominative case marker or the genitive case marker. On the other hand, when it is a complex element, and is an adjunct, it can only be marked with the accusative case marker. If this is correct, in (7), the case alternation does not actually take place among three candidates, but only between two candidates.

4.3. THE THIRD MYSTERY

Finally, let us address the third mystery. It is worthwhile reviewing the conditions on genitive subject licensing proposed by Maki *et al.* (2010b) before investigating the mechanism behind the third mystery. Based on the grammaticality contrast between the ‘deep’ genitive subject in a relative clause, such as (16b), and the one in a gapless pronominal sentential modifier, such as (17b), Maki *et al.* (2010b) claim that feature percolation from e_i to the head noun *nom* ‘book’ saves the deep genitive subject.

- (16) a. [öcügedür Ulayan-ø/-u
yesterday Ulagan-Nom/-Gen
qudaldun-abu-γsan] nom
buy-take-past.ADN book
‘the book [which Ulagan bought
yesterday]’
- b. [bi-ø [öcügedür Ulayan-u
I-Nom yesterday Ulagan-Gen
qudaldun-abu-γsan geγü]
buy-take-past.ADN that
bodu-γsan] nom
think-past.ADN book
‘the book [which I thought [that Ulagan
bought yesterday]]’
- (17) a. [öcügedür Ulayan-ø/-u
yesterday Ulagan-Nom/-Gen
iniye-gsen] uγir
laugh-past.ADN fact
‘the fact [that Ulagan laughed yesterday]’
- b. [Bayatur-ø [öcügedür
Bagatur-Nom yesterday
Ulayan-ø/*-u iniye-gsen
Ulagan-Nom/-Gen laugh-past.ADN
geγü] ke-le-gsen] uγir
that talk-past.ADN fact
‘the fact [that Bagatur told [that Ulagan
laughed yesterday]]’

To be precise, they propose that a relationship is established between the relative head and *pro* by

binding (c-commanding), in such a way that the nominal feature in the head nominal percolates down to *pro*, as shown by the structure in (18), where the categories on the path from the nominal head to the resumptive pronoun are squared.

- (18) $\boxed{NP} \boxed{IP} \boxed{I} \boxed{VP} \boxed{CP} \boxed{IP} \text{ NP-Gen } \boxed{I} \boxed{VP} \text{ pro}_1$
 $\textcircled{C} \text{]]]]] \boxed{N_i}$

It is not implausible to assume that if a feature on a maximal projection XP has a certain feature, the head X^0 also shares it with XP by percolation. If the squared categories in (18) on the path from the relative head to *pro* all host a [+N] feature, the circled C in the most deeply embedded clause also hosts the [+N] feature. If this takes place, the local configuration with the genitive subject in the most deeply embedded clause in (18) looks like (19).

- (19) [GEN...V(ADN)] $C_{[+N]}$

Note that this is exactly parallel to the configuration in (17a), where N, instead of $C_{[+N]}$, is involved in genitive subject licensing. Thus, they claim that this type of mechanism is in operation in genitive subject licensing in Mongolian, and propose (20).

- (20) A genitive subject must be c-commanded by a nominal feature in a local domain.

Furthermore, based on the ungrammaticality of (21), where the genitive subject does not co-occur with the adnominal form of the predicate, they extend (20) to (22).

- (21) [bi-ø [öcügedür Ulayan-ø/*-u
I-Nom yesterday Ulagan-Nom/-Gen
pro qudaldun-ab-čai geγü]
buy-take-past.CON that
bodu-gsan] nom
think-past.ADN book
‘the book which [I thought [that Ulagan
bought yesterday]]’

- (22) *Conditions on Genitive Subject Licensing in Mongolian*

- a. A genitive subject must be

c-commanded by a nominal feature in a local domain, and

- b. A genitive subject must be in a local relation with the adnominal form of the predicate.

With this background, let us reconsider the example in (11). (11) is ungrammatical when the embedded subject is marked genitive, in spite of the fact that it does not run afoul of the conditions on genitive subject licensing in (22). Maki *et al.* (2010b) have not dealt with examples such as (11). Now, what distinguishes (11) from (10) is that in (11), while the category of the head of the relative clause *edür* ‘day’ is clearly a noun, the corresponding resumptive pronoun is not nominal, but adverbial or a PP corresponding to “on the day,” as shown in (23).

- (23) Bi- \emptyset yayaru ber Ulayan- \emptyset /*-nu
 I-Nom hastily Ulagan-Nom/-Gen
 [_{PP} *pro*_i] ire-gsen gezü
 come-past.ADN that
 bodu- γ san edür_i
 think-past.ADN day
 ‘the day when I thought that Ulagan came
 hastily’

We claim that this categorical/feature mismatch prevents feature percolation from the PP resumptive pronoun to the nominal relative head noun in (23), which leads to the ungrammaticality of (23)/(11) with the genitive subject, hence, results in the argument/adjunct asymmetry between (23)/(11) and (10).

Note here that the deep genitive subject is impossible, irrespective to whether the head that corresponds to the resumptive pronoun is an NP as an argument of a transitive verb, as shown in (24), or it constitutes a PP along with the postposition of which it is an argument, as shown in (25).

- (24) * Bi- \emptyset yayaru ber Ulayan- \emptyset /*-nu
 I-Nom hastily Ulagan-Nom/-Gen

*e*_i ire-gsen ge_{jü} bodu- γ san
 come-past.ADN that think-past.ADN
 edür_i-i, Bayatur- \emptyset neliyed
 day-Acc Bagatur-Nom well
 çegejilejü bai-jai.
 remember be-past.CON
 ‘Bagatur well remembered the day when
 I thought that Ulagan came hastily.’

- (25) * Bi- \emptyset yayaru ber Ulayan- \emptyset /*-nu
 I-Nom hastily Ulagan-Nom/-Gen
*e*_i ire-gsen ge_{jü}
 come-past.ADN that
 bodu- γ san edür_i tü, Bayatur- \emptyset
 think-past.ADN day on Bagatur-Nom
 qarin untaju bai-jai.
 yet sleep be-past.CON
 ‘Bagatur was still sleeping on the day
 when I thought that Ulagan came hastily’

In (24), the PP resumptive pronoun is in categorical/feature mismatch with the head noun *edür* ‘day,’ which leads to the ungrammaticality of (24). In (25), apparently, the PP resumptive pronoun shows no categorical mismatch with the PP *edür tü* ‘day on’ made out of the head noun *edür* ‘day’ and the postposition *tü* ‘on.’ However, note that the inherent postposition in the PP resumptive pronoun is not identical to the postposition *tü* ‘on,’ which is required by the matrix predicate, not by the predicate in the embedded clause. Therefore, in the strict sense, the PP resumptive pronoun is in feature mismatch with the matrix PP that contains the head noun *edür* ‘day’ and the postposition *tü* ‘on,’ which leads to the ungrammaticality of (25).

5. CONCLUSION

This paper examined three case alternation mysteries in Mongolian, and investigated the mechanisms behind them. The mechanisms involved in the mysteries are as follows. First, Universal Grammar in principle allows the accusative subject in limited

environments, along with further language-particular conditions on the predicates compatible with the accusative subject. Second, the expression *edür tü* ‘day on’ in Mongolian is not syntactically uniform, and has two functions: (i) *edür* ‘day’ is a noun and a relative head, and (ii) the complex *edür tü* ‘day on’ functions as the head of the adjunct clause. Third, and finally, the argument/adjunct asymmetry with the deep genitive subject in Mongolian indicates the condition on feature agreement between the PP resumptive pronoun and the relative head noun.

One important question remains, however. In Mongolian, the accusative subject may co-occur with a non-nominal adjunct head. This is true to Old Japanese as well. However, this is impossible in Modern Japanese, as shown in (26).

- (26) Nagare-ga/*-o hayai node,
 stream-Nom/-Acc fast because
 kono kawa-wa, abunai.
 this river-Top dangerous
 ‘Because it runs fast, this river is
 dangerous.’

The question is what caused this change in the history of the Japanese language. We leave this open for future research.

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**Goal-driven Movement in Japanese
: Verb-Verb Compounds**

Chihiro Fujimori
Hirosaki University (part-time)

Keywords: verb-verb compounds, Phase Impenetrability Condition, movement motivated by the goal

1. Introduction

In Fujimori (2000), I argued about the syntactic structure and its derivation of Verb-Verb Compounds (henceforth, VVCs) and proposed that the compounded verbs, namely, V1, the former verb, and V2, the latter verb, project to vP respectively, and that arguments generated in the V1 projection move into θ -positions in the V2 projection.

- (1) a. Taro_i-ga Hanako_j-o yaki-korosi-ta
T.-Nom H.-Acc burn-kill-past
'Taro burned Hanako to death'
b. [_{VP} SUB_i [_{VP} OBJ_j [_{VP} t_i [_{VP} t_j V1] v]V2] v]

The most crucial in this proposal is that, in the course of the derivation, the object moves over the subject and the object c-commands the subject. By means of this movement, we can account for several facts.

- (2) a. Dareka-ga daremo-o yaki-
someone-Nom everyone-Acc burn-
korosi-ta
kill-past (some>every, every>some)

- 'Someone burned everyone to death'
b. [Otagai_i-no musume]_j-ga
each other-Gen daughters-Nom
[Taro to Jiro]_i-o yaki-korosi-ta
T. and J.-Acc burn-kill-past
'Each other's daughters burned Taro and Jiro to death'
c. [Soitu_i-no musume]_j-ga
he-Gen daughter-Nom
daremo_i-o yaki-korosi-ta
everyone-Acc burn-kill-past
'His daughter burned everyone to death'

However, this analysis has one serious problem. That is, when the object moves into the V2 projection, it skips the subject, violating the Minimality requirement for movement.

- (3) [_{VP} daremo-o_j [_{VP} dareka-ga v [_{VP} t_j V1] v]
V2]

Therefore, my (2000) argument should be reanalyzed not to violate the locality of movement, retaining the idea that the object c-commands the subject in the course of the derivation.

2. Phase and Successive Cyclic Movement

2.1. [EPP]-driven Movement

Notice here that, in this analysis, the object moves across the vP phase boundary. Chomsky (2000, 2001) argues that derivation must proceed phase by phase. This means that, once derivation reaches the phase boundary, it must be sent to the semantic component (Spell-Out or Transfer), and that once it is sent to the semantic component, no more operations can be applied into the phase from the higher elements, which is called the Phase Impenetrability Condition (henceforth, PIC). Due to PIC, when an

element needs to move out of a phase, it must first move to the Spec position of the phase. Chomsky assumes that this movement is implemented by giving the head of the phase the EPP property. Therefore, for Chomsky, [EPP] is the driving force for the movement of a phrase to the Spec position.

- (4) What_i does he think [_{CP} *t_i* that Mary bought *t_i*?]
[EPP]

In (4), the *wh*-phrase *what* in the embedded clause must move to the sentence-initial position. However, because the embedded C is a phase, *what* must first move to the Spec position of the embedded C to avoid the PIC effects. According to Chomsky, this movement is driven by [EPP] which is assigned to the embedded C. Therefore, *what* undergoes feature checking on [EPP] with the embedded C.

2.2. The 'Look Ahead' Problem of [EPP]

However, Bošković (2007) convincingly argues against Chomsky (2000, 2001). He compares (4) with (5).

- (5) You think [_{CP} that Mary bought a car]
no [EPP]

According to Chomsky, the embedded C in (5), in contrast to (4), does not have [EPP], so any movement to satisfy [EPP] does not occur. If so, there must be two Cs, one with [EPP], and the other without [EPP]. Bošković argues that this account is conceptually problematic.

- (6) *Who thinks what_i that Mary bought *t_i*?
(7) [_{CP} what_i that Mary bought *t_i*]
[EPP]

(7) illustrates the structure in the course of derivation in (6). At this point of the derivation, we do not know whether C with [EPP] is necessary, because there is no clue whether we need further movement of *what*. Moreover, if C without [EPP] were chosen, there would be no movement of *what*, but if some element entered into the higher clause which needs to move *what* to check some feature of it, because PIC prevents *what* from moving out of the phase, the feature could not be checked and the derivation would crash. Therefore, Bošković concludes that at the point of (7), we need to know what is going to happen in the higher clause, so the serious *look ahead* problem arises.

In this respect, the same argument can hold in VVCs. In Japanese simple transitives, the Accusative Case can be checked in the complement position of V, which can account for the absence of scope interaction in the simple transitives. This means that, in *v*, there is no [EPP] to derive the movement of the object.

- (8) [_{IP} [_{VP} Dareka-ga [_{VP} daremo-o
someone-Nom everyone-Acc
hihansi] _ϒ] ta]
criticize no [EPP] past
'Someone criticized everyone'

On the other hand, in VVCs, the object moves into the V2 projection. However, because *v* is a phase, the object must first move to the Spec of the intermediate *v* to avoid the PIC effects. According to Chomsky, this movement is motivated by [EPP].

- (9) [_{VP} daremo-o_j [_{VP} dareka-ga [_{VP} *t_j* V1] _ϒ]]
[EPP]

However, just like (7), at the point of (9),

we do not know whether the object must move into the V2 projection. Furthermore, if *v* without [EPP] were chosen, there would be no motivation for the object to move to SpecvP, so it could not move further. Therefore, the derivation of VVCs does show another case of *look ahead* on [EPP], which is parallel to what Bošković (2007) points out.

2.3. No Feature Checking in the Intermediate Positions

Beside, Bošković (2007) argues that there is no feature checking in intermediate positions of successive cyclic movement. For example, Bošković argues that the intermediate C cannot license ellipsis of its IP complement.

- (10) a. John's talk about history was interesting
but [_{DP} Bill [_{D'} 's talk about history]] was boring
- b. *A single student came to the class
because [_{DP} [_{D'} the student]] thought that it was important
- (11) a. *John met someone but I don't know
who_i Peter said [_{CP} *t_i* [_{C'} that John met *t_i*]]
- b. *I know who Jill said C/that Jim met,
but I don't know who_i Bill said [_{CP} *t_i* [_{C'} C/that Jim met *t_i*]]

The ungrammaticality of (11) can be easily accounted for if it is assumed that in the intermediate SpecCP no feature checking occurs with C.

In this respect, Saito's (2006, 2011) argument seems to be relevant to the current analysis. He argues that, in Japanese causatives, which take a vP complement, both a causer and a causee can qualify as the antecedent for *zibun* (self), which indicates the subject-oriented property. Let's see (12),

especially (12b), in which both *Hanako* and *Taro* can be qualified as the antecedent for *zibun*.

- (12) a. Hanako-ga Taroo-o zibun-no
H.-Nom T-Acc self-Gen
ie-de sikat-ta
house-at scold-past
'Hanako scolded Taro at her/*his house'
- b. Hanako-ga Taroo-ni zibun-no
H.-Nom T-Dat self-Gen
hon-o sute-sase-ta
book-Acc discard-make-past
'Hanako made Taro discard her/his book'
- c. [_{vP} Hanako [_{vP} [_{vP} Taroo [_{vP} zibun
V]v]V] v]

Saito argues that if an element in SpecvP can count as 'subject,' why *Taroo-ni* in (12b) is qualified as the antecedent for *zibun* can be accounted for.

On the other hand, Saito also argues that, when the object is scrambled, it cannot be qualified as the antecedent for *zibun*, though it moves through SpecvP.

- (13) a. Taroo-o_i Hanako-ga *t_i* zibun-no
T.-Acc H-Nom self-Gen
ie-de sikat-ta
house-at scold-past
'Hanako scolded Taro at her/*his house'
- b. [Taroo-o [_{vP} *t_i* [_{vP} Hanako-ga [_{vP} zibun
-no ie-de *t_i* sikar] v] ta]

To account for this, Saito proposes that an element in SpecvP can be qualified as the antecedent for *zibun* only if it checks [EPP] of *v*.

As shown above, in VVCs, the object moves through SpecvP. If it checked [EPP] of *v*, it could be qualified as the antecedent of *zibun*. However, it cannot be borne out. As in (14),

Taro can be qualified as the antecedent for *zibun*, but *Hanako* cannot.

- (14) a. Taroo-ga Hanako-o zibun-no
 T.-Nom H-Acc self-Gen
 ie-de yaki-korosi-ta
 house-at burn-kill-past
 'Taro burned Hanako to death at his/*her house'
- b. Taroo-ga Hanako-o zibun-no
 T.-Nom H.-Acc self-Gen
 kuruma-de hiki-korosi-ta
 car-with run-over-kill-past
 'Taro ran over Hanako with his/*her car to death'

This means, following Saito, that the object does not undergo feature checking on [EPP] in SpecvP. Therefore, we do not need to posit [EPP] on *v*.

3. Goal-driven Movement

3.1. Bošković's (2007) account for How to Drive Movement

Now, we can dispense with [EPP] to drive movement. If so, what derives movement? To account for it, Bošković (2007) proposes that the uninterpretable features on the moving element, or the 'goal', not on the target, motivates the movement of a phrase containing it.

- (15) [_{XP} ... X ... Y] (XP=phase)
 iF
 uK

In (15), *uK* of *Y*, which cannot be checked within *XP*, motivates the movement of *Y* to SpecXP. Bošković reformulates Last Resort as in (16) and argues that, if this movement would

not occur, *uK* of *Y* would not be checked, and the derivation would crash.

- (16) Bošković's (2007) Last Resort
 X undergoes movement iff without movement the structure will crash.

If this proposal is correct, there is no need to assign [EPP] on the intermediate Cs, therefore there is no feature checking on [EPP] there.

Furthermore, as a probe, *Y* in (15) will have to move to a position c-commanding the *uK* licenser to check the feature, so it will have to move to the closest position c-commanding the licenser; that is, the Spec position of the licenser.

- (17) [_{WP} Y W [_{XP} t_Y... X ... t_Y]]
 iF uF
 uK K

Notice that this movement is driven by the uninterpretable feature *uK* on *Y*, not [EPP] on *X*.

3.2. Goal-driven Movement in VVCs

Now, let us analyze the derivation of VVCs according to the goal-driven movement analysis.

3.2.1. [*uCase*] checking

It seems to be the case that, in VVCs, the realization of Cases is determined by the properties of V2, not those of V1, as the contrast between (21c) and (21d) shows.

- (18) a. Taroo-ga Hanako-o ot-ta
 T.-Nom H.-Acc chase-past
 'Taro chased Hanako'
- b. Taroo-ga Hanako-ni tui-ta
 T.-Nom H.-to reach-past
 'Taro reached Hanako'
- c. Taroo-ga Hanako-ni oi-tui-ta

- 'Taro caught up with Hanako'
 d. *Taroo-ga Hanako-o oi-tui-ta

Here, one question arises: Does any Case-checking occur in the V1 projection? Bošković argues that once uK is checked it must be immediately deleted. Therefore, once $[uCase]$ is checked and deleted, further Case-driven movement never occurs. Therefore, if $[uCase]$ s were checked in the V1 projection, there would be no motivation for Case-checked arguments to move further. Therefore, it is the most likely that there is no Case checking in the V1 projection.

Now, $[uCase]$ s of arguments in the V1 projection are left to be checked, so if they remain there, the derivation will crash. Therefore, due to the Last Resort in (16), they have to move into the V2 projection to have their $[uCase]$ s checked. In the course of the derivation, they move across the vP phase boundary, so they have to first move to Spec vP to avoid the PIC effects. At this point, the subject has already been merged in Spec vP , but the object has to move to Spec vP . Assuming multiple specifiers, it will move to the upper Spec position of v .

- (19) [_{VP} OBJ_j [_{VP} SUBJ [_{VP} t_i V1] v]]
 $[uCase]$ $[uCase]$

In (19), the object c-commands the subject, in which configuration the relevant facts in (2) can be accounted for. At the next stage of the derivation, V2 will be merged. As argued above, the movement for Case checking must be motivated by an uninterpretable feature of the goal, so unchecked $[uCase]$ of the object functions as a probe. Thus, the object moves to the Spec position of V2, in which position it

assumes theme role and has its $[uCase]$ checked and deleted, as in (20).

- (20) [_{VP} OBJ_j [_{VP} t_j [_{VP} SUBJ [_{VP} t_j V1] v]] V2]
 ~~$[uCase]$~~ $[uCase]$

At the next stage of the derivation, v will be merged. Here, the subject has $[uCase]$ to be checked, so it functions as a probe. Here I will assume that, because the checked $[uCase]$ of the object has already been deleted, it does not prevent the subject from moving over the object. After the subject assumes θ -role in Spec vP as in (21a), it further moves to SpecTP to have its $[uCase]$ checked, as in (21b).

- (21) a. [_{VP} SUBJ_i [_{VP} OBJ_j [_{VP} t_j [_{VP} t_i [V1] v]] V2] v]
 b. [_{TP} SUBJ_i [_{VP} t_i [_{VP} OBJ_j [_{VP} t_j [_{VP} t_i [V1] v]] V2] v] T]
 ~~$[uCase]$~~ ~~$[uCase]$~~

Thus, we can account for how the derivation of VVCs proceeds, with the insight of the several facts shown in (2) maintained.

3.2.2 Freezing Effect

As shown in (20), when $[uK]$ is checked, it must be immediately deleted, so the element bearing the checked $[uK]$ cannot move further. Bošković (2008a, b) calls this the *freezing effect*.

- (22) What_i does he think [_{CP} t_i that Mary bought t_i] (=4)

In (22), if some feature of what were checked in the embedded SpecCP, there would be no uninterpretable feature inducing further movement, therefore what would not have any motivation to move further, or 'frozen' in that

position. Therefore, in order for what to move to the matrix SpecCP, there must be no feature checking in the intermediate positions. Bošković formulates this as in (23).

(23) X probes for *uK* only once.

Now let us turn to the cases of VVCs. As shown above, NPs in the V1 projection move into the V2 projection to have their [*uCase*]s checked. This means, following the freezing effect mentioned above, that NPs cannot have their [*uCase*]s checked in the V1 projection.

4. How to License θ -roles?

Here, some implication about the licensing of θ -roles arises. Hornstein (1999) assumes that θ -roles are “features” on verbs and that there is no upper bound on the number of θ -roles a chain can have. Therefore, a NP can have, or check, several θ -roles in the course of derivation. Let's see (24).

(24) a. John hopes to leave

b. [_{IP} John [_{VP} John [hopes [_{IP} John to [_{VP} John leave]]]]]]

In (24), *John* first merges with V and it “checks” agent θ -role with *leave*, then it moves through the embedded SpecIP to the matrix SpecVP. In that position, it “checks” agent θ -role with *hope*.

4.1. Checking through Move?

My (2000) analysis follows Hornstein's (1999) proposals, and argues that arguments assume their θ -roles both in the V1 and V2 projections.

(25) a. Taroo-ga Hanako-o yaki-korosi-ta

b. [_{VP} SUBJ_i V [_{VP} OBJ_j [_{VP} t_j [_{VP} t_i [_{VP} t_j

< $\theta_{k\text{korosu}}$ > < θ_{korosu} > < θ_{yaki} > < θ_{yaki} >
yaki] v]] korosu] v]

However, as shown in 3.2.1, arguments do move in spite of the fact that they have “checked” their θ -roles in the V1 projection. If so, this kind of movement should be banned due to the freezing effect. Therefore, if Bošković's (2007) argument is right, we have to conclude that NPs cannot establish the θ -checking relations with their different licensors several times.

4.2. Checking through Agree?

In another way, how about licensing of θ -roles through Agree? As for Agree, Bošković (to appear) argues as (26).

(26) Bošković's (to appear) view on *Agree*

“... what derives Agree is valuation: only unvalued features can function as a probe.”

Furthermore, Bošković (to appear) argues that Case checking can be accounted for by valuation. He points out that the Case feature is clearly uninterpretable on both the Case assigner and the Case assignee. However, he also argues that, while (finite) T always governs Nominative, the Case of NPs depends on the syntactic context in which they occur, which means that T's Case is valued while NPs' Case are unvalued.

(27) a. T NP
[*val/uCase*] [*unval/uCase*]
b. John kissed Mary
[Nom] [Acc]
c. Mary kissed John
[Nom] [Acc]

Then he argues that the NP would move to

SpecTP and then probe T from this position. Since the NP has an unvalued Case feature, it can function as a probe. Therefore, under his recent analysis, what derives movement is inadequacy of valuation, not that of interpretability.

I believe the same analysis could hold on θ -roles. Suppose that θ -features are uninterpretable on both the θ -role assigner and the assignee. However, while V typically assigns the theme role and v the agent role, the θ -roles of NPs depend on the syntactic context in which they occur, therefore V/ v 's θ -features are valued and NPs' are unvalued.

- (28) a. NP V/ v
 [*unval/u* θ] [*val/u* θ]
 b. John kissed Mary
 <Agent> <Theme>
 c. Mary kissed John
 <Agent> <Theme>

As shown above, the unvalued feature can function as a probe. The object c-commands its checker, V, from the complement position and the subject c-commands its checker, v , from SpecvP. In these configurations, both θ -features can be Agreed and valued. Furthermore, Bošković (to appear) argues that the uninterpretable features can be deleted without checking when they are valued. Therefore, θ -feature-valued NPs have no motivation for further movement to evaluate other θ -features. Thus, in the current system, not only (re-)Merge but also Agree do not suffice to account for the licensing of θ -features. Therefore, we cannot maintain Hornstein's (1999) idea that θ -roles are "features" in any sense as long as we should maintain Bošković's argument that the motivation for movement

resides only in the 'goal'.

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now she is home.

The Meaning of *By Now*

Shinya Hirasawa
The University of Tokyo

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probability increase

1. Introduction

This paper attempts to identify the meaning of the English phrase *by now* (where *now* denotes the time of utterance) and to reveal its compositional and non-compositional aspects.¹ At first sight, it might seem that the meaning of *by now* is fully compositional and that it can straightforwardly be derived from the meanings of *by* and *now*. In fact, well-known English dictionaries including *Oxford Advanced Learners' Dictionary*, *Longman Dictionary of Contemporary English* and *Collins COBUILD Advanced Dictionary of English* do not treat *by now* as an idiom.

But a moment's reflection reveals that the reality is not so simple. If the meaning of *by now* were predictable from the meaning of *now* (i.e. the time of utterance) and that of *by* ("*By* refers to the time at which the result of an event is in existence" (Quirk et al. 1985: 692)), then (1b) would sound just as natural as (1a) does. As it is, however, such is not the case.

- (1) a. Susan left the store at 5:30 and **by six** she was home.
b. *Susan left the store at 5:30 and **by**

By is used in (1a) to imply that the state of Susan being at home at six was the result of her having left the store at 5:30. But the preposition cannot be used in (1b) to imply that the state of Susan being home at the speaking time is the result of her having left the store at 5:30. How could this discrepancy arise if the meaning of *by now* were fully compositional?

2. Earlier Descriptions

As far as I know, Quirk et al. (1985) and Leech and Svartvik (2002) are the only two earlier studies that touch on the meaning of *by now*.

Quirk et al. (1985: 692) offer the following example, but they do not make it clear whether the "but I'm not sure" part is essential.

- (2) She should be back **by now** (but I'm not sure).
(Quirk et al. (1985: 692))

With regard to this matter, Leech and Svartvik (2002: 87) indicate that as in Sentence (3) one often uses *by now* when uncertain about whether the event has actually transpired and that it is otherwise more preferable to use *already*.

- (3) The wound should have healed **by now**.
(Leech and Svartvik (2002: 87))

So it is tempting to assume that the concept of inference might somehow be the key to the correct use of *by now*.

However, there are examples like (4), where *by now* sounds somewhat incongruous even though it is used with an expression associated with inference.

(4) Taro: When will Ken be coming back to Japan? I thought he said he would some time next month, but ...

Miki: *He must be back **by now**, because he wrote in his blog yesterday that he'd eaten Japanese food for the first time in six months.

One must replace *by now* with *already* for Miki's response to sound wholly natural.

Conversely, there are examples where, even without any inference involved, *by now* sounds natural.

(5) We all know what you did **by now**. Everyone hates you **by now**.

(6) I am not planning to go into any details here. **By now**, everyone knows what Fanshawe's work is like. It has been read and discussed there have been articles and studies, it has become public property.

(Paul Auster, *The Locked Room*)

(7) As godfather to the boy and longtime friend of the father, Renzo has been participating in this grim saga for seven years, and **by now** there is little of anything left to say.

(Paul Auster, *Sunset Park*)

(8) I turn back and find him ripping the adhesive tape off his nose and pulling the feeding tube out of his stomach. I grab hold of his hand but

the tube is **by now** all the way out and a milky liquid pools into the bed. (COCA²)

(9) This subtle shift in use between *must* and *have to* is the result of recent shifts in the system of compelling modal verbs, especially in spoken American English. Up to the early 19th century, the only strong obligation marker was *must*. **By now** the semi-modals (*have got to* (53%) and *have to* (39%)) have almost completely ousted *must* (8%).

(Günter Radden and René Dirven, *Cognitive English Grammar*)

(10) **By now** several hundred thousand Poles have entered for competitions, and a special national archive has been developed for the material collected.

(Paul Thompson, *The Voice of the Past—Oral History*)

Examples (4)-(10) cast doubt on the analysis presented in Quirk et al. (1985) and Leech and Svartvik (2002), in that these examples suggest that the concept of inference is neither a sufficient condition nor a necessary condition for the use of *by now*. So it can reasonably be said that the crux of the matter lies somewhere else. But where?

3. Probability Increase

My hypothesis is that *by now* sounds natural when the speaker draws on knowledge that the probability of the event modified by *by now* occurring increases over time up to the time of utterance. This inferred probability increase associated with *by now* is depicted

in Fig. 1. For the sake of simplicity, the increase in probability is represented by a straight line, but in reality it should follow a much more complex path depending on the nature of the situation.

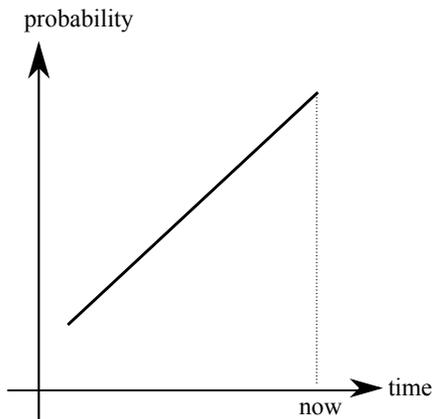


Fig. 1 Probability Increase Associated with ‘by now’

My hypothesis can explain the difference in naturalness between (2) and (3), on the one hand, and (4) on the other. The examples are repeated here:

- (2) She should be back **by now** (but I’m not sure).
- (3) The wound should have healed **by now**.
- (4) Taro: When will Ken be coming back to Japan? I thought he said he would some time next month, but ...
Miki: *He must be back **by now**, because he wrote in his blog yesterday that he’d eaten Japanese food for the first time in six months.

In (2), the speaker draws on the knowledge that the longer he waits, the more probable it is for the woman to have returned. In (3), the speaker says what he says because he knows that the probability of a wound healing increases over time. Thus, Sentences (2) and (3) meet the condition stipulated in my hypothesis. My interpretations of (2) and (3) might sound too restrictive, but that is because these examples are given without any contextual information, as is often the case with examples invented by linguists. In everyday life, *by now*, as with any other linguistic expression, is always experienced (i.e. said, written, heard, read, etc.) in linguistic and situational context. In Examples (11) and (12), *should [must] ... by now* is used in a context that makes it easier to conceptualize a relevant sort of probability increase.

- (11) “I always have tea,” he said. “You should know that **by now**.”
(Rebecca Brown, *The Gifts of the Body*)
- (12) But what *is* her gallery? She keeps coming here and taking away our best work. She must have stacks of it **by now**.
(Kazuo Ishiguro, *Never Let Me Go*)³

In (11), the man referred to as *he* has come down with AIDS, and the homecare worker he addresses in his remark has been serving him for some time. By the time we come across (11) in the book, we have this contextual information at hand from the preceding part of the story development. And this contextual information helps the sentence *You should know that by now* to

sound natural, because it is part of our common knowledge that the more time a person spends with another, particularly a caregiver, the more likely it is that habitual beverage preferences will become shared knowledge. In short, probability increase is evoked by contextual information in (11).

Similarly, in (12), *by now* sounds natural because we understand that the probability of ‘her’ having stacks of ‘our best work’ increases over time. Such understanding is derived from our reading of the preceding sentence *She keeps coming here and taking away our best work*.

We have thus seen that, in cases where *by now* is used with some inferential expression, the crucial factor is the probability increase, not the inference itself. This line of reasoning predicts that, even when used with an inferential expression, *by now* sounds strange if some probability increase is not involved. And this prediction is borne out by the facts. *By now* sounds unnatural in Miki’s utterance in (4) because the probability of Ken being back in Japan does not increase, but more likely remains the same, after Miki read in his blog that he had eaten Japanese food. So my hypothesis can explain the deviance of *by now* in (4). It thus turns out that inference, in and of itself, is not a key factor in the use of *by now*.

Now let’s turn to cases where *by now* sounds natural without the co-occurrence of any inferential expressions. Their naturalness can also be explained by my hypothesis. Pertinent examples are repeated here:

- (5) We all know what you did **by now**.
Everyone hates you **by now**.

- (6) I am not planning to go into any details here. **By now**, everyone knows what Fanshawe’s work is like. It has been read and discussed there have been articles and studies, it has become public property.

(Paul Auster, *The Locked Room*)

- (7) As godfather to the boy and longtime friend of the father, Renzo has been participating in this grim saga for seven years, and **by now** there is little of anything left to say.

(Paul Auster, *Sunset Park*)

- (8) I turn back and find him ripping the adhesive tape off his nose and pulling the feeding tube out of his stomach. I grab hold of his hand but the tube is **by now** all the way out and a milky liquid pools into the bed. (COCA)

To discuss the use of *by now* in (5), it helps to compare it with its *now* equivalent:

- (5) We all know what you did **by now**.
Everyone hates you **by now**.
(13) We all know what you did **now**.
Everyone hates you **now**.

The speaker in (5) draws on the knowledge that the probability of all the speakers knowing the hearer’s actions increases over time. The probability increase associated with *by now* in the first sentence of Example (5) is depicted in Fig. 2.

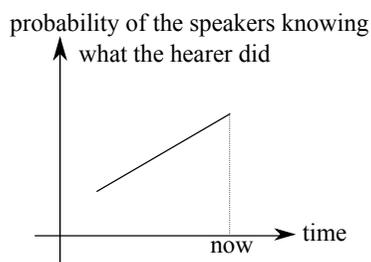


Fig. 2 Probability Increase Associated with ‘by now’ in *We all know what you did by now*

My hypothesis is consistent with native speakers’ intuition that Example (5) strongly suggests that people found out about the hearer’s actions one by one and turned against him individually, or that they gradually found out the full extent of his actions and turned against him more and more until they hated him. The probability increase hypothesis explains that this effect comes from the use of *by now*. It leads the hearer to interpret the state of all the people concerned knowing of and hating his actions as one for which the probability increases over time. On the other hand, Example (13), where *now* rather than *by now* is used, implies that his actions were revealed to everyone at once, at which point everyone immediately turned against him. This lends support to our view that increasing certainty over time makes it possible to use *by now*.

By the same token, in (6), *by now* is possible because, as is suggested by the third sentence, more and more people have become familiar with Fanshawe’s work, i.e., it has become more and more likely that everyone is familiar with its characteristic style.

In (7), the speaker draws on the encyclopedic knowledge that, when two

people share the same place, it is more and more probable with the passage of time that there is little of anything left to say to one another. As for (8), it should be noted that *all the way* suggests that the final state described is a sort of culmination. So we could say here as well that increasing certainty enables the use of *by now*.

What *we all* and *everyone, little and all the way* convey in (5), (6), (7) and (8) respectively is sometimes achieved by specific numerical expressions as in (9) and (10).

- (9) This subtle shift in use between *must* and *have to* is the result of recent shifts in the system of compelling modal verbs, especially in spoken American English. Up to the early 19th century, the only strong obligation marker was *must*. **By now** the semi-modals (*have*) *got to* (53%) and *have to* (39%) have almost completely ousted *must* (8%).

(Günter Radden and René Dirven,
Cognitive English Grammar)

- (10) **By now** several hundred thousand Poles have entered for competitions, and a special national archive has been developed for the material collected.

(Paul Thompson, *The Voice of the Past—Oral History*)

As percentages, 53% and 39% are rather high, at least compared with 8%. This makes it natural to evoke probability increase, that is, to think that the proportions of (*have*) *got to* and *have to* are more and more likely to

reach the specified levels (53% and 39%) as time passes. Similarly with (10). “Several hundred thousand” is a large number that naturally takes quite a long time to reach. Hence the hearer can readily associate the situation described with a probability increase over time.

Now we are in a position to turn back to the asymmetry between (1a) and (1b):

- (1) a. Susan left the store at 5:30 and **by six** she was home.
b. *Susan left the store at 5:30 and **by now** she is home.

As suggested in Quirk et al. (1985: 692), the temporal *by* (except in *by now*) “refers to the time at which the result of an event is in existence,” regardless of whether any concept of probability increase is involved. Sentence (1a) is compatible with this description. Six o’clock is construed as the time at which the result of Susan having left the store at 5:30 was observed. This is why (1a) sounds natural. On the other hand, *by now* strongly suggests that the speaker draws on knowledge of a probability increase. This suggestion creates a conflict with the “she is home” component of (1b). The speaker who says *she is home* knows for certain that the woman is already home. There is thus no need for the speaker to depend on the knowledge that the longer the speaker waits after Susan leaves the store, the more likely she is back. Hence the unnaturalness of (1b).

4. Concluding Remarks: How Compositional Is the Meaning of *By Now*?

It follows from my description that the semantic property of *by now* is neither fully compositional nor fully non-compositional. It is compositional and predictable to the extent that the event or state modified by *by now* is construed as a resultant state, as is the case with temporal *by*-phrases at large. At the same time, it is non-compositional and unpredictable to the extent that *by now* involves probability increase, which is not a crucial factor in the use of temporal *by*-phrases as a whole.

Such partial compositionality as we have observed in *by now* is not at all rare in language (Taylor 2006, Goldberg and van der Auwera 2012). Rather, “it is the fully regular, the fully compositional, that is exceptional” (Taylor 2012: 72). Thus, if we want to grasp fully how language is used, it is not sufficient to reveal the meaning(s) of each individual word: we should also attempt to gain an insight into semantic and pragmatic aspects of larger units such as phrases and collocations. These properties, however straightforward as they may seem, are actually idiosyncratic and unpredictable to some extent, which I hope has been vividly illustrated through the present study on *by now*.

Notes

1. “According to the compositionality principle, complex expressions are formed by the assembly of smaller units, such that the properties of the whole can be predicted from the properties of the parts and the manner of their combination.” (Taylor 2006: 61)
2. Davies, Mark. (2008-) *The Corpus of Contemporary American English*: 450

million words, 1990-present. Available online at <http://corpus.byu.edu/coca/>.

3. The first emphasis in the example is not mine. The woman denoted by the singular female pronoun is described in the novel as a “guardian,” though the profession as such is more or less the same as a “teacher” in everyday language. This particular guardian habitually takes away works of art created by her students (including the speaker in the example) and makes a collection of them. She is thus rumored to have a “gallery” that stocks them.

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Max Elide and Derivational Economy

Hiroko Kimura

Tohoku University (Part-time Lecturer)

Keywords: Max Elide, Category Movement,
PF Adjacency

1. Introduction

This paper examines maximization effects observed in ellipsis environments, which is illustrated in (1).

(1) Object Extraction

- They studied a Balkan language,
- a. ?? but I don't know which Balkan language they did [_{VP} study ~~t_{A'}~~].
- b. but I don't know which Balkan language [_{TP} they studied ~~t_{A'}~~].

(Lasnik (2001))

Given the possibility of deleting a larger domain via sluicing, which is illustrated in (1b), VP-Ellipsis, by which a smaller constituent is deleted, is prohibited in (1a). The maximization effects have been captured by the Max Elide condition, the ban on deleting a smaller constituent in cases where deletion of a larger constituent is possible. This paper considers problems of the Max Elide condition and proposes an economy-based account for the data which have been captured by the condition.

2. The Max Elide Condition

Merchant (2008) defines the Max Elide condition as in (2).

(2) Max Elide

Let XP be an elided constituent containing an

A'-trace. Let YP be a possible target for deletion. YP. YP must not properly contain XP. (Merchant (2008))

This condition means that deletion has to eliminate the biggest deletable constituent if an ellipsis site contains an A'-trace. It successfully rules out (1a), where the elided VP contains an A'-trace created via wh-movement.

At the same time, the condition rules in (3a).

(3) Subject Extraction

Someone solved the problem.

- a. Who [_{TP} t_{A'} did [_{VP} ~~t_{A'} solve the problem~~]]?
- b. Who [_{TP} ~~t_{A'} solved the problem~~]?

Here, the possibility of sluicing illustrated in (3b) does not block that of VP-Ellipsis in (3a). In (3a), the wh-phrase is subject. It is base-generated inside VP in accordance with the VP Internal Subject Hypothesis (cf. Kitagawa (1986)), and moves to Spec-CP for the EPP requirement. Then, it further moves to Spec-CP via wh-movement. This means that the trace inside the elided VP is an A'-trace. Then, Merchant's Max Elide condition is vacuously satisfied, since the ellipsis site does not contain an A'-trace.

As shown above, Merchant's Max Elide condition can explain the subject-object asymmetry, which is illustrated by the contrast (1a) and (3a). Even if the condition is descriptively correct, however, it is unclear why deletion is affected by the presence of A'-trace. Merchant's Max Elide condition resorts to an ad hoc A-A' distinction. In this sense, it is not a principled explanation.

Besides the conceptual problem, the condition faces empirical difficulties. For instance, Takahashi (2006) points out that it fails to account for the following examples, which we dub 'co-binding' cases here.

(4) *Co-binding*

- a. I know which puppy you said Mary would adopt $t_{A'}$ and Fred said she would [_{VP} ~~adopt~~ $t_{A'}$]
b. I know which puppy you said Mary would adopt $t_{A'}$ and Fred did [_{VP} ~~say~~ ~~she would adopt~~ $t_{A'}$]

(Takahashi (2006))

Here, two VPs are candidates for deletion: the embedded VP as shown in (4a) and the embedding VP as shown in (4b). The object wh-phrase undergoes wh-movement in an ATB fashion. This means that the trace inside the ellipsis site is an A'-trace. Given the possibility of deleting the larger VP illustrated in (4b), Merchant's Max Elide condition wrongly rules out (4a), where the smaller VP is deleted.

To sum up, Merchant's Max Elide condition faces both conceptual and empirical problems. Crucially the condition resorts to an ad hoc A-A' distinction. In what follows, we present an economy-based account, which can account for the Max Elide paradigms without recourse to the ad hoc A-A' distinction.

3. Theoretical Apparatus

Before presenting the account, we introduce one theoretical apparatus: Agbayani's (2000), Agbayani and Ochi's (2006) movement theory. According to the theory, overt movement consists of two sub-operations: feature movement and category movement, and the latter is regulated by what I dub the 'PF Adjacency Condition' here.

(5) *The PF Adjacency Condition*

- a. F and its category have to be adjacent to each other.
b. Two elements are adjacent if no elements that are visible at the interface intervene between them.

(based on Agbayani (2000))

The condition requires that a formal feature (a bunch of formal features) moved by feature movement and its remnant category should be phonetically adjacent to each other.

Let us consider how the movement mechanism works with (6), where the object wh-phrase undergoes wh-movement.

(6) What did you buy?

- a. [_{CP} C_[Q] [_{TP} you T buy what_[+WH]]]
 ∇ Feature Movement
b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you T buy what]]]
 ∇ Movement of Category
c. [_{CP} what_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you T buy t_i]]]]

In order to check the *Q*-feature, the wh-feature moves to Spec-CP via feature movement, leaving its category behind. If the derivation should stop at this stage, the PF Adjacency Condition would be violated, since *you* and *buy* intervene between the wh-feature and its category. In order for the condition to be satisfied, the wh-phrase undergoes category movement and moves to the outer Spec-CP. This is how overt movement involves feature movement and category movement.

One of the consequences of the movement theory is that when the PF Adjacency Condition can be satisfied directly after feature movement, the application of category movement is unnecessary. One such case is local subject movement, exemplified in (7).

(7) Who will come?

- a. [_{CP} C_[Q] [_{TP} who_[+WH] will come]]
 ∇ Feature Movement
b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} who will come]]]

Directly after feature movement takes place, the relation between the wh-feature and its category satisfies the PF Adjacency Condition, since no overt elements intervene between them.

Agbayani and Ochi claim that in this case, the application of category movement is banned by the economy principle which precludes superfluous steps in the derivation.

The gist of Agbayani and Ochi's movement theory is summarized as follow. Category movement is regulated by the PF Adjacency Condition. The unnecessary application of category movement is prohibited by the economy principle.

4. Proposal

Utilizing the movement mechanism just reviewed, we propose an economy-based account of the Max Elide paradigms. Our main claim is that derivations of the degraded or ungrammatical examples involve more derivational steps than those of grammatical examples. Then, the former is excluded by the economy principle. Before revisiting the Max Elide paradigms, let me introduce one crucial assumption regarding deletion. Following Den Dikken, Meininger and Wilder (2000), we assume that deletion can affect non-constituents. More specifically, we defines sluicing and VP-Ellipsis as in (8).

- (8) a. *Sluicing*
 – delete all the recoverable elements except a focused phrase inside a TP constituent.
- b. *VPE*
 – delete all the recoverable elements except a focused phrase inside a VP constituent.

With the definitions in mind, let us reconsider the Max Elide paradigms.

4.1. Object Extraction

Let us start with (1), reproduced as (9), the typical example of Max Elide.

(9) Object Extraction

- They studied a Balkan language,
 a. ?? but I don't know which Balkan language they did [_{VP} ~~study~~ _{LA'}].
 b. but I don't know which Balkan language [_{TP} ~~they studied~~ _{LA'}].

The example of sluicing is derived as in (10).

- (10) a. [_{CP} C_[Q] [_{TP} they studied which Balkan language_[+WH]]]
 ⇓ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} they studied which Balkan language]]]
 ⇓ Deletion (Sluicing)
 c. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} ~~they studied~~ which Balkan language]]]

Here, the wh-phrase survives deletion because it is a focused phrase. Of importance is that deletion eliminates all the interveners between the wh-feature and its category, so that the PF Adjacency Condition is satisfied without recourse to category movement.

Next let us consider (9a), which has been excluded via the Max Elide condition. If the wh-phrase should not undergo category movement, we would have a derivation like (11).

- (11) a. [_{CP} C_[Q] [_{TP} they did [_{VP} study which Balkan language_[+WH]]]]
 ⇓ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} they did [_{VP} study which Balkan language]]]]]
 ⇓ Deletion (VP-Ellipsis)
 c. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} they did [_{VP} ~~study~~ which Balkan language]]]]]

Here, deletion takes place as in (11c) in accordance with (8b). This operation cannot delete all the interveners between the wh-feature and its category; *they* and *did* still intervene between them in the eventual representation. Therefore, the derivation results in a violation of

the PF Adjacency Condition. In order for the condition to be satisfied, the wh-phrase has to undergo category movement as shown in (12).

- (12) a. [_{CP} C_[Q] [_{TP} they did study which Balkan language_i [_{CP} [+wh]]]]
 ⇓ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} they did study which Balkan language]]]
 ⇓ Category Movement
 c. [_{CP} which Balkan language_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} they did [_{VP} study *t_i*]]]]]
 ⇓ Deletion (VP-Ellipsis)
 d. [_{CP} which Balkan language_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} they did [_{VP} ~~study *t_i*~~]]]]]

Although this derivation satisfies the PF Adjacency Condition, it is less economical than the derivation in (10) in that it involves category movement. Therefore, it is ruled out by the economy principle which precludes superfluous steps. This is how the typical Max Elide paradigm can be recaptured.

4.2. Subject Extraction

Next, let us consider the subject extraction case, reproduced as (13).

- (13) *Subject Extraction*
 Someone solved the problem.
 a. Who [_{TP} *t_{A'}* did [_{VP} *t_A* ~~solve the problem~~]]?
 b. Who [_{TP} ~~*t_{A'}* solved the problem~~]?

Recall that the possibility of sluicing does not exclude that of VP-Ellipsis. Let us start by considering the derivation of sluicing.

- (14) a. [_{CP} C_[Q] [_{TP} who_[+WH] solved the problem]]
 ⇓ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} who solved the problem]]]
 ⇓ Deletion (Sluicing)

- c. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} who ~~solved the problem~~]]]

The subject wh-phrase moves to Spec-TP for the EPP requirement. Since this position is adjacent to the landing site of the wh-feature, the PF Adjacency Condition is satisfied without recourse to category movement. The example of VP-Ellipsis is also derived in a similar way, as shown in (15).

- (15) a. [_{CP} C_[Q] [_{TP} who_[+WH] did [_{VP} solve the problem]]]
 ⇓ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} who did [_{VP} solve the problem]]]]
 ⇓ Deletion (VP-Ellipsis)
 c. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} who did [_{VP} ~~solve the problem~~]]]]]

Again, the subject wh-phrase occupies a position adjacent to the landing site of the wh-feature, so that the PF Adjacency Condition is satisfied without recourse to category movement. Crucially, both the derivations are economically equal in that they do not involve category movement. Hence, the example of VP-ellipsis is successfully derived as well as that of sluicing.

4.3. Co-binding

Let us move on to a more complicated case, the co-binding case reproduced as (16).

- (16) *Co-binding*
 a. I know which puppy you said Mary would adopt *t_{A'}* and Fred said she would [_{VP} ~~adopt *t_{A'}*~~]
 b. I know which puppy you said Mary would adopt *t_{A'}* and Fred did [_{VP} ~~say she would adopt *t_{A'}*~~]

Here, deletion of the smaller VP is allowed as well as that of larger VP. (16a) is derived as in (17).

(17) a. [_{CP} C_[Q] [_{TP} you said Mary would [_{VP} adopt which puppy_[+WH]]] and [_{TP} Fred said she would [_{VP} adopt which puppy_[+WH]]]]

∅ Feature Movement

b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you said Mary would [_{VP} adopt which puppy]] and [_{TP} Fred said she would [_{VP} adopt which puppy]]]

∅ Category Movement

c. [_{CP} which puppy_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you said Mary would [_{VP} adopt *t_i*]] and [_{TP} Fred said she would [_{VP} adopt *t_i*]]]]]

∅ Deletion (VP-Ellipsis)

d. [_{CP} which puppy_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you said Mary would [_{VP} adopt *t_i*]] and [_{TP} Fred did say she [_{VP} ~~would adopt *t_i*~~]]]]]

The wh-phrase has to undergo category movement; otherwise the PF Adjacency Condition would never be satisfied. (16b) is derived in a similar fashion, as shown in (18).

(18) a. [_{CP} C_[Q] [_{TP} you [_{VP} said Mary would adopt which puppy_[+WH]]] and [_{TP} Fred did [_{VP} say she would adopt which puppy_[+WH]]]]

∅ Feature Movement

b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you [_{VP} said Mary would adopt which puppy]] and [_{TP} Fred did [_{VP} say she would adopt which puppy]]]]]

∅ Category Movement

c. [_{CP} which puppy_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you [_{VP} said Mary would adopt *t_i*]] and [_{TP} Fred did [_{VP} say she would adopt *t_i*]]]]]

∅ Deletion (VP-Ellipsis)

d. [_{CP} [which puppy]_i [_{CP} [+wh] [_{C'} C_[Q] [_{TP} you said Mary would adopt *t_i*]] and [_{TP} Fred did [_{VP} ~~say she would adopt *t_i*~~]]]]]

Again, the application of category movement is a necessary operation. Since both the derivations involve the same number of operations, (16a) can be derived in addition to (16b).

4.4. Interim Summary

So far, we have presented an economy-based account of the Max Elide paradigms. The current account is superior to Merchant's Max Elide condition in two respects. First, in order to capture the subject-object asymmetry, the contrast between (1a) and (3a), Merchant resorts to an ad hoc A-A' distinction. Without the distinction, on the other hand, the current account can explain the subject-object asymmetry. Second, the economy-based account can accommodate the 'co-binding' case, which poses an empirical problem to Merchant's account.

5. Further Advantages

This section presents one further argument in favor of the economy-based account. It comes from a certain matrix-embedded asymmetry.

5.1. Matrix-Embedded Asymmetry

We have examined the data involving argument extraction. Now let us turn our attention to adjunct extraction. Hartman (2007) observes that adjunct extraction out of an ellipsis site exhibits an intriguing matrix-embedded asymmetry.

(19) a. John said Mary would leave, but I forget when.

b. John said Mary would leave, but I forget when he did.

(Hartman (2011))

- (24) a. [_{CP} C_[Q] [_{TP} when_[+WH] [_{TP} he said Mary would leave]]]
 ∅ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} when [_{TP} he said Mary would leave]]]]
 ∅ Deletion (Sluicing)
 c. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} when [_{TP} ~~he said Mary would leave~~]]]]

The wh-phrase is base-generated in a position adjoined to Spec-TP, a position adjacent to the landing site of the wh-feature. Therefore, the PF Adjacency Condition is satisfied without recourse to category movement. The example of VP-Ellipsis is derived in a similar way.

- (25) a. [_{CP} C_[Q] [_{TP} when_[+WH] [_{TP} he did [_{VP} say Mary left]]]]]
 ∅ Feature Movement
 b. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} when [_{TP} he did [_{VP} say Mary left]]]]]]
 ∅ Deletion (VP-Ellipsis)
 c. [_{CP} [+wh] [_{C'} C_[Q] [_{TP} when [_{TP} he did [_{VP} ~~say Mary left~~]]]]]]

Again, the underlying position of the wh-phrase is adjacent to the landing site of the wh-feature, so that category movement is unnecessary. Since both the derivations are economically equal, the matrix reading is obtained both in sluicing and in VP-Ellipsis.

This is how the economy-based account captures not only the lack of the embedded reading but also the possibility of the matrix reading in VP-Ellipsis.

6. Conclusion

This paper has presented an economy-based account of the Max Elide paradigms. The gist of our proposal is as follows. Since the degraded or ungrammatical examples are derived through more derivational steps than grammatical ones, the former is excluded by the economy

principle.

The economy-based account is superior to Merchant's explanation based on the Max Elide condition in two respects. First, the economy based-account need not resort to the ad hoc A-A' distinction. Second, it can accommodate the 'co-binding' case, which poses a problem to Merchant's account.

As long as the whole discussion is on the right track, it presents a novel argument in favor of derivational economy.

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The ‘N *after* N’ Construction and Its Theoretical Implications*

Kazuya Kudo
Kwansei Gakuin University

Keywords: ‘N *after* N’, productivity, strong N-feature, multiple pronunciation of a copy, cyclic feature deletion

1. Introduction

The NPN construction (Jackendoff (2008)) is a particular construction with two identical nouns paralleled by prepositions.

- (1) a. *Page for page*, this is the best-looking book I’ve ever bought.
- b. John and Bill, *arm in arm*, strolled through the park.
- c. We went through the garden *inch by inch*.
- d. Your *day-to-day* progress is astounding.
- e. *Student upon student* flunked.
- f. We looked for *dog after dog*.

(Jackendoff (2008: 9))

Previous studies almost exclusively treat these constructions as some kind of “idioms” due to their peculiar grammatical properties (Williams (1994), Matsuyama (2004), Jackendoff (2008)).

However, the productivity of the construction varies according to the choice of prepositions. For example, ‘N *after* N’ takes any N as its part, as in (2a), but others do not:

- (2) a. after: day after day, page after page, picture after picture, term paper after term paper

- b. to: hand to hand, back to back, cheek to cheek, ?finger to finger, ?front to front, ?lip to lip
- c. over: hand over hand, *finger over finger

Furthermore, ‘N *after* N’ seems to have a certain internal syntactic structure: it allows prenominal adjectives (3a), postnominal adjuncts (3b), and triplication (3c).

- (3) a. day after miserable day
(cf. *side by firm side)
- b. day after day of rain
(cf. *day to day of rain)
- c. week after week after week
(cf. *page for page for page)

Based on the data cited above, we can readily tell that ‘N *after* N’ is productive enough to be considered in syntax, given that the productivity of language only resides in its systematicity and recursiveness at syntax.¹

In a nod to its high productivity, I will claim in this paper that ‘N *after* N’ is indeed generated *syntactically* (i.e., obeying general syntactic rules and principles), whereas other forms of NPN constructions may still be examples of lexical or constructional idioms.

The paper is organized as follows: Section 2 discusses the syntactic category of ‘N *after* N’ and proposes that ‘N *after* N’ is a QP headed by a null quantifier. Section 3 investigates the internal structure of ‘N *after* N’ and presents a movement analysis of the construction. Section 4 addresses the issue of multiple occurrence of N in ‘N *after* N’ and gives a purely syntactic treatment to the phenomenon. Section 5 is a conclusion.

2. Syntactic Category of ‘N *after* N’

Let us begin by examining the syntactic category of ‘N *after* N’ and demonstrate that ‘N

N-feature of Q can be checked-off via the head-comp relation, since Q usually takes an NP as its complement (i.e., $[_{QP} Q NP_{[+N]}]$).

In the case of ‘N *after* N,’ however, the complement of Q is a PP, which does not hold an N-feature. Therefore, the head-comp checking of Q’s strong N-feature cannot be achieved in this construction. As a result, the NP in the complement domain of Q needs to be moved up (i.e., Copied and Merged) into [Spec, QP] (due to “last resort”) in order to check-off Q’s strong N-feature via the spec-head relation instead. The relevant structure is given in (10):

(10) $[_{QP} NP_i_{[+N]} [_{Q'} Q [_{PP} P NP_i_{[+N]}]]]$

We will see in the rest of this section that the phonological sequence of ‘N *after* N’ and all the peculiar properties of the construction result from this movement analysis.

The direct consequence of this analysis is that the first N in ‘N *after* N’ is a copy of the second N. Therefore, the first N can have prenominal adjectives (or postnominal adjuncts) only if the second N does.

- (11) a. day after miserable day
 b. miserable day after miserable day
 c. *miserable day after day

Note that (11a) conveys the same meaning as (11b), as should be expected from our analysis. (11c) is ill-formed simply because the structure, where the first N and the second N are not identical (i.e., $[_{QP} [_{NP} AP NP_i] [_{Q'} Q [_{PP} P NP_i]]]$), is incompatible with the Copy Theory. Even if we simulate an alternative derivation, in which AP is adjoined to the moved NP, the structure (i.e., $[_{QP} [_{NP} AP NP_i] [_{Q'} Q [_{PP} P NP_i]]]$) is ruled out due to the Extension Condition (Chomsky (1993, 1995)) in (12):

(12) *The Extension Condition*

Syntactic operations must extend the tree at the root.

Yet another derivation, in which AP is adjoined to the whole QP (i.e., $[_{QP} AP [_{QP} NP_i [_{Q'} Q [_{PP} P NP_i]]]]]$), violates the selectional property of AP, in that AP cannot adjoin to QP (e.g., **beautiful each day*). Thus, the derivation for (11c) cannot be converged in any case.

By the same token, our analysis can correctly rule out the derivation in which adjectives are different between the first N and the second N, as in (13).

(13) *miserable day after awful day

(13) is bad because the structure (i.e., $[_{QP} [_{NP} AP_b NP_i] [_{Q'} Q [_{PP} P [_{NP} AP_a NP_i]]]]]$) is incompatible with the Copy Theory. Again, even if we take an alternative derivation, in which AP is adjoined to the moved NP, the structure (i.e., $[_{QP} [_{NP} AP_b NP_i] [_{Q'} Q [_{PP} P [_{NP} AP_a NP_i]]]]]$) is still ruled out due to the Extension Condition. Yet another derivation, in which AP is adjoined to the whole QP (i.e., $[_{QP} AP_b [_{QP} NP_i [_{Q'} Q [_{PP} P [_{NP} AP_a NP_i]]]]]$), also violates the selectional property of AP, as described above.

The second consequence of the proposed analysis is that the first N in “N *after* N” is a moved constituent. This becomes evident in the triplicated version of ‘N *after* N’, where prenominal adjectives (or postnominal adjuncts) can appear either on the last noun or on all of them, as seen in (14).²

- (14) a. week after week after miserable week
 b. miserable week after miserable week after miserable week
 c. *week after miserable week after miserable week
 d. *miserable week after week after week

(14d) is simply impossible because of the same reasons discussed above. Here we take up (14c) to show that our analysis is actually on the right track. The syntactic structure of (14c) is given in (15):

Tanaka, Hiroyuki Tanaka, Hiroyuki Ura and the audience at the meeting for their helpful comments. I am also grateful to Christopher Ahern, who helped me with the English data. Special thanks go to Tsutomu Ohna for his invaluable comments and suggestions on this topic. All remaining errors are my own.

Notes

¹ In fact, the data cited in Jackendoff (2008) suggest that ‘N *after* N’ is the most productive among all NPN constructions. ‘N *upon/on* N’, ‘N *by* N’, ‘N *for* N’ and ‘N *to* N’ are semi-productive, in that they allow some of the productivity tests, while ‘N *over* N’, ‘N *in* N’ and ‘N *from* N’ seem to have no productivity at all.

² Jackendoff (2008) notes that in the triplicated ‘N *after* N’ construction, the second N and the third N may be modified by different adjectives.

(i) week after miserable week after thoroughly rotten week (Jackendoff (2008: 21))

This construction may have a different syntactic structure from the types of ‘N *after* N’ discussed here. In fact, each occurrence of *week* in (i) has a different denotation, and, curiously enough, the sense of (i) is that the weeks get successively worse, while the literal meaning of *after* suggests that the worst week comes first. We leave this issue open for future research.

³ Note that the NP_i in (15) is not *frozen* on the site, because it is assumed to bear a Focus feature to be checked-off in the future derivation. In fact, Jackendoff (2008) notes that triplication carries the semantic force of an intensifier. Thus, (14b) is possible, since it is not the case with Criterial Freezing given in (ii):

(ii) *Criterial Freezing* (Rizzi (2006: 112))

A phrase meeting a criterion is frozen in place.

(Criterion: YP+F X+F for [+F] = a feature expressing a scope-discourse property: Top, Foc, Q, Rel, ...)

⁴ As is well known, it is common for children to pronounce a copy of the moved element.

(iii) *English Child Grammar* (Thornton (1990))

Who do you think really **who**’s in the can?

⁵ The cross-linguistic data suggest that phonetic realization of multiple copies of an item is not rare in UG. In fact, there are many languages where the head of the chain and some of its traces are phonetically realized (see Nunes (2004) for the relevant data and discussion).

(iv) *German* (Fanselow and Mahajan (2000))

Wovon glaubst Du **wovon** sie
what-of believe you what-of she
träumt?
dreams

“What do you believe that she dreams of?”

(v) *Romani* (McDaniel (1986))

Kas misline **kas** o Demiri dikhlâ?
whom you whom Demir saw
“Who do you think Demir saw?”

(vi) *Afrikaans* (du Plessis (1977))

Met wie het jy nou weer gesê
with who did you now again said
met wie het Sarie gedog **met wie**
with who did Sarie thought with who
gaan Jan trou?
go Jan marry

“Whom did you say (again) that Sarie thought Jan is going to marry?”

(vii) *Frisian* (Hiemstra (1986))

Wêr tinke jo **wêr**’t Jan wennet?
where think you where-that Jan lives
“Where do you think that Jan lives?”

Interestingly enough, the data from Afrikaans in (vi) clearly shows that not only the tail but also the intermediate copy of a chain may be pronounced overtly.

⁶ If this assumption is plausible, the data in (14c) may also be explained by the condition on phase edges.

(viii) *Edge Condition* (Gallego and Uriagereka (2007:55))

Syntactic objects in phase edges are internally frozen.

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Relative Pronoun-Less Relative Clauses in Modern Urdu

Hideki Maki and Amanullah Bhutto
Gifu University and Islamabad College for Boys
G-6/3

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Urdu

1. INTRODUCTION

This paper examines relative pronoun-less relative clauses in Modern Urdu (Urdu, hereafter), and investigates what their properties suggest for the theory of (Urdu) syntax.

The organization of this paper is as follows. Section 2 provides basic syntactic properties of Urdu as the background to the subsequent sections. Section 3 presents data on relative clauses and the distribution of the genitive subject in Urdu. Section 4 discusses what the data suggest for the theory of (Urdu) syntax. Finally, Section 5 concludes the paper.

2. BACKGROUND

Urdu is a register of the Hindi-Urdu or Hindustani language, and belongs to the Indo-European family. It is the national language of Pakistan. In this section, we provide basic properties of clausal structures and the case system in Urdu as the background to the subsequent sections.

First, Urdu is an ergative-absolutive language. An ergative-absolutive language maintains a syntactic or morphological equivalence for the object of a transitive verb and the single argument of an

intransitive verb, while treating the agent of a transitive verb differently. Consider the examples in (1) and (2).¹

- (1) John- \emptyset /*-ne yahan pohncha.
John-Abs/-Erg here arrived
'John arrived here.'
- (2) John-ne/*- \emptyset kitab- \emptyset khareedi.
John-Erg/-Abs book-Abs bought
'John bought the book yesterday.'

In (1), the subject of the intransitive verb bears no morphological case marker. In this paper, we assume that the morphologically null case marker is the absolutive case marker, which we represent as \emptyset . On the other hand, in (2), the subject of the transitive verb is marked with the ergative case marker *-ne* 'Erg.' Note that the object of the transitive verb is marked absolutive, just like the subject of the intransitive verb in (1).

Second, Urdu shows person agreement between the subjects and the predicates, as shown in (3). In the following, we will see the forms for future tense for the predicate 'to see.'

- (3) a. Main John-ko dekhun-ga.
I John-to will.see.1.SG.
'I will see John.'
- b. Tum John-ko dekho-ge.
you John-to will.see.2.SG.
'You will see John.'
- c. Woh John-ko dekhe-ga.
he John-to will.see.3.SG.M.
'He will see John.'

Third, Urdu has two types of relative clauses. Kachru (1978), among others, investigates the relative clause formation in Urdu, focusing on relative clauses with the relative pronoun starting with the [j] sound, as shown in (4).

- (4) Jo kitab John-ne kal
the book John-Erg yesterday
khareedi buhut dilchasp hai.
bought very interesting be.PRES

‘The book which John bought yesterday is very interesting.’

We call this the English type relative clause. In (4), *jo* functions as the relative pronoun. However, there is another type of relative clauses in Urdu, which do not make use of the relative pronoun, as shown in (5).

- (5) Kal John-ki khareedi-hui
yesterday John-Gen bought-PERF
kitab buhut dilchasp hai.
book very interesting be.PRES
‘The book which John bought yesterday is very interesting.’

We call this the Japanese type relative clause.

In this paper, we will mainly focus on Japanese type relative clauses in Urdu, and consider what their properties suggest for the theory of (Urdu) syntax.

3. DATA

With the background established, let us now summarize some properties of relative pronoun-less relative clauses in Urdu. First, the subject can only be marked genitive, as shown in (6).

- (6) Kal John*-ne/-ki
yesterday John*-Erg/-Gen
khareedi-hui kitab buhut dilchasp
bought-PERF book very interesting
hai.
be.PRES
‘The book which John bought yesterday is very interesting.’

On the other hand, in the English type relative clause, the subject must be marked ergative, not genitive, as shown in (7).

- (7) Jo kitab John-ne/*-ki kal
the book John-Erg/-Gen yesterday
khareedi buhut dilchasp hai.
bought very interesting be.PRES
‘The book which John bought yesterday is very interesting.’

Note here that the possessor noun in (6) is marked with the genitive case marker *-ki* or *-ka*, depending on the gender of the head noun, as shown in (8).

- (8) a. Mary-ki beti
Mary-Gen.F daughter.F
‘Mary’s daughter’
b. Mary-ka beta
Mary-Gen.M son.M
‘Mary’s son’
c. Mary-ki betiyan
Mary-Gen.PL.F daughter.PL.F
‘Mary’s daughters’
d. Mary-ke bete
Mary-Gen.PL.M son.PL.M
‘Mary’s sons’

(8a-b) show that the possessor noun must bear *-ki* when the head noun is feminine and singular, and it must bear *-ka* when the head noun is masculine and singular. (8c-d) show that the possessor noun must bear *-ki* when the head noun is feminine and plural, and it must bear *-ke* when the head noun is masculine and plural.

A closer examination shows that the gender and the number features are all shared by the head noun, the genitive subject, and the pronominal predicate, as shown in (9).

- (9) Kal John-ke
yesterday John-Gen.M.PL.
khareede-hue ghore ache
bought-PERF.M.PL horse.M.PL fine
hain.
be.PRES.PL
‘The horses John bought yesterday are fine.’

Therefore, with any gender/number mismatch, the example in (10) will become ungrammatical, as shown in (11-12).

- (10) Kal John-ki
yesterday John-Gen.F.
khareedi-hui kitab buhut
bought-PERF.F book.F very

dilchasp hai.
 interesting be.PRES
 ‘The book which John bought yesterday is very interesting.’

- (11) * Kal John-ka
 yesterday John-Gen.M
 khareedi-hui kitab बहुत
 bought-PERF.F book.F very
 dilchasp hai.
 interesting be.PRES
 ‘The book which John bought yesterday is very interesting.’

- (12) * Kal John-ke
 yesterday John-Gen.PL
 khareedi-hui kitab बहुत
 bought-PERF.F book.F very
 dilchasp hai.
 interesting be.PRES
 ‘The books which John bought yesterday are very interesting.’

Second, the predicate of a relative clause must have the perfective form *-hui*, without which the sentence becomes ungrammatical, as shown in (13).

- (13) * Kal John-ki khareedi-~~hui~~
 yesterday John-Gen bought-~~PERF~~
 kitab बहुत dilchasp hai.
 book very interesting be.PRES
 ‘The book which John bought yesterday is very interesting.’

Note that the perfect maker *-hui* cannot be used for English type relative clauses, as shown in (14).

- (14) * Jo kitab John-ne kal
 the book John-Erg yesterday
 khareedi-hui बहुत dilchasp hai.
 bought-PERF very interesting be.PRES
 ‘The book which John bought yesterday is very interesting.’

The grammatical version of (14) is shown in (4).

Third, there is a complement/non-complement asymmetry with respect to the verb forms in

Japanese type relative clauses. As we have seen above, the predicate of a Japanese type relative clause takes the perfective form *-hui* when the object (complement) of the predicate is relativized. Consider (10).

However, the predicate of a relative clause cannot have the perfective form *-hui*, if adjuncts (non-complements) such as time and place phrases are relativized, as shown in (15-17), or if the subject (non-complement) of the predicate is relativized, as shown in (18-20).

- (15) Train-se John-ka Tokyo
 train-by John-Gen.M Tokyo
 jane-ka din acha tha.
 go.INF-Gen.M day.M fine be.PAST
 ‘The day when John went to Tokyo by train was fine.’
- (16) Kal John-ki Mary-se
 yesterday John-Gen.F Mary-to
 baat karne-ki jagah library hai.
 talk.INF-Gen.F place.F library be.PRES
 ‘The place where John talked to Mary yesterday is the library.’
- (17) Tokyo-main John-ka kitab- \emptyset
 Tokyo-in John-Gen.M book-Abs
khreedne-ka din kal hai.
 buy.INF-Gen.M day.M yesterday be.PRES
 ‘The day (when) John bought the book in Tokyo is yesterday.’
- (18) Kal kitab- \emptyset khreedne
 yesterday book-Abs buy.INF
 wala shakhs John hai.
 the man John be.PRES
 ‘The man who bought the book yesterday is John.’
- (19) * Kal kitab- \emptyset
 yesterday book-Abs
khareedi-hui shakhs John hai.
 bought-PERF man John be.PRES
 ‘The man who bought the book yesterday

is John.’

- (20) * Kal kitab-ø
yesterday book-Abs
khareedi-hui wala shakhs John hai.
bought-PERF the man John be.PRES
‘The man who bought the book yesterday
is John.’

In (15-17), the predicates are of the infinitival forms.

In the English type relative clauses, the predicates are of the past forms, as shown in (21-23).

- (21) Jis din John-ne kitab-ø khareedi
the day John-Erg book-Abs bought
woh kal hai.
when yesterday be.PRES
‘The day when John bought the book is
yesterday.’
- (22) Jis jagah-se John-ne kitab-ø
the place-by John-Erg book-Abs
khareedi woh Tokyo hai.
bought where Tokyo be.PRES
‘The place where John bought the book is
Tokyo.’
- (23) Jis shakhs-ne kal kitab-ø
the man-Erg yesterday book-Abs
khareedi woh John hai.
bought who John be.PRES
‘The man who bought the book yesterday
is John.’

Fourth, in Japanese type relative clauses whose heads are adjuncts, the agreement on the genitive subject may not be as strict as the one in Japanese type relative clauses whose heads are arguments. Compare (24-25) with (15-16).

- (24) Train-se John-ke Tokyo
train-by John-Gen.NTR Tokyo
jane-ka din acha tha.
go.INF-Gen.M day.M fine be.PAST
‘The day when John went to Tokyo by
train was fine.’
- (25) Kal John-ke

yesterday John-Gen.NTR

- Mary-se baat karne-ki jagah
Mary-to talk.INF-Gen.F place.F
library hai.
library be.PRES
‘The place where John talked to Mary
yesterday is the library.’

Note that in (24-25), the genitive case markers are not in agreement with the head nouns in gender/number, as *-ke* is attached to masculine and plural nouns. We call it a neutral genitive case marker in this paper.

Let us now summarize the properties of relative clauses in Urdu. First, English type relative clause formation is consistent with respect to the choice of the tense/aspect, irrespective to what is relativized. Second, with respect to the choice of the tense/aspect and the possibility of inserting the genitive case marker between the relative clause and the head noun, there are complement (object)/non-complement (adjunct and subject) asymmetries.

4. DISCUSSION

The above data suggest several important things for the theory of (Urdu) syntax. First, the genitive subject in Urdu is licensed by the head noun/D. In Japanese type relative clauses, the gender and the number features are all shared by the head noun, the genitive subject, and the pronominal predicate, as shown by the example in (10). In (10), the head noun *kitab* is feminine, and this feature percolates down to the subject and the predicate in the relative clause, in spite of the fact that the subject *John* is masculine.

Note here that as shown by (3c), the subject is in agreement with the verb in gender. This indicates that subject-verb agreement in gender is overridden by the agreement in gender between the head noun on the one hand, and the subject and the verb in the relative clause. This in turn suggests that the genitive

case on the subject is influenced by the head noun of the relative clause, irrespective of whether it is directly influenced by the head noun or it is indirectly influenced through the mediation of the verb in the relative clause.

This fact poses a question on Hiraiwa's (2001) Nominative-Genitive Conversion (NGC) Universal shown in (26), which he proposes based on the data from a variety of languages in the world.

(26) *The Nominative-Genitive Conversion (NGC) Universal*

Nominative-Genitive Conversion is possible only in a language L which employs the C-T-V AGREE strategy in relativization; consequently, NGC is not observed in the languages which use overt wh-movement strategy or overt complementizer strategy in relative clause formation. (Hiraiwa (2001: 113))

The most important point in the NGC Universal is that the head noun of the relative clause does not play a fundamental role in licensing the genitive subject in a relative clause.

However, the agreement pattern in (10) clearly shows that the head noun of the relative clause makes crucial contribution to the agreement in gender between the genitive subject and it. Therefore, irrespective of whether Urdu employs the C-T-V AGREE strategy in relativization, the head noun of the relative clause in the language plays a crucial role in licensing the genitive subject in the relative clause of the language.

Furthermore, there is another piece of evidence for the claim that the genitive subject in Urdu is licensed by the head noun/D, not by Hiraiwa-type *v*-T-C complex. As shown in the examples in (15-16), the predicate of a relative clause cannot have the perfective form *-hui*, if adjuncts (non-complements) such as time and place phrases are relativized. The important point in (15-16) is that

the predicate in the relative clause is of the infinitival form, and does not contain tense/aspect. Therefore, the predicate simply consists of a small *v*. At the same time, the predicate is followed by the genitive case marker *-ka/-ki*, which it is hard to consider as the relevant COMP in Hiraiwa's terms. Therefore, in (15-16), there is no relevant complex *v*-T-C complex formed. Yet, the sentences are perfectly grammatical with the genitive subject. Therefore, it is safe to claim based on (15-16) that the genitive subject is licensed by the head noun of the relative clause in Urdu, which in turn suggests that Hiraiwa-type genitive subject licensing via complex head formation is not universal.

Second, the data suggest that gender agreement is dissociated from (genitive) case agreement. As shown by the examples in (24-25) in Japanese type relative clauses whose heads are adjuncts, the agreement on the genitive subject may not be as strict as the one in Japanese type relative clauses whose heads are arguments, as shown in (9-10). Let us consider (24) as a representative case of adjunct relativization. In (24), the head noun *din* 'day' is masculine, and it agrees in gender with the genitive case marker *ka* attached to the infinitival form of the relative clause. However, the subject of the relative clause need not agree with the head noun in gender, and is followed by the gender-neutral genitive case marker *-ke*. On the other hand, in (10), which is a representative case of argument relativization, the head noun must agree with the genitive subject in gender. The crucial difference between (24) and (10) is the existence of the perfective marker *-hui* attached to the verb: (24) does not have it, while (10) does. In (24), the verb is of the infinitival form, and the perfective marker *-hui* cannot be attached to it. Instead of *-hui*, the genitive case marker is attached to the verb, which in turn agrees with the head noun in gender. Based on this, let us assume that the head noun first undergoes agreement in gender with the

genitive case marker in the case of adjunct relativization, and with the verb followed by the perfective marker *-hui* in the case of argument relativization. In the case of argument relativization, due to the subject-verb agreement, the subject and the verb agree in gender. On the other hand, in the case of adjunct relativization, since the verb itself is of the infinitival form, and does not have any information on gender, it does not agree with the genitive subject in gender. This is why the genitive subject in adjunct relativization does not show strict gender agreement with the head noun of the relative clause.

Note here that the genitive subject in adjunct relativization may agree with the head noun of the relative clause in gender, as shown in (15-16). In these examples, the genitive subject agrees with the head noun of the relative clause in gender possibly by mediation of the genitive case marker attached to the infinitival form of the verb. This does not happen in (24-25).

If the above argument is correct, the gender agreement first takes place between the head noun of the relative clause and the verb of the relative clause, and by mediation of the subject-verb agreement, the genitive subject agrees with the verb in gender in the case of argument relativization. In the case of adjunct relativization, the gender agreement first takes place between the head noun of the relative clause and the genitive case marker attached to the infinitival form of the verb of the relative clause, and the genitive subject of the relative clause need not agree in gender with the head noun. However, the genitive subject may agree with the head noun of the relative clause in gender possibly by mediation of the genitive case marker attached to the infinitival form of the verb.

We claimed above that the genitive subject in Urdu is licensed by the head noun/D. Then, the fact that the genitive subject is not always in agreement

in gender with the head noun in adjunct relative clauses clearly indicates that gender agreement is dissociated from (genitive) case agreement. This in turn suggests that agreement takes place among the relevant features, not the categories.

Third, there is no literal genitive/ergative case alternation in Urdu. The data we have seen suggest the syntactic environments in which the genitive subject is possible. (10) shows that the perfect form *-hui* is an ergative case absorber, so that only the genitive subject is allowed (via agreement with the head noun with D).

Also, (15) shows that without tense/aspect, the ergative subject is impossible, and again, only the genitive subject is allowed. Thus, these examples indicate that the genitive subject is allowed only when there is no ergative case assigner for it and there is an external nominal head. This in turn shows that there is no literal genitive/ergative case alternation in Urdu, and each case may appear in the environment appropriate for it.

Note here that there is no literal genitive/ergative case alternation in English type relative clauses in Urdu, either. (4) becomes ungrammatical with a genitive subject, as shown in (27).

- (27) * Jo kitab John-ki kal
the book.F John-Gen.F yesterday
khareedi buhut dilchasp hai.
bought very interesting be.PRES
‘The book which John bought yesterday is
very interesting.’

This provides an answer for the question as to why the genitive subject is impossible in the relative clause with a relative pronoun, which is part of Hiraiwa’s (2001) generalization. This is because when the relative pronoun appears, there should be a projection of C, which in most cases takes TP, the head of which should be an ergative case assigner. Therefore, unless there exists an ergative case absorber, a genitive subject is impossible in the

relative clause with a relative pronoun.

Fourth, there is a correlation between the tense/aspect of the predicate in the relative clause and the adjacency between the predicate and the head noun of the relative clause. In Section 3, we saw a complement/non-complement asymmetry with respect to the tense/aspect of the predicate in relative clauses. The representative examples are (15), (18), and (10). In (15) and (18), the predicate is of the infinitival form, while in (10), it contains the perfective form. This is a complement/non-complement asymmetry with respect to the tense/aspect of the predicate in relative clauses. At the same time, in (15) and (18), there is an intervening element between the predicate of the relative clause and the head noun of the relative clause (the genitive case marker *-ka* in (15) and the element *wala*, which indicates ‘the’ in (18), while the predicate and the head noun of the relative clause are adjacent in (10). Therefore, there is a correlation between the tense/aspect of the predicate in the relative clause and the adjacency between the predicate and the head noun of the relative clause. Although the question remains as to why this is so, the above examples clearly show that an intervening element between the predicate and the head noun prevents the predicate from having the tense/aspect morpheme.

5. CONCLUSION

In this paper, we looked at the properties of relative pronoun-less relative clauses in Urdu, and found four things. First, the genitive subject in Urdu is licensed by the head noun/D rather than the predicate of the relative clause. Second, gender agreement is dissociated from (genitive) case agreement. Third, there is no literal genitive/ergative case alternation in Urdu. Fourth, there is a correlation between the tense/aspect of the predicate in the relative clause and the adjacency between the

predicate and the head noun of the relative clause.

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FOOTNOTE

¹ The abbreviations used in this paper are as follows. 1=1st person, 2=2nd person, 3=3rd person, Abs=Absolute, Acc=Accusative, Erg=Ergative, F=feminine, Gen=Genitive, INF=infinitival, M=masculine, Nom=Nominative, NTR= neutral, PERF=perfective, PL=plural, and SG=singular.

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The Syntax of the Causative Construction with the Accusative Path*

Kaori Miura

Kyushu Sangyo University

Keywords: causative constructions, motion
verbs, coercive/permissive causation

1. INTRODUCTION

This paper has two aims: (i) to defend the position that the multiple accusative causative construction with motion verbs in Japanese as in (1) has a double-*vP* structure; (ii) to argue for the base-generation approach to the coercive and noncoercive causation (Kuroda 1965a, Shibatani 1977, Miyagawa 1989, Koizumi 1995).

- (1) Taro-wa Hanako- $\{ni/?o\}$ hamabe-o
Taro-Top Hanako-Dat/Acc beach-Acc
aruk-ase-ta
walk-Cause-Past

‘Taro caused Hanako to walk on the beach’

There are mainly two types of causative constructions in Japanese (Miyagawa 1989): one includes a structure where the causative verb embeds a transitive verb (i.e. *tabes-ase-ru* ‘cause-eat’) and the other involves a structure where the causative verb embeds an intransitive verb (i.e. *ik-ase-ru* ‘cause-go’).

It is widely assumed that the case alternation on the causee in the intransitive causative construction (henceforth, ICC) is associated with the so-called coercive/permissive reading (Kuroda 1965a, Miyagawa 1989, Koizumi 1995). The accusative causee conveys a coercive causation (corresponding *make-causative* in English), whereas the dative causee, an indirect causation

(corresponding to *let-causative* in English). The volition of the causee matters with the latter construction, thus, the causee referent can reject the ordered causation. On the other hand, such an implication cannot hold with the former construction.

The transitive causative construction (henceforth, TCC) allows only the dative causee, disallowing the accusative causee as in (2).

- (2) Taro-wa Hanako- $\{ni/*o\}$ gohan-o
Taro-Top Hanako-Dat/Acc dish-Acc
tak-ase-ta
cook-Cause-Past
‘Taro made Hanako cook dish’

Some of the previous literature claims that this is due to the Double-*o* Constraint effect (henceforth, *DoC*) (Harada 1973, 1975). Thus, a derivation becomes ill-formed, if there is more than one accusative-marked NP in a VP-node. Since the accusative causee never surfaces with the TCC, we cannot test the coercive/permissive distinction with this construction. Koizumi (1995) argues that the dative TCC can be associated with either coercive or permissive reading, as it lacks the accusative TCC. I recognize his attempt is on the right track, but I suggest that it lacks conclusive evidence.

There are two views about the relation between case-marker alternation on the causee and the coercive/permissive distinction in the literature: the base-generation view (Koizumi 1995) and the transformation view (Takazawa 1987). The former claims that the dative causative and the accusative causative are semantically and structurally independent. The latter view argues that they share the basic meaning and the accusative causative derived from the structure of the dative causative by transformation. In Takezawa’s (1987: 15) discussion, the causee is neither governed by Infl[-tense], nor by the higher causative verb *sase* (because of the presence of barrier $S'(CP)$), then the postposition *ni*

is inserted by the so-called ‘Dummy P’ insertion. When the S’ is deleted for some reason, now the causee can be governed by the causative verb; hence, it is assigned *o* under ECM (Exceptional Case Marking).

The transformational view cannot capture the fact below. The subject-oriented adverb like *katteni* ‘at will’ cannot go well with a sentence including the coercive reading like (3a), but it can, with a sentence having the permissive reading as (3b).

- (3) a. #Taro-wa Hanako-o katteni
 Taro-Top Hanako-Acc at.will
 gakkou-ni ik-ase-ta
 school-to go-Cause-Past
 ‘Taro made Hanako to go school at will’
- b. Taro-wa Hanako-ni katteni
 Taro-Top Hanako-Dat at.will
 Gakkou-ni ik-ase-ta
 school-to go-Cause-Past
 ‘Taro made Hanako to at will’

The challenge for the base-generation view is to show how to test the semantic distinction with TCCs.

I propose that Motion Verb Causatives with the Path accusative (henceforth, MVCP) as in (1) can be a good test ground regarding the coercive/permissive distinction of TCC. This is because although MVCPs allow both the dative and accusative causee, they show the bi-clausality, which will be demonstrated in the next section. If there is an intimate relation between the case marking on the causee and the coercive/permissive reading, we should expect that the semantic difference in (3) have to be identified in the paradigm (1). Namely, the accusative MVCP has the coercive reading, whereas the dative MVCP, the permissive reading. I will show that this expectation holds true. I also show that the dative and the accusative MVCP are derived from a different set of vo-

cabulary items.

The outline of this paper is given below. Section 2 shows both the dative MVCP and the accusative MVCP are bi-clausal structure. Section 3 investigates the nature of the path of MVCPs. In section 4, I propose that the dative and the accusative MVC are structurally independent one another. In section 5, following Kuroda (1978), I show that the DoC, a version of Hiraiwa (2010), is irrelevant to the derivation of the dative MVCP and the TCC. But, it does affect the derivation of the accusative MVCP. Section 6 concludes the paper.

2. MVCs and BI-CLAUSALITY

MVCs (e.g. *nobor-ase-ru* ‘climb-cause-present,’ *aruk-ase-ru* ‘walk-cause-present,’ *hasir-ase-ru* ‘run-cause-present’) consist of motion verbs (e.g. *noboru*, *aruku*, *hasiru*) and the causative morpheme *sase*.

The accusative MVCP, as well as the dative MVCP, characterizes the bi-clausality. As the TCC data in (4a) shows, the passivization of the causee is allowed with TCCs as (4b) shows. However, that of the object of the lexical verb is not, as in (4c).

- (4) a. Taro-wa Hanako-ni gohan-o
 Taro-Top Hanako-Dat dish-Acc
 tak-ase-ta
 cook-Cause-Past
 ‘Taro made Hanako cook a dish’
- b. Hanako-ga Taro-niyotte gohan-o
 Hanako-Nom Taro-by dish-Acc
 tak-aser-are-ta
 cook-Cause-Pass-Past
 ‘Literally: Hanako was caused to cook a dish by Taro’
- c. *Gohan-ga Taro-niyotte Hanako-ni
 dish-Nom Taro-by Hanako-Dat
 tak-aser-are-ta
 cook-Cause-Pass-Past
 ‘Literally: The dish was caused to be

cooked by Hanako’

Marantz (1984) argues that this is a piece of evidence that shows the clausal structure of Japanese TCCs is bi-clausal. The VP structure of TCCs is bi-clausal and the theme of the lexical verb is embedded in the lowest part of the VP. In the proposed structure, the causative verb takes the NP (causee) and an S. The copy of causee and the NP (theme) are dominated by the S. When the passive morpheme attaches to the causative verb, it only absorbs the Case-assigning ability of the causative verb. It cannot do so with the lexical V in the lower S; hence the NP (theme) is intact under Passivization.

If the MVCP has the bi-clausal structure, it is expected that the path cannot be passivized. As illustrated in (5a), this expectation is borne out.

- (5) a. *Sono hasigo-ga Taro-niyotte
 the ladder-Nom Taro-by
 Hanako-ni nobor-aser-are-ta
 Hanako-Dat climb-Cause-Pass-Past
- b. *Sono hasigo-ga Taro-niyotte
 the ladder-Nom Taro-by
 Hanako-o nobor-aser-are-ta
 Hanako-Acc climb-Cause-Pass-Past
 ‘Literally: The ladder was caused to be climbed by Hanako’

It is widely argued that the subjecthood of the causee often associates with the bi-clausality of TTCs (Shibatani 1973, a.o.). The subject-oriented anaphor *zibun* ‘self’ can antecede the causee of TCCs, as well as the causer. It can refer to either *Taro* (causer) or *Hanako* (causee) in (6).

- (6) Taro_i-wa Hanako_j-ni zibun_{i/j}-no
 Taro-Top Hanako-Dat self-Gen
 syasin-o mis-ase-ta
 photo-Acc show-Cause-Past
 ‘Taro_i caused Hanako_j to show his_i/her_j photo’

The same holds true with the dative MVCP, as in (7). However, the accusative MVCP does not identify this nature clearly. As the double question mark (??) in (7) exhibits, it may or may not be interpreted as the antecedent of *zibun*.

- (7) Taro-wa Hanako-ni/??o
 Taro-Top Hanako-Dat/Acc
 zibun-no kurumade
 self-Gen car.with
 sono michi-o ik-ase-ta
 the road-Acc go-Cause-Past
 ‘Literally: Taro_i caused Hanako_j to go on the road by his_i/her_j car’

3. THE SYNTAX OF THE PATH IN MVCPs

This section focuses on the nature of the path in MVCPs. The nature of the path in a simplex transitive clause has caused a controversy (Shibatani 1977, Kuroda 1978, Miyagawa 1989, Miyake 1996, Hiraiwa 2010). Some argues that the element is adjunct (Shibatani 1977, Miyagawa 1989), while others claims that it behaves like an argument (Kuroda 1978).

Before showing the argumenthood of the path, let me argue that the category of ‘*o*’ that marks the path is a case-marker not a postposition. In general, postpositions, such as *de* ‘with,’ cannot license an NQF, as (8) shows.

- (8) *Mary-wa [ohasi-de ni-hon]
 Mary-Top chopstick-with two-CL
 sakana-o tabe-ta
 fish-Acc eat-Past
 ‘Mary ate fish with two chopsticks’

Since the accusative path in (9) licenses an NQF (Numeral Quantifier Floating), I argue that the path accusative is not PP.

- (9) Taro-wa Hanako-o [hasigo-o
 Taro-Top Hanako-Acc ladder-Acc
 ni-kyaku] nobor-ase-ta
 two-CL climb-Cause-Past
 ‘Taro caused Hanako to climb two ladders’

Going back to the argumenthood of the path accusative, two pieces of evidence will be given. It is not easy to test the argumenthood of an NP in Japanese, as NPs can scramble. I assume that if an NP is a sister of V^0 it can behave as an argument of a transitive verb, following some of the previous literature (Miyagawa 1989, Koizumi 1994).

VP-Preposing is one of the tests to show the argumenthood of an NP (Koizumi 1994, Yatsushiro 1998). According to Yatsushiro (1998), in a transitive sentence as in (10), the verb infinitive and its sister can be a target of fronting as in (10a), while the preposing of only the verb infinitive to the exclusion of its sister cannot as in (10b).

- (10) a. [_{VP} Hon-o yomi-sae]_i Taro-ga
 book-Acc read-even Taro-Nom
 t_i si-ta
 do-Past
 ‘Literally: Even read a book, Taro did’
- b. *[Yomi-sae]_i Taro-ga
 read-even Taro-Nom
 hon-o t_i si-ta
 book-Acc do-Past
 ‘Literally: Even read, Taro did the book’

If this assumption is tenable, we expect that the same holds true with MVs. As in (11a), preposing of the verb and the path is allowed, while preposing of only the verb infinitive, leaving the path as remnant within VP is out as in (11b).

- (11) a. [_{VP} Sono hamabe-o aruki-sae]
 the beach-Acc walk-even
 Taro-ga t_i si-ta
 Taro-Nom do-Past
 ‘Literally: Even walk on the beach,
 Taro did’
- b. *[Aruki-sae]_i Taro-ga
 walk-even Taro-Nom
 sono hamabe-o t_i si-ta
 the beach-Acc do-Past

‘Literally: Even walk, Taro did the beach’

Thus, the path behaves like a thematic object of transitive verbs with respect to VP-Preposing.

4. SUPPORTING THE BASE-GENERATION APPROACH

To propose a base structure of MVCs, I assume the split vP hypothesis (Chomsky 1995), where the agent of a clause is introduced by v^* . The structure is built by Merge and the feature-checking is operated by Agree. I also adopt the notion of Phase (Chomsky 2000, 2001) in my theory. *Phase* is a syntactic unit at which all the uninterpretable features on vocabulary items in a derivation are deleted. After the checking, the given derivation is sent to the interfaces. In Chomsky (2000, 2001), v^*P and CP are proposed as Phases.¹ Since MVCs show the bi-clausal nature, following Harley (2008), I assume the double vP hypothesis. (12) is her structure for TCCs.

- (12) [_{v*P} NP (causer) [_{v*P} NP (causee) [_{VP} NP (theme) V] $v^*_{\{ACC\}}$] $v^*_{\{DAT\}}$]

The structure is three-layered. It captures the bi-clausality of the TCC because each v is a phase-head. Thus, the causative predicate is decomposed into the root, the lower unpronounced v^* (i.e. the ACC assigner for the theme) and the higher v^* (i.e. the DAT assigner for the causee).

Since the dative MVCs patters with the TCCs with respect to the bi-clausality, adopting (12) to my theory, I propose the initial structure of the dative MVC is (13), merging the path to the sister of V and the causee to the specifier of the inner v^* . In that position, the causee is assigned Dative case by the higher v^* .

- (13) [_{v*P} NP (causer) [_{v*P} NP (causee) [_{VP} NP (path) V] $v^*_{\{ACC\}}$] $v^*_{\{DAT\}}$]

Applying the structure (13) to the analysis of accusative MVCs, however, does not capture

the reality. First, the causee is assigned the accusative case, which indicates that the higher v^* does not have [DAT], but have [ACC]. Second, the accusative causee may or may not have the subject property.

I interpret that the second fact suggests that the accusative causee can be merged to either a specifier of inner v or a non-specifier position. But where is this non-specifier position?

IPs like *dare* ‘who’ or *nani* ‘what’ form an NPI (Negative Polarity Item) when they are combined with the quantificational particle *mo* ‘also’ attaching to the infinitive verb (Kuroda 1965b, Kishimoto 2001, Hiraiwa 2005). The IP *nani* and *mo* in (14) means that Taro didn’t buy anything, thereby showing an NPI reading.

- (14) Taro-wa nani-o kai-mo
 Taro-Top what-Acc buy-also
 si-nakat-ta
 do-Neg-Past
 ‘Taro didn’t buy anything’

Assuming that the particle *mo* attaches to v (Kishimoto 2001, Hiraiwa 2005); and an IP forms an NPI with respect to *mo* when it is within the local c-commanded domain of *mo* (Hiraiwa 2005).

The fact that an IP causee *dare-o* and *mo* induce an NPI reading in (15) indicates that the IP causee must be merged within VP, or the c-command domain of v .

- (15) Taro-ga dare-o sono michi-o
 Taro-Nom who-Acc the road-Acc
 aruk-ase-mo-si-nakat-ta
 walk-Cause-also-do-Neg-Past
 ‘Taro didn’t cause anyone to walk on the road’

Now, let me postulate that the derivation of the accusative MVCP starts with a state in which both NPs are merged within VP, as in (16).

- (16) [_{VP} NP (causee) NP (path) V]

Because the causee and the path are structural accusatives, there must be a moment in deriva-

tion at which they are Agreed with Case-licensing heads.

If we assume that the higher v values [ACC], the derivation somehow converges. However, if this were the case, why were there no accusative TCC in Japanese at all? As illustrated in (17), neither a base double accusative TCC as in (17a), nor a transformed double accusative TCC as in (17b) is available in Japanese.

- (17) a. *Taro-wa Hanako-o gohan-o
 Taro-Top Hanako-Acc dish-Acc
 tak-ase-ta
 cook-Cause-Past
 ‘Taro caused Hanako to cook dish’
 b. *Taro-ga gohan-o
 Taro-Nom food-Acc
 tak-ase-ta no-wa
 cook-Cause-Past C-Top
 Hanako-o da
 Hanako-Acc Cop
 ‘It is Hanako who Taro caused to cook dish’

MVCPs show quite a contrast in this respect.

- (18) a. ?Taro-wa Hanako-o hamabe-o
 Taro-Top Hanako-Acc beach-Acc
 aruk-ase-ta
 walk-Cause-Past
 ‘Taro caused Hanako to walk on the beach’
 b. Taro-ga hamabe-o
 Taro-Nom beach-Acc
 ark-ase-ta no-wa
 walk-Cause-Past C-Top
 Hanako-o da
 Hanako-Acc Cop
 ‘It is Hanako who Taro caused to walk on the beach’

I propose a structure like (19) for the final v P of the accusative MVCP, where the lower v Agrees with the causee (i.e. its local goal) and the higher v , with the path (i.e. its local goal). The lower v P is an unaccusative structure whose

ν has [ACC] but does not theta-mark the subject (Miyake 1996, Collins 1999).

- (19) [_{VP} NP (C:)] [_{VP} [_{VP} [NP (C:ACC)
NP (C:ACC) V]] $\nu_{\{ACC\}}$] $\nu^*_{\{ACC\}}$]

Since the both NPs merge with VP, the inner ν probes the causee as it is closer within the local c-command domain.

- (20) [_{VP} [_{VP} [NP (C:ACC) NP (C:) V]] $\nu_{\{ACC\}}$]

Spell-Out, at this point, cannot send (20) to the interfaces, as the inner NP is still Case-unvalued. Then the derivation proceeds as in (21a). When the higher ν merges to the syntactic object, it starts to search for the matching goal. Since the causee has been already inactive at this point, the outer ν Case-values the path, as (21b) shows.

- (21) a. [_{VP} NP (C:)] [_{VP} [_{VP} [NP (C:ACC)
NP (C:) V]] $\nu_{\{ACC\}}$] $\nu^*_{\{ACC\}}$
b. [_{VP} NP (C:)] [_{VP} [_{VP} [NP (C:ACC)
NP (C: ACC) V]] $\nu_{\{ACC\}}$] $\nu^*_{\{ACC\}}$

5. IMPLICATIONS

Hiraiwa (2010: 753, (90)) proposes the phase-bound DoC in relation to Agree, as cited in (22). When Spell-Out is in operation, and it transfers the complement of a phase to the interfaces, if there is more than one structural accusative value in the domain, the derivation becomes illicit.

- (22) Multiple identical occurrences of the structural accusative Case value cannot be morphophonologically realized within a single Spell-Out domain at Transfer.

(21b) violates (22), since there are two structural accusative values within a complement of a phase head ν^* - ν -V. I argue that this is why the canonical order of accusative MVCP is degraded, although not totally out.¹

The semantic distinction of coercive/permisive reading gives rise to between the two types of MVCP as in (23).

- (23) a. Taro-wa sono jyoyuu-ni katteni
Taro-Top the actress-Dat at.will

- hamabe-o aruk-ase-ta
beach-Acc walk-Cause-Past
b. ??Taro-wa sono jyoyuu-o katteni
Taro-Top the actress-Acc at.will
hamabe-o aruk-ase-ta
beach-Acc walk-Cause-Past
'Taro caused the actress to walk on
the beach at her will'

This can be explained by the fact that the two types of MVCPs are derived from a distinctive structure. The causee of the dative MVCP is directly merged to the specifier of the inner ν^* P. The accusative MVCP occasionally have the subject property. I suggest that the causee may show the subject property when it is remerged to the spec of the inner ν P.

6. CONCLUSION

The issue of coercive/permisive distinction of causative construction in Japanese has not been settled due to the lack of conclusive evidence (Koizumi 1995). Thus, the intriguing fact that this paper revealed, i.e., the two types of MVCPs can be a test ground for the semantic distinction, sheds a new light on a long-stranding issue of causative constructions.

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¹ Although Hiraiwa argues that the DoC is irrelevant to the derivation of the causative construction, I argue that it can affect the derivation of the accusative MVCP.

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Ultimate Pied-Piping in Japanese and Sinhala*

Hisashi Morita
Aichi Prefectural University

Keywords: *quantity questions, how many/much NP, intervention effects, copy theory*

1. Introduction

In this paper I will show that the whole sentences can be pied-piped in Japanese and Sinhala *wh*-questions if quantity questions such as ones containing *how many/much NP* are employed. To show this, I will provide a few pieces of evidence for pied-piping in Sinhala and Japanese. Then I will introduce peculiar data concerning *how many/much NP* questions in both languages and will answer why that is the case. I will also consider why other types of *wh*-expressions can resort to large-scale pied-piping in indirect questions.

1.1. Do *wh*-expressions move in Japanese?

First consider the following examples:

- (1) [_{CP}John-ga nani-o itta kara]
-Nom what-Acc said because
Mary-ga satta no?
-Nom left Q
'(Lit.) Mary left because John said what?'
- (2) Mary-wa [_{DP}John-ga nani-o itta
-Top -Nom what-Acc said
jijitu-ni] ki-o kaketeiru no?
fact-Dat attention-Acc pay Q
'(Lit.) Mary is concerned with the fact that
John said what?'

As (1) and (2) show, Japanese is an *wh-in-situ* language, and it allows *wh*-expressions to be

base-generated inside islands such as adverbial and relative clauses. This fact shows that Japanese *wh*-questions seem to be insensitive to the subjacency condition.

To account for this phenomenon, several types of proposal have been presented, and I will introduce a few of them. A first type is to claim that *wh*-expressions in *wh-in-situ* languages such as Japanese and Chinese do not move (cf. Tsai 1994 among others). A second type is to propose that somehow covert movement is not subject to the subjacency condition (Huang 1982). A third type is to argue that the whole islands are pied-piped (cf. Nishigauchi 1986, Morita 2002, 2009 among others). I will support the third type.

2. Primary data

In this section I will introduce important data of Sinhala and Japanese *wh*-questions to show that the two languages resort to large-scale pied-piping. Moreover, I will show that *how many/much NP* questions in both of the languages exhibit different characteristics from other types of *wh*-expressions.

2.1. Sinhala

As the following data show, *wh*-questions in Sinhala have two interesting features. First, so called a Q-particle, *də*, is directly attached to a *wh*-expression. Second, the *wh*-expression with *də* exhibits agreement with a verb, so the verb ends with *e*.

- (3) Siri mokak-də keruw-e?
what-Q did-E
'What did Siri do?'

(Gair and Sumangala 1991: 93)

As the following examples show, *e* marks the scope of questions, which is similar to *ka* in Japanese.

- (4) a. Ranjit [kau-də aaw -e kiyəla] dannəwa.
 who-Q came-E that know
 ‘Ranjit knows who came.’
 b. Ranjit [kau-də aawa kiyəla] dann-e.
 who-Q came that know-E
 ‘Who does Ranjit know ___ came?’
 (Kishimoto 1997:6)

The next set of examples indicates that *wh*-expressions are allowed inside islands, but *də* cannot appear inside islands. Thus, the first feature introduced above is violated and *də* must be attached to the edge of islands as follows:

- (5) a. *oyaa [_{NP} kau-də liyəpu potə] kieuw-e?
 you who-Q wrote book read-E
 b. oyaa [_{NP} kauru liyəpu potə]-də kieuw-e?
 you who wrote book-Q read-E
 ‘You read the book that who wrote?’

Suppose that *wh*-expressions move covertly in Sinhala and *də* is attached to what moves. Then (5)*b* shows that the entire island is pied-piped to avoid the violation of the subjacency condition.

Interestingly, quantity questions such as *how many/much NP* questions in Sinhala show a somewhat different phenomenon from other types of *wh*-expressions. Compare (6), (7) and (8):

- (6) a. *kauru ee potə kieuwa də?
 who that book read Q
 b. kau-də ee potə kieuw-e?
 who-Q that book read-E
 ‘Who read that book?’
 (a: Kishimoto 1997: 14, b: Hagstrom 1998: 22)
- (7) a. kiidenek enəwa də?
 how.many come Q
 b. kiidenek də enn-e?
 how.many-Q come-E
 ‘How many (animate) are coming?’
 (Kishimoto 1997: 8)
- (8) a. salli koccərə dunna də?
 money how.much gave Q
 b. salli koccərə-də dunn-e?
 money how.much-Q gave-E

‘How much money did (you) give?’
 (Sumangala 1992: 248)

As has been mentioned, *də* must be attached to a *wh*-expression as in (6). However, as (7) and (8) show, *də* need not be adjacent to *how many/much NP*. Sumangala (1992) claims that examples *b* are more focused than examples *a*, and Hagstrom (1998) speculates that somehow *how many/much NP* questions are similar to *Yes/No questions*, the latter of which also places *də* at the end of a sentence. However, these accounts do not explain why only *how many/much NP* questions show such a behavior. In section 3, I will claim that it is possible to pied-pipe the whole sentence in the case of *how many/much NP* questions in Sinhala and Japanese, which I call ultimate pied-piping in this paper.

2.2. Japanese

Several pieces of evidence for pied-piping in Japanese *wh*-questions have been presented, and I will introduce two of them: *ittai(zentai)* ‘the hell/in the world’ and intervention effects.

2.2.1. *Ittai* (Pesetsky 1987)

Pesetsky (1987) notices that *ittai* normally can be placed before a *wh*-expression as in (9), but it is not allowed when a *wh*-expression is inside an island as in (10)*a*.

- (9) Mary-wa John-ni ittai(zentai) nani-o
 -Top -Dat the.hell what-Acc
 ageta no?
 gave Q ‘What the hell did Mary give to John?’
- (10) a. *Mary-wa [_{DP}John-ni ittai(zentai)]
 -Top -Dat the.hell
 nani -o ageta hito-ni] atta no?
 what-Acc gave person-Dat saw Q
 ‘(Lit.) Mary saw the person that gave what to John?’ (Pesetsky 1987, (43))
 b. Mary-wa ittai(zentai) [_{DP}John-ni nani-o
 ageta hito-ni] atta no?

Instead, if *ittai(zentai)* is adjoined to the island as in (10)*b*, the sentence becomes grammatical. The inability of using *ittai(zentai)* inside islands is similar to *də* in Sinhala. Hence, this evidence can be regarded as the existence of pied-piping in Japanese *wh*-questions.²

2.2.2. Intervention effects (Hoji 1985, Hagstrom 1998, etc)

The next piece of evidence for pied-piping is that intervention effects are lifted when both interveners and *wh*-expressions are inside islands. Before going into details, let me first introduce intervention effects, which are characterized as follows:

(11) *[C ... intervener ... *wh*] (the linear order is irrelevant)

Interveners include *A ka B* ‘A or B’, *WH-mo* (e.g. *dare-mo* ‘everyone’, ‘anyone’), *WH-ka* (e.g. *nani-ka* ‘something’) and *NP-sika* ‘only NP’. Relevant examples are the following:

- (12) a. ?*[John-ka Bill-ga] nani-o
 -or -Nom what-Acc
 nomimasita ka?
 drank Q
 b. nani-o_i [John-ka Bill-ga] t_i
 nomimasita ka (Hoji 1985: 268)
 ‘What did John or Bill drink?’
 (cf. [John-matawa Bill-ga] nani-o
 nomimasita ka?)
- (13) a. ??[dare-mo-ga] nani-o kaimasita ka?
 who-MO-Nom what-Acc bought Q
 b. nani-o_i [dare-mo-ga] t_i kaimasita ka?
 ‘What did everyone buy?’ (Hoji 1985: 270)
 (cf. [minna-ga] nani-o kaimasita ka?)

(12)*a* and (13)*a* indicate that interveners such as *John-ka Bill* ‘John or Bill’ and *dare-mo* ‘everyone’ cannot precede *wh*-expressions, but when the *wh*-expressions are placed before the interveners due to scrambling, intervention effects are lifted and the sentences become grammatical as in (12)*b* and (13)*b*.

Intervention effects are considered to be one type of violation of the economy condition in that C needs to agree with the closest *wh*-expression to derive a *wh*-question; however, an intervener blocks the Agree (see Hagstrom (1998) and Morita 2009 for details).³

Moreover, Hagstrom (1998) shows that interveners do not intervene when they are inside islands:

- (14) a. ?*[John-ka Bill-ga] nani-o katta no?
 -or -Nom what-Acc bought Q
 ‘What did John or Bill buy?’
 b. Mary-wa [_{CP}[John-ka Bill-ga] nani-o
 -Top -or -Nom what-Acc
 katta atode] dekaketa no?
 bought after left Q
 ‘(Lit.) Mary left after John or Bill bought
 what?’ (Hagstrom 1998: 54)
- (15) a. ?? [dare-ka-ga] nani-o katta no?
 who-KA-Nom what-Acc bought Q
 ‘What did someone buy?’
 b. Mary-wa [_{CP}[dare-ka-ga] nani-o
 -Top who-KA-Nom what-Acc
 katta atode] dekaketa no?
 bought after left Q
 ‘(Lit.) Mary left after someone bought
 what?’ (Hagstrom 1998: 55)

As shown in (14)*b* and (15)*b*, intervention effects are lifted when interveners and *wh*-expressions are within the same islands, which suggests that the entire islands are pied-piped.

2.2.3. Quantity questions in Japanese

As in Sinhala, *how many/much NP* questions are exceptional in Japanese too. Examine the following examples:

- (16) [Ken-ka Mary-ga] nansatu-no
 -or -Nom how.many-Gen
 hon -o yomimasita ka?
 book-Acc read Q
 ‘How many books did Ken or Mary read?’

(17) [dare-mo-ga] nansatu-no hon-o
 who-MO-Nom how.many-Gen book-Acc
 yomimasita ka?
 read Q
 ‘How many books did everyone read?’

(18) (?) [dare-ka-ga] nansatu-no
 who-KA-Nom how.many-Gen
 hon-o yomimasita ka?
 book-Acc read Q
 ‘How many books did someone read?’

The examples above show that *how many/much* NPs do not trigger intervention effects despite the preceding interveners.

It is easy to account for this fact about quantity questions if one assumes that they allow the entire sentences to be pied-piped. There are pieces of evidence for the ultimate pied-piping. Consider the following sentences:

(19) a. ?* [Ken-ka Mary-ga] ittai(zentai)
 -or -Nom the.hell
 nansatu -no hon-o yomimasita ka?
 how.many-Gen book-Acc read Q
 b. ittai(zentai) [Ken-ka Mary-ga]
 nansatu-no hon-o yomimasita ka?
 ‘How many books in the world did Ken or Mary read?’

(20) a. ?? [dare-mo-ga] ittai(zentai)
 who-MO-Nom the.hell
 nansatu -no hon-o yomimasita ka?
 how.many-Gen book-Acc read Q
 b. ittai(zentai) [dare-mo-ga] nansatu-no
 hon-o yomimasita ka?
 ‘How many books in the world did everyone read?’

(21) a. ?* [dare-ka-ga] ittai(zentai)
 who-KA-Nom the.hell
 nansatu -no hon-o yomimasita ka?
 how.many-Gen book-Acc read Q
 b. ittai(zentai) [dare-ka-ga] nansatu-no
 hon-o yomimasita ka?
 ‘How many books in the world did someone read?’

In examples *a* above, *ittai(zentai)* is placed immediately before a *how many NP* to prevent ultimate pied-piping. As expected, they exhibit intervention effects because the *wh*-expression alone must go through *wh*-movement in that case. If *ittai(zentai)* appears at the beginning of the sentences as in examples *b*, the entire sentences can be pied-piped; hence, no intervention effect is observed.

3. Proposal

In this section I would like to present a semantic/pragmatic account for the reason why only *how many/much* expressions can resort to ultimate pied-piping. Before doing this, I will introduce the meaning of *wh*-questions, and show that ultimate pied-piping is pragmatically inappropriate for other types of *wh*-expressions.

3.1. The meaning of *wh*-questions

Following Hambling (1973), I will assume that the meaning of a *wh*-question is a set of propositions. Consider the following *wh*-question:

(22) Which movie did Bill watch?

The meaning of (22) is the following:

(23) {Bill watched Harry Potter, Bill watched Star Wars, Bill watched LOTR, ...}

The truth value of each proposition in (23) is still unvalued, so that the listener chooses only (and all) true propositions out of the set, which counts as an answer to the question.

To derive (23), *which movie* is fronted and functions as an operator as in (24):

(24) $\lambda p \exists x [\text{movie}(x) \ \& \ p = \wedge \text{Bill watched } x]$

‘movie(x)’ is called a restriction, and it is presupposed according to Strawson (1952) and Lahiri (2002). As a result, when one utters (22), it is presupposed that there are some movies in the context.

3.2. The reason for the lack of ultimate pied-piping in ordinary *wh*-expressions

Suppose ultimate pied-piping is applied to (22) and Chomsky's (1995) copy theory is assumed. Then the following semantic representation will be available:

(25) $\lambda p \exists x [\text{Bill watched movie}(x) \ \& \ p = \wedge \text{Bill watched } x]$

Since the whole question is pied-piped, the restriction becomes more specific. Nevertheless, (25) generates a set of propositions as in (23). However, there is one important difference between (24) and (25). That is, (25) provides a set of true propositions because each proposition consists of 'Bill watched *x*, which he watched', the non-restrictive relative part of which is derived from the presupposed restriction. Moreover, this semantic representation does not function as an information-seeking question because the answer is already provided by the questioner and the listener cannot make any contribution. Accordingly, ultimate pied-piping is pragmatically inappropriate in ordinary *wh*-questions.

3.3. The reason for ultimate pied-piping of quantity questions

Before I provide the answer for why *how many/much NP* questions are different from other types of *wh*-expressions, I would like to discuss the meaning of *how many/much NP* questions, starting with a case where only a *how many NP* is raised. Consider the following question:

(26) How many books did Bill read?

For the sake of exposition, I will assume the following two semantic representations for (26):

(27) $\lambda p \exists n [\text{number}(n) \ \& \ p = \wedge \exists^n x [\text{Bill read book}(x)]]$

(28) $\lambda p \exists n \exists^n x [\text{number}(n) \ \& \ \text{book}(x) \ \& \ p = \wedge \text{Bill read } x]$

' $\exists^n x$ ' means that there are *n* instances of *x*. (27)

provides the following set of propositions:

(29) {Bill read one book, Bill read two books, Bill read three books, ...}

On the other hand, (28) generates the following set:

(30) {Bill read Harry Potter, Bill read Narnia, Bill read LOTR, ...}

(30) is possible because books generally have their own titles. As is the case with (23), the truth value of each proposition is still unvalued, so that the listener chooses all true propositions. However, this is not all in the case of (30). S/he must count the number of all the true propositions and utter the number as an answer.

Next suppose ultimate pied-piping is applied to (26). Then the following semantic representation will be available:

(31) $\lambda p \exists n \exists^n x [\text{number}(n) \ \& \ \text{Ken or Mary read book}(x) \ \& \ p = \wedge \text{Ken or Mary read book}(x)]$

As is the case with (25), the restriction of (31) is presupposed, so that the set of propositions are all true. Nonetheless, this semantic representation is not an inappropriate question because the listener still has a job of counting the true propositions. Therefore, s/he can make a contribution by providing new information, so the sentence can be asked.⁴

3.4. Another environment where ultimate pied-piping may be applied

Actually, there is another environment where the restriction and the scope are identical: indirect questions. This is so because the listener is not required to answer. The following examples support this claim:

(32) a. Ranjit [kau-da] aaw-Q kiyəla] dannəwa.

who-Q came-E that know

b. Ranjit [kauru aawa da] kiyəla] dannəwa.

who came Q that know

'Ranjit knows who came.'

(Kishimoto 1997: 6-7)

(33) Mary-wa [[John-ka Bill-ga] nani-o
 -Top -or -Nom what-Acc
 nonda ka] sitteiru. (cf. (12))
 read Q know
 ‘Mary knows what John or Bill drank.’

In (32), *də* can be separated from the *wh*-expression and employed as a question particle, which suggests that the entire embedded clause has gone through covert *wh*-movement. Similarly, no intervention effect is observed in (33) because the whole indirect question is pied-piped. Both of the examples permit ultimate pied-piping despite the fact that they are not quantity questions, because the listeners are not required to answer.

4. Summary

In this paper, the following findings have been made. First, ultimate pied-piping is possible with *how many/much NP* questions in Japanese and Sinhala, and possibly many other languages, which supports the movement theory of covert *wh*-questions. Second, ultimate pied-piping is also possible in indirect questions, which partly answers why intervention effects are unobserved in embedded context. Thus, the present account, if correct, supports that intervention effects are syntactic (as well) (contra Tomioka 2007). Finally, large-scale pied-piping contributes to interpretations; specifically, the content of restriction becomes more specific (contra Arregi 2003). This fact independently supports Chomsky’s (1995) copy theory.

NOTES

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¹ Pesetsky’s (1987) examples do not have *zentai* after *ittai*, but I added *zentai* because it seems to make the grammatical contrast clearer.

² It is also possible to consider that *ittai(zentai)* is an independent operator which goes through Agree with interrogative *C*. In that case, the data does not serve as evidence for pied-piping. I would like to thank Hideki Kishimoto (p.c.) for pointing out this possibility.

³ Intervention effects are also observed in Sinhala:

- (i) a. ?*kauru-t mokak-də kiwi-e?
 who-T what-Q said-E
 b. mokak-də kauru-t *t_i* kiwi-e?
 what-Q who-T said-E
 ‘What did everyone say?’

(Hagstrom 1998: 59)

Like Japanese, universal quantifiers are interveners in Sinhala, so it cannot be placed before a *wh*-expression as in (ia). But scrambling lifts the effect as in (ib).

⁴ The situation where the ultimate pied-piping arises is easily imagined. For example, suppose we want to know the number of guests in a party and the list of the guests’ names is available. Then we simply can count the names in order to answer how many guests are in the party.

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**Metaphor as Two-way Synecdoche:
A Critical Assessment**

Toshio Ohori & Bo Sen
The University of Tokyo

Keywords: cognitive semantics, metaphor, synecdoche, structural mapping, attributive categorization

1. Introduction

Research on the process of metaphor understanding has produced two different proposals, the conceptual metaphor view (Lakoff and Johnson 1980; cf. also Lakoff 2008 on the neural theory of metaphors) and the attributive categorization view (Glucksberg and Keyser 1990; Glucksberg and McGlone 1999; Glucksberg 2008). The conceptual metaphor view is a maximalist view, in the sense that metaphor is analyzed as systematic mapping between conceptual domains. On the contrary, the attributive categorization view is a minimalist view, as it rejects the idea that rich cross-domain mappings exist as our cognitive asset when we understand metaphors. This paper examines the validity of the attributive categorization view on metaphors focusing on two issues, namely coherence of metaphorical expressions and the status of event structure metaphors.

2. The Validity and Limitation of the Attributive Categorization Theory

2.1 Metaphor as Two-way Synecdoche

Let us start with a straightforward illustration of the attributive categorization

theory using a nominal metaphor in the form A IS B. The use of the noun *shark* as vehicle in (1) is analyzed as referring to a larger class of organisms that have such attributes as <vicious>, <aggressive>, and <merciless> (Glucksberg 2008). Then *my lawyer* is taken to be an instance of this generalized, ad-hoc category, SHARK (for ad-hoc categories, cf. Barsalou 1983). Figure 1 visualizes this process.

(1) My lawyer is a shark.

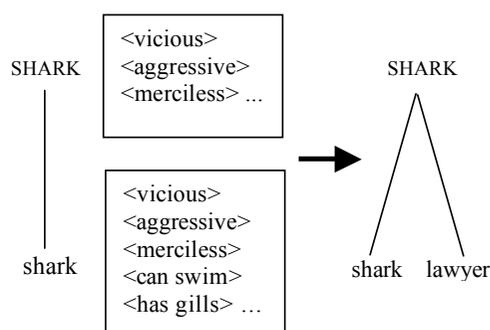


Figure 1. Attribute categorization (adapted from Glucksberg 2008)

In traditional rhetoric, synecdoche refers to both the SPECIES FOR GENUS and the, GENUS FOR SPECIES schemas, and hence the operations in the attributive categorization theory may be labeled “two-way synecdoche” (Group μ 1970).

In cognitive linguistics, many researchers consider synecdoche to be a subtype of metonymy and do not distinguish the GENUS-SPECIES relation from the WHOLE-PART relation (we will come back to this issue in Section 4). However, some pioneering works by Sato (1978) and Seto (1997) suggested that there are significant differences between the two relations, and that only the figurative expressions involving the GENUS-SPECIES relation be called synecdoche (cf. also Mori

2006, 2007). The present paper adopts this definition of synecdoche as being based on our categorical knowledge and the ability to interpret any situation at varying levels of specificity.

Now an important point to be noted here is that the two-way synecdoche in the form A IS B is only one aspect of metaphor, and much richer metaphorical understanding can be achieved through other means, creating a tapestry of coherence relations. For example, (1) can be extended as:

- (2) My lawyer is a shark, and he has strong teeth.

In this example, *has strong teeth* can be taken to mean “has strong potential to attack”, and this interpretation is motivated by the association with the shark metaphor, not simply by the ad-hoc categorization based on the concept denoted by the lexical item *teeth* (which may evoke effective law enforcement in other context, for example). According to the cultural stereotype, a shark is vicious because it bites with its teeth. Therefore this attribute is given salience in metaphor understanding, while attributes like <can swim> and <has gills> have little to do with the stereotype of shark and is not highlighted.

Let us further illustrate this point with another example, taken from Glucksberg (2001: 99): *Dr. Moreland’s lecture was a three-course meal for the mind*. This sentence can be elaborated to the following expression with the addition of the verb *digest* and the adjective *heavy*.

- (3) Dr. Moreland’s lecture was a three-course meal for the mind. I need some more time

to digest it, because it was rather too heavy for a novice.

According to the attributive categorization theory, *digest* and *heavy* may be interpreted separately from *three-course meal*, and each of them may stand for an ad hoc category. However, it is difficult to come up with any relevant categories which *digest* and *heavy* stand for via the SPECIES FOR GENUS synecdoche in isolation based only on stereotype knowledge. There is a priming effect which narrows down the possible range of interpretations for *digest* and *heavy*, and this effect precisely derives from the conceptual metaphor IDEAS ARE FOOD which systematically connects clusters of entities, attributes, and activities. Also, the coherence of metaphor understanding is enabled by experientially basic primary metaphors, such as ANALYZING IS TAKING APART and DIFFICULTY IS HEAVINESS in the present case (Grady 1997).

2.2 The Treatment of Predicative Metaphors

While previous studies of attributive category theory have not focused on predicative and adjective metaphors, there is one notable study, namely Torreano, Cacciari & Glucksberg (2005) that tried to extend the dual reference analysis of nominal metaphors to predicative metaphors. They tested the hypothesis that the acceptability of predicative metaphors can be explained via the abstraction of the verb to a (largely ad-hoc) superordinate category. That is, a specific verb such as to *fly* can be taken to denote a more general category of actions such as traveling fast. Let us examine this process by taking a closer look at the steps of category formation. The following two sets of sentences will be examined.

- (4) a. The bird grabbed the worm and flew/went across town.
- b. The boy grabbed his bike and flew/went across town.
- c. The idea flew/went across town.
- (5) a. Matt unlocked/opened his door.
- b. Matt unlocked/opened his old wound.
- c. Matt unlocked/opened her heart.

(Torreano et al. 2005)

The attributive categorization theory argues that *fly* is understood as denoting a more general concept such as traveling fast, via abstraction from its literal meaning ‘to move through the air by means of wings or winglike parts’. Thus (4b) can be explained by setting up the category FLY (=TRAVEL FAST) because this is a stereotypical property of flying. However, (4c) cannot simply be interpreted in the same way because ideas do not actually “travel”. In (5c)—and in (5b) too if it is taken to refer to a mental “wound”—even after abstracting from the verb *unlock* to a higher level concept, say OPEN, it does not embrace the metaphorical act of opening one’s heart. Here a conceptual metaphor like HEART IS A CONTAINER plays an important role in understanding (5b) and (5c) (for a more recent modification of the attributive categorization theory, see Utsumi and Sakamoto 2011).

3. Event Structure Metaphors

3.1 The Metaphoricity of Event Structure Metaphors

The proponents of attributive categorization theory do not pay strong attention to event structure metaphors such as EVENTS ARE ACTIONS, partly because they consider that metaphorical language should be separated from thinking and that in event structure metaphors the topic and the vehicle do not form distinct

conceptual domains.

From our viewpoint, however, what matters is why we use grammatical structures employed to encode agentive actions in order to talk about naturally-occurring events, and why we use the language for describing locations when we talk about other types of states such as mental states in a remarkably consistent way. We will argue that it does not make much sense to abstract from such basic notions as causations, motions, and spatial orientations to higher level concepts in order to account for metaphor understanding and that it is more sensible to assume that expressions of event structure are primarily enabled by cross-domain mappings. These claims will be substantiated below.

3.2 EVENTS ARE ACTIONS and the Status of Agents

Lakoff (1990) claimed that various aspects of event structure, including notions like states, changes, processes, actions, causes, purposes, and means, are understood metaphorically in such terms as space, motion, force, etc. Grady (1997) called metaphors connecting these basic experiences primary metaphors. The following examples involve the metaphor EVENTS ARE ACTIONS, which is responsible for encoding some inanimate entity as the agent of a sentence.

- (6) This notebook reminds me of my school days.
- (7) An acute stomachache stopped me from going out.
- (8) Two more years will make you forget about her.

Here, the attributive categorization theory would assert that the speaker creates a generalized category from a vehicle concept, namely action,

by leaving out certain semantic components in it.

However, if we assume that what distinguishes actions from events is the presence of agency, what remains after eliminating the agent component from an action will be an event itself, and hence the category formation process will be rather vacuous. No relevant attribute will remain in the “generalized” category of ACTION.

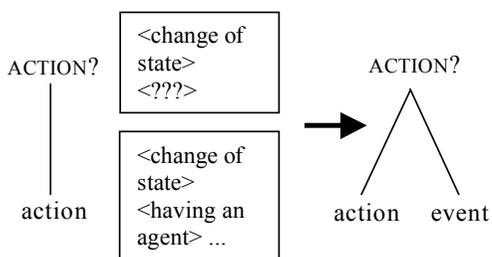


Figure 2. Presumed attribute categorization for EVENTS ARE ACTIONS

Alternatively, one could start from individual lexical items such as *remind*, *stop*, and *make*. The notion of agency can also be analyzed into such components as <animate>, <volitional>, and <causer>. In this way, one could envisage, for example, an attributive category REMIND, where the components <human> and <volitional> are eliminated but the <causer> component remains, thereby motivating the expression (6).

There are two problems with this analysis. First, agency is not a fixed notion but is to a considerable extent a product of construal. Nishimura (1993), examining the following examples, claims that there is no a priori reason for requiring that the applicability of agent be strictly limited to an animate entity

- (9) a. The terrorist killed him with a bomb.
- b. A bomb killed him.

An animate subject (9a) can be taken as the prototype of “a cause producing an effect” and an inanimate subject (9b) can be an instance of the extended category from it. When (9b) is used, a normal expectation is that there is somebody behind who planned the bombing, even though his/her identity may not be known. This highly conventionalized implication is precisely what motivates the use of instrumental subjects. But then, in order to account for this effect, it is necessary to reactivate the agency attribute, which is once eliminated to form the “generalized” category of KILL (where only the <causer> component remains). An important point to be noted in this connection is that unlike in (1) where the attributes such as <vicious>, <aggressive>, and <merciless> pre-exist in the topic concept and only wait to be highlighted, agency is sometimes creatively superimposed on inanimate subjects, especially when the personification metaphor is at work, as in:

- (10) A vengeful bomb killed him.

Second, there is unmistakable regularity in the expressions under investigation, unlike in the parade examples given by proponents of attributive categorization theory. In the *shark* metaphor (1), an attribute selected for metaphorical understanding is highly context dependent. On the other hand, for any use of action predicates with inanimate instrumental subjects describing non-agentive events, the selected attribute for characterizing the topic concept is essentially predictable, namely the <causer> component. This entails that there is an established connection between two classes of concepts, actions and events, as part of our linguistic knowledge.

3.3 TIME IS SPACE and the Abstract Thinking

The *shark* metaphor (1) may be seen as an instance of loose talk, i.e. a judgment based on certain attributes which make up the generalized category of SHARK. But the following examples of the event structure metaphor TIME IS SPACE do not seem to naturally allow loose talk as in (11')-(12') and (11'')-(12'').

- (1) My lawyer is a shark.
(11) We are ahead of the schedule!
(12) Christmas is coming soon.
- (1') My lawyer is a kind of shark.
(11') ?We are kind of ahead the schedule!
(12') ?Christmas is sort of coming soon.
- (1'') Loosely speaking, my lawyer is a shark.
(11'') ?Loosely speaking, we are ahead the schedule!
(12'') ?Loosely speaking, Christmas is coming soon.

Given that loose talk is a useful method for identifying graded categorization, the above examples of the event metaphor TIME IS SPACE do not reflect gradable judgments based on ad-hoc categories, i.e. there is some qualitative difference between (1) and (11)-(12). The application of words denoting spatial concepts to time is a highly conventionalized mode of language use. Spatial relations are fundamental in human cognition and hence the spatial concepts make a privileged metaphor vehicle. Our experience about time is deeply related to spatial relations, such as far and near, forward and backward, long and short, among others. We can only be in one place at one time, and each moment can happen only once (cf. Kranjec,

Cardillo, Schmidt, and Chatterjee 2010).

Now if the attributive categorization theory admits that (11)-(12) are metaphorical expressions, they may need to argue that time is an instance of an attributive category generalized from spatial concepts of motion and location. But in these examples, the process of attributive category formation is also vacuous, because the elimination of the <spatial motion> component from *ahead (of)* and *come* does not yield to any attribute that would highlight time-related concepts.

A possible way out of this problem is to assert that (11)-(12) simply exemplify polysemy and that metaphorical mapping is not at work. However, this is mere labeling, not an explanation. Why is our entire vocabulary perfused with space-time polysemy that is so coherent and systematic? What is the motivation for it? The answer from the conceptual metaphor theory is that understanding time in terms of space is part of our habitual thought system. Event structure metaphors should be explained by the embodied synchronization of two domains in the real world, rather than by the mechanism of ad-hoc categorization. What matters is the *linguistically entrenched* analogical connections between concepts.

4. The Issue of GENERIC IS SPECIFIC

Before we turn to conclusion, it will be helpful to discuss the status of the schema GENERIC IS SPECIFIC in the conceptual metaphor theory because it is sometimes a source of confusion in the literature. As pointed out by Sullivans & Sweetser (2009), there is a cline of metaphoricality in examples of the GENERIC IS SPECIFIC metaphor.

One example of the GENERIC IS SPECIFIC schema given by Sullivans & Sweetser (2009)

that is least metaphorical is when someone hands over a generic-brand paper tissue and says *Here's a Kleenex*. This is in fact an instance of SPECIES FOR GENUS synecdoche. It functions to extend a specific case to a more general level.

Another case of GENERIC IS SPECIFIC operation can be found in the expression *man doth not live by bread alone*. In this case, a most representative example of food in the Western culture is picked up to refer to the entire class of food. When GENERIC IS SPECIFIC operates in this way, certain attributes of the specific category are selected to form a generic category. Once this extension is built, the superordinate category BREAD (=FOOD) functions as a linking node and all the other relevant nodes will be mapped. A similar example is the Japanese expression *gohan-o taberu* (steamed.rice-ACC eat), where *gohan* 'steamed rice' may refer to different kinds of meals. Here GENERIC IS SPECIFIC opens a path for a two-way synecdoche process.

However, the GENERIC IS SPECIFIC analysis has its own limits and problems. One is a notional problem. Metaphorical mapping normally takes place between conceptual categories, while neither GENERIC nor SPECIFIC is a conceptual domain as such. Genericity and specificity are meta-level attributes of concepts and consequently GENERIC IS SPECIFIC is not a mapping between concepts. Hence we suggest that this schema be removed from a list of metaphors. The second problem is empirical. GENERIC IS SPECIFIC best works for cases where one can focus on a relatively concrete stereotype with rich enough attributes (cf. Rosch 1978). In contrast, as we have shown in section 3, the two-way synecdoche analysis does not seem to work for highly abstract event structure metaphors involving such concepts as agency and space.

5. Conclusions

From the above discussion, the following conclusions can be drawn.

(a) The attributive categorization theory works well for the A IS B type nominal metaphors where relatively concrete stereotypes can be identified, but it does not directly account for how the coherence of metaphorical expressions is recognized. The theory needs to be refined to handle predicative metaphors and other subtle metaphoric expressions.

(b) The attributive categorization theory does not work adequately for event structure metaphors such as EVENTS ARE ACTIONS and TIME IS SPACE, because it offers only a vacuous account of metaphorical meanings in event structure metaphors, e.g. the superimposition of agency in the EVENT domain. Also, it fails to explain the systematicity and predictability of polysemy relations in the linguistic structure.

(c) The status of the GENERIC IS SPECIFIC schema adopted in conceptual metaphor theory may need to be reconsidered in order to deal with the problems raised by the proponents of the attributive categorization theory. The limitation of its applicability should be recognized in order to streamline the theory of metaphor.

Given that both categorization and analogical mapping constitute our basic cognitive abilities for thinking, it is no surprise that our use of metaphors is motivated by both. We conclude that the two views are different in scope and application, and a fruitful direction of research is to examine their division of labor and the modes of their interaction in meaning construction.

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**On the Asymmetric Behavior
of Movements
in the Double Object Construction***

Tomonori Otsuka
Kyushu University

Keywords: A-bar movement, A-movement,
asymmetric, double object, phase

1. INTRODUCTION

Although Chomsky's (2008) framework of feature inheritance is theoretically interesting, it has not been offered enough empirical support by previous research. In this paper, I will demonstrate that the asymmetric behavior of movement in the double object construction (DOC), which has been difficult to explain in previous research, is readily accounted for based on Chomsky's (2008) framework with the additional assumptions that DOC has three layers of phases and has a null preposition, appearing as "to" phonetically under certain circumstances. Through the demonstration, I will provide an empirical support for Chomsky's (2008) proposal.

2. PROBLEMS

It has long been noticed that DOC has asymmetric behavior of A- and A-bar movements: namely movements concerning case and agreement and ones concerning discourse force (e.g. wh-movement, topicalization and so on)

respectively.

- (1) a. *Who did you give *t* a book?
(Oba (2005: 61))
b. What did you give John *t*?(ibid.)
(2) a. *Who did you say John sent [_{IO} a friend of *t*] a book?
(Oba (2005: 57))
b. Who did you say John sent me [_{DO} a picture of *t*?
(Runner (2001: 40))

The examples in (1) show that the Indirect Object (IO) in DOC cannot undergo A-bar movement, while the Direct Object (DO) can. The contrast observed in the examples in (2) indicates that the asymmetry is not only related to movement of the actual object, but to the extraction of the object from within the relevant phrases as well. As we can see in (2), extraction from within the IO is not possible, whereas that from within the DO is.

Interestingly, when it comes to A-movement of IOs and DOs, the opposite situation is found. As the examples in (3) demonstrate, although A-movement of the IO is possible, the DO cannot undergo A-movement. Thus, (3b) is not well-formed.

- (3) a. Tom was given the book.
b. *The book was given Tom.

The asymmetry is summarized in the table below. This asymmetry has not been fully accounted for in previous research.

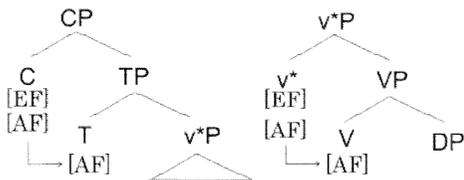
	Indirect Objects	Direct Objects
A-movement	OK	*
A-bar movement	*	OK

3. BACKGROUND

The analysis I use is based on the framework suggested by Chomsky (2008). In recent studies in the Minimalist Program, a current approach of Generative Grammar, derivations are considered to occur simultaneously in a small unit, named a “phase”. A phase is considered to be v*P and CP in the framework. Chomsky (2008) develops this model and introduces processes of “Feature Inheritance” and “Parallel Movement,” illustrated below.

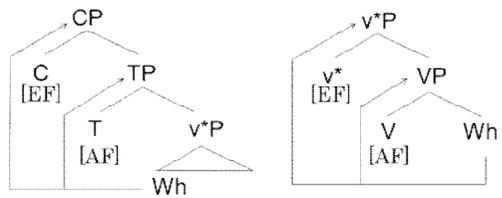
Feature Inheritance is the process of phase heads’ transmitting features onto their complement’s heads. Chomsky (2008) assumes that phase heads trigger syntactic operation and thus only phase heads can carry uninterpretable features. Phase heads have the uninterpretable Agreement Feature (AF) and the Edge Feature (EF), the former of which is handed over to heads of the complement, as shown in (4).

(4)



With the AFs transmitted onto the complements’ head, the EFs on the phase heads and the AFs on the Complements’ heads trigger syntactic operations simultaneously. That is to say, they access the same elements simultaneously and move them to their Spec position. Thus, in this analysis, A- and A-bar movements occur in a parallel manner as represented in (5).

(5)



4. A PROPOSAL

4.1. DOC has three phase layers

In this paper, I propose that DOC has three phase layers. This assumption is based on the two facts below.

Firstly, DOC is argued to have three propositions. In Chomsky’s (2008) framework, a phase is assumed to represent a proposition. The normal transitive sentence has two phases, that is, v*P and CP, the former representing a proposition of completed theta-role relation and the latter, a proposition of discourse force (e.g. question, topic and so on). Now, DOC has another interpretation. That is “possessiveness,” as shown below.

(6) Jorge gave Maria the ball again.

- a. [Jorge gave Maria the ball], and that had happened before.
- b. Jorge [gave Maria the ball] and someone else had given it to Maria before.
- c. Jorge gave [Maria the ball], and Maria had had the ball before.

(Bruening (2010b: 548))

As (6c) shows, DOC always has the interpretation that IOs possess DOs, while this is not necessarily true for the prepositional dative construction, namely sentences like “John sent a book to Mary.”

In addition, Beck and Johnson (2004) argue that the possessive interpretation

has progressive aspect. They claim that sentences having progressive aspect do not hold the same meaning as the normal aspectual sentences as is indicated in (7) and thus, the sentence in (7) can be followed by a sentence like “...but the door would not open.” Therefore, progressive aspect enables the possessive interpretation of DOC to be deniable.¹

(7) Mary was opening the door

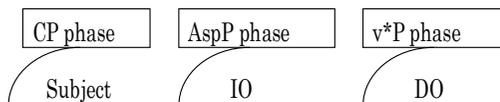
≠ Mary opened the door.

(Beck and Johnson (2004:115))

Secondly, the distinctness condition in Richards (2010) prohibits items of the same category from existing in a phase. In this respect, since DOC has three DPs, it requires three phases, conceptually.

(8) S V IO DO

Now, based on these facts, I conclude that DOC has three phase layers, one of which I assume to be Asp(ect)P.



4.2. DOC has a preposition in its structure

Next, I assume that DOC has a PP in its structure. Bruening (2010a) claims that under certain circumstances, a preposition “to” can appear in DOC.

(9) a. The lighting here gives me a headache.

b.*The lighting here gives a headache to me.

c. The boss denied George his pay.

d.*The boss denied his pay to George.

(Bruening (2010a: 288))

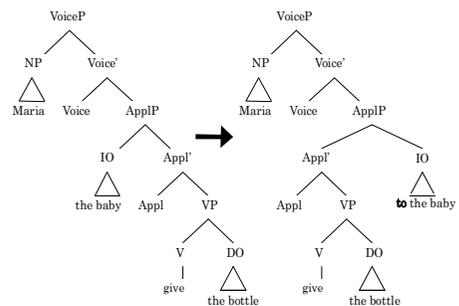
(10) a. ...a stench or smell is defused over the ship that would give a headache to the most athletic constitution.

b. Who could deny something to someone so dedicated to the causes of international friendship and collaboration?

(Bruening (2010a: 288))

The examples in (9) show that certain verbs and idioms can appear only in DOC and cannot be used in the form of the prepositional dative construction. When IOs' information is heavy, however, these expressions can be made use of in DOC, as shown in (10). Bruening (2010a) suggests that this fact is explained by an operation named “R-dative shift.” He claims that in DOC, when an IO undergoes A-bar movement, “R-dative shift” is necessarily applied before the IO is moved and thus the IO has to move rightward with the preposition “to” appearing to the left of the IO. This is shown in (11).

(11) R-dative shift



(Bruening (2010a: 290))

Concerning “R-dative shift,” however, there arise a couple of problems. Firstly, the motivation of the operation is uncertain since this “R-dative shift” is assumed only in order to explain the examples in (10). Secondly, the

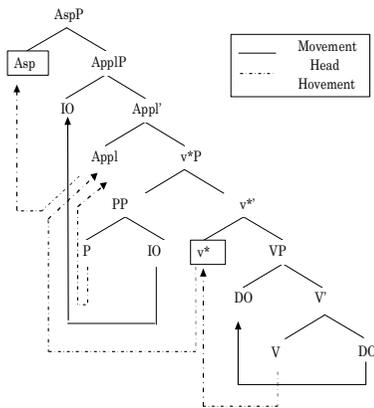
appearance of “to” violates the Inclusiveness Condition, which prohibits introduction of new elements into derivations.

In this paper, I reanalyze this idea by assuming that there exists a P in DOC and under certain circumstances, it phonetically appears as “to”. More specifically, the P is usually incorporated into the verb “give,” and when the incorporation is impossible, the P can appear for some speakers.

4.3. The structure of DOC

Based on the two assumptions above, I assume the structure of DOC as below.

(12)



In (12), V is merged with the DO and projects a VP. v^* , which is a phase head, merges with the VP forming a v^*P , whose Spec position is occupied by a PP which includes the IO. Once the v^*P is formed, v^* triggers syntactic operations. Based on Chomsky’s (2008) framework, v^* transmits its AF onto V and V agrees with the DO, triggering the DO’s movement to Spec-VP. This derivation is equivalent to the one in normal transitive sentences.

Continuously, Appl(igative) head is

merged with the v^*P , forming the ApplP. Asp, which is a phase head, is merged with the ApplP, forming the AspP. Although the subject exists in Spec-AspP, this is omitted for explanatory simplicity. Since I assume the AspP is a phase, Asp triggers another set of syntactic operations. Asp transmits its AF onto Appl and Appl agrees with the IO inside of the PP, which then undergoes movement to Spec-AppIP. Later on, the derivation continues just as in normal transitive sentences, with T and C merged continuously and with syntactic operations triggered.

At the same time, there occurs successive head movement. V moves to v^* , and then $V-v^*$ moves to Appl. At this point, the P is incorporated into V. Finally, $V-v^*$ moves to Asp and is pronounced there as “give.”

In the derivation, the IO is extracted from within the PP, which occupies the Spec of the v^*P phase. Nevertheless, this extraction, namely extraction from within the Spec of phases, is prohibited in Chomsky (2008). In the present analysis, however, I assume that the A-extraction from within the Spec of phases is accepted while A-bar extraction is not.²

5. EXPLANATION

In this section, I explain the asymmetry exemplified in section 1, which is repeated in the chart below, based on the proposal in section 4.

	Indirect Objects	Direct Objects
A-movement	OK	*
A-bar movement	*	OK

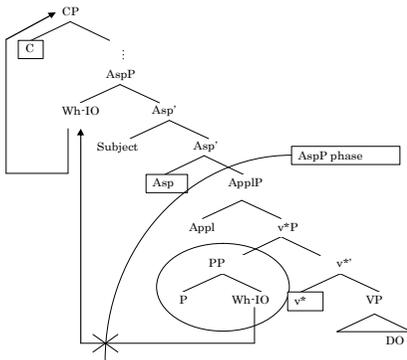
5.1. A-bar movement

As is already shown, in DOC, IOs cannot undergo A-bar movement while DOs can.

- (13) a. *Who did you give *t* a book?
 b. What did you give John *t*?
 (= (1a, b))

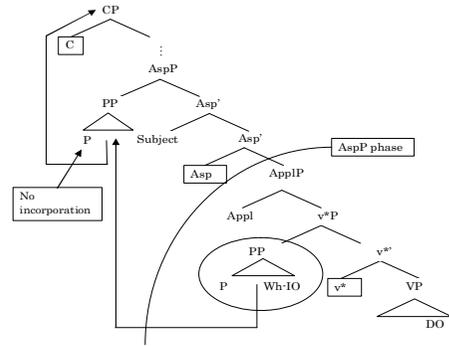
This fact is captured when we consider the derivation of both sentences. (14) represents the derivation of wh-question where the IO is moved.

(14)



The AspP is formed by successive mergers as was shown in (12) above. Now, Asp triggers syntactic operations. The AF on Appl, which is transmitted from Asp onto Appl, triggers A-movement of the IO, which moves to Spec-AppIP though this is omitted for descriptive simplicity. Simultaneously, an EF on Asp triggers A-bar movement of the IO. Nevertheless, the IO itself cannot move because of the ban on the A-bar extraction from within the Spec of phases as argued in 4.3. above. Thus, the PP as a whole has to move and therefore the P cannot be incorporated

into V when it undergoes head movement.
 (15)



Finally, I conclude that, because of the appearance of “to,” A-bar movement of the IO is not observed and only the form of (16b) can be generated.

- (16) a. *Who did you give *t* a book?
 (Oba (2005: 61))

b. To whom did you give *t* a book?

There, however, exist speakers who accept the sentence like (16a). For these speakers, I assume that they have a null P and therefore, even though the PP is fronted, the P does not appear as “to”.

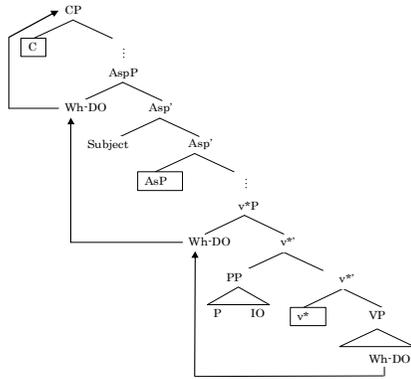
- (17) [_{PP} ϕ who] did you give *t* a book?

Even such speakers do not accept A-bar extraction from within the IO.

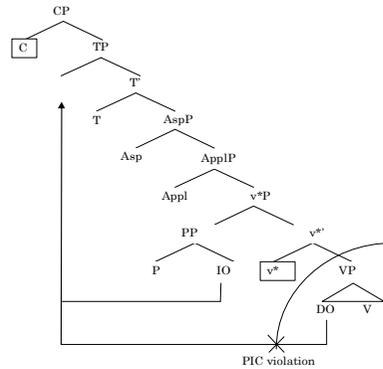
- (18) *Who did you say John sent [_{IO} a friend of *t*] a book?
 (= (2a))

On the contrary, A-bar movement of the DO is accepted generally. This is explained because there is no PP above the DO as we have seen in the case of the IO and therefore the DO can move successive-cyclically as shown in (19).

(19)



(21)



5.2. A-movement

The asymmetric situation is observed concerning A-movement of the IO and the DO: A-movement of the IO is possible whereas that of the DO is not.

- (20) a. Tom was given the book.
 b. *The book was given Tom.
 (= (3a, b))

Here, I assume that the phase nearest to T becomes a non-phase in passivization. Thus, the AspP becomes a non-phase and the v*P remains a phase. Therefore, A-movement of the IO is possible since there are no phase boundaries between the IO and T. Note also that in the present analysis, A-extraction from within the Spec of phases is not prohibited as shown in 4.3. On the other hand, A-movement of the DO is always prohibited by the “Phase Impenetrability Condition (PIC),” which bans the access to the element within other lower phases’ transfer domains.

However, it is argued that some speakers accept a sentence like (20b). In addition, when the IO is a pronoun, A-movement of the DO tends to be more acceptable.

(22) The book was given him.
 Here, I assume that for these speakers, not only the AspP but also the v*P becomes a non-phase. Therefore, nothing prevents the DO from moving over the IO, since there is no c-commanding relation between the IO in the base position and the DO and thus no superiority effect is observed. I also suggest that the IO is attached to V as a clitic in these cases.

6. CONCLUSION

Based on Chomsky’s (2008) framework and the assumptions that DOC has three phase layers and that DOC has a P in its structure, I have demonstrated that the asymmetry between the IO and the DO concerning A- and A-bar movement can be readily explained. I have also shown that exceptions to this asymmetry are captured as well in the present analysis.

NOTES

*Earlier versions of this article were presented at the 65th conference of the

Kyushu branch of the English Literary Society of Japan at Oita University (October 29, 2011) and English Linguistic Society of Japan 5th International Spring Forum at Konan University (April 22, 2012). I would like to express my sincere gratitude to Nobuaki Nishioka for valuable suggestions and comments. I am also grateful to Carey Benom, Stephen Laker and Jenifer Larson-Hall for helpful suggestions.

¹ Therefore, the sentence in (6) can be followed by “...but she refused to receive it.”

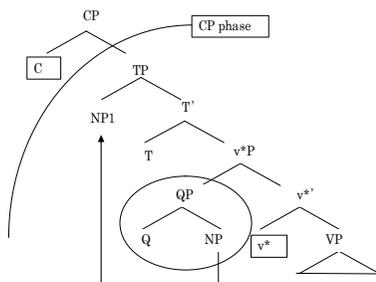
² The motivation of this assumption is below.

- (i) a. All the children have seen this movie.
- b. The children have all seen this movie.

(Sportiche (1988))

In (ib), a Floating Quantifier, “all” is stranded in its base position. Some researchers analyze Floating Quantifiers as movement of NP out of QP whose head is Q, “all”. Thus, the example of Floating Quantifier in (ib) is analyzed to include A-extraction of the subject from within Spec-v*P, which is a phase as shown in (ii).

(ii)



Based on this, I assume that (ib) is an example of A-extraction from within the

Spec of phases and that this is legitimate.

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Second, gapping can include *wh*-elements, which are usually assumed to be located above TP; see (5).

- (5) a. When did John arrive and when Mary?
 b. Why did John go by train and why Mary by car? (Repp (2009: 34))

From these counterexamples, we can conclude that gapping cannot consist of vP coordination.

2.2 Rightward Focus Movement Analysis

Concerning multiple sluicing, Lasnik (2007) offers a rightward focus movement analysis.

- (6) a. One of the students spoke to one of the professors, but I don't know which to which.
 b. ...but I don't know

$$[_{CP} \text{which}_i [_{TP} \text{t}_i \text{ spoke } \text{t}_j] [\text{to which}]_j]$$


In (6b), the first remnant *which* moves to Spec, CP and the second one *to which* adjoins rightward to CP, followed by TP deletion. However, Lasnik's approach faces some serious problem, as raised by Park and Kang (2007).

- (7) a. Who_i did Mary talk to t_i t_j yesterday [about phonology];?
 b. *I know who Mary talked to yesterday about phonology, but I don't know who about semantics.
 (Park and Kang (2007: 398))

(7a) indicates that the application of both *wh*-movement and the right adjunction is legitimate. However, when multiple sluicing applies, the sentence is illegitimate, as illustrated in (7b). This fact strongly suggests that the second remnant in multiple sluicing does not

adjoin rightward.

3. AN ALTERNATIVE ANALYSIS

3.1 The Size of Coordination

Based on the previous discussion, we present a new account for the structure of gapping and multiple sluicing. First, adopting Rizzi's (2004) CP cartography, we argue that gapping consists of CP coordination as shown in (8b).³

- (8) a. Why did John go by train and why Mary by car?
 b. $[_{IntP} \text{why} [_{FocP} \text{Mary}_i [_{TP} \text{t}_i \text{ did go } \text{t}_j] \text{by car}_j]]$

As for multiple sluicing, given that the deletion operation at PF is applied to a constituent, both of the *wh*-phrases move overtly above TP, because the tensed elements are included in the deletion domain, as a sentence like (6a) indicates. Therefore, we conclude that the remnants move to the CP domain both in gapping and multiple sluicing in English.

3.2 The Directionality of Movement

Since Jayaseelan (1990), it has been argued that gapping includes Heavy NP Shift. For instance, as (9) indicates, when the object of a preposition undergoes Heavy NP Shift, the sentence becomes ungrammatical.

- (9) a. I talked t_i yesterday [about the man I recently met].
 b. *I talked about t_i yesterday [the man I recently met].
 (Abe and Hoshi (1997: 102))

Jayaseelan points out that this property also holds in gapping, as shown in (10).

- (10) John talked about Bill and Mary *(about) Susan.

Furthermore, Heavy NP Shift cannot move two or more elements rightward.

- (11) *John gave t_i t_j yesterday [the tall man]_i [the book written by the professor at MIT]_j.

If gapping involves this operation, we can properly account for the ungrammaticality of (12).

- (12) *Alan gave Sandy a book, and Peter Betsy a magazine.

(Jayaseelan (1990: 76))

Moreover, since the remnants in gapping are considered to be contrastive focus, we assume that the first remnant moves leftward to Spec, FocP in the CP domain to check a focus feature, and the other remnants move rightward to adjoin to FocP in the CP domain, though they do not check any features.

Concerning the directionality of the *wh*-remnants in multiple sluicing, we assume that they also move to Spec, FocP. Then we may plausibly ask why they move leftward overtly in multiple sluicing, while, in general, only one *wh*-phrase moves overtly in English multiple *wh*-questions. For this issue, we employ Nakao's (2008) analysis. She assumes that in-situ focused elements in fact undergo covert focus movement.⁴ However, if the in-situ focused element is deleted at PF, it needs to be pronounced in the higher position to satisfy Pesetsky's (1997) recoverability in (13).

- (13) Recoverability

A syntactic unit with semantic content must be pronounced unless it has a sufficiently local antecedent.

Adopting these notions, we assume that in

multiple sluicing the second remnant must also move overtly to satisfy recoverability in (13).

3.3 The Superfluous Movement and the Locality Condition

Taking the above discussion into consideration, we propose the following assumptions.

- (14) Assumptions

- a. Gapping and multiple sluicing consist of coordination of the CP domain.
- b. In gapping, the first remnant moves leftward, and the second one adjoins rightward, while in multiple sluicing, both of the two remnants move leftward.

Moreover, following Saito and Fukui (1998) and Tanaka (2012), we assume that the directionality of movement is regulated by the existence of feature checking: there is a feature checking for the leftward movement while there is not for the rightward movement. Generally, rightward movement is considered to be applied only one time, moving an element in VP only to vP, not to TP or higher. However, if we assume that the tensed elements and verbs in TP are deleted and the deletion operation is applied to the constituents, it is plausible to suppose that the second remnant moves successively to some position above TP. For this assumption, we propose the following economy condition.

- (15) A Condition on Superfluous Movement

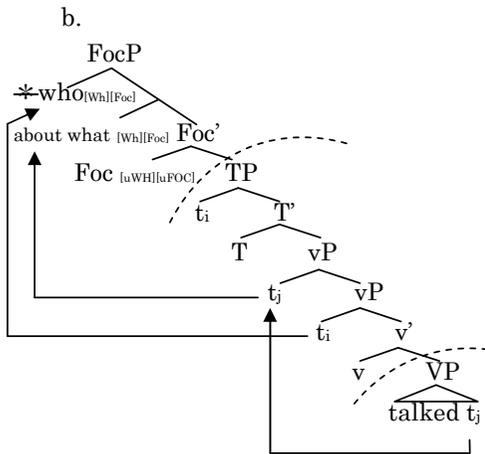
If an element moves rightward above vP successively, the phasal

(19) a. John talked about Bill yesterday,
and Mary (*today) about Susan.

b. Mary watched the baseball game
on Friday, and Jim (*on Sunday)
the horse race.

As for the derivation of multiple sluicing,
we have the following structure.

(20) a. Mary said everybody talked
about something, but I don't
know who about what.



In (20b), first *about what* moves to outer Spec, vP. Next, the first remnant *who* moves to Spec, TP and Spec, FocP simultaneously (cf. Chomsky (2008)). However, these movements cause the locality violation, for the movements of *about what* to Spec, TP and Spec, FocP are shorter than that of *who* to Spec, FocP. Therefore, a copy of *who* at Spec, FocP gets an * feature. However, the Foc head can check the * feature of *who* in Spec, FocP and it is deleted. Third, the second remnant in Spec, vP moves to inner Spec, FocP by the tucking in operation (cf. Richards (2001)). Finally, deletion of TP occurs and the derivation converges.

4. AN APPROACH TO ISLAND REPAIR PHENOMENA

4.1 Non Island Repair in Gapping

As for the case of gapping, in which the island repair effect is not observed, the derivation of (21a) is represented in (21b).

(21) a. *Suzy likes men who play instruments, and Mary, sports.

b. [_{FocP} Mary_i [_{TP} ~~t_i~~ T [_{vP} ~~t_i~~ [_{vP} like [_{DP} men [_{CP} who [_{@vP} v [_{vP} play ~~t_j~~]]]]]]]]] *t_j] *sports_j]

In (21b), the second remnant *sports* successively move rightward to the matrix CP domain. However, along the way, when the remnant crosses over the complex NP island, an * feature is assigned to the remnant. In addition, when the second remnant moves above vP, the vP is assigned an @ in accordance with the condition in (15). Although features of the lower copies are deleted by PF deletion, the * of the copy adjoining to the FocP is not deleted because it is rightward movement without involving feature checking. The same accounts hold for the other cases of island phenomena.

4.2 Island Repair in Multiple Sluicing

As shown above, island repair is observed in multiple sluicing. The structure of (22a) is illustrated in (22b).

(22) a. ?Ben will be mad if Abby talks to one of the teachers about something, but she couldn't remember which about what.

b. [_{FocP} *which_i *about what_j Foc [_{TP} Bill will [_{vP} *t_i *t_j v mad [_{CP} *t_i *t_j [_{CP} if Abby talks to ~~t_k~~]]]]]]]]]

In (22b), *which* moves to the edge of CP

and, similarly, *about what* moves to the inner edge of CP. Here, both of them get * features as they move out of an adjunct island and violate the locality condition in (17). However, when *which* and *about what* move to Spec, FocP, the * features of the two remnants are checked against the C head and deleted. Moreover, the lower copies with * features are deleted at PF. Consequently, no * features remain and the derivation converges. We can employ the same account to other cases, such as a *wh*-island and a complex NP island.

5. CONCLUSION

This article offers a rationale for the difference in syntactic behavior between gapping and multiple sluicing, based on island repair phenomena. Moreover, by assuming the two economy conditions, a condition on superfluous movement and a locality condition, we can account for why gapping does not exhibit island repair while multiple sluicing does.

Notes

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Remaining inadequacies are of course my own.

¹ At first, some informants judged multiple sluicing difficult to accept. However, if they put a pause between the first and the second remnant, they found that such sentences became more acceptable.

² Koizumi (1987) proposes the following condition concerning the remnants in the second conjunct.

(i) Adjuncts are invisible to gapping.

(ii) a. Charlie entered the bedroom at 5:30, and Vera the kitchen at 6:00.
b. *Max gave Sally a nickel, and Peter Susan a dime.

(ii a) is grammatical since the remnant *at 6:00* is a temporal adverb, namely, an adjunct while (ii b), which includes three argument remnants, is excluded. There is no agreement on how this contrast follows. Therefore, I will leave this issue for future research.

³ Rizzi (2004) proposes the following fine structure of the CP system.

[_{ForceP} Force [_{TopP*} Top* [_{IntP} Int [_{TopP*} Top* [_{FocusP} Focus [_{Mod*P} Mod* [_{TopP*} Top* [_{FinP} Fin [IP]]]]]]]]]]

⁴ See Chomsky (1995) and Bošković (2002) for the covert movement analysis of in-situ *wh*-elements.

⁵ Merchant (2008) proposes that * is a feature of a trace while Chomsky (1972) argues that * is a feature which is assigned to an island node (cf. Lasnik and Saito (1992)).

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The (Un)passivizability of *Have*, *Own*, and *Possess**

Shiro Takeuchi
University of Tsukuba

Keywords: (un)passivizability, possessive verbs,
(conceptual) binding relation

1. Introduction

It has been pointed out by several previous studies that there is a difference in passivizability among possessive verbs. Consider (1):

- (1) a. * A house on Kauai is had (by Leslie).
- b. A house on Kauai is owned (by Leslie).
 (Wasow (1980: 308))
- c. The land is possessed by John.
 (Kobukata (2010: 24))

As is illustrated in (1), *have* does not passivize; on the other hand, *own* and *possess* do.

This study attributes the difference in passivizability of *have*, *own*, and *possess* to the presence or absence of a bound variable in the second argument of each verb. More specifically, I claim that there is an implicit bound variable in the second argument of *have* in its semantic structure (SS). The structure that I propose is a modified version of that given in Pinker (1989). The presence of a bound variable prevents *have* from passivizing.

In section 2, I overview several previous studies and point out their problems. In section 3, I present an alternative proposal on the unpassivizability of *have*, and in section 4, I offer further pieces of evidence which support my account.

2. Previous Studies

2.1. Morphological Explanation: Kageyama (1998)

As Kobukata (2010) explains, Kageyama (1998) (cf. Wasow (1980)) reduces the unpassivizability of *have* to its lack of an external argument. Kageyama argues that the absence of an external argument is illustrated by the contrast in (2):¹

- (2) *haver / owner / (possessor)

It is generally assumed that *-er* nominals correspond to an entity understood to be the external argument of the base verb (Rappaport Hovav and Levin (1992)). Assuming that passivization is a process where the external argument of a verb is suppressed, Kageyama concludes that its absence prevents *have* from passivizing.

Contrary to his claim, however, it is not so difficult to find the form *haver*. Consider (3):

- (3) What the haver has is characteristically something considered “good,” and what the non-haver does not have is something “bad” or a deficiency.

(Hans-H. Hoppe,

Democracy-The God That Failed)

The fact that the form *haver* does exist, however rare it may be, indicates that the verb *have* has an external argument.

Note here that there is also the form *havable* available. Consider (4):

- (4) Force is not havable. Let me restate our definition.

(J. Zimba, *Force and Motion:*

An Illustrated Guide to Newton’s Laws)

It is well known that *-able* adjectives are predicated of the direct internal argument of the base verb (Itoh (1981), Wasow (1977)). The attested example in (4) suggests that *have* has an internal argument. From these pieces of evidence, I conclude that *have* is a transitive verb (cf. Takezawa (2000, 2003)), which has both internal and external arguments, and that

Kageyama's claim on its unpassivizability is not valid.

2.2. Functional Explanation: Tham (2005)

Tham (2005) attributes the unpassivizability of *have* to its presentational function. Tham claims that the second argument of *have* bears presentational focus.

He claims that this view is supported by the definiteness restriction (DR) shown by *have*. Consider (5).

- (5) a. * Mowgli has {the/every/each} pen
b. Mowgli owns {a/two/some/the/every/most of the} pen(s).

(Tham (2005: 141, 231))

“Strong quantifiers” presuppose the existence of the referents that they modify. That is, the referents that they modify are (almost always) discourse old, while the second argument of *have*, which is a focus, is discourse new. Therefore, the presentational focus is incompatible with the function of strong quantifiers. Tham claims that this is the reason for *have* showing the DR.

When it comes to passivization, Tham follows Givon (1976) and says that the passive subject has the status of topic. Therefore, he asserts, the second argument of *have* cannot be the passive subject.

Contrary to his claim, however, as Kobukata (2009:11) notes, the first argument of *have* can bear a presentational focus, as in (6). She also states that both arguments can bear a presentational focus, as shown in (7).

- (6) Q. Who has a {wife/lover}?
A. John has a {wife/lover}.
- (7) a. It is a beautiful wife that John has.
b. It is John who has a wife.

In addition, both *own* and *possess* exhibit the same behavior, as in (8) and (9).

- (8) a. It is a house that John {owns/possesses}.
b. It is John who {owns/possesses} a house.

- (9) Q. Who {owns/possesses} a car?

A. John {owns/possesses} one.

The functional explanation thus does not account for the difference in passivizability of the possessive verbs we are concerned with here.

2.3. Syntactic Explanation: Morita (2003)

Morita (2003) deals with the unpassivizability of *contain*. Morita points out that the two arguments of *contain* do not exhibit the usual agent-patient pattern. He observes that the arguments of *contain* show a whole-part relation. The first argument is a whole of which the second argument is a part. Consider (10) (Morita (2003: 170)):

- (10) a. The package contained a present.
b. * A present was contained by the package.
- (11) a. The poor girl lost her mind.
b. * Her mind was lost by the poor girl.

Morita argues that in (10a), *a present* is a part of *the package*, which is a whole. He also assumes that the same relation holds in sentences like those in (11a); that is, he claims that *her mind* is a part of *the poor girl*.

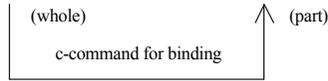
Morita observes that in (11a), *her mind* is anaphoric to *the poor girl*. On the basis of the whole-part relation exhibited both by (10a) and (11a), he claims that the arguments of (10a) are also in an anaphoric relation. That is, he claims that in (10a), *a present* is anaphoric to *the package*.

Morita attributes this relation of arguments to the existence of small *v* that assigns the (structural) partitive Case to its complement. He argues that small *v* divides into two: one assigns the (structural) accusative Case to its complement, and the other assigns the (structural) partitive Case to its complement. In other words, small *v* assigns to its complement either accusative or partitive Case, as shown in (12) (Morita (2003: 180)):

- (12) a. v_{acc} : <Agent, accusative>
 b. v_{part} : <whole, partitive>

According to Morita, a partitive DP, a DP that is assigned the partitive Case, is anaphoric to a whole DP; in other words, a whole DP c-commands a partitive DP, as in (13a).

- (13) a. the package $T^0 v_{part}$ contain a present



- b. a present T^0 be v_{def} contained by the package
 *(part) (whole)

(Morita (2003:184))

As shown in (13b), passivization, however, breaks this c-command relation required for the whole-part relation, which results in a Binding Condition A violation (Chomsky (1993:43)).

To postulating the small v part, the passive sentences of *own* and *possess* that we saw before constitute serious counterexamples. First let us consider the following examples:

- (14) a. * What Bill did was own a VW.
 (Jackendoff (2007:198))

- b. * What John did was possess a house.

As illustrated in (14), the subject referents of both *own* and *possess* are not agents. Therefore, in Morita's account they should be *whole*, and the second arguments should be *part*. However, as we saw before, both verbs do passivize. Consider also the sentences in (15).

- (15) a. That house is owned by a couple from Harrogate...

(B. McMahon, *The Complete Guide to Buying Property in Italy*)

- b. That power is possessed by Congress alone...

(*Congressional Record*)

These facts make the postulation of small v part, the structural partitive Case, and a partitive DP objectionable.

As for *have*, Morita assumes, following Kayne (1993), that *have* is derived from a genitive

PP, like those in (16a).

- (16) a. Mary's attractive appearance/sister
 b. $Mary_{whole} T^0 v_{part}$ have [$_{DP} t$ an attractive appearance/a sister]

((16b) = Morita (2003: 186))

Following Barker (1995), he emphasizes that a genitive PP exhibits a whole-part relation. He argues that a *have* sentence also exhibits the same relation, postulating a small v_{part} in *have* sentences, as shown in (16b).

There are at least two problems with this account. First, there is no small v in a DP. Second, the whole-part relation that Barker argues for is semantic. It follows from these points that even if one may find that the derivation of *have* from a genitive DP is valid, it seems difficult to postulate a syntactic element (small v) in order to capture the relation that the arguments of *have* exhibit.²

3. Proposal

Now that we have pointed out problems with the several previous studies on the unpassivizability of *have*, I will propose an alternative account. First let me discuss the basic assumption of this study.

3.1. No Distinction between Alienable and Inalienable Possessions

While some previous studies on *have* have made a clear distinction between alienable and inalienable possession, I assume no distinction between these. Partee (1983/1997) argues that it is difficult to postulate two *haves*, alienable and inalienable, on the basis of the conjoinability shown in (17).

- (17) a. John has a wife and a house.

- b. John has piles of money and no living relatives. (Partee (1983/1997:187))

In (17a), for example, the relation between *wife*, a relational noun, and *John*, a person, can be regarded as inalienable, while the relation

between *house*, a non-relational noun, and *John* can be regarded as alienable. Regardless of this possible distinction, however, the two nouns (or, the two noun phrases) can be coordinated. It follows from this fact that the two nouns are of the same kind and that the one and the same *have* expresses both relations. I follow Partee on this point.

3.2. Proposal: Bound Variable

In this subsection, I propose an alternative account. As shown in (18a), a possessive pronoun in the second argument of *have*, when it appears, has to be anaphoric to the first.³ On the other hand, as in (18b), there is no such restriction in *own* and *possess*.

- (18) a. I have {a/my/*his/*the/*every}
 {house/wife}.
- b. I {own/possess} {a/my/his/the/every}
 house.

In (18a), *my* should be interpreted in a bound variable sense, as in sentences (25) below. This fact indicates that there is an implicit bound variable present in the second argument of *have*. What I mean by this is that *I have a house* and *I have a wife* are construed as the following, respectively:

- (19) a. I_i have a house (*of my_i own*).
- b. I_i have a wife (*of my_i own*).

The proposal that the second argument of *have* has to be bound to the first is supported by the contrast in (20).

- (20) a. Who {owns/possesses} this land?
 John {owns/possesses} it.
- b. * Who has this land? John has it.
- cf. John has some land. He has had it for
 five years.

The second argument of *own*, and *possess* need not be bound to the first, thus sentence (20a) is grammatical. On the other hand, in (20b), *this land* and *it* are not bound to *who* and *John*, respectively, resulting in the ungrammaticality of

the sentence as an instance of possessive *have*.

On the basis of these facts, I revise the semantic structure for *have* by Pinker (1989) in (21), and propose the semantic structure for *have* in (22).

- (21) [_{state} HAVE ([THING], [THING])]
- (22) [_{state} HAVE ([THING] ^{α} , [THING(α)])]

The structure in (22) shows that α in the second argument of HAVE has to be bound to the first, and that the superscript on the first argument binds α in the second. This account enables us to answer the question of the unpassivizability. That is, when the second argument is put in subject position, the bound variable associated with it cannot be bound to the first argument.

The same kind of conceptual binding relation can be found in the sentences in (23).

- (23) a. * His toe was stubbed by Philip.
- b. * A toe was stubbed by Philip.

(Massam (1990: 180))

(23b) is especially important to our discussion. Here, *a toe* is construed as *Philip's* toe, although there is no overt syntactic element in the object NP that is bound to the subject NP. This can be seen as another instance of conceptual binding.

The structure in (22) also explains the existence of the definiteness restriction shown by *have*. The second argument of *have* has to be bound to the first, while a noun phrase in which “strong quantifiers” appear cannot be bound to the first argument.

3.3. Variability in Judgments (Pinker (1989))

Let us consider here the variability in judgments on the passivizability of the verb *possess*. On the basis of the instance in (24), Pinker (1989: 242) states that *possess* does not easily passivize; however, as we saw before, *possess* does passivize. So it is safe to say that the judgments as to whether or not *possess* passivizes vary among speakers.

- (24) *? A keen moral sense is possessed by Abe.

Note here that the second argument in (24) is a moral sense, which can be regarded as an internal attribute of a person. An internal attribute of a person is unique to him/her; thus, it seems safe to say that it is bound to its possessor. In the case of (24), a *keen moral sense* has to be bound to the subject referent, *Abe*, but it is not. This is the reason for the ungrammaticality of sentence (24). In this case, again, the speaker construes the binding relation between the arguments which is not made explicit.

In fact, the verbs *have*, *own*, and *possess* share certain features. Consider (25):

- (25) a. Mike has his {house/wife}, and so does Bill.
 b. Mike {possesses/owns} his house, and so does Bill.

As in (25), when a possessive pronoun anaphoric to the first argument appears within the second argument, they all exhibit only “sloppy reading.”

In addition, in that context, both *own* and *possess* resist passivization, as in (26).

- (26) a. * His_i sense of humor is possessed by John_i.
 b. * His_i huge old house is owned by John_i.

On the basis of these observations, I maintain that binding relation is obligatory in possessive *have*, and optional in *own* and *possess*.

Before leaving this section, I tentatively propose the semantic structures for *own* and *possess*, as shown in (27). For the present purposes, it suffices to say that there is no bound variable in the second argument.

- (27) [_{state} HAVE ([THING], [THING])]

I leave to the future research the specifications of the semantic structures for both *own* and *possess*. See also Pinker (1989: 242).

4. Not Syntactic But Conceptual

Last but not least, let me show that it is not syntax but the construal on the part of the speaker of the relation between arguments that is

relevant and crucial to the felicity of instances of possessive *have*.

4.1. Syntactic Bound Variable?

There are some previous studies (e.g. Massam (1990) and Ritter and Rosen (1997)) that postulate a syntactic bound variable in the specifier position in the object NP of *have*. I deny this assumption.

- (28) a. This table has four legs.
 b. This plane has four engines.
 (29) a. # An arm has five fingers.
 b. # Geometry has triangles.

(Taylor (2002: 196))

The sentences in (28) and (29) show no distinction in structure, nor in the animacy of the subject referents; nevertheless, there is a difference in their felicity. If the binding relation is syntactic, both (28) and (29) have to be OK. This fact suggests that it is not so much syntax as the construal on the part of the speaker that counts in the felicity of possessive *have*. In (29a), for example, the speaker finds the relation of the arguments implausible.

Furthermore, the sentences in (30) can constitute counterexamples to the assumption of postulating a syntactic bound variable in the specifier position of the object NP.

- (30) a. She has the lips of Marilyn Monroe.
 b. I have the most beautiful skin in the world.

In each sentence in (30), the specifier position of the object NP is already filled in; therefore, there is no more room available for any syntactic element, explicit or implicit, to appear. This fact indicates that the binding relation of the two arguments is conceptual, rather than syntactic.

4.2. A Possible Parallelism

The following examples support the view that the construal plays a major part in deciding

the antecedent of a variable. Culicover and Jackendoff (2005) discuss the preference of the semantic notion of control to the syntactic one. One piece of evidence that support their view is the fact that the possible controller varies. In (31a), the gerund can be controlled by either NP, by both jointly, or by an implicit generic person. In (31b), the gerund can be controlled by either NP, or both jointly. In (31c), the gerund can be controlled only jointly.

- (31) a. John_i talked to Sarah_j about _{i/j/i+j/gen} taking better care of himself_i/herself_j/themselves_{i+j}/oneself_{gen-}.
(Culicover and Jackendoff (2005: 423))
- b. John_i talked to Sarah_j about _{i/j/i+j} meeting Mike at six.
- c. John_i talked to Sarah_j about _{i+j} meeting each other_{i+j} at six.
(Culicover and Jackendoff (2005: 460))

In (31b, c), there is no syntactic difference. The choice of a controller or controllers thus depends on the meaning of the lexical items appearing in these sentences.

The same discussion can be applied to the sentences in (32).

- (32) a. John and Mary have a {house/sister}.
- b. John and Mary have a sense of humor.
- In (32a), the second argument can be possessed separately, or jointly; on the other hand, in (32b), the second argument can be possessed only separately. This is probably because one and the same sense of humor, which is an internal attribute of someone, cannot be possessed by more than one person. Note here that as in (31b, c), there is no syntactic difference in (32) either. What is different is the value of the second argument and thus the relation of the first to the second. The difference in interpretation thereby suggests that the meaning, not syntax, plays a crucial role in deciding the controller/antecedent of a variable.

5. Conclusion

In this study, I attributed the unpassivizability of *have* to the presence of a bound variable in the second argument in its semantic structure. I claimed that the first argument and the second argument are in a binding relation, and that this relation is conceptual rather than syntactic.

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Notes

¹ Kageyama (1997) does not discuss the verb *possess*.

² Note that this account does not invalidate Morita's claim on the verb *contain*.

³ Some might argue that sentences like the following, where the subject and the genitive pronoun in the object denote distinct referents, constitute counterexamples to the present account.

(i) But she_i has your_j kids with her_i. (BNC)
However, this sentence is an instance of the existential/locative *have* construction, the typical example of which has a pronoun coreferential with the subject in its PP (Ritter and Rosen (1997)). For the difference between the possessive *have* construction and the existential/locative *have* construction, see, for example, Ichijo (2011) and the references therein.

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A Smuggling Approach to Japanese Cleft Construction

Yuta Tatsumi
Osaka University

Keywords: Japanese cleft construction, copulas, smuggling.

1. INTRODUCTION

The aim of this paper is to investigate the derivation of Japanese cleft construction. Hiraiwa and Ishihara (2002, 2012) proposes that Japanese cleft construction is derived from ‘no da’ in-situ focus construction. Although their analysis nicely accounts for the parallelism between Japanese cleft construction and the ‘no da’ in-situ focus construction, it suffers from some difficulties concerning the copulas in Japanese. Thus, in this paper I offer an alternative derivation of Japanese cleft construction, assuming that cleft constructions include a smuggling step in its derivation.

2. ISSUES

2.1. PREVIOUS ANALYSES

Comparing some types of focus constructions in Japanese (cleft, pseudo-cleft, ‘no da’ in-situ focus, and sluicing/stripping), Hiraiwa and Ishihara (2002, 2012) points out that there is a striking parallelism between Japanese cleft construction and the ‘no da’ in-situ focus construction. Although they show four syntactic similarities, I review only one of them here for reasons of space. Let us consider the following examples.

(1) *Pseudo-cleft construction*

[Taro-ga tabeta] no/mono/kudamono-wa
Taro-NOM ate C/thing/fruit-TOP
ringo-ø mit-tu da.
apple-ø 3-CL COP
‘What/the thing/the fruit Taro ate was three apples.’

(2) *Cleft-construction*

[Taro-ga tabeta] no/*mono/*kudamono-wa
Taro-NOM ate C/thing/fruit-TOP
ringo-o mit-tu da.
apple-ACC 3-CL COP
‘It/*the thing/*the fruit was three apples that Taro ate.’

(3) *‘no da’ in-situ focus*

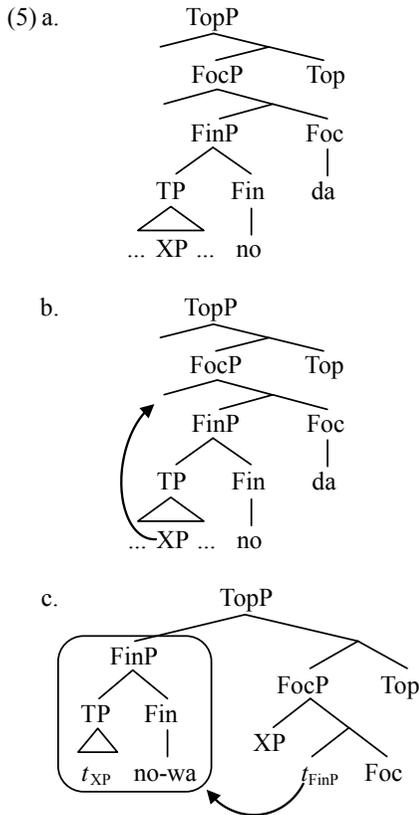
[Taro-ga RINGO-O MIT-TU tabeta]
Taro-NOM apple-ACC 3-CL ate
no/*mono/*kudamono da.
C/thing/fruit COP
‘It/*the thing/*the fruit was three apples that Taro ate.’

In pseudo-cleft constructions, the particle *no* can be substituted with a noun phrase or a pronoun, as in (1). On the other hand, in cleft constructions and ‘no da’ in-situ focus constructions, the particle *no* cannot undergo such a substitution as in (2) and (3).

Based on such a parallelism, Hiraiwa and Ishihara (2002, 2012) argues that Japanese cleft constructions are derived from ‘no da’ in-situ focus constructions via two syntactic operations; focus movement and remnant topicalization. The important point here is that they adopt Rizzi’s (1997) articulated CP structure as in (4).

(4) [_{ForceP} Force [_{TopP} Top [_{ForceP} Foc [_{FinP} Fin [_{TP}...]]]]]

The derivation proposed by Hiraiwa and Ishihara is represented as follows.



They assume that the particle *no* occupies the head of FinP, and that the copula *da* occupies the head of FocP. The structure of ‘no *da*’ in-situ focus constructions is represented in (5a). In cleft constructions, the focused phrase XP overtly moves to Spec,FocP, and the remnant FinP is topicalized to Spec,TopP after the focus movement. The topicalized FinP is marked with the topic marker *wa* in this position, as in (5c). Under this analysis, cleft constructions are connected to ‘no *da*’ in-situ focus constructions in a syntactic way.

It is important to note that under Hiraiwa and Ishihara’s analysis, the copula *da* is

assumed to be a focus particle in both cleft constructions and ‘no *da*’ in-situ focus constructions. This means that the copula *da* is directly introduced into a derivation as a head of FocP. In the remainder of this section, I will give some problems about this assumption.

2.2. SOME PROBLEMS

Hiraiwa and Ishihara’s analysis nicely captures the syntactic properties of Japanese focus constructions. However, their analysis cannot be extended to another type of cleft construction in Japanese. Let us consider the sentences in (6). It is well known that Japanese copula *da* can be replaced with *de aru* without changing its logical meaning.

- (6) a. [Taro-ga tegami-o moratta] no-wa
 Taro-NOM letter-ACC received C-TOP
 Hanako-kara **da**.
 Hanako-from COP
 ‘It’s from Hanako that Taro received a letter.’
- b. [Taro-ga tegami-o moratta] no-wa
 Taro-NOM letter-ACC received C-TOP
 Hanako-kara **de aru**.
 Hanako-from COP

Note further that when a sentence appears with negation, the only possible expression is with *de aru*, not with *da*, as in (7). The same contrast is observed when the copula is focused by the particles as in (8).

- (7) a.*[Taro-ga tegami-o moratta] no-wa
 Taro-NOM letter-ACC received C-TOP
 Hanako-kara **da-nai**.
 Hanako-from COP-NEG

b. [Taro-ga tegami-o moratta] no-wa
 Taro-NOM letter-ACC received C-TOP
 Hanako-kara **de(-wa)-nai**.
 Hanako-from COP(-TOP)-NEG
 ‘It is not from Hanako that Taro received
 a letter.’

(8) a. *[Taro-ga tegami-o moratta] no-wa
 Taro-NOM letter-ACC received C-TOP
 Hanako-kara **da-mo/sae** (aru).
 Hanako-from COP-even (be-PRES)

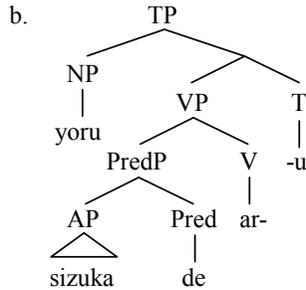
b. ?[Taro-ga tegami-o moratta] no-wa
 Taro-NOM letter-ACC received C-TOP
 Hanako-kara **de-mo/sae aru**.
 Hanako-from de-even be-PRES
 ‘It is even from Hanako that Taro
 received a letter.’

These contrasts may indicate that the basic form of Japanese copula is *de aru* rather than *da*. Thus, whatever we adopt for the derivation of Japanese cleft constructions should be extended to cleft constructions with *de aru*. However, Hiraiwa and Ishihara’s analysis cannot be extended to cleft constructions with *de aru* because they assume that cleft constructions have the “mono clausal” structure as in (5). Obviously, in the derivation (5), there is no position in which the verb *aru* can be located. Thus, I offer another derivation of Japanese cleft construction instead of Hiraiwa and Ishihara’s analysis.

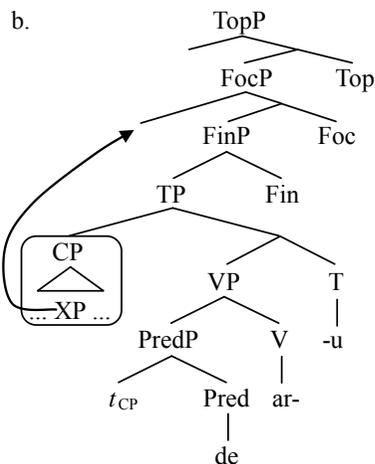
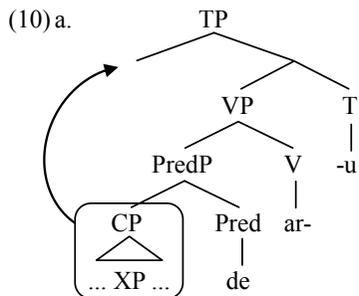
3. PROPOSAL

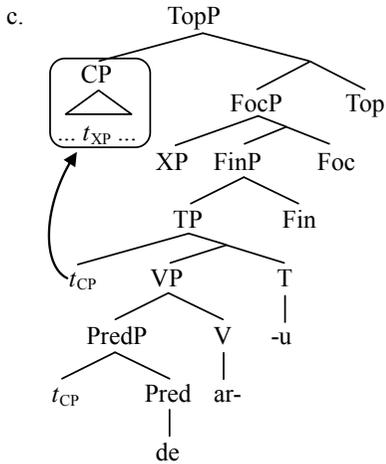
Of importance here is the derivation of cleft constructions with *de aru*. Following Nishiyama (1999), I assume that *da* is the contracted form of *de aru*, and that *de* itself projects Predicate Phrase, as in (9b).

(9) a. yoru-ga sizuka de ar-u.
 night-NOM quiet de be-PRES
 ‘The night is quiet.’



Using principles of Distributed Morphology, Nishiyama (1999) argues that *de aru* can be optionally realized as the contracted form *da*. Combing this analysis of Japanese copulas with Hiraiwa and Ishihara’s main insight into Japanese cleft constructions, I propose that cleft constructions in Japanese has the following complex structure.





In the first step, the embedded CP is moved to Spec,TP as in (10a). This movement is driven by the EPP feature on T. Second, XP undergoes focus movement to Spec,FocP. Finally, the remnant CP is moved to Spec,TopP and marked with the topic marker *wa*. The last two movements are similar to Hiraiwa and Ishihara’s original analysis. However, under the proposed derivation, cleft constructions can include TP and NegP. Thus, we can account for the problems discussed in section 2.

Note that if we assume, following much work on locality, that a probe must enter an Agree relation with the closest available goal, it seems that the head of FocP in (10) cannot Agree with XP before the movement of the embedded CP to Spec,TP takes place. This is because PredP itself is the closest available goal for the head of FocP (see (8b)). Thus, the movement of the embedded CP to Spec,TP in (10a) may count as an instance of what Collins (2005a, b) calls “smuggling.” To be more precise, the movement of the embedded CP to Spec,TP smuggles XP over PredP, so that the head of FocP can be accessible to XP. In Sauerland (1999), this type of path pattern is referred to as “surfing paths.”

4. CONSEQUENCES

The proposed analysis of Japanese cleft constructions nicely captures the alternation of copulas, maintaining Hiraiwa and Ishihara’s main insight. In addition to these advantage, the derivation (10) has other consequences.

Hasegawa (2011) argues that the copula *da* in cleft constructions is different from the real copulative *da*, based on the fact that only the former can inflect for tense independently of the event expressed in the *no* clause. Compare (11) with (12).

(11) a. Taro-wa byooki **da/dat-ta**.
 Taro-TOP sick COP/COP-PAST
 ‘Taro is/was sick.’

b. Taro-wa kinoo byooki
 Taro-TOP yesterday sick
 ***da/dat-ta**.
 COP/COP-PAST
 ‘Taro *is/was sick yesterday.’

(12) a. [Taro-ga tegami-o mora-u]
 Taro-NOM letter-ACC receive-PRES
 no-wa Hanako-kara **da/dat-ta**.
 C-TOP Hanako-from COP/COP-PAST
 ‘It is/was from Hanako that Taro receives a letter.’

b. [Taro-ga kinoo tegami-o
 Taro-NOM yesterday letter-ACC
 moratta] no-wa Hanako-kara
 received C-TOP Hanako-from
da/dat-ta.
 COP/COP-PAST
 ‘It is/was from Hanako that Taro receives a letter.’

In the predicative use of the copula *da* as in (11), the realization of tense is constrained by

an actual tense of the event. On the other hand, in cleft constructions as in (12), the tense realized on the copula depends on speaker's psychological realization of the event. Thus, if a speaker remembers or reaffirms what the speaker has previously acknowledged, the past tense is used independently of the tense of the event expressed in the *no* clause. Based on this fact, Hasegawa (2011) concludes that the copula in clefts is different from the real copulative *da*.

However, if we look at these examples more carefully, the contrast between (11) and (12) does not lead us to such a conclusion. Rather, what these data exactly show is that the tense of a copula in cleft constructions is independent from the one expressed in the *no* clause. The proposed derivation (10) has the complex structure, and there are two distinct T. Thus, under the proposed analysis, the contrast between (11) and (12) can be nicely accounted for, in contrast to Hiraiwa and Ishihara's analysis.

The proposed derivation has further implications for the following construction.

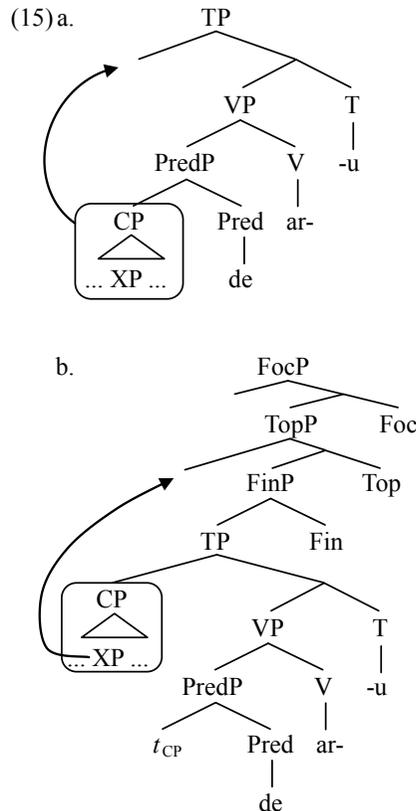
- (13) [Taro-ga tegami-o moratta] no-ga,
 Taro-NOM letter-ACC received C-NOM
 Hanako-kara da.
 Hanako-from COP
 'It's from Hanako that Taro received a letter.'

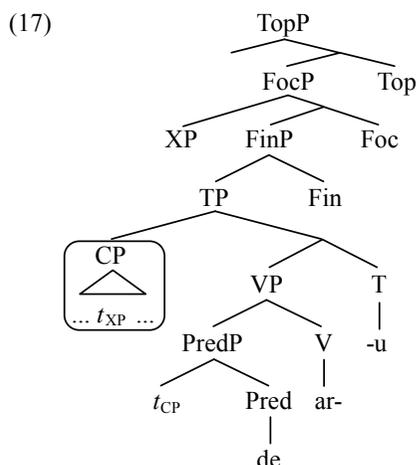
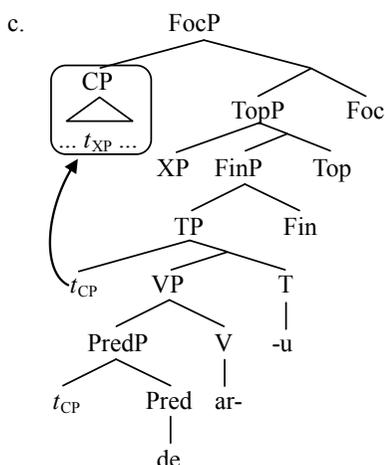
Someone might think that the sentence (13) does not have to do with the cleft constructions discussed in this paper because the *no* clause in (13) is not marked with the topic marker *wa*. However, this type of sentence is similar to cleft constructions in terms of NP substitution, as shown in (14).

- (14) [Taro-ga tegami-o moratta] no/*hito-ga
 Taro-NOM letter-ACC received C-NOM
 Hanako-kara da.
 Hanako-from COP
 'It/*the person is from Hanako that Taro received a letter.'

Furthermore, it is interesting to note that the sentence (13) is more natural when we put a prosodic prominence on the *no* clause. Recall that in 'no da' in-situ focus constructions, focused phrases are also marked by a prosodic prominence. Thus, it seems natural to expect that the sentence (13) is related to focus constructions in Japanese.

My proposed analysis of Japanese cleft construction may be extended to the sentence (13). The derivation is illustrated in (15).





Rizzi (1997) proposes that there is a TopP between FinP and FocP. I assume, following this proposal, that TopP can be located below FocP in Japanese. Thus, in (15) the structural relationship between FocP and TopP is reversed. In (15a), the embedded CP moves to Spec,TP, and receives nominative Case there. After that, XP moves to Spec,TopP, and the remnant CP undergoes focus movement to Spec,FocP.

5. A REMAINING QUESTION

In this paper, I have examined the derivation of cleft constructions. The proposed derivation (10), however, might incorrectly predict that the following sentence is grammatical.

- (16) * Hanako-kara [Taro-ga tegami-o
Hanako-from Taro-NOM letter-ACC
moratta] no-ga da/de-ar-u.
received C-TOP COP/Pred-be-PRES
'FROM HANAKO, Taro received a
letter.'

This is because if a remnant CP stays in Spec,TP as in (17), the derivation results in the sentence (16).

At present, I do not have a definite idea of how the sentence (16) is ruled out. However, one possible solution is the analysis proposed by Koizumi (2000). He argues that the occurrence of the conjunctive particle *to* in Japanese is constrained by the filter (18).

- (18) * X-to, unless X is a nominal-like category.
(Koizumi 2000: 274)

Although it is not clear what counts as “nominal-like” category, the filter (18) makes correct predictions for the following examples.

- (19) a. [N ringo]-to banana-o tabe-ta.
apple-and banana-ACC eat-PAST
'Someone ate apples and bananas.'
b. *ringo-[case marker o]-to banana-o
apple-ACC-and banana-ACC
tabe-ta.
eat-PAST
c. ringo-o [NQ mit-tu]-to banana-o
apple-ACC 3-CL-and banana-ACC
ni-hon tabe-ta.
2-CL eat-PAST
'Someone ate three apples and two
bananas.'

In (19c) the numeral quantifier (NQ) counts as a “nominal-like” element, and the sentence does not yield a violation of the filter (18). Koizumi (2000) mentions the possibility that the copula *da* is also subject to a similar morpho-phonological constraint. In fact, the following contrast supports his suggestion.

- (20) a. [Hanako-kara tegami-o moratta] no-wa
 Hanako-fromletter-ACC received C-TOP
 Taro da.
 Taro COP
 ‘It is Taro who received a letter from Hanako.’
- b. *[Hanako-kara tegami-o moratta] no-wa
 Hanako-fromletter-ACC received C-TOP
 Taro-ga da.
 Taro-NOM COP
- c. [Hanako-kara tegami-o moratta] no-wa
 Hanako-fromletter-ACC received C-TOP
 gakusei-ga san-nin da.
 student-NOM 3-CL COP
 ‘It is three students who received a letter from Hanako.’

Thus, it seems possible to assume that the sentence (16) is unacceptable because it violates the morpho-phonological constraint like (15).

Although the ungrammaticality of (13) is an interesting issue, I leave a full-fledged account of this sentence for future research.

6. CONCLUSION

In this paper, I have offered the derivation of Japanese cleft constructions, assuming that cleft constructions include the smuggling step in its derivation. The proposed analysis accounts for the alternation between *da* and *de aru* in Japanese cleft construction without any

unnecessary stipulations, and further has the implications for other types of cleft constructions.

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A Modification of the Unique Path Constraint*

Masaki Yasuhara
University of Tsukuba

Keywords: the Unique Path Constraint, spatial extension, anchored motion

1. Introduction

It has been observed that a single clause cannot describe a change of state and a change of location at the same time (Simpson (1983), Goldberg (1991, 1995, 2001), Levin and Rappaport (1995), Tortora (1998), among others.). On the basis of this observation, Goldberg (1991:368) formulates the Unique Path Constraint (henceforth, the UPC):

- (1) **Unique Path Constraint:** if an argument X refers to a physical object, then more than one distinct path cannot be predicated of X within a single clause.

The UPC prohibits multiple expressions that denote distinct paths from co-occurring in a single clause. Goldberg argues that a result phrase and a path phrase may not co-occur in a single clause in sentence (3) because this co-occurrence violates the UPC. Hereafter, we call this co-occurrence restriction the UPC effect.

- (2) a. Sam kicked Bill black and blue.
b. Sam kicked Bill out of the room.

- (3) a. * Sam kicked Bill black and blue out of the room.
b. * Sam kicked Bill out of the room black and blue.

(Goldberg (1991:368))

The result phrase *black and blue* in sentence (2a) exhibits a change of state of the referent denoted by the object NP *Bill*. Likewise, the path phrase *out of the room* in sentence (2b) expresses a change in *Bill*'s location. Goldberg argues that the result phrase and the path phrase exhibit two distinct paths; the co-occurrence of the result phrase and the path phrase in a single clause violates the UPC, as in (3).

The following examples, however, appear to be problematic for the UPC (Goldberg (1995), Levin and Rappaport (1995), etc.):

- (4) John emptied the bottle into the sink.
(5) John cut the carrot into the bowl.
(6) John broke the egg into the bowl.

All of these sentences include the matrix verbs that denote a change of state of the objects, in addition to the path phrases. Two distinct paths (i.e. paths denoting both a change of state and literal motion) co-occur in a single clause in these sentences, apparently violating the UPC.

In this paper, I argue that the examples in (4)-(6), which are supposed to be counterexamples to the UPC by many researchers, are only apparent counterexamples. Although these sentences appear to contain two distinct paths, it will be shown that one path further specifies the other; that is, the path phrases specify the meaning of the verbs. Specifically, it will be shown that path phrases can further specify a change of state denoted by verbs when the path phrases refer to the motion of only a part of an object, which I will call

anchored motion. I argue that the two paths in the sentences in (4)-(6) constitute a unique path, in accordance with the UPC.

The organisation of this paper is as follows. Section 2 introduces some basics of the UPC effect. Section 3 critically reviews Levin and Rappaport's (1995) explanation of the sentences in (4)-(6). Section 4 argues that, despite the claim to the contrary, these sentences can be accounted for under the UPC. Section 5 gives concluding remarks.

2. The Unique Path Constraint Effect

Goldberg (1991) argues that the UPC prohibits the co-occurrence of a change of state expression and a change of location expression in a single clause when the change of state expression and the change of location expression refer to distinct paths. Note that the UPC does not prohibit a co-occurrence of a change of state expression and a change of location expression when they refer to a unique path. For example, observe the following data:

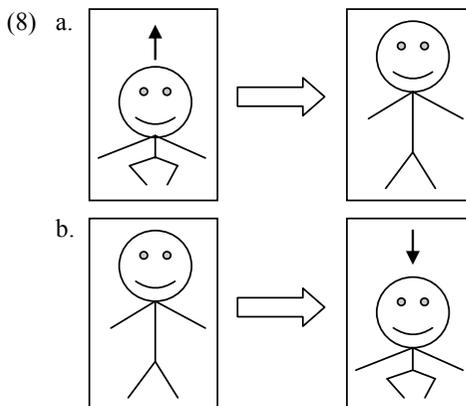
- (7) a. John stood up straight.
 b. He got down into a squatting position.

(cf. Goldberg (1991:373))

In these sentences, the result phrases *straight* and *into a squatting position* co-occur with the path phrases *up* and *down* in a single clause, respectively. The path phrases and the result phrases in these sentences do not refer to two distinct paths. For example, in (7a), the path phrase *up* specifies motion that accompanies a change of position (becoming straight). The path phrase *up* and the result phrase *straight* refer to the unique path in terms of change of position. In (7b), likewise, the change of

position denoted by the result phrase *into a squatting position* is accompanied by motion of a part of the body, which is referred to by the path phrase *down*. The examples in (7), thus, include a unique path in terms of change of position, and therefore do not violate the UPC.

The situations described in (7a) and (7b) can be illustrated by the figures in (8a) and (8b), respectively:



The rightward arrows show the transitions of situations; the situation in the left square changes into the one in the right square. In the left square of (8a), it is illustrated that John from (7a) is trying to stand up. As a result of this, he stands up straight in the right square of (8a). In (8b), similarly, the left square shows that the referent *he* in (7b) is trying to get down; consequently, he comes to be in a squatting position, as depicted in the right square. The upward and downward arrows in these figures represent directions of movements. Note that in the cases in both (7a) and (7b), the legs are anchored at a fixed location (say, the ground), and what moves is only the upper half part of the body. In this way, change of physical position involves the motion of only a part of an object.

A crucial difference between the sentences in (3) and (7) is whether a path phrase refers to

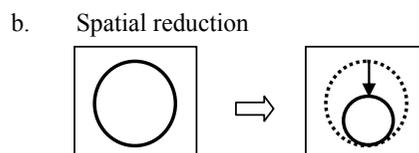
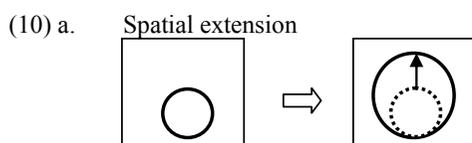
motion of only a part of an object. The path phrases in (3) express translational motion (Talmy (2000:25)); movement that changes the location of an object. In (3) Bill is caused to move from the inside of the room to the outside. The path phrase *out of the room* expresses motion in which Bill changes his location. In (7), on the other hand, the movements described by the path phrases *up* and *down* do not change the location of the referents *John* and *he*. Hereafter, we will call this type of motion anchored motion. I will define anchored motion as follows:

- (9) Anchored motion is the movement in which an object undergoing change remains anchored at a fixed location, while rearranging parts of its extension in space.

This definition is based on Goldberg's (1991:373) statement. Given the contrast in acceptability between (3) and (7), we can argue that a path phrase can co-occur with a change of state expression in a single clause when the path phrase refers to anchored motion; in this case, no UPC violation arises.

In this section, we have observed some basics of the UPC effect. What is important is that the UPC does not prohibit the co-occurrence of a path phrase and a change of state verb in a single clause when the former further specifies the meaning of the latter.

The relation between a change of state and a change of location in terms of anchored motion is schematically represented in the following figures:



The upward and downward arrows in the squares represent anchored motion that accompanies change of spatial extent, and the rightward arrows show transitions of situations. The figures in (10a) illustrate spatial extension, which corresponds to the example in (7a); an action of standing up involves motion from inward to outward. The figures in (10b), on the other hand, show spatial reduction, which corresponds to the sentence in (7b); an action of sitting down inherently includes motion from outward to inward.

As noted in section 1, several researchers argue that the sentences in (4)-(6) are counterexamples to the UPC. In the next section, we will review an account presented by Levin and Rappaport (1995), and show that their account faces a serious empirical problem.

3. A Previous Study and Its Problem

Levin and Rappaport (1995) argue that the UPC is inadequate by noting the following examples, and they propose an alternative account of the co-occurrence restriction of a change of state expression and a change of location expression in a single clause.

- (11) a. The cook cracked the eggs into the glass.
 b. Daphne shelled the peas onto the plate.
 c. I emptied the tank into the sink.
 d. slice the mushrooms into the bowl

(Levin and Rappaport (1995:60))

Levin and Rappaport argue that *the eggs*, *the*

peas, *the tank* and *the mushrooms* in these sentences are polysemous. In sentence (11a), for instance, it is the whole eggs that the cook cracked, and it is only the liquid part of the eggs that fell into the glass. Although both of the whole eggs and the liquid part of the eggs are referred to by the name *egg*, the referents are different; the name *egg* is polysemous; it refers to both a whole egg and the liquid part. The same is true of the other examples in (11): The NP *the peas* can refer to the content and the shell, *a tank* the container and its content, and *the mushroom* a whole mushroom and that mushroom cut in pieces.

On the basis of these observations, Levin and Rappaport (1995) propose as an alternative to the UPC that an entity may undergo only one change. This restriction can explain the unacceptability of the sentences in (3). In these sentences, the referent *Bill* undergoes two changes. Further, the proposed restriction can account for the acceptability of the sentences in (11). The NPs in (11) can denote two entities polysemously; therefore, the two entities denoted by these NPs may undergo two distinct changes. In (11a), for example, the whole eggs are cracked (change of state), whereas only the liquid parts of the eggs go into the glass (change of location).

According to Levin and Rappaport (1995), when an NP cannot refer to more than one entity, this NP is incompatible with a change of state verb and a path phrase in a single clause; this is exemplified by (12a):

- (12) a. * I broke the mirror into the garbage pail.

(Levin and Rappaport (1995:61))

- b. a mirror ≠ pieces of a mirror

The NP *the mirror* refers to an intact mirror; it cannot refer to pieces of a mirror. Levin and Rappaport claim that the infelicity of (12a) follows from the fact that *the mirror* cannot polysemously refer to both an intact mirror and pieces of a mirror.

Levin and Rappaport's (1995) explanation, however, immediately faces a serious empirical problem. Although the following sentence includes the NP *the mirror*, in the same way as (12a), it is compatible with the change of state verb *break* and the path phrase *into the trash can* in a single clause:

- (13) John broke the mirror into the trash can little by little.

The fact that this sentence is acceptable contradicts the account presented by Levin and Rappaport; they would incorrectly predict that (13) is unacceptable in the same way as (12a).

In the next section, I will argue that the examples in (4)-(6) can be successfully explained under the UPC by stating that the path phrases they contain express anchored motion. It will be further shown that this account can give a straightforward account of the sentence in (13) as well.

4. The UPC Account

As we have observed in section 1, the sentences in (4)-(6), repeated here as (14)-(16), have been supposed to be counterexamples to the UPC by many researchers, because these sentences involve two distinct paths in a single clause:

- (14) John emptied the bottle into the sink.
 (15) John cut the carrot into the bowl.
 (16) John broke the egg into the bowl.

In this paper, I argue that the path phrases included in these sentences refer to anchored

motion, rather than translational motion. That is the motion type of these path phrases is quite different from the path phrase *into the room* included in the following sentence.

(17) John threw the ball into the room.

In fact, a close scrutiny of these sentences reveals that (14)-(16) are crucially different from (17) in the nature of motion. Sentence (17) displays translational motion, which can be confirmed by the unacceptability of the following sentence:

(18) * John has thrown the ball into the room, but he still holds the ball in his hand now.

This sentence suggests that the ball moves into the room; therefore, it cannot stay in John's hand after he threw it.

What is relevant in the sentences in (14)-(16) is anchored motion, in which only a part of an object moves along a path. I discuss these sentences in turn.

First, let us consider the sentence in (14). The change of state exhibited by the verb *empty* implies the physical separation of an object: When I empty a bottle full of water, the water necessarily becomes apart from the bottle, with the bottle anchored at the fixed location, say, in my hand. In this sense, the change of state of emptying presupposes physical separation. Thus, it is predicted that the motion that accompanies the physical separation (i.e. anchored motion) can be described by a path phrase. This prediction is borne out by the sentence in (19). This sentence is acceptable in the interpretation in which only the content of the bottle moved into the sink, with the bottle anchored at the original place.

(19) John emptied the bottle into the sink.

(In the interpretation in which “John poured only liquid into the sink, and the bottle remained in his hand.”)

In this interpretation, the path phrase *into the sink* explicitly denotes anchored motion of the liquid. The co-occurrence of a change of state verb and a path phrase that expresses anchored motion does not violate the UPC. The sentence in (14) satisfies the UPC, and no UPC violation results.

The change of state verb *cut* also entails physical separation of an object. The physical separation inherently involves anchored motion of an object, and this motion can be referred to with a path phrase. Thus, we can predict that the path phrase in (15) denotes the anchored motion of an object. This prediction is confirmed by the following sentence:

(20) Grate or cut the cheese into the sauce, reserving a little to grate over the top of the dish.

(A. Sammy, *Aunt Sammy's Radio Recipes*, the underlining is mine)

The underlined part in this sentence, in which the interpretation where the whole part of the cheese is moved along a path is cancelled, does not contradict the former part of the sentence, which explicitly suggests that the path phrase denotes anchored motion. As a result, no UPC violation arises in (15).

When path phrases in sentences such as (15) refer to translational motion, these sentences become unacceptable.

(21) # Mary cut the sausage into the pan.

a. (This sentence is acceptable in the interpretation in which “Mary put a sausage into the pan while cutting it little by little.”)

- b. (This sentence is not acceptable in the interpretation in which “Mary put cuts in a sausage (but the sausage is not cut into pieces) and put it in the pan.”)

This sentence is acceptable in the interpretation shown in (21a), but not in the interpretation in (21b). The interpretation in (21a), in which only a part of a sausage went into the pan while Mary cuts it, explicitly includes anchored motion of the sausage. On the other hand, the interpretation in (21b), in which a whole part of a sausage went into the pan, involves translational motion of the sausage. The unacceptability of sentence (21) in the interpretation of (21b) can be attributed to the translational motion of the sausage.

Lastly, the verb *break* describes physical separation and it is compatible with a path phrase that denotes anchored motion. In (16), for example, only the content of the egg moves along a path denoted by the path phrase; its shell part remains anchored at a fixed location, say, in John’s hand. In this case, the motion of the content can be regarded as anchored motion of the egg, and the co-occurrence of the verb *break* and the path phrase results in no UPC violation. In fact, this sentence is unacceptable when the path phrase refers to translational motion of the egg.

- (22) # John broke the egg into the bowl.

(In the interpretation in which “John broke the egg and then both the liquid and shell fell into the bowl.”)

This sentence is infelicitous in the relevant interpretation; the translational motion of the egg and its change of state constitute two distinct paths, violating the UPC.

In this way, I have argued that the sentences in

(14)-(16) can be explained under the UPC. The present analysis can give a straightforward account of the example in (13), repeated here as (23), which is problematic for Levin and Rappaport’s (1995) explanation.

- (23) John broke the mirror into the trash can little by little.

This sentence is acceptable in an interpretation in which “John divided the mirror into pieces little by little and put each piece into the trash can.” In this case, a part of the mirror remains anchored at a fixed location while the mirror is broken into pieces and the pieces are moved into the trash can. In this interpretation, the path phrase describes anchored motion of the mirror; therefore, the co-occurrence of the verb *break* and the path phrase *into the trash can* satisfies the UPC.

The co-occurrence of the verb and the path phrase, however, becomes unacceptable in an interpretation where “John broke the mirror into pieces on the floor, and then, he put all of the pieces into the trash can at one time,” as exemplified by (24):

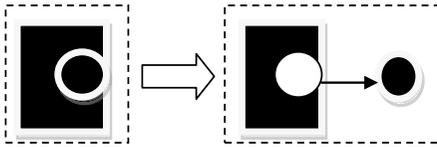
- (24) # John broke the mirror into the trash can.

In this case, no part of the mirror remains anchored at a fixed location when the mirror is broken into pieces and the pieces are moved into the trash can. In this interpretation, the described motion is translational. Translational motion of an object and its change of state constitute two distinct paths; therefore, the co-occurrence of the verb *break* and the path phrase *into the trash can* results in a violation of the UPC in (24).

The spatial extension expressed by the sentences in (14)-(16) can be represented in the

following figures:

(25) Spatial extension involving physical separation



In (25), the thick white arrow displays a transition of situations. The thin arrow represents anchored motion of the circle. In the left square, the black square and the circle constitute a unit. The right square exhibits the physical separation of the circle from the black square. The dotted squares denote the ranges of space covered by the black square and the circle. The figures in (25) show that the black square and the circle in the separated state occupy a larger area than they do in the unified state.

5. Conclusion

In this paper, I have argued that examples such as (14)-(16), which have been considered to be counterexamples to the UPC, are only apparent counterexamples. Although these sentences involve a change of state expression and a change of location expression in a single clause, they can be explained under the UPC. What is crucially important is that the UPC does not rule out a co-occurrence of a change of state expression and a change of location expression in a single clause when the change of state and the change of location are involved in a unique path. In the cases of (14)-(16), the path phrases refer to motion that accompanies change of state denoted by the verbs, and, as a result of this, the change of state and the change of location constitute a unique path.

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English Imperatives as a Discourse-Configurational Language

Norio Suzuki

Kobe Shinwa Women's University

Keywords: English imperatives, Agree, selection-driven, reprojection/relabeling, discourse-configurational language

1. Introduction

The goals of this paper are the following: (i) To reinterpret English imperatives (EIs) as a discourse-configurational language (DC-language, e.g., Japanese, Korean; limiting discussion on subject omission; Miyagawa 2010), but not as an agreement-based language (A-language, e.g., English, Italian; §§2-3); (ii) To treat *Agree* alike in both A- and DC-grammars; §3); (iii) To redefine some discourse (D)-related resources to describe EIs; §4); (iv) To reanalyze Hiroe's (2010) data in terms of 'selection-driven' reprojection/relabeling (Donati & Cecchetto 2011; §§5-6); & (v) To reconsider EIs from the perspectives of Learnability/Parametric considerations; §7).

2. Miyagawa (2010)

The dichotomy between A- (e.g., English) & DC- languages (e.g., Japanese) in terms of ϕ -features & topic-/focus-features (respectively) inherited by T from the phase head C (see Chomsky 2008) for the purpose of triggering A-movement at T.

3. Evidence Pointing to EIs Being a DC-Language

- (1) a. Somebody **open** the window.
(no agreement on the verb)
(cf. 'Somebody opens the window': a declarative, agreement on the verb)
b. **Don't** be noisy. (*do*-support, without V-to-T movement of the *be*-verb)
(cf. 'John isn't /is not noisy': a declarative, V-to-T movement of the *be*-verb, without *do*-support)

The EIs in (1a,b) point to there being *no* ϕ -

feature agreement between subject & verb (a defining characteristic of DC-languages), & lack of ϕ -feature agreement on T makes it impossible for the *be*-verb to raise to T ((1b)). Unvalued ϕ - & topic-/focus-features detect nPs/NPs (*pro* for (1b)) with unvalued Case-features. Case-valuation is implemented roughly in the same way in both types (*upon Agree in ϕ -features & upon Agree in topic-/focus-features* for A- & DC-languages, respectively; Saito 2007 for a different view of Case in East Asian (EA) languages & his attempt to equate EA argument-ellipsis & radical pro-drop (RPD)). I take an overt & a *pro* EI subject (*somebody* & *pro* in (1a,b)) to be a focus & a topic nP/NP, respectively. Further, *pro* in EIs receives nominative Case, valued by T(ense)_{<Imp>} (based on such Modern English data as *Go and do thou likewise* (Luke x.37) (*The Holy Bible*: 394), an imperative with the nominative pronoun *thou* as subject, & on the Japanese imperative, *Omae-ga ik-e* ('you-NOM go-IMP'; 'You go'), which contains an overt nominative subject).

4. Some D-Related Resources to Describe EIs

- (2) a. Go away. b. You go away.

Following Grohmann's (2003) tripartite clausal structure (i.e., the *theta-domain* (TH-domain), the *Case/agreement-domain* (C/A-domain for A-languages; the *Case/topic/focus-domain* (for DC-languages)), & the *discourse-domain* (D-domain)), we obtain the following NS-structures for the TH-domains of (2a,b); i.e., (3a, b), respectively:

- (3) a. [_{VP} *pro*_{topic} go away]
b. [_{VP} *you*_{focus} go away]

The subjects receive a theta-role of 'goer.' Perhaps, *pro* and *you* may receive a topic and a focus feature from the "pragmatics" module at this stage of derivation via the "invasive" approach to the NS/FLN-interfaces connection (López 2003; see below). We then have the NS-structures for their Case/topic/focus-domains,

assuming EIs to be a DC-language; i.e., (4a, b), respectively:

- (4) a. [C<IMP, topic> [TP T<Imp> [vP *pro*_{topic} go away]]]
 b. [C<IMP, focus> [TP T<Imp> [vP *you*_{focus} go away]]]

Inheritance of topic-/focus-features from C by T takes place. Valuation of *pro*'s & *you*'s unvalued Case-features takes place, the imperative Tenses $T_{\langle Imp, topic/focus \rangle}$ assigning nominative Case to *pro* & *you* with a topic- & a focus-feature, respectively, *under Agree*. The topic-/focus-features have been assigned to *pro* & *you*, respectively, from the “pragmatics” module at the strong v phasal TRANSFER via the “invasive” approach to the NS-interfaces connection (López 2003). Finally we get the NS-structures for their D-domains; i.e., (5a, b), respectively:

- (5) a. [Cp <IMP> [TP T<Imp> [vP *pro*_{topic} go away]]]
 b. [Cp <IMP> [TP *you*_{focus} T<Imp> [vP (*you*_{focus}) go away]]]

The feature <IMP> in C functions to mark its sister TP as imperative, with the “performative” meaning of “command.” What remains for the purposes of interpretation of (2a, b) is identification of the subjects. As for “subject interpretation” in EIs, LF copying operates (Saito 2007), providing imperative subjects with *you*, the sole LF object available to English for imperative purposes (see Saito 2007 for the view that ‘LF copying is an available option universally’). The D-domain of imperatives includes the notion of “YOU,” which denotes the “addressee” & counts as the (sole) value of the “pragmatic role” of *Addressee*. The *pro*_{topic} & *you*_{focus} subjects of imperatives covertly raise to [Spec, C], where they receive the pragmatic role of *Addressee* from the *Speaker*, whose “linguistic” domain is the D-domain.

$T_{\langle ense \rangle \langle Speaker \rangle}$, which resides in the D-domain &

corresponds to the “*Speaker’s*” *Absolute Present Tense* (see Hornstein 1990 for a Reichenbachian theory of tense), values “vocative Case.” (See Suzuki Forthcoming for the ‘**generalized theta-Criterion**’ requiring an argument to bear a semantic/theta-role or a pragmatic-role. The Case-visibility requirement on theta-assignment, according to which such ‘vocative’ expressions as *John!* may receive a pragmatic-role of *Addressee* only if its Case-feature is valued as vocative; the generalized theta-Criterion). $T_{\langle Imp \rangle}$ used to raise overtly to the imperative C (*Go and do thou likewise*, with the verbs in C), but it does not any more. The subjects of (2a,b) receive both a theta-role of *goer* & a pragmatic-role of *addressee*. Referring to the “addressee” makes an imperative subject *topicalized* or *focused*, depending on whether it is covert or overt, respectively. EIs capitalize on the DC-language strategy in assigning a topic or focus status to [Spec,T]. This situation points to EIs being (partly) a DC-language.

5. Reanalyzing Hiroe’s (2010) Data in terms of ‘Selection-Driven’ Reprojection/Relabeling

(Donati & Cecchetto 2011)

- (6) a. John said *call Mary*.
 (cf. *John said that call Mary; = Hiroe’s 2010: 108 (9a, b))
 b. John **only** said *give roses_F to his mom*.
 (cf. *John only said, ‘Hey, give roses_F to his mom’; = Hiroe’s 2010: 108 (12a, b))
 c. Every professor said buy his book.
 (= Hiroe’s 2010: 108 (13a))
 d. ?Who did John say t_{who} call at three?
 (= Hiroe’s 2010: 108 (13b))
 e. **No one** said buy *anything*.
 (= Hiroe’s 2010: 108 (13c))
 Notice that assuming that imperatives are

generally CPs and the locus of the imperative force is C, Hiroe (2010: 108) goes on to observe that *there results no selectional relation between the matrix verb and the embedded C head, with the consequence of the CP imperative sentence only appearing in the complement position of the matrix verb*. Let us see what our analysis of embedded imperative constructions as exemplified in Hiroe (2010) would be like by first looking at the specific example in (6a) as a typical case of an embedded imperative:

(7) a. John said *call Mary*.
 (= (6a), Hiroe's 2010: 108 (9a))

b. [_{VP} *pro*_{topic} call Mary]

(NS-structure for theta-domain of embedded imperative in (a); imperative subject *pro* receiving a theta-role of 'caller of Mary' at this stage of NS-derivation; also *pro* receives a topic feature from the 'pragmatics' module at this stage)

b'. [C<IMP, topic> [TP T<Imp> [_{VP} *pro*_{topic} call Mary]]]

(NS-structure for Case/topic/focus-domain of embedded imperative in (a); inheritance of topic-feature from C to T taking place at this stage; topic feature on T<Imp, topic> Agreeing with *pro*_{topic} which has been assigned topic-feature from 'pragmatics' module; valuation of *pro*'s unvalued Case-feature by the imperative Tense T<Imp, topic> assigning nominative Case to *pro*)

b''. [CP <IMP> [TP T<Imp> [_{VP} *pro*_{topic} call Mary]]]

(NS-structure for the whole discourse-domain (D-domain) of embedded imperative in (a); feature <IMP> in embedded C functioning to mark its sister TP as imperative, with 'performative' meaning of 'command'; **Notice here that *John said that call Mary in (6a = Hiroe's 2010: 108 (9b)) above is presumably**

ruled out as an embedded imperative due to the presence of the declarative marker that in embedded C; Identification of subject *pro*: for 'subject interpretation,' LF copying operating to provide *pro* with *you*; D-domain notion of 'YOU' denoting 'addressee' & counting as (sole) value of 'pragmatic-role' of *Addressee*; *pro*_{topic} subject covertly raising to [Spec, C] to receive pragmatic-role of *Addressee* from *Speaker*)

b''''. John said [CP <IMP> [TP T<Imp>

[_{VP} *pro*_{topic} call Mary]]]

(entire structure involving embedded imperative in (a); I reformulate Hiroe's (2010: 108) 'speech-act compounding' (SAC) as a species of **reprojection** (Bhatt 2002, Donati 2006, Fanselow 2004, Georgi & Müller 2010, Hornstein & Uriagereka 2002, Suzuki 2012, Cecchetto & Donati 2010, Donati & Cecchetto 2011):

<Hiroe (2010: 108)>: ' ... V ...

[CP [C DIRECTIVE] [_{VP} ...]]'

(CP being imperative with 'directive force') → SAC → ' ... V (STATIVE)

...[CP [C DIRECTIVE] [_{VP} ...]]'

(the whole sentence having force of a 'statement/declarative')

<REFORMULATION of Hiroe's (2010) SAC analysis in terms of *reprojection*>:

(i) said [CP <IMP> ...]

(no thematic-selectional relation between *said* & imperative CP; **but perhaps, this stage almost non-existent, see (ii) just below**)

(i) said [CP <- Q>/<IMP> ...]

(imperative CP 'reprojected' as a declarative (i.e., with a <-Q>-feature in C; a species of '**selection-driven**' **reprojection/relabeling** in the sense of Donati & Cecchetto 2011 (necessarily) applies upon Merge of *said* & imperative CP, the former treating the latter

complement as if it is a usual ‘declarative’ complement)

Suppose that on condition that the matrix verb be one of speech-act, such as *say*, an embedded imperative construction is possible (albeit with some usual *reprojecting/relabeling* operation in the sense just above). Then, the matrix subject *John* should be regarded as the *Speaker* of the embedded imperative. I call this *Speaker_{John}* (i.e., *in John’s world* or *with John* as *Speaker*) to differentiate it from (the usual) *Speaker* in the sense of (7b’’) above (albeit necessarily with a *different* speaker as *Speaker* depending on the specific speech situation). Out of the examples in (6b,c,e), all of which may somehow **need a configuration of c-command for the purposes of their complete semantic interpretation** at some point of derivation, let us take up (6c), repeated here as (8a):

(8) a. Every professor said buy his book. (= (6c), Hiroe’s 2010: 108 (13a))

(the intended interpretation being that the pronoun *his* is bound by the universal quantifier phrase *every professor*, which requires the presence of a (asymmetric) c-command configuration pertaining to the two elements somewhere in the derivation)

b. [_{VP} *pro_{topic}* buy his book]

(theta-domain of embedded imperative in (a); imperative subject *pro* receiving a theta-role of ‘buyer of his book’ and also a topic feature from the ‘pragmatics’ module)

b’. [_{C<IMP, topic>} [_{TP} T<IMP> [_{VP} *pro_{topic}* buy his book]]]

(Case/topic/focus-domain of embedded imperative in (a); inheritance of topic-feature from C to T; topic feature on T<IMP, topic> Agreeing with *pro_{topic}*; valuation of *pro*’s unvalued

Case-feature by the imperative Tense T<IMP, topic> assigning nominative Case to *pro*)

b’’. [_{CP} <IMP> [_{TP} T<IMP> [_{VP} *pro_{topic}* buy his book]]]

(whole discourse-domain (D-domain) of embedded imperative in (a); feature <IMP> in embedded C functioning to mark its sister TP as imperative; Identification of subject *pro*: see (7b’’) above)

b’’’. Every professor said [_{CP} <IMP>

[_{TP} T<IMP> [_{VP} *pro_{topic}* buy his book]]]

(entire structure involving embedded imperative in (a);

(i) said [_{CP} <-Q>/<IMP> ...]

(imperative CP ‘reprojected’ as a declarative ; i.e., with a <-Q>-feature in C; ‘selection-driven’ **reprojection/ relabeling** in the sense of Donati & Cecchetto 2011)

(ii) Every professor said

[_{CP} <-Q>/<IMP> ... his ...]

(*his* bound by *Every professor*; **Notice that this semantic interpretation applies in the semantic component Σ (part of FLN, the mapping component to the CI-interface; see Chomsky 2004) for the whole structure consisting of the matrix and embedded clauses; Notice further that while NS-derivation operates strictly phase-wise-derivationally, interpretive operations in Σ (& in the phonological component Φ) can apply massively representationally**)

The matrix subject *every professor* is regarded as the *Speaker* of the embedded imperative. I call this *Speaker_{every professor}* (i.e., *in every professor’s world* or *with every professor* as *Speaker*) to differentiate it from (the usual) *Speaker* in usual imperatives.

As for (6b; ‘John **only** said *give roses_F to his mom*’), I just note on the basis of Reinhart (2006: 259-260) that “... the potential scope of *only* is just its c-command domain, where it

selects the focus as its scope,” which can only be implemented via **selection-driven reprojction/relabeling** involving the matrix verb *said* and *give roses_F to his mom* (its <-Q> (<IMP>)

complement; see (8b’’) above). And as for (6e; ‘**No one** said *buy anything*’), I just note again the standard assumption that a negative polarity item, such as *anything*, must be in the c-command domain of a negative operator, such as *no one*, which situation can again only be obtained via **selection-driven reprojction/relabeling** involving the matrix verb *said* and *buy anything* (its <- Q> (<IMP>) complement; see (8b’’) above).

Let me now turn to the *wh*-movement example in (6d) above, repeated here as (9a), where the embedded imperative subject is a *wh*-phrase that itself has raised to the matrix sentence initial position:

(9) a. ?Who did John say t_{who} call at

three?

(= (5d), Hiroe’s 2010: 108 (13b))

(t_{who} indicating the original, theta-position for the raised *wh*-phrase *who*)

b. [_{vP} *who_{focus}* call at three]

(theta-domain of embedded imperative in (a); imperative subject *who* receiving a theta-role of ‘caller at three’; *who* receives a focus feature from the ‘pragmatics’ module at this stage of derivation)

b’. [_{vP} *who_{focus}* [_{v’} (*who_{focus}*) call at three]]

(indicating the strong-phase-wise successive cyclic raising of the *wh*-phrase; this step of derivation may or may not be needed depending on the assumption adopted)

b’’. [_{C<IMP, focus>} [_{TP} *who_{focus}*

{T<Imp, focus>} [{vP} (*who_{focus}*)

[_{v’} (_{vP} *who_{focus}*) call at three]]]]

(Case/topic/focus-domain of embedded imperative in (a); inheritance of focus-feature from C to T; focus feature on $T_{<Imp, focus>}$)

Agreeing with *who_{focus}*, which has been assigned a focus-feature from ‘pragmatics’ module; valuation of *who*’s unvalued Case-feature by the imperative Tense $T_{<Imp, focus>}$ assigning nominative Case to *who*; raising of *who* to [Spec, T] due to ‘EPP’)

b’’’. [_{CP} *who_{focus}* <IMP> [_{TP} (*who_{focus}*) $T_{<Imp>}$

[_{vP} (*who_{focus}*) [_{v’} (_{vP} *who_{focus}*) call at three]]]]

(whole discourse-domain (D-domain) of embedded imperative in (a); feature <IMP> in embedded C functioning to mark its sister TP as imperative; *who wh*-raising to [Spec, C]; **Identification of subject *who***: for ‘subject interpretation,’ LF copying operating to provide *who* with *you*, D-domain notion of ‘YOU’ denoting ‘addressee’ & counting as (sole) value of ‘pragmatic- role’ of *Addressee*; *who_{focus}* subject overtly (due to its status as an English *wh*-phrase) raising to [Spec, C] to receive pragmatic-role of *Addressee* from *Speaker*)

b’’’. Who did John say [_{CP} (*who_{focus}*) <IMP>

[_{TP} (*who_{focus}*) $T_{<Imp>}$ [_{vP} (*who_{focus}*)

[_{v’} (*who_{focus}*) call at three]]]]

(the entire structure involving embedded imperative in (a);

(i) say [_{CP} *who_{focus}* <- Q>/<IMP> ...]

(imperative CP ‘reprojected’ as a declarative (i.e., with a <- Q>-feature in C; ‘**selection-driven reprojction/ relabeling** in the sense of Donati & Cecchetto 2011))

(ii) Who did John say [_{CP} (*who_{focus}*)

<- Q>/<IMP> ...]

(as for where to pronounce *who*, see Suzuki 2007a for the (largely, economy-based) *which-copy-to-pronounce rule*, which applies cyclically)

The matrix subject *John* is regarded as the *Speaker* of the embedded imperative. I call this *Speaker Speaker_{John}* (i.e., *in John's world* or *with John as Speaker*) to differentiate it from (the usual) *Speaker* in usual imperatives.

6. Some Consequences of Selection-Driven Rejection/Relabeling

(Donati & Cecchetto 2011)

Notice that Donati and Cecchetto's (2011: 546-547) claim that "(only) **head movement can be selection driven**" on the assumption that "only head movement has the property of relabeling its target" may lead to an interesting analysis of the following, also cited in Hiroe (2010):

- (10) John is going to, is it Chicago?, next week.
(= Hiroe's 2010: 109 (20a))

Taking the preposition *to* to require an nP/NP complement in this case (see Chomsky 2007, Georgi and Müller 2010, Suzuki 2012 for the nP/NP approach to nominal phrases instead of the DP approach), Donati and Cecchetto's (2011) theory of selection-driven movement may predict that in addition to being an interrogative sentence, *is it Chicago?* should also be an nP/NP at some point of the derivation, specifically when the preposition is merged with *is it Chicago?* Abstracting away from discussion of heavy restriction on possible sentence types that can appear in the relevant position in (10), I assume at least something like the following to be involved in the derivation and interpretation of (10) (see Suzuki 2012 for a similar mechanism for the purpose of analyzing restrictive relative constructions):

- (11) a. [pp to [CP is it Chicago]]
(actually, non-existent)
b. [pp to [nP [n (Chicago)]] [CP is it Chicago]]]

The structure in (11a) as it is should be a violation of selectional requirements on the part of the preposition *to*. I take the covert raising of n (*Chicago*) to the CP initial position to be an instance of selection-driven movement so as to meet such selectional conditions on the preposition's complement. Recall that covert head raising in (11b) has also relabeled/reprojected the CP target as nP, which situation has been required by the selectional relation between the preposition *to* and the portion *is it Chicago?* Look at the following Japanese example:

- (12) Amerika-ni ita-toki Shikago-
America-in stayed-TIME Chicago-
datta- ka-e ryokou-shita-ne.
was-Q-to traveled-didn't we?
(When we stayed in the United States, we
traveled to somewhere like Chicago,
didn't we?)

- (13) a. [pp [CP Shikago-datta-ka]-e]

(actually, nonexistent)

- b. [pp [nP [CP Shikago-datta-ka]

[n(Shikago)]]-e]

The syntactic structure in (13a) would be a violation of selectional requirements on the part of the postposition *e*, selection-driven considerations urging the n head *Shikago* to (covertly) raise to the right of the CP interrogative clause so as to reproject/relabel the CP target as nP in accordance with the preposition's selectional condition on its complement.

7. EIs from the Perspectives of Learnability/ Parametric Considerations

(Why is a DC- grammar subject possible for English imperatives ?)

Recall that English is an A-language whose major strategy for the purpose of triggering A-movement at T (and, perhaps, at V; see Chomsky 2008: 148 for application of feature-inheritance connection to both the C-T and v*-V domains) is

one via ϕ -feature agreement between the subject and the finite verb (i.e., Agree-feature/ ϕ -features at T; and also between the object and Agree-feature at V) with concomitant Case-valuation upon Agree. One of the most intriguing questions with the above observation concerning English may be one of why it is possible for English, an A-language, to have a DC-grammar subject for its imperative constructions. The situation with English imperative constructions seems to go against Chomsky's (2008) observation that: "That would yield the intriguing but puzzling conclusions about raising of objects to Spec-V, particularly in ECM constructions, but perhaps generally. The evidence is compelling, but has been unclear why such rules should exist: why should objects raise to Spec-V at all, an operation that is even more odd because its effects are not visible, given that V then raises to v*? *These strange facts fall into place automatically if the properties of the C-phase hold of phases generally*" (p. 148; emphasis — NS; to which I return below when we examine Roberts and Holmberg's 2010: 41 principle of *Generalization of the Input* to the effect that '**If the acquirers assign a marked value to H, they will assign the same value to all comparable heads**' and Boeckx's 2011: 217 hypothesis of *Superset Bias* to the effect that '**Strive for parametric-value consistency among similar parameters**'; also see the speculation on the part of Noam Chomsky and Massimo Piattelli-Palmarini that 'parameters emerge as a **mini-max solution: an attempt to navigate between the path of least genetic specification (minimal UG) and the path of least instruction (superset bias)**,' cited in Boeckx's 2011: 221). That is, English imperatives somehow countenance *both* DC-type topic/focus- feature-wise implementation of Agree (and Case-valuation; for the purposes of *subject-verb* agreement) and A-type ϕ -feature-wise treatment of Agree and Case-valuation for the purposes of the v*-V domain, which may constitute an instance of gross incompatibility with general economy considerations.

Why is it possible to have a DC-grammar subject for English imperatives?

<Acquisitional situation with possible triggers>

The English learner somehow initially starts out with a Chinese-type null- subject grammar (Hyams 1986, 1991) reset the relevant parameter so as to match adults at the time of acquiring 3 sg present Tense (i.e., -s), but somehow does not reset it in the case of **imperative subjects**, presumably due to the presence of grammar competition governed by relevant triggers (Yang 2002 et seqq., 'Deploy the **Elsewhere Condition**').

Selected References: Bhatt. 2002. The raising analysis of relative clauses.// Boeckx. 2011. Approaching parameters from below.// Cecchetto & Donati. 2010. On labeling: Principle C and head movement.// Chomsky. 2004. Beyond explanatory adequacy.// 2007. Approaching UG from below.// 2008. On phases.// Donati. & Cecchetto. 2011. Relabeling heads: A unified account for relativization structures. *LI* 42.// Fanselow. 2004. Münchhausen-style head movement and the analysis of verb second.// Georgi & Müller. 2010. Noun-phrase structure by reprojection.// Grohmann. 2003. Successive cyclicity under (anti-)local considerations. *Syntax* 6.// Hiroe. 2010. Meireibun-no umekomi-seigen (Restrictions on embedded imperatives). In *Proceedings of 82nd E L S J.*// Hornstein. 1990. *As time goes by: Tense and Universal Grammar.*// Hornstein & Uriagereka. 2002. Reprojection.// Hyams 1986. *Language acquisition and the theory of parameters.*/ 1991. A reanalysis of null subjects in child language.// López. 2003. Steps for a well-adjusted dislocation. // Miyagawa. 2010. *Why agree? Why move?//* Reinhart. 2006. *Interface strategies.*// Roberts & Holmberg. 2010. Introduction: Parameters in minimalist theory. In *Parametric variation.*// Saito. 2007. Notes on East Asian argument ellipsis.// Suzuki. 2012. Modification as reprojection. *JELS* 29./ Forthcoming. Sentential classification in terms of tense.// *The Holy Bible: The authorized King James version* (1611).// Yang. 2002. *Knowledge and learning in natural language.*

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代 表 者 稲田俊明

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(〒113-0023)

東京都文京区向丘1-5-2

開拓社内

電話(03) 5842-8900

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