Papers from the Thirty-Eighth Conference
November 7-8, 2020
and from
the Thirteenth International Spring Forum
of
The English Linguistic Society of Japan

JELS 38

日本英語学会第 38 回大会（オンライン開催）
第 13 回国際春季フォーラム（開催中止）
研究発表論文集

The English Linguistic Society of Japan
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Edited by
The Conference Organizing Committee

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第38回大会運営委員長
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[I]

Thirty-Eighth Conference
November 7-8, 2020

Immediate Containment*

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Keywords：syntax, labeling algorithm, contain, *wh* operator, Case

1. Introduction: Labeling Theory

This study aims to discuss how labels restrict possible interface interpretations. The proposals are: i) the interfaces interpret the structure according to the containment relation between the set and the syntactic objects (SOs) and ii) if an SO is located in the position where it can provide the label, the SO is *immediately contained* by the set and must be interpreted according to the set.

In Chomsky (2013, 2015), Merge is defined as the set-forming operation from two SOs.

(1) Merge (X, Y) ={X, Y}

Merge does not specify the identity of the set. Then, the set must be assigned the label to be interpreted at the interfaces, as suggested in (2).

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

The following schemata show how labels are assigned to each set.

(3) a. $\{_{\alpha}$ X, YP$\}$ (α=X)
b. $\{_{\alpha}$ XP, ~~YP~~$\}$ (α=X)
c. $\{_{\gamma}\ \{_{\alpha}$ X[*u*F], WP$\}$, $\{_{\beta}$ Y[F], ZP$\}\}$
(α=X, β=Y, γ=<F, F>)

(3a) shows a set from a head and a phrase, where Minimal Search (MS) locates the head to determine α=X. The sets in (3b, c) are formed by two phrases. In (3b), the moved SO YP becomes invisible to MS, and the remaining head X serves as the label. In (3c), both heads X and Y are located by MS. Then, the agreement features shared by X and Y provide the unique label.

Following the labeling theory, this study will show that the interpretive mechanism based on labels works both at the C-I and SM interfaces. The next section introduces Epstein, Kitahara and Seely (EKS) (2017), on which my proposal is based. Then, section 3 proposes an interpretive rule at the interfaces. In sections 4 and 5, I will discuss how the proposal works at each interface, focusing on *wh* interrogatives and Case manifestation. Section 6 is the conclusion.

2. Epstein, Kitahara and Seely (2017)

EKS (2017) argue that probe-goal Agree should be replaced by MS and feature-assignment in the morpho-phonological component. Their empirical basis concerns the following *wh* phrase.

(4) $\{_{\gamma}\ \{_{\beta}$ which[*u*Q], dog$\}\ \{_{\alpha}$ C[int], …$\}\}$
(α=C, β=which, γ=<int, int>)

If [*u*Q] on *wh* operators determine their interpretations via probe-goal Agree, the feature-valuation of *which* in (4) would fail since it only c-commands *dog*. (5) shows EKS's proposals.

(5) a. Agree does not take place in syntax.
b. MS replaces probe-goal Search (Agree).
c. The morpho-phonological component interprets [*u*F] based on the label <F, F>.

According to EKS, the label <int, int> only has the interpretation of the information of valued [int] on C since [*u*F] on a *wh* operator is empty. If so, the information of the label <F, F> suffices to determine the interpretation of [*u*F]. Note that EKS's proposal is not a mere replacement but also has a theoretical advantage. (6) shows the steps in each framework, where fewer steps are required in EKS's system.

(6) a. The framework with (syntactic) Agree
i. valuation of [*u*F] by Agree→ii. MS (labeling)→iii. morpho-phonological realization of valued [*u*F] at the SM interface.
b. EKS (2017)
i. MS (labeling)→ii. feature-assignment at the morpho-phonological component.

Extending EKS's (2017) framework, I will propose the totally representational model for the C-I/SM interfaces.

3. Proposal

I start with rule (7), which is not a new proposal but deducible from (2). The proposal is different from EKS (2017) in two points: i) EKS suggest that feature-assignment takes place at the morpho-phonological component, but I assume both of the C-I/SM interfaces interpret [*u*Q] according to the label, and ii) Although MS serves in EKS's proposal, I argue that the containment relation suffices to hold the relation. Then, the proposal allows long-distance feature-assignment in (8). Since Y is contained in set β labeled <F, F>, [*u*F] on Y is also assigned the value from [F] on Z. Note that the problem of [*u*F] is illegibility at the interfaces. Then, if the interfaces interpret the sets according to the labels, it is natural to assume that the interfaces interpret [*u*F] according to the label of the set which contains [*u*F].

(7) Interpretation by Contain (to be revised)
The interpretation of an SO X is defined by the identification label of the set containing X.

(8) $\{_{\beta}$ Z[F] $\{_{\alpha}$ X[*u*F] {...Y[*u*F]...}$\}$
(α=X, β=<F, F>)

Further, I propose a new relation (9) and an interpretive rule (10).[1]

(9) Immediately Contain
A set A with label L immediately contains an SO X iff X provides (part of) L.

(10) Given the following structure and some operation that can assign [F′]
$\{_{\beta}$ Z[F] $\{_{\alpha}$ X[*u*F] {...Y[*u*F]...}$\}$
(α=X, β=<F, F>)
then, the interpretation of [*u*F] on Y may be [F] or [F′], whereas [*u*F] on X has to receive the interpretation of [F].

(10) is based on the following reasoning: X in (10) (partly) assigns the label <F, F> and the label <F, F> identifies the set. Then, [*u*F] on X must receive the value from [F] on Z since it is inconsistent that label β is defined by X whereas X is interpreted independently of the label. In contrast, Y is just contained in the set labeled <F, F>. [*u*F] on Y can be interpreted by the label <F, F>, but it is an option. If another mechanism can assign a different value [F′], [*u*F] on Y can be

interpreted as [F′]. Extending the relation beyond [*u*F], I summarize (7) – (10) as follows:

(11) Interpretation by Contain
Given the structure
{$_{\beta}$ Z[F] {$_{\alpha}$ X[uF] {...Y...}} (α=X, β=<F, F>)
i. Y, contained in the set labeled <F, F>, may be given the relevant interpretation according to the label at the interfaces.
ii. X, immediately contained in the set labeled <F, F>, must be given the relevant interpretation according to the label at the interfaces.

The next two sections discuss how the proposed relation works at the C-I/SM interfaces.

4. Rigid/Optional C-I Interpretation

4.1. Multiple *Wh* Construction

The first issue concerns the following multiple *wh* interrogative clause.

(12) Who knows where we bought what?

The puzzle is two-fold: i) how [*u*Q] on in-situ *what* is assigned and ii) why in-situ *what* can take either matrix/embedded scope whereas *who*/*where* must take the surface scopes. They are particularly relevant to the (standard) Agree-based framework with covert movement. First, since *what* does not c-command its goal, some additional assumption is necessary for [*u*Q] on *what*. Second, The scope optionality of *what* is shown by the following two interpretations (cf. Baker (1970)).

(13) a. Q1: for which <x, y>, x knows where we bought y
A1: John knows where we bought pizza, Tom knows where we bought books...
b. Q2: for which x, x knows where we bought what
A2: John and Tom (knows where we bought what).

If covert movement is assumed to explain the matrix scope, the analysis must clarify why the *wh* island effect is not observed in covert movement. The proposed framework naturally solves the puzzles. Consider the following structure:[2]

(14) {$_{\delta}$ who[*u*Q] {$_{\gamma}$ T[int] ... {$_{\beta}$ where[uQ] {$_{\alpha}$ C[int]...what[*u*Q]}}
(α=C, β=<int, int>, γ=T, δ=<int, int>)

I assume that [*u*Q] on *wh* operators are interpreted based on the label <int, int>. Since *who* and *where* provide the labels <int, int>, they are immediately contained by the sets δ/β, respectively. Then, they receive the rigid surface scopes by rule (10). On the contrary, although *what* requires the label <int, int> to assign the interpretation to its [*u*Q], any <int, int> label does not require *what* in labeling. In such a case, *what* can take either of the matrix or embedded scope by the Choice Function proposed by Reinhart (1998).

This section has discussed how the proposal naturally accommodates the multiple *wh* construction. The next section concerns *wh* island phenomena.

4.2. *Wh* Island

(15) shows a typical example with a *wh* island with the structure.

(15) a. *What did you ask where she ate?
b. {$_{\varepsilon}$ what[*u*Q] {$_{\delta}$ did[int] you ask {$_{\gamma}$ ~~what[*u*Q]~~ {$_{\beta}$ where[*u*Q] {$_{\alpha}$ C[int] she ate

~~what[*u*Q]~~}}}
(α=C, β=γ=<int, int>, δ=C[int], ε=<int, int>)

Since a copy of an SO is invisible to MS, *what* is not the source of label γ=<int, int>; the set inherits the label from set β. Then, *derivationally*, *what* is not immediately contained by set γ. However, I assume that the C-I interface cannot have access to the derivational history and that the C-I interface cannot distinguish the following schemata:

(16) a. {$_\gamma$ what[uQ] {$_\beta$ where[uQ] {$_\alpha$ C[int], ...}}
(α=C, β=γ=<int, int>)
b. {$_\gamma$ ~~what[uQ]~~ {$_\beta$ where[uQ] {$_\alpha$ C[int], ...}}
(α=C, β=γ=<int, int>)

In (16a), label γ=<int, int> is provided by *what*, *where*, and C[int] as a structure with multiple specs. In (16b), *what* is a copy and invisible to MS, and label γ inherits label β. Since the interfaces cannot see the derivational history, *what* is assumed to be immediately contained in (16b) as well as (16a).[3, 4]

The discussion so far has deduced *wh* island effects from Immediately Contain. The literature reports that *wh* island effects disappear in subject *wh* interrogative clauses.

(17) a. What do you wonder who saw?
(George (1980), Chomsky (1986: 48))
b. {$_\gamma$ what[phi][uQ] do[int] you wonder {$_\beta$ ~~what[phi][uQ]~~ {$_\alpha$ who[phi][uQ] T[uphi][int] saw ~~what[phi][uQ]~~}}
(α=β=<phi, phi>/<int, int>, γ=<int, int>)

C deletion is applied to (17) and T has both [*u*phi] and [int]. Unlike (15), the copy of *what* in (17b) is not immediately contained by set β. To see this, let us consider the following structure:

(18) {$_\gamma$ DP2[phi] {$_\beta$ DP1[phi] {$_\alpha$ T[uphi], ...}}}
(α=T, β=<phi, phi>, γ=??)

When MS is applied to (18), the three SOs DP2[phi], DP1[phi], and T[*u*phi] are located. Note that the unique label is assigned in labeling when MS locates one element. In the XP-YP configuration, the agreement features provide the label <F, F> because [*u*F] is empty so that MS only locates the valued [F]. In contrast, there are two visible SOs in (16): DP1 and DP2. Then, the unique label cannot be assigned. Turning back to (17), if *what* is immediately contained in set β, *what* must provide the label. If so, however, label β cannot be defined for the same reason as (18). Therefore, it follows that *what* must not provide label β, which means the occurrence of *what* must be a copy and must not be immediately contained by set β. If the argument is on the right track, *what* is exempted from the *wh* island effect and is assigned the unique matrix scope by label γ.

This section has demonstrated how the proposed framework deduces the *wh* island effects. Since the island effect is mysterious in the free Merge hypothesis, I have deduced the effect from an interpretive constraint. The next section concerns the SM effect of my proposal.

5. Rigid/Optional SM Interpretation

5.1. Rigid Case

In the following rudimentary sentence, Cases must be rigid.

(19) a. I like him.
b. {$_\eta$ C {$_\zeta$ I[phi] {$_\varepsilon$ T[uphi] {$_\delta$ ~~I[phi]~~ {$_\gamma$ R-*v** {$_\beta$ him[phi] {$_\alpha$ ~~R[uphi]~~, ~~him[phi]~~}}}}}}}
(α=R, β=<phi, phi>, γ=δ=R-v*, ε=T,

ζ=<phi, phi>, η=C)

Following EKS (2012), I assume the following assignment rules:

(20) a. The label <phi, phi> from a nominal and T assigns nominative Case to the nominal contained.
b. The label <phi, phi> from a nominal and R assigns accusative Case to the nominal contained.

Nominative Case on *I* is straightforward; since *I* is immediately contained in set ζ labeled <phi, phi> and no other set labeled <phi, phi> contains *I*. *Him*, on the other hand, is contained in the two sets labeled <phi, phi>: β and ζ. However, *him* is also immediately contained in set β, and the interpretation according to β is forced. Then, the nominal providing the label <phi, phi> receives the rigid Case.

5.2. Optional Case

If nominals do not provide the label <phi, phi>, the Case is optional.

(21) a. It was I whom public opinion eventually condemned. (Smits (1989: 300))
b. It is me who(m) John is after. (Akmajian (1970: 152))
c. {$_{\beta}$ it[phi] {$_{\alpha}$ T[*u*phi] {$_{predP}$ I/me ...}}}
(α=T, β=<phi, phi>)

(22) a. ?There am I. (Schütze (1997: 136))
b. There's me. (Schütze (1997: 136))
c. {$_{\delta}$ C {$_{\gamma}$ there[person] {$_{\beta}$ is[*u*phi] {$_{\alpha}$ ~~there[person]~~, I[phi]}}}}
(α=I, β=T, γ=<person, person>, δ=C)

(21) and (22) involve nominals after copular *be*. In (21a), the focus *I* is nominative according to label β=<phi, phi> in the structure (21c). However, the focus is not immediately contained, and therefore, there is another default option of (21b). Similar examples are shown as (22a, b), where there is inter-speaker variation.[5] In the *there* construction, *there* and the logical subject merge in (22c), where *there* copies [phi] from the logical subject. This copying is executed either by feature inheritance or feature sharing by MS. Since *there* does not have full [phi], the label <phi, phi> cannot be provided. The inter-speaker variation lies in whether this deficit label (here, <person, person>) can assign the nominative Case.[6] The same optionality is found in other languages. (25) shows the structure of (23) and (24).

(23) Er läßt ihn {einen guten Mann/ein
he let-3SG him {a good man-ACC/ a
guter Mann} sein.
good man-NOM} COP-3SG (German)
'He lets him be a good man.'
(Schütze (1997: 87))

(24) Ég taldi {hana/*hún} vera
I believed {her-ACC/*she-NOM} to.be
kennara/*kennari.
teacher-ACC/*NOM (Icelandic)
'I believed her to be a teacher.'
(Maling and Sprouse (1995: 170))

(25) {$_{\zeta}$ R-*v** {$_{\varepsilon}$ DP[phi] {$_{\delta}$ ~~R[*u*phi]~~ {$_{\gamma}$ ~~NP[phi]~~ {$_{\beta}$ T {$_{\alpha}$ be, Pred NP[phi]}...}}}}}
(α=be, β=γ=T, δ=R, ε=<phi, phi>, ζ=R-*v**)

In the German example (23), a predicate nominal appears in the ECM construction. Since the default Case in German is nominative, the predicate nominal is optional between the accusative Case according to label ε=<phi, phi> and the default nominative Case.

The Icelandic example (24) complicates the

discussion. The first contrast is expected; since the matrix object provides label ε=<phi, phi>, it has to be accusative. However, unlike German, the optionality of the predicate nominal is not found here. I do not have any answer to the question of why the default nominative is precluded in this case. Nevertheless, I do not assume that Icelandic has a different Case assignment system from other languages. Instead, Icelandic does not depend on an option which other languages use. This speculation is consistent with Chomsky's (1995: 192) suggestion that linguistic variation is an issue for externalization.

In sum, this section has proposed the Case assignment system based on labels. The c-command-based framework needs some stipulations to make a distinction between rigid Cases in (19) and optional Cases in (21) and (22). In both cases, T c-commands the (logical) subjects in the base-positions. Traditionally, spec-head agreement explains the difference, but the speculative notion spec is no longer useful in the minimalist program. One may assume [*u*Case] on nominals following Bošković (2007), but such an analysis does not capture nominative Case in (21) and (22). Thus, integrating spec-head/probe-goal agreement under the notion of (Immediately) Contain is the best way to explain the phenomena.

6. Conclusion

This study has proposed a new relation Immediately Contain and an interpretive mechanism at the interfaces to capture optionality at the C-I/SM interfaces. Chomsky's (2013) view (2) provides the conceptual basis for this proposal since all of my proposals (7) – (11) are based on (2). (11) is also theoretically desirable since it can generalize probe-goal/spec-head agreement in a principled way. Finally, sections 4 and 5 demonstrate the descriptive power in the proposed framework.

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NOTES

[1] The name is the same as *Immediately Contain* in Chomsky (2000, 2001), but the natures are different. Chomsky defines the notion by Merge in syntax, while I define the relation at the interfaces according to labels.

[2] Following Chomsky (2015), I apply C deletion to subject *wh* interrogative clauses.

[3] The copy status of *what* in (16b) does not mean that it does not provide the label since an SO can move after it assigns the label (for example, an object *wh* operator can move after labeling in the *v**P phase).

[4] The C-I interface interprets an SO when the SO is located in the position where it can provide the label <F, F>. I do not assume an operation like *Neglect* in Sportiche (2016) to ignore a problematic copy. I would like to thank Hisatsugu Kitahara for bringing up this issue.

[5] For example, Huddleston (1984: 69) excludes *there* sentences with a nominative subject.

[6] Which feature(s) *there* has is controversial. Although I assume [person] following Chomsky (2000, 2001), Hazout (2004) and Richards (2008) argue that *there* has [3-person] and [*u*number]. Any proposal is consistent with my analysis as long as *there* provides the deficit label.

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対格主語動名詞の史的発達についての一考察*

（A Consideration of the Historical Development of Gerunds with Accusative Subjects）

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キーワード: 対格主語動名詞, 動詞的動名詞, 構造拡張, 動名詞内部での格付与

1. はじめに

宇賀治 (2000)は、(1a)の通格主語を伴う動名詞、および(1b)の対格の代名詞主語を伴う動名詞は、共に中英語では稀であったが、近代英語に入り次第に頻繁になったと論じている。本稿では、(1a)と(1b)のような例を合わせて対格主語動名詞と呼ぶことにする。

(1) a. I was dismayed at the editor rejecting my article. (Declerck (1991: 495))
b. I wouldn't like the idea of you travelling to some exotic country on your own. (Declerck (1991: 495))

しかしながら、宇賀治(2000)では、対格主語動名詞が頻繁になった正確な年代が述べられておらず、頻度の変化を示す具体的なデータも与えられていない。加えて、対格主語動名詞が頻繁になった要因についても言及がないため、なぜ近代英語において対格主語動名詞が頻繁になったのかも不明なままである。

これら 2 点を踏まえて、本稿の目的は、*The Penn-Helsinki Parsed Corpus of Early Modern English* (PPCEME)と *The Penn Parsed Corpus of Modern British English*, Second edition (PPCMBE2)から得られたデータに基づき、対格主語動名詞の頻度の上昇時期を明らかにすること、およびその頻度の上昇の要因を明らかにすることである。具体的には、前述のコーパスを用いた調査により、対格主語動名詞は 1670 年代に頻度が上昇し始め、その後は安定した頻度を保っていることを示す。また、この頻度の上昇は、動詞的動名詞の構造が FP から TP へと拡張したことにより、動名詞内部で T から動名詞の主語への格付与が可能になったことに起因すると主張する。

本稿の構成は以下の通りである。2 節では、PPCEME と PPCMBE2 から得られたデータを提示し、近代英語期における対格主語動名詞の頻度は 1670 年代に上昇し、その後は安定した頻度を保っていたことを示す。この頻度の上昇時期は、虚辞を伴う動詞的動名詞、および文副詞と共起する動詞的動名詞の例が見られるようになった時期とおおよそ一致していることから、動詞的動名詞の内部構造の変化が対格主語動名詞の頻度の上昇に影響を与えたと主張する。また、対格主語動名詞と動詞的動名詞のいくつかの統語的類似性も概観する。この類似性から、動詞的動名詞の構造の変化が対格主語動名詞に影響を与えたとする主張の妥当性が支持される。3 節では、この頻度の上昇の要因は、動詞的動名詞の内部構造が FP から TP へと拡張したことにあると主張する。4 節は結語である。

2. データ

PPCEME と PPCMBE2 を用いた調査結果は、表 1 に示す通りである。

表 1: 近代英語期の対格主語動名詞の生起数および 50 万語あたりの頻度

	1500-1569	1570-1639	1640-1700
生起	5	3	20
頻度	4.4	2.4	19.2
	1700-1769	1770-1839	1840-1914
生起	34	65	51
頻度	20.3	35.1	24.5

注目すべき点は、1639 年以前は対格主語動名詞の頻度が極めて低かったが、1640 年から 1700 年においてその頻度が大きく上昇し、その後は多少の増減はあるものの安定した頻度を保っていることである。ただし、頻度の上昇が 1640 年代に入ってすぐに起こったわけではないことが、観察された 20 例のテクストの年代をまとめた表 2 より明らかとなる。

表 2: 1640-1700 年の生起例のテクストの年代

年代	1640s	1650s	1660s
生起数	1	1	1
テクスト数	1	1	1
年代	1670s	1680s	1690s
生起数	6	7	4
テクスト数	5	3	3

観察された 20 例のうち 3 例は、1640 年代から 1660 年代の 3 つの異なるテクストからのものである。残る 17 例に関しては、1670 年代の 5 つのテクストから 6 例、1680 年代の 3 つのテクストから 7 例、そして 1690 年代の 3 つのテクストから 4 例となっている。観察された 20 例の内、17 例が 1670 年代以降のテクストにおいて観察されるということから、対格主語動名詞の頻度の上昇は 1670 年代に始まったと結論付けられる。

興味深いことに、対格主語動名詞の頻度の上昇時期は、Visser (1966)が観察している、(2)のような虚辞を伴う動詞的動名詞の出現時期とおおよそ一致している。

(2) Epicurus and his scholars of old... make this an argument of there being no God.
(1657-83 John Evelyn, Hist, Religion, I, 79/ Visser 1966: 1185)

虚辞は T の持つ EPP 素性を満たすために挿入されるという、極小主義における一般的な仮定に従えば、(2)のような動詞的動名詞はその内部構造に少なくとも TP を含むということになる。

加えて、(3)で示すように、certainly のような文副詞を伴う動詞的動名詞も、対格主語動名詞の頻度の上昇時期とほぼ同様の時期に観察されるようになった。(3)の例は、初期近代英語期のコーパスである *Early English Books Online* (EEBO)からの用例である。[1] 一般に文副詞は TP に付加すると仮定されており、この種の副詞が動詞的動名詞と共起するという事実も、動詞的動名詞の構造には少なくとも TP が存在することを示している。

(3) that is, in certainly discovering the meaning of the Holy Ghost (EEBO/A41608 1685)

虚辞の there や certainly のような文副詞を伴う動詞的動名詞が観察される時期が、対格主語動名詞の頻度の上昇が始まる時期とおおよそ一致しているという事実は、動詞的動名詞の内部構造の変化が対格主語動名詞の頻度の上昇に影響を与えたことを示していると考えられる。

これは、対格主語動名詞と動詞的動名詞の統語的な並行性からも支持される。(4)から(6)で示すように、対格主語動名詞が生起できる統語的位置は、主語位置、前置詞補部、そして動詞補部である。これらの位置は名詞が生起する統語的位置と並行的であり、対格主語動名詞は、それが生起する統語的位置については名詞的特性を示す。(7)から(9)で明らかなように、同様のことが動詞的動名詞に

も当てはまる。

(4) To this I answered, That if Appetites being Natural, was an Argument for the indulging them […] (BURNETROC-E3-P1,39.57)
(5) […] I must entirely declare against such Children losing their Time about that Language; (WEBSTER-1718-1,15.51)
(6) and, after some Contest, sent Messengers to know his Pleasure, who returning, positively forbad him going to Mexico, (COOKE1-1712-1,1,418.27)
(7) Slitting the bark is an excellent additional help to most of the foresaid evils […] (LANGF-E3-H,114.174)
(8) she took occasion upon considering her own Case here in England, in France, and in her own Country […] (THOWARD2-E2-P2,104.339)
(9) and left off making any further inquirie; (COVERTE-E2-H,14.53)

対格主語動名詞と動詞的動名詞の動詞的特性の 1 つは、目的語を直接取ることである(e.g. (5)/(7))。さらなる動詞的特性として、否定辞 not との共起が可能であること、副詞による修飾が可能であること、having +過去分詞の形式で完了相を表すことが可能であることが挙げられる。対格主語動名詞の用例を(10)から(12)、動詞的動名詞の用例を(13)から(15)にそれぞれ示す。

(10) Which word by way of terror sometime used, by them not having the Spirit, extend it to their Non plus ultra, […] (1647 E. Douglas Mystery Gen. Redemption 13 / OED Online)
(11) and […] I am driven by him falsely reporting my words, […] (EEBO/A02635, 1567)
(12) And by him having foiled the Devil; in his Power, all the Saints overcome the Devil […] (EEBO/A49801, 1659)
(13) I hope they will pardon me in not writing, […] (EHATTON2-E3-P2,2,153.15)
(14) Besides these, they would have every day some practice of writing English headily (BRINSLEY-E2-P1,23.216)
(15) Yet this Caput mortuum was so far from having lost its Electrical Faculty[...] (BOYLE-E3-H,25E.82)

上記に示した 4 つの統語的並行性は、対格主語動名詞と動詞的動名詞が類似した構造を持つことを示していると考えられる。もしこれが正しいとすると、動詞的動名詞の構造に変化が生じた場合に、その変化が対格主語動名詞にも影響を与えたということは十分にあり得る。したがって、対格主語動名詞の頻度の上昇には、動詞的動名詞の構造変化が関与しているという前述の考えは妥当なものであるといえる。

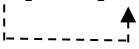
次節では、動詞的動名詞が TP 構造を持つようになったことにより、動名詞内部での T から主語への格付与が可能になったことが、その頻度の上昇の要因であると提案する。

3. 提案

まず、本稿の提案にとって重要となる 4 つの仮定を(16)に挙げる。

(16) a. T は解釈不可能な数素性を持つ。
b. 解釈不可能な数素性のみを持つ不完全な T も一致により対格の付与が可能であるが可能である。
c. 接辞-ing は解釈可能な φ 素性と解釈不可能な格素性を持つ。
d. vP 領域は複数の機能主要部から構成されており、これらの主要部は顕在的な要素がある場合にのみ存在する。

第一に、Arano (2014)に従い、(16a)のように T は元々解釈不可能な数素性を持つと仮定する。Arano は、(17a)に示すように、T はそれ独自で解釈不可能な数素性を持つ一方で、(17b)に示すように、解釈不可能な人称素性は C が持ち、T が C に選択される場合にのみ C から T へと継承されると提案している。紙幅の都合上、以下では、人称素性を P、時制素性を T、数素性を N と略記する。また、破線の矢印は素性継承を表し、取り消し線は、継承された素性が C に残っていないことを示している。

(17) a. C [P, T] …T [N]
b. C [~~P, T~~] …T [P, T, N]

(cf. Arano (2014: 25))

Arano は(16a)を支持する証拠として、(18)の VP 省略を挙げている。

(18) The printer works, but the copier doesn't seem to. (Wurmbrand (2012: 4))

Lobeck (1990)は、ある機能主要部がその補部の省略を認可する場合には、その指定部にある要素と主要部が指定部-主要部の一致関係に入る必要があると主張している。これを踏まえると、(18)において不定詞節補部の VP が省略できるという事実は、T 主要部である to と主語 the copier が指定部-主要部の一致関係に入っていることになる。(18)では、主語と T 主要部の一致関係であるため、それに関わる素性は φ 素性であると考えられ、主語と T 主要部が共に φ 素性を持つということになる。ここで、(18)の不定詞節は繰り上げ述語 seem に選択されている点に注意する必要がある。一般に繰り上げ述語が取る不定詞節は C を伴わない TP であると仮定されている。したがって、(18)では、T は C からの素性継承の結果、何らかの素性を持つわけではない。よって、T はそれ独自で素性を持つことになり、(18)の事実は(16a)を支持する証拠となる。これが正しければ、C を欠く構造において、T は数素性のみを持つという点で不完全であるといえる。本稿では、数素性のみを持つ T を不完全な T と呼び、数素性および人称素性を持つ T と区別する。

第二に、これに関連して、不完全な T も一致により格付与が可能であると仮定する。不完全な T は解釈不可能な数素性を持つために探査子となり、適合する目標子と一致する必要がある。したがって、格付与が一致の副産物であるとする、極小主義の考え(e.g. Chomsky 2000)に従えば、不完全な T も格付与の前提条件を満たしていることになる。そのため、数素性のみを持つ不完全な T も格付与が可能であると考えるのは不自然ではない。そうすると次に問題となるのは、不完全な T がどのような格を付与するのかである。一般に T が付与するのは主格であるが、主格が付与される定形節において、T が数素性に加えて人称素性も持つことを踏まえると、不完全な T が付与する格は主格であるとは考えられない。そのため、本稿では、不完全な T が付与する格は対格であると仮定する。

さらに、Sugiura (2014)に従い、(16c)のように接辞-ing は解釈可能な φ 素性と解釈不可能な格素性を持つと仮定する。この仮定は対格主語動名詞と動詞的動名詞の生起位置から支持される。前述のように、これらの動名詞の生起位置は、主語位置、前置詞補部、そして動詞補部である。これらの位置は格付与位置であり、一般にこれらの位置には名詞などの解釈不可能な格素性を持つ要素が生起する。格付与が一致の副産物であるとすると、この位置に生起する要素は、解釈可能な φ 素性を持つことになる。これを考慮すると、対格主語動名詞と動詞的動名詞の生起位置が格位置であるという事実は、これらの動名詞は解釈可能な φ 素性と解釈不可能な格素

性を持つということになり、ゆえに、(16c)の仮定は妥当であると思われる。

最後に、Harwood (2018)に従い、(16d)のように仮定する。具体的には、vP 領域は、(19)の構造を持つと仮定する。[2]

(19) [$_{FP}$ [$_{F}$ ing] [$_{vPperfP}$ [$_{vperf}$ have] [$_{PerfP}$ [$_{Perf}$ -en] [$_{vP}$ EA [$_{vP'}$ v [$_{VP}$ V IA]]]]]]
(cf. Harwood (2018: 442))

vP_{perfP} 以下の構造は基本的に Harwood (2018) に従っている。v は補部に VP を選択し、外項を導入する。PerfP 主要部には完了形態素 -en が基底生成される。PerfP は v_{perf} に選択され、その主要部には完了の have が基底生成される。本稿では、vP 領域の最上位の投射として FP を仮定し、主要部 F は EPP 素性を持ち、この主要部に接辞-ing が基底生成されると仮定する。主要部 F はその補部に vP/vP_{perfP} のいずれかを選択する。この選択関係は、これらの投射の主要部が主要部 F に基底生成される接辞-ing の適切なホストとして機能することから導かれる。また、(19)において、否定辞の not と副詞は VP/vP に付加されると仮定する。

また、Harwood は、vP は外項を導入するため常に存在する一方で、それ以外の機能投射はその主要部が顕在的である場合にのみ存在するとしている。例えば、完了の have が存在する場合にのみ、vP_{perfP} が投射されるとしている。本稿でも、(19)の vP 以外の機能投射は、その主要部が顕在的である場合にのみ存在すると仮定する。

(16)の仮定を踏まえた上で、(2)のような虚辞を伴う例、および(3)の文副詞伴う例の出現を証拠として、動詞的動名詞の構造が 1670 年代に(20)の構造から TP を含む(21)の構造を持つようになったと提案する。紙幅の都合上、以下では、議論に関係する投射のみを示す。

(20) [$_{FP}$ EA_{i} [iφ, uCase] [$_{F}$ -ing [iφ, uCase] ~~[EPP]~~] [$_{vP}$ t_{i} [$_{v'}$ [$_{v}$ V_{j} +v] [$_{VP}$ …t_{j}…]]]]
(21) [$_{TP}$ EA_{i} [iφ, ACC] [$_{T'}$ [T ~~[EPP, uNum]~~] [$_{FP}$ t_{i} [$_{F}$ -ing [iφ, uCase] ~~[EPP]~~] [$_{vP}$ t_{i} [$_{v'}$ [$_{v}$ V_{j}+v] [$_{VP}$…t_{j}…]]]]]]

この構造の拡張により、動名詞内部に不完全な T が出現し、動名詞内部での格付与が可能になったこと、および前節でみた動詞的動名詞との類似性から、対格主語動名詞も 1670 年代に(21)の構造を持つようになったことを提案する。

(22) […] I must entirely declare [against such Children losing their Time about that Language;] (WEBSTER-1718-1,15.51)
(23) a. [$_{TP}$ such children$_{i}$ [iφ, ACC] [$_{T'}$ [T ~~[EPP uNum]~~] [$_{FP}$ t_{i} [$_{F}$ -ing [iφ, uCase] ~~[EPP]~~] [$_{vP}$ t_{i} [$_{v'}$ [$_{v}$ V_{j}+v] [$_{VP}$…t_{j}…]]]]]
b. [$_{PP}$ against ~~[uφ]~~ [$_{TP}$ such children$_{i}$ [iφ, ACC] [$_{T'}$ [T ~~[EPP uNum]~~] [$_{FP}$ t_{i} [$_{F}$ -ing [iφ,ACC] ~~[EPP]~~] [$_{vP}$ t_{i} [iφ, uCase] [$_{v'}$ [$_{v}$ V_{j}+v] [$_{VP}$…t_{j}…]]]]]]]

(21)の構造に従えば、(22)の角括弧部分の派生は(23)のようになる。(23a)の段階において、解釈不可能な数素性を持つ T が探査子となり、FP 指定部の EPP 素性を満たすために移動した主語 such children を目標子として見つけ、両者の間で一致が生じる。この一致により、T の解釈不可能な数素性は主語により値付けおよび削除される。同時に主語の格素性は対格と値付けられる。また、T の EPP 素性を満たすために、主語 such children は TP 指定部へと移動する。この段階では接辞-ing の格素性は値付けられないが、(23b)の段階で動名詞外にある前置詞が探査子として機能し、その目標子として接辞-ing を見つけ、これらの要素間で一致が起こることにより、接辞-ing の解釈不可能な格素性は対格と値付けられる。すなわち、対格主語動名詞の主語への格付与は動名詞内部の不完全な T によ

り、接辞-ing への格付与は動名詞外の格付与子により行われる。最後に、本稿では、Embick and Noyer (2001)で提案された PF 操作である Lowering を採用する。これにより、接辞-ing は音韻部門においてその補部である v へと移動することにより、適切な host に添加する。また、(12)のような完了形の例の場合には FP の補部が vP_{PerfP} であり、接辞-ing が v_{perf} にある have に添加し、Perf 主要部の接辞-en が v にある本動詞に添加する点を除けば、(23)と同様に派生される。

次に、1670 年代以前の対格主語動名詞の頻度の低さについて説明を試みる。本稿では、この頻度の低さは、対格主語動名詞の主語への格付与が動名詞内部の T との一致ではなく、デフォルト格という有標な仕組みにより行われていたことに起因すると主張する。Schütze (2001: 206)では、デフォルト格は、概略、格素性を持たない名詞表現、または格素性を持つものの統語において格を付与されない名詞表現に対して付与される格と定義される。彼は Spell-out 後に、英語におけるそのような名詞表現には対格がデフォルト格として付与されると提案しており、本稿でもこれに従う。

(24) a. $[_{FP}\ DP_i\ [i\varphi]\ [_F$ -ing $[i\varphi, uCase]\ \sout{[EPP]}]\ [_{vP}\ t_i\ [_{v'}\ [_v\ V_j + v]\ [_{VP}\ \ldots t_j \ldots]]]]$

b. $[_{FP}\ DP_i\ [i\varphi, uCase]\ [_F$ -ing $[i\varphi, uCase]\ \sout{[EPP]}]\ [_{vP}\ t_i\ [_{v'}\ [_v\ V_j + v]\ [_{VP}\ \ldots t_j \ldots]]]]$

(25) a. $[_{XP}\ X\ \sout{[u\varphi]}\ [_{FP}\ DP_i\ [i\varphi]\ [_F$ -ing $[i\varphi, \sout{uCase}]\ \sout{[EPP]}][_{vP}\ t_i\ [_{v'}\ [_v\ V_j + v]\ [_{VP}\ \ldots t_j \ldots]]]]]$

b. $[_{XP}\ X\ \sout{[u\varphi]}\ [_{FP}\ DP_i\ [i\varphi, uCase]\ [_F$ -ing $[i\varphi, uCase]\sout{[EPP]}]\ [_{vP}\ t_i\ [_{v'}\ [_v\ V_j + v]\ [_{VP}\ \ldots t_j \ldots]]]]]$

前述のデフォルト格の定義を考慮すると、1670 年代以前の対格主語動名詞の構造は、(24a, b)のいずれかの構造が可能であったと考えられる。これらの構造は、(21)とは異なり T を持たない FP であるために、動名詞内部での格付与という選択肢はない。結果として、対格主語動名詞の主語と接辞-ing は共に動名詞外の要素から格付与される必要がある。本稿では、1 つの格付与子が 1 つの名詞句にのみ格付与を行うとする考えに基づき、(25a, b)で示すように、動名詞外の要素は接辞-ing に格付与すると仮定する。したがって、対格主語動名詞の主語は統語部門では格付与されないことになり、このままでは派生が破綻してしまう。そのため、格付与されていない名詞句は音韻部門へと排出された後に、デフォルト格としての対格を付与される。しかしながら、この対格付与は一致に基づく格付与が行われない場合に限り適用可能な有標な仕組みであるため、それに依拠して派生されていた 1670 年以前の対格主語動名詞は有標な構文であるといえる。この有標性ゆえに、1670 年以前は頻度が低かったと説明される。一方、1670 年代以降はデフォルト格としての対格付与ではなく、一致に基づく対格付与が可能になったため、対格主語動名詞の有標性はなくなり、結果として頻度の上昇が起こったと説明される。

4. 結語

本稿では、対格主語動名詞の頻度が上昇した時期、およびその要因を明らかにすることを試みた。まず、対格主語動名詞の頻度が 1670 年代以降に上昇したことを、PPCEME と PPCMBE2 を用いた調査により実証した。また、この頻度の上昇は、動詞的動名詞が TP まで拡張した結果、(21)の構造が利用可能になり、動名詞内部での主語への格付与が可能になったことに起因すると主張した。一方、1670 年代以前は、対格主語動名詞がデフォルト格としての対格付与という有標な仕組みに依拠していたため、頻度が低かったと説明した。

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注

[1] EEBO から得られた用例に関しては、スラッシュ以降に、テクストの個体識別番号、テクストの年代の順で情報を記す。

[2] Harwood (2018)では、PerfectP と vP の間に vP_{prog} と ProgP という 2 つの投射を、vP と VP の間に VoiceP という投射をそれぞれ仮定している。しかし、これらの投射は本稿の議論とは関係がないため割愛した。これらの投射については Harwood (2018)を参照されたい。

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The Role of Extremeness in English Binominal NPs and Its Theoretical Implications*

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Keywords : binominal NPs, extremeness, gradability, metaphor, predicate inversion

1. Introduction

English binominal NPs (BNPs) (e.g., *an idiot of a man*) have long inspired empirical and theoretical interest from linguists due to their unique syntactic and semantic properties. BNPs, in general, have the following syntactic form: N_1 of a(n) N_2, where the two nominal elements are separated by the preposition-like *of*. In linguistics literature, BNPs have been studied to reveal (i) the syntactic and semantic nature of the first noun (i.e., N_1) and (ii) the role of the preposition-like *of*. As for (i), scholars have argued that the first noun behaves like a gradable predicate and modifies the second noun (Ike-uchi (1997); see also Aarts (1998)); hence, the first noun carries degree-related readings. As for (ii), scholars have pointed out that the obligatory occurrence of the preposition-like *of* yields figurative readings in BNPs (e.g., Den Dikken (2006)). With this background in mind, the present study reviews the empirical characterization of BNPs presented in previous work and identifies several empirical problems that they encounter. In the spirit of Bolinger (1972), this study analyzes binominal NPs by considering the syntactic and semantic nature of the first noun in terms of nominal gradability (cf. Morzycki (2012b)) and "extremeness" in the sense of Morzycki (2012a). Empirically, the study demonstrates that the first noun slot is compatible only with nouns that allow extreme modification (e.g., *absolute idiot*). For example, in the case of *an (absolute) idiot of a man*, the first noun with extremeness functions as a metaphor for the second noun. Theoretically, the study argues that predicate inversion in the nominal domain enables such an extreme figurative interpretation.

The rest of this paper is organized as follows. Section 2 reviews previous studies on BNPs and identifies several empirical problems. Modifying the predicate inversion approach to BNPs (e.g., Den Dikken (2006)), section 3 proposes an analysis based on extremeness. Section 4 provides evidence for the proposed analysis. Section 5 states a theoretical consequence of the proposal and offers concluding remarks.

2. Previous Studies

This section reviews previous studies on the following two main aspects of BNPs: the role of the preposition-like *of* and the categorial status of the first noun.

2.1. The Role of the Preposition-like *Of*

It has been observed in linguistics literature that BNPs carry figurative meanings (e.g., Austin (1980), Den Dikken (2006); see also Aarts (1998: 151)). More specifically, Den Dikken (2006) observes that the occurrence of the preposition-like *of* signals that a BNP must receive a figurative interpretation.[1] For example, the BNP in (1a) can be paraphrased by the DP with the figurative marker *like* in (1b). In contrast, the DP without the preposition-like *of*

in (2) cannot carry such a figurative meaning; however, it remains acceptable as a root compound that denotes "*a village with lots of jewels*" or "*a village where jewels are made*."

(1) a. a jewel of a village
b. a village like a jewel
(2) (*) a jewel village

Because the occurrence of the preposition-like *of* triggers figurative readings, as Den Dikken (2006: 170) observes, the following statement results in inconsistency:

(3) # That idiot of a man is not an idiot.

Following Den Dikken (2006), this paper assumes that the occurrence of the preposition-like *of* enables figurative readings in BNPs.

2.2. The Categorial Status of the First Noun

Previous studies observe that the first noun behaves like an adjective (e.g., Ike-uchi (1997), Aarts (1998)). For example, *an angel of a girl* carries a meaning similar to *an angel-like girl*. Presenting the examples in (4) and (5), Ike-uchi (1997: 534-535) argues that the first noun behaves as if it is a gradable adjective and modifies the second noun.

(4) a. * Mary is the most angel that I have ever met.
b. * Mary is a more angel than Jane.
c. * She is a very angel.
(5) a. Mary is the most angel of a girl that I have ever met.
b. ?? Mary is a more angel of a girl than Jane.
c. ?? She is a very angel of a girl.

The examples in (4) suggest that *angel* is not a gradable adjectival predicate because it does not occur in comparative sentences nor allow modification by *very*. If the same noun with the superlative form occupies the first noun slot in BNPs, then the unacceptable status greatly improves (although it remains imperfect for some native speakers, as Ike-uchi admits), as shown in (5a); likewise, the unacceptable status of (4b) and (4c) also slightly improves, as illustrated in (5b) and (5c), respectively.

Ike-uchi's (1997) observation encourages a theoretical treatment of the first noun as a gradable adjective (see Asaka (2002) for a related but different approach). This approach is of theoretical interest, but as discussed below, the examples in (5) must be carefully reconsidered.

2.3. The Degree-relatedness of the First Noun

Bolinger (1972: 75-76, fn.14) explores the syntactic and semantic status of the first noun in BNPs in terms of what he calls "degree nouns." Presenting contrasts like (6) and (7), Bolinger argues that the first noun slot of BNPs must be occupied by nouns with degree-related meanings.[2]

(6) a. * John is a lawyer of a man.
b. John is a shyster of a man.
(7) a. * Bill is a lad of a man.
b. Bill is a brat of a man.
(8) a. # lawyer → l a w y e r
b. shyster → s h y s t e r

According to Bolinger, a noun like *shyster* carries a negative meaning (e.g., *dishonest* lawyer), and the relevant negative connotation can be emphasized by prosodic intensification (8b); meanwhile, a noun like *lawyer* does not

carry such a negative meaning nor does it tolerate prosodic intensification (8a). The same contrast holds for *brat* and *lad*.

Although we must clarify the notion of degree nouns, we can safely say that any analysis of binominal NPs must account for Bolinger's (1972) observation.

2.4. Empirical Problems

Having reviewed existing observations and arguments, let us now point out the empirical problems with which they may be confronted.

First, Den Dikken's (2006) argument that the occurrence of the preposition-like *of* is basically appropriate; however, considering it with Bolinger's (1972) observation (cf. (6) and (7)) compels a recognition that figurative readings of BNPs must be "degree-related." For example, nothing, in principle, prevents us from comparing *man* to *lawyer*; a figurative statement such as "That man is like a lawyer" is acceptable. However, the unacceptable status of **a lawyer of a man* suggests that BNPs do not simply carry figurative meanings but rather express "degree-related" figurative meanings. Of further empirical and theoretical interest is the exact nature of the "degree-relatedness" involved in the first noun slot of binominal NPs.

Second, Ike-uchi's (1997) argument that the first noun in a BNP behaves like a gradable adjective must be carefully reconsidered for at least two reasons. First, given the marginal acceptability of (5b) and (5c), they fail to effectively prove his argument. Although my four informants agreed that (5a) is the most acceptable, it remains far from acceptable. Second, comparative forms like (5a) and (5b) can be considered as instances of metalinguistic comparatives as per Morzycki (2012b), rather than ordinary ones. For these reasons, we cannot definitively conclude that the first noun can be theoretically treated as a gradable adjective or its equivalent.

In order to solve the empirical (and theoretical) problems identified in this subsection, the next section takes up the "degree-related" nature of the first noun in terms of its gradability and extremeness.

3. Proposal

This section has two purposes. First, it explores the possibility of characterizing the "degree-related" nature of the first noun in terms of "extremeness" (cf. Morzycki (2012a)). Second, modifying Den Dikken's (2006) syntactic analysis of BNPs, it proposes their syntactic derivation.

3.1. Extremeness

Brdar-Szabó and Brdar's (2010) observation that BNPs function as a means of hyperbole offers a key insight into the nature of the first noun. According to them (Brdar-Szabó and Brdar's (2010: 400), "[p]robably one of the most prominent functions of hyperbole is intensification, i.e. to express the assertion that an entity possesses some property to a very high degree, that the circumstances and/or effects of an event are extreme, etc." For example, in a BNP like *an angel of a girl*, the girl is compared to an angel's beauty (or nice personality); notably, this figurative relationship is associated with "extreme" intensification (see Carston and Wearing (2015) for a related argument). This holds for other examples like *a fool of a man*.

The present study approaches this hyperbolic property with recourse to Morzycki's (2012a) concept of extremeness, which identifies hyperbole as a primary function of an extreme adjective. Helpful to note here is that extreme

adjectives, such as *huge*, differ from neutral adjectives, such as *big*, in that, unlike the latter, the former are lexically endowed with extremeness, signaling that a degree exists outside of a particular range unique to a particular context. This difference is indicated by their capacity to be modified by extreme adverbs (e.g., absolutely, downright, outright) and to raise objection. Regarding the former, an extreme adjective like *huge* can be modified by *absolutely*; meanwhile, a neutral adjective cannot.

(9) a. John's shoes are (very/??absolutely) big.
b. John's shoes are (??very/absolutely) huge.

Regarding the latter, extreme adjectives are especially useful for objecting to a statement in a preceding discourse. According to Morzycki (2012a: 572), when a speaker has uttered (10) and her interlocutor wishes to object to her characterization, (11a) is preferred to (11b).

(10) Clyde isn't particularly wealthy.
(11) a. No, he's (outright) destitute.
b. ?? Yes, he's (outright) destitute.

This pattern clearly contrasts with the way the neutral adjective *poor* behaves, as shown below:

(12) a. ?? No, he's very poor.
b. Yes, he's very poor.
(Morzycki (2012a: 572))

Furthermore, Morzycki (2012a) argues that extreme modification (cf. (9)) can be observed across syntactic categories. For example, an extreme modification pattern like *absolutely idiotic* has an adnominal counterpart (e.g., *absolute idiot*). This parallelism implies that extremeness exists in both adjectives and nouns. Additionally, this parallelism also implies that gradability exists in both the adjectival and nominal domains (see also Morzycki (2012b)). Such a parallel view on gradability allows us to ascribe the hyperbolic property of BNPs to the linguistic concept of extremeness, with the semantic property expressed as a part of the system of nominal gradability.

Based on the above discussion, the present study proposes that the first noun of a BNP carries extremeness and can therefore have a hyperbolic function. Accordingly, following Morzycki (2012a) and putting aside the formal semantic approach to analyzing extremeness, this study assumes that any predicate that encodes extremeness is endowed with the lexical feature [+E(xtreme)], which enables the adjective to be modified by extreme adverbs (cf. (9)) and to raise objection (cf. (10)).

3.2. Syntactic Derivation of Binominal NPs

The present study proposes an analysis of BNPs on the basis of Den Dikken's (2006) analysis, according to which predicate inversion derives BNPs. Due to space limitations, a simplified version of Den Dikken's analysis is introduced below (see also Den Dikken (1998)).

Based on Moro's (1997) observation that the presence of the copula (*to be*) indicates predicate inversion (cf. (13b)), Den Dikken (2006) argues that the preposition-like *of* speaks to predicate inversion in the nominal domain (cf. (14b)). In Den Dikken's approach, the BNP in (14b) is derived from the underlying structure like the one in (14a) by applying predicate inversion to the noun *jewel*. The predicate inversion operation is triggered to license the figurative interpretation.

(13) a. Imogen considers Brian (to be) the best candidate. (Den Dikken (2006: 177))
b. Imogen considers the best candidate *(to be) Brian. (Den Dikken (2006: 177))

(14) a. a village like a jewel
b. a jewel *(of a) village

More precisely, Den Dikken assumes that the BNP in (14b) has the underlying structure in (15a), in which *village* is generated as the subject of the small clause (SC) and *jewel* as the predicate of the SC. The predicate noun also involves the null figurative morpheme denoted as SIMILAR, which enables a figurative meaning on the semantic side. Next, the head X moves to the upper head Y, which allows the predicate inversion to apply to the predicate noun with the null morpheme SIMILAR. In the resulting structure in (15b), the Y head is phonologically realized as *of*, and phonologically marks the inverted predicate noun occupying [Spec, YP] and licensing the null predicate SIMILAR. As a result, the BNP carries the figurative meaning in (15b).

(15) a. $[_{XP(=SC)}\ [_{Subj}$ a village] $[_{X'}$ X $[_{Pred}$ SIMILAR jewel]]]
b. $[_{YP}\ [_{Pred}$ SIMILAR jewel$]_j\ [_{Y'}$ Y(= *of*) + $X_i\ [_{XP(=SC)}\ [_{Subj}$ a village] $[_{X'}\ t_i\ t_j\ ]]]]$

Furthermore, the present study deepens Den Dikken's (2006) analysis of predicate inversion by assuming that any noun that occurs as a predicate in an underlying SC structure must have the [+E(xtreme)] feature, which yields an extreme interpretation on the semantic side. This modified analysis proposes that BNPs are derived by applying predicate inversion to a noun with [+E] generated as the predicate of the underlying SC structure. This derivation process enables BNPs to carry hyperbolic (i.e., extreme) figurative meanings.

In sum, this section has proposed an approach to analyzing BNPs based on extremeness and predicate inversion. The next section presents supportive evidence for the proposed analysis.

4. Supportive Evidence

The analysis of BNPs proposed in the previous section makes the following two predictions: first, the first noun only allows modification by extreme adnominal modifiers; second, BNPs behave like extreme adjectives in contexts in which they are used to raise objections. This section provides the results of my informant survey and then takes them up to prove the two predictions stated above.

4.1. Degree Modification

The first piece of evidence for the argument that the first noun must carry extremeness is based on the fact that the contrasts in (6) and (7) presented by Bolinger (1972) correlate with their (in-)compatibility with extreme adnominal modifiers, as shown below:

(16) a. * an absolute lawyer (cf. (6a))
b. an absolute shyster (cf. (6b))

(17) a. * an absolute lad (cf. (7a))
b. an absolute brat (cf. (7b))

Adnominal modification patterns involving *idiot* offer further supporting evidence. Morzycki (2012b) points out that *idiot* can be modified by three types of adnominal modifiers: *slight*, *big* and *absolute*. These three adnominal modifiers yield different degree-related interpretations: *absolute* denotes extremeness, *big* adds degree-intensification (although *big* is weaker than *absolute*), and *slight* points to a minimum

value. Of these three adnominal modifiers, *absolute* is the best when it occurs with the first noun in BNPs, as shown below:

(18) a. a(n){ * slight / ?(?) big / absolute }idiot of a man
b. a/the { ?? bigger / ? biggest } idiot of a man

It should be noted that other nouns, such as *angel* and *Rolls-Royce*, only allow modification by *absolute*, which can occur in the first slot; in this case, it functions to intensify the figurative meaning of BNPs in (19).[3]

(19) a. a(n) {* slight / * big / absolute } angel of a girl
b. a(n) {* slight / * big / absolute } Rolls-Royce of a hotel

Ultimately, this subsection has provided supportive evidence for the present approach in terms of degree modification.

4.2. Raising Objection

The second prediction of the present analysis is that BNPs behave like extreme adjectives in contexts in which they are involved with raising an objection (cf. (11)). According to my informants, this prediction is also correct, as confirmed by the following contrasts:

(20) John isn't particularly a smart person.
(21) a. No, he is an (absolute) idiot of a man.
b. ?? Yes, he is an (absolute) idiot of a man.
(22) This isn't particularly an ugly village.
(23) a. No, it's a jewel of a village.
b. ?? Yes, it's a jewel of a village.

My informants all agreed that in this context in which a speaker has uttered (20) and her interlocutor wants to object to the characterization, (21a) is much more appropriate a response than (21b). The same is true of the next example.

This subsection has shown that BNPs and extreme adjectives behave similarly in the context of an objection; this strongly evidences the present proposal that binominal NPs carry extreme figurative meanings.

5. Concluding Remarks

The present study has shown that BNPs carry hyperbolic (extreme) figurative meanings and identified the first noun as the source of extremeness. Based on this empirical observation, the study has proposed a syntactic analysis of BNPs, according to which predicate inversion is applied to the first noun, which corresponds to the predicate noun in the underlying SC structure.

If this study's proposal is indeed on the right track, then it will provide independent support for Beltrama and Trotzke's (2019) claim that extremeness (or, as they put it, "emphasis for intensity") may trigger syntactic operations across languages (see also Honda (2018))

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NOTES

[1] Den Dikken (2006: 172-175) refer to examples of this kind as comparative BNPs (e.g., a horror of a story, a beauty of a parlor).

[2] The simplified examples here were created based on the ones in Bolinger's (1972: 75-76, fn.14) work. My four informants confirmed that the relevant examples correctly reflect Bolinger's original argument.

[3] One may wonder whether *absolute* can be an adjective here, rather than an adnominal degree modifier. This problem demands careful consideration, but if it is an adjective, a statement like "That angel is absolute" or "That Rolls-Royce is absolute" should be fine. However, contrary to the expectation, my informants observed that these statements do not make sense. To the extent that this observation is correct, we can say that *absolute* in (19) is an instance of an adnominal degree modifier.

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Freezing Principle in English Cleft Sentences

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Keywords: *It*-clefts, Freezing Principle, Relative clauses, Head-raising, Substitution structure

1. Extraction from the Focus Position in English Cleft Sentences

The examples cited in (1)–(4) strongly suggest that English cleft sentences (*it*-clefts) involve syntactic movement.

(1) ?*[Which drink]$_i$ was it Boris who bought t_i?
(2) *How$_i$ was it Boris [who bought the drink t_i]? (Reeve 2012: 27)
(3) *It is [John's book]$_i$ that Bill met a woman [who had not read t_i]. (Rizzi 2013: 171)
(4) a. ??It was every boy$_i$'s mother that he$_i$ saw first.
b. It was his$_i$ mother that every boy$_i$ saw first. (Percus 1997: 344)

(1) shows that the extraction of focus phrase obeys the *wh*-island condition. The ungrammaticality of (2) and (3) indicates that the formation of *it*-clefts conforms to the adjunct condition and the complex NP constraint. The difference in grammaticality of (4a, b) reveals that weak crossover effects (WCO effects) exist in English *it*-clefts.

However, a further extraction from the focused position is allowed if a DP is focalized in English *it*-clefts, as exemplified in (5a–d).

(5) a. ?Who$_j$ was it [a picture of t_j]$_i$ that he decorated his door with t_i?
b. ?What$_j$ was it [a review of t_j]$_i$ that they had that argument about t_i?
c. ?Which books$_j$ is it [the covers of t_j]$_i$ that we've got to paste these labels on t_i?
(Pinkham and Hankamer 1975: 440)
d. ?What$_j$ was it [an increase in t_j]$_i$ that the parliament discussed t_i?
(Hartmann 2018: 199)

Given that the focus phrase in English *it*-clefts undergoes syntactic movement, the extraction of the *wh*-phrase in (5a–d) would interfere with the Freezing Principle (Wexler and Culicover 1980, etc.). However, (5a–d) are grammatical. As stated in (6), the Freezing Principle dictates that additional extractions from moved elements are unconditionally banned. *Frozenness*, a basic consideration of the principle, is defined in (7). Rizzi (2006, 2010) recaptures this principle in the current theoretical model as *Criterial Freezing*, stated in (8).

(6) *Freezing Principle* (FP)
If a node *A* of a phrase-marker is frozen, no node dominated by *A* may be analyzed by a transformation.
(Wexler and Culicover 1980: 119)
(7) The definition of *frozenness*
If the immediate structure of a node in a phrase-marker is nonbase, that node is *frozen*.
(*op. cit.*, p. 119)
(8) *Criterial Freezing*
A phrase meeting a criterion is frozen in place. (Rizzi 2006: 112)

In (5a–d), the *wh*-phrase is moved from the focus phrase that has undergone syntactic movement. This additional movement seems

to violate the Freezing Principle/Criterial Freezing. However, (5a–d) are grammatical.

The examples cited in (9) indicate that this principle is tenable. Subextraction (topicalization) is applied to a topicalized phrase in (9a), and *wh*-movement is implemented from an element that has undergone topicalization in (9b). Both subextractions result in ungrammaticality.

(9) a. ??[Vowel harmony]$_j$, I think that [$_{TP}$ [$_{DP}$ articles about t_j]$_i$, [$_{TP}$ you should read t_i carefully]].
b. ??Who$_j$ do you think that [$_{DP}$ pictures of t_j]$_i$, John wanted t_i?
(Lasnik and Saito 1992: 101)

Interestingly, in English *it*-clefts subextraction from a PP focus element is not allowed, as in (10a–c). This shows that English *it*-clefts conform to the Freezing Principle if the focused element is categorized as PP.

(10) a. *Who$_j$ was it [with a picture of t_j]$_i$ that he decorated his door t_i?
b. *What$_j$ was it [about a review of t_j]$_i$ that they had that argument t_i?
c. *Which books$_j$ is it [on the covers of t_j]$_i$ that we've got to paste these labels t_i?
(Pinkham and Hankamer 1975: 440)

If both DP clefts and PP clefts are derived in the same way, subextaction from the focused phrase should have the same outcome with respect to grammaticality. The examples cited in (11) show that "Freezing effects" arise in the situation where a *wh*-phrase is subextracted from a dislocated *wh*-phrase. This reveals that subextraction in *wh*-interrogatives obeys the Freezing Principle.

(11) a. */??[Whose book]$_j$ do you wonder [[$_{DP}$ how many reviews of t_j]$_i$ John read t_i]?
b. */??[Whose mouth]$_j$ do you wonder [[$_{PP}$ how far into t_j]$_i$ the dentist stuck his finger t_i]? (Corver 2017: 1720)

Thus, the dissimilarity in availability of subextraction from dislocated elements between DP clefts and PP clefts is a mystery that needs explanation. In this paper, I argue that the dissimilarity is rooted in the difference in derivational structures between DP clefts and PP clefts.

2. Substitution vs. Adjunction in English *it*-Clefts

2.1 Substitution Structure for DP Clefts

I propose that DP clefts create the "substitution" structure, which derives English restrictive relative clauses. According to Kayne (1994), etc., English restrictive relatives involve overt phrasal movement of the relative head to Spec-CP and the D head takes this relative clause CP as its complement. This derivation is represented in (12).[1]

(12) [$_{DP}$ [$_{D}$ the] [$_{CP}$ place$_i$ [$_{C'}$ that Tim visited t_i]]]

Thus, it is shown that the promotion/head-raising makes a substitution structure: The raised head moves to Spec-CP of the complement of DP. I claim that English DP clefts also form the substitution structure, and they involve the promotion of the focus phrase to Spec-CP of the presuppositional clause. In this vein, I argue that English DP clefts are regarded as a sort of "relative clause." In this model, (13) is derived as in (14), which involves raising of the DP/NP focus to Spec-CP.

(13) It was a [picture]$_i$ that he decorated his door with t_i.

(14) [$_{TP}$ it was$_V$ [$_{VP}$ t_V [$_{DP}$ a [$_{CP}$ [picture]$_i$ that [$_{TP}$ he decorated his door with t_i]]]]]

With this substitution structure in mind, let us consider (5a), reproduced here as (15), which involves the subextraction of the *wh*-phrase from the focused DP.

(15) ?Who$_j$ was it [a picture of t_j]$_i$ that he decorated his door with t_i?

(16) [$_{CP}$ C <+wh> [$_{TP}$ it was$_V$ [$_{VP}$ t_V [$_{DP}$ D (a) [$_{CP}$ **[$_{NP}$ picture of who]$_i$** that [$_{TP}$ he decorated his door with t_i]]]]]]?

(17) [$_{CP}$ Who$_j$ was$_V$ [$_{TP}$ it t'_V [$_{VP}$ t_V [$_{DP}$ D (a) [$_{CP}$ [$_{NP}$ picture of t_j]$_i$ that [$_{TP}$ he decorated his door with t_i]]]]]]?

As represented in (16), the *wh*-feature on the matrix C needs to be checked. The NP focus *picture of who* is dislocated to the left-edge of the CP phase in the presuppositional clause by promotion/head-raising. The promotion of the focus phrase creates the substitution structure, and the focus phrase is on the edge of the CP phase. Thus, the NP focus directly moves to Spec-CP, namely the phase-edge, by promotion; and hence, *who* can be extracted from the NP focus without violation of Phase Impenetrability Condition (Chomsky 2000).

Yet *wh*-movement from the NP focus does not result in violation of the Freezing Principle. The solution suggested here is that the substitution structure for DP/NP clefts enables this subextraction of *who*. There is a chain between the raised element, namely the NP focus, and its θ-position. However, under this subextraction structure, no feature sharing takes place in the raised position of this focused NP. Therefore, the NP focus does not get frozen. Consequently, a *wh*-phrase in the NP focus, which is on the phase edge, can be extracted. The validity of the substitution structure for DP/NP clefts and my suggestion regarding the focus NP in the raised position being unfrozen will be discussed in detail in Section 3.

2.2 Adjunction Structure for PP Clefts

Next, let us consider the structure of PP clefts. I claim that unlike DP/NP clefts, PP clefts cannot have the substitution structure. This proposal is supported by the fact that PPs cannot be the head of restrictive relative clauses. (18a–d) indicate that only nominals can be the head of English restrictive relatives. The underlined part is supposed to be the head of the relative clause.

(18) a. Peter put it under the table where I had put it earlier.[2]

b. *Bill was drunk which was disgusting.

c. *John answered the question politely which I thought was how he should have answered it.

d. *The cheese was bought by John which was fortunate. (Fabb 1990: 60)

The substitution structure can derive restrictive relative clauses. Hence, the unavailability of PP relative heads provides plausible support for the argument that PP clefts cannot have the substitution structure.

Further, I suggest that PP clefts create the "adjunction" structure for their focalization. Let us examine (19), which involves PP in the focus position. This PP cleft is derived as in (20).

(19) It was [with a picture]$_i$ that he decorated his door t_i.

(20) [$_{TP}$ it was$_V$ [$_{VP}$ t_V [$_{FocP}$ **[$_{PP}$ with a picture]** [$_{CP}$ **[$_{PP}$ with a picture]$_i$** C $_{<+FOC>}$
MATCHING $_{<+FOC>}$
that [$_{TP}$ he decorated his door t_i]]]]]

The <+Foc> feature on the C head in the presuppositional clause attracts the PP *with a picture* to the Spec-CP. The focused element *with a picture* is adjoined, namely base-generated, in the FocP on top of the presuppositional CP. The adjoined focus element and the raised PP in the left-edge of the presuppositional clause form the *Matching* relation. The adjoined focus PP is identified with the raised PP in the embedded Spec-CP by this *Matching* operation.[3]

On the basis of this Matching model, let us examine (10a), reproduced here as (21), which involves *wh*-movement from the focus PP in the *it*-cleft.

(21) *Who$_j$ was it [with a picture of t_j]$_i$ that he decorated his door t_i?

(22) [$_{CP}$ C <+wh> [$_{TP}$ it was$_V$ [$_{VP}$ t_V [$_{FocP}$ **[$_{PP}$ with a picture of who]** [$_{CP}$ **[$_{PP}$ with a picture of who]$_i$** C $_{<+FOC>}$
MATCHING $_{<+FOC>}$ ⇒ **Frozen**
that [$_{TP}$ he decorated his door t_i]]]]]]

As discussed in (20), the adjoined focus PP in FocP and the raised PP in the embedded Spec-CP enter into the *Matching* relation. These PPs are identified under the *Matching* relation and share the feature <+FOC>. I argue that this feature sharing via *Matching* makes the raised PP *frozen*, and the *wh*-phrase cannot be extracted from the raised PP. If *who* is extracted from the PP in Spec-CP, this extraction yields violation of the Freezing Principle/ Criterial Freezing. Should the *wh*-phrase be extracted from this raised PP, it would involve dislocation from the adjunct and interfere with violation of the adjunct condition.

Let us suppose that there is another derivation for the extraction of the *wh*-phrase. Since the PP focus in the phase-edge of the presuppositional clause is *frozen*, let us assume that *who* in the adjoined PP in FocP is subextracted. This extraction is represented in (23).

(23) [$_{CP}$ C <+wh> [$_{TP}$ it was$_V$ [$_{VP}$ t_V [$_{FocP}$ **[$_{PP}$ with a picture of who]** [$_{CP}$ **[$_{PP}$ with a picture of who]$_i$** C $_{<+FOC>}$
MATCHING $_{<+FOC>}$ ⇒ **Frozen**
that [$_{TP}$ he decorated his door t_i]]]]]]

Given this *wh*-extraction, it would not cause a Freezing violation. However, this extraction from the adjoined PP would result in the lack of identity with the matched PP in Spec-CP. Hence, this alternative derivation is not allowed either.

3. Similarity between English DP/NP Clefts and English Restrictive Relatives

In Section 2, I argued that English DP clefts create the substitution structure. This means that English DP clefts show the same syntactic behavior as restrictive relatives. In this section, I shed light on reconstruction/connectivity effects and investigate the similarity between these two constructions.

English restrictive relatives show reconstruction/connectivity effects regarding Condition A of binding theory and idiom chunks. Consider the following:

(24) a. The portrait of himself$_i$ that John$_i$ painted is extremely flattering.

b. The interest in each other$_i$ that John and Mary$_i$ showed was fleeting.
(Schachter 1973: 32-33)

(25) a. The *headway* that we made was satisfactory. (Brame 1968)
b. The careful *track* that she's keeping of her expenses pleases me.
(Schachter 1973: 32)

The promotion/head-raising of the relative head creates a movement chain between the relative head and its gap, enabling reconstruction of the head. In this substitution structure, the relative head directly moves to Spec-CP that appears as the complement of D. That is, the relative head in the θ-position is "promoted" to the external head position. This syntactic chain enables the reconstruction of the relative head.

However, English restrictive relatives do not show reconstruction/connectivity effects regarding Condition C of binding theory. Consider the examples in (26).

(26) a. the picture of Bill$_i$ that he$_i$ likes
(Munn 1994: 402)
b. The accident of John$_i$'s that he$_i$ will never forget is the one that affected him$_i$ first. (Cecchetto 2005: 26)

The *Matching* structure is proposed for those relative clauses that do not show reconstruction/ connectivity effects. In this structure, the relative head is not directly moved to the external head position. The *Matching* relation between the external relative head and the raised element in the left-edge of the relative clause guarantees the identification of these two elements. Since the external head and its θ-position are not linked by a syntactic chain, reconstruction in the relative clause is not possible in *Matching* relative clauses (Sauerland 2000, Aoun and Li 2003, Cecchetto 2005, etc.).[4]

Let us now examine reconstruction effects for DP/NP clefts. The examples in (27) reveal that DP/NP clefts show reconstruction/ connectivity effects.

(27) a. It is herself$_i$ that Mary$_i$ trusts the most.
b. It was a picture of herself$_i$ that Mary$_i$ gave to John. (Kiss 1998: 259)
c. It's careful track that she's keeping of her expenses. (Reeve 2012: 47)

The presence of reconstruction/connectivity effects for DP/NP clefts supports the analysis presented here: They create the substitution structure.[5]

4. Conclusion

I have argued that the presence or absence of Freezing effects between DP/NP clefts and PP clefts depends on the differences in their syntactic structures. DP/NP clefts are derived by the substitution structure: The NP focus directly moves to Spec-CP that is the complement of D by promotion/head-raising. In this respect, DP clefts are a sort of "relative clause." The substitution structure enables subextraction from the focus NP, since no feature sharing takes place in the edge position of the CP phase.

On the other hand, PP clefts cannot make a substitution structure but instead create the "adjunction" structure. PP is attracted by the <+FOC> feature in C in the presuppositional clause, and the PP focus is independently adjoined on top of the embedded CP. These two PPs enter into *Matching* relation, and this *Matching* operation gets the raised PP *frozen*. Consequently, additional extraction from the raised PP is not allowed by Freezing Principle/

Criterial Freezing. The validity of the substitution structure for DP/NP clefts is demonstrated by the presence of reconstruction/ connectivity effects of the focused DP/NP.[6]

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NOTES

[1] The promotion/head-raising analysis of English restrictive relatives is also suggested by Brame (1968), Schachter (1973), Vernaud (1974), Bianchi (1999), Cecchetto (2005), etc.

[2] This is deemed grammatical, but the relative clause takes NP *table*, not PP *under the table*, as its head.

[3] The rudiments of this "adjunction" structure for *it*-clefts were presented by Chomsky (1977). Sauerland (2000), Fox (2002), Aoun and Li (2003), Cecchetto (2005), and others elaborated this model and suggested this adjunction model for the structure of relative clauses that show no reconstruction effects of the relative head. This elaborated adjunction model is often referred to as the Matching Analysis.

[4] Aoun and Li (2003:110) argue that *wh*-relatives also do not show reconstruction/connectivity effects as in (i a–b). They also propose the *Matching* structure for *wh*-relatives.

(i) a. ??The headway which Mel made was impressive.
b. ??The careful track which she's keeping of her expenses pleases me.

[5] Masao Ochi pointed out the necessity of showing the lack of reconstruction/connectivity effects for PP clefts. The occurrence of PP clefts is constrained more severely than DP clefts (Delahunty 1982). Hence, I have not prepared convincing data for the unavailability of reconstruction for PP clefts. I leave thorough analysis of this issue for future research.

[6] Space does not permit me to explain the possibility of analyzing PP clefts by the substitution structure. Given that P is a functional category for nominals and [PP-DP-NP] is an Extended Projection (Grimshaw 2000), PP can be regarded as a phase (Citko 2014, etc.). DP can move to Spec-PP, the phase-edge, and then can undergo further movement and make a substitution structure. However, P is stranded in the base position; hence, PP cannot occur in the focus position in its derivation. Thus, PP clefts cannot be derived by the substitution structure.

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引用句構文の通時的変化に関する一考察*

(A Consideration of the Diachronic Change in Quotative Constructions)

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キーワード：引用句, 動詞第二現象, コピー理論, 倒置

1. はじめに

引用句を伴う(1)に示す文は引用句構文(Quotative Construction: 以下 QC)と呼ばれ、とりわけ、主語と動詞の倒置が生じている(1b)のような文は引用句倒置(Quotative Inversion)と呼ばれる。(1)における対比が示すように、QC における倒置は随意的に生じる。[1]

(1) a. “We haven’t had that spirit here since 1969,” the captain said.
b. “We haven’t had that spirit here since 1969,” said the captain.
(Gyoda (1999: 276))

QC は古英語期からすでに観察され、現代英語の QC と同様に、引用句に主語と動詞が後続する語順を示す。本稿におけるコーパス調査によると、QC は古英語から現代英語に至るまで、ほぼ同じ形を保持しているが、QC における倒置の随意性は現代英語において顕著に見られる傾向であり、初期英語においては VS 語順が圧倒的多数を占める。QC の歴史的発達について扱っている文献は非常に少なく、極小主義の枠組み内で分析を提示しているものとなると、私の知る限りでは存在しない。[2] 本稿では、QC の歴史的発達を歴史コーパスから得られたデータに基づき明らかにし、それに対して極小主義の枠組みを用いて理論的説明を与えることを目的とする。具体的には、QC では、文頭の引用句が動詞の意味の希薄化を引き起こした結果、動詞移動が消失したとされる 18 世紀以降においても動詞の屈折領域への移動が保持されていると主張する。さらに、現代英語において顕著に観察される倒置の随意性は、発音対象となるコピーの位置の違いから導かれると主張する。

2. コーパス調査

本節では、歴史コーパス YCOE, PPCME2, PPCEME, PPCMBE を用いて実施したコーパス調査の結果を提示し、QC の発達過程について概観する。[3] コーパス調査は語順別、つまり SV 語順か VS 語順かに分けて行った。まず、古英語期から初期中英語期までの QC の生起数について概観する。また、Kemenade (1997)や Fischer et al. (2000)が指摘しているように、古英語期から初期中英語期までは、名詞句主語と代名詞主語は生起する位置が異なるとされているため、主語の種類を名詞句と代名詞に分けてデータを集計した。時代区分ごとの集計結果は表 1 と表 2 に示されている。 (2)は古英語期からの例、(3)は初期中英語期からの例である。

表 1: OE-初期 ME の QC の生起数（名詞句）

	O1/2	O3	O4	M1	M2
SV	0	0	0	0	0
VS	1	3	1	16	5

表 2: OE-初期 ME の QC の生起数（代名詞）

	O1/2	O3	O4	M1	M2
SV	2	2	3	10	0
VS	0	4	1	6	0

(2) a. Iacob, cwæð he.
Jacob, said he.
‘ “Jacob,” said he.’
(cootest,Gen:32.27.1336)
b. Ongitaþ, mine þa leofestan bearn,
Consider, my the dearest children
cwæð Sanctus Isodorus,
said Saint Isidore
‘ “Consider, my dearest children,” said Saint Isidore.’
(coverhom,HomU_7_[ScraggVerc_22]:20.2824)

(3) a. Iher me dohter he seið.
hear me daughter he said
‘ “Listen to me, daughter,” he said.’
(CMHALI,127.9)
b.‘Where is he?’ said the kyng.
Where is he, said the king
‘ “Where is he,” said the king.’
(CMMALORY,3.64)

表 1 と表 2 が示すように、非常に少ない数ではあるが、QC は古英語期から既に存在していたことが分かる。また、よく知られているように、古英語期から初期中英語期の時期には動詞第二現象(Verb Second: 以下 V2)が観察されるため、それに伴い、VS 語順が多く見られると考えられる。とりわけ、主語が名詞句である場合には、VS 語順のみが観察されることが傾向として顕著である。その一方で、主語が代名詞である場合には、VS 語順だけでなく、SV 語順も観察されることが分かる。

次に、後期中英語期以降の QC の生起数を表 3 と表 4 に示す。(4)は後期中英語期からの例、(5)は初期近代英語期からの例、(6)は後期近代英語期からの例である。

表 3: 後期 ME 以降の QC の生起数（名詞句）

	M3	M4	E1	E2
SV	0	1	1	0
VS	16	205	46	98
	E3	L1	L2	L3
SV	0	0	0	8
VS	18	12	71	44

表 4: 後期 ME 以降の QC の生起数（代名詞）

	M3	M4	E1	E2
SV	1	5	1	6
VS	48	7	91	90
	E3	L1	L2	L3
SV	4	0	11	24
VS	9	2	58	18

(4) “Þer haue I ben,” seyd þe preste,
There have I been said the priest
‘ “I have been there,” said the priest.’
(CMKEMPE,58.1300)

(5) a. But only he would be mayster of his horsses, the Scripture sayeth,
(LATIMER-E1-H,32L.240)
b. Are you my uncle? sayes Will.
(ARMIN-E2-H,43.304)

(6) a. ‘Jump in,’ Fleetwood said to his man.
(MEREDITH-1895,19,162.648)
b. “He must be a first-rater,” said Sam.
(DICKENS-1837,546.56)

表 3 と表 4 が示すように、QC においては、後期中英語期以降も VS 語順が優勢であることが分かる。Haeberli and Ihsane (2016)によると、動詞の屈折領域への移動は 15 世紀半ばから衰退し始め、18 世紀中に消失した。しかし、2 つの表から明らかなように、現代英語で頻繁に観察される SV 語順が QC において増加し始めるのは、後期近代英語期に入ってからである。この事実は、屈折領域への動詞移動が消失したとされる 18 世紀以降においても、QC においてはそれが保持されていることを示唆している。

3. QC における動詞の意味の希薄化と動詞移動

本節では、QC における動詞移動と引用句の関係について考察する。本稿では、Gyoda (1999)に従い、QC における動詞は助動詞 have や be などと同様に意味的に軽いために、T に移動可能であると仮定する。内田 (1979)によれば、QC に現れる動詞は[say＋α]という意味特性を持ち、1 語で[say＋α]の意味を表す動詞と、[say＋α]のうちの α の部分の意味のみを表す動詞の 2 種類に分類される。ここでは内田 (1979)に従い、前者を R1、後者を R2 と表記する。表 5 は R1 と R2 に分類される動詞の具体例を示したものである。

表 5: 現代英語の QC に現れる動詞

R1	answer, declare, demand, explain, insist, promise, recommend, suggest, whisper, etc.
R2	burp, giggle, groan, growl, laugh, shriek, sigh, sing, sob, weep, etc.

R2 に分類される動詞は、発話行為そのものとは直接的に結び付かない動詞であるが、発話に付随する話者の伝達的意図を表すことが可能である。本稿では、Gyoda (1999)に従い、QC では文頭の引用句によって say の意味が伝達されると仮定し、その結果として、動詞の意味が希薄化され、その役割は話者の伝達的意図を補足するという機能的役割に変化していると主張する。2 節でのコーパス調査が示しているように、古英語から現代英語に至るまで、QC は同じ形式で存在し続けていること、および say やその祖語が最も頻繁に QC において用いられてきたことを考慮すると、この仮定は自然なものであると言える。また、この仮定は(7)と(8)に示される例によって経験的にも支持される。

(7) a. He giggled and said, “Cochon.”
b. *He giggled, “Cochon.”
(内田 (1979: 24))

(8) a. “He worked hard,” Madame Volet said and giggled.
b. “He worked hard,” Madame Volet giggled.
(内田 (1979: 24))

(7a, b)の対比が示すように、引用句が前置されていない場合、動詞 giggle は単独で引用句を補部にとることができず、say が義務的に必要であることがわかる。一方、(8a, b)の対比が示すように、引用句が前置されている場合は、giggle だけで容認可能であり、say の生起は義務的ではない。コーパス調査から得られたデータを見てみると、古英語期から中英語期までは、QC に現れる動詞は最も規範的な伝達動詞である say やその祖語のみであった。しかし、初期近代英語期から R1 に分類される動詞が徐々に QC に生起し始め、後期近代英語期には R2 に分類される動詞を含め、生起する動詞の種類が大幅に増加する。表 6 はコーパス調査から得られた QC に生起する動詞を時代区分ごとに分類したものである。(9)はコーパス調査から得られた具体例である。

表 6: QC に現れる動詞の史的変化

OE	cweþan (say), secgan (say)
ME	seien (say), quethen (quote), crien (cry)
EModE	say, quoth, cry, answer, tell, reply
LModE	say, cry, answer, tell, reply, inquire, interpose, add, ask, sigh, exclaim, explain, murmur, repeat, resume, observe, rejoin, venture, whisper … etc.

(9) a. “You see how these fellows drink, and smoke, and roar,” replied Mr Pickwick.
(DICKENS-1837,547.72)

b. “I only wish she could help looking like a girl of seventeen,” sighed Mrs. Curtis.
(YONGE-1865,172.348)

c. “This comes of being the youngest of the family,” observed Colin meditatively.
(YONGE-1865,177.485)

したがって、これらの事実は、文頭に位置する引用句によって担われる say の意味の伝達が、後期近代英語期に確立されたことを示唆していると言える。以上の議論を踏まえ、本稿では、QC における動詞の屈折領域への移動が 18 世紀以降も観察されるのは、引用句の前置による動詞の意味の希薄化が後期近代英語期に起こったことに起因すると主張する。

4. QC の派生

本節では、前節までの議論を踏まえた上で、QC の派生に対して極小主義の枠組みを用いて理論的説明を与える。まず、古英語期から初期中英語期までの QC の派生を(10)に示す。

(10) “Quote” + Verb + Subject
a. [$_{v*P}$ Subj$_{[i\varphi]}$ *v** [$_{VP}$ V Quote]]
b. [$_{CP}$ C [$_{TP}$ Subj$_{[i\varphi]}$ T$_{[\text{u}\varphi][EPP]}$ [$_{v*P}$ Quote [$_{v*P}$ t_{subj} V [$_{VP}$ t_V t_{Quote}]]]]]
c. [$_{CP}$ Quote V [$_{TP}$ Subj$_{[i\varphi]}$ $t_{V[\text{u}\varphi][EPP]}$ [$_{v*P}$ t_{Quote} [$_{v*P}$ t_{subj} t_V [$_{VP}$ t_V t_{Quote}]]]]]

まず、(10a)に示す *v**P フェイズにおいて、主語が v*P 指定部に、引用句が動詞の補部にそれぞれ併合される。引用句は *v**の末端素性(Edge Feature: 以下 EF)(Chomsky (2008))によって牽引され、*v**P の末端に移動する。この移動により、引用句は転送を回避することになり、次の CP フェイズにおいてもアクセス可能となる。次に、(10b)に示す CP フェイズにおいて、T の持つ解釈不可能な φ 素性([uφ])が主語の持つ解釈可能な φ 素性([iφ])と一致操作の下で素性照合を行う。その結果、T の持つ[uφ]は値を付与され、転送時に削除される。その後、主語が、T の持つ EPP 素性を満たすために TP 指定部に移動する。そして、(10c)に示すように、*v**P の末端に位置する引用句は C の持つ EF によって牽引され、CP 指定部に移動する。2 節で言及したように、古英語期から初期中英語期までは V2 が観察されるため、動詞は主要部移動により C まで移動する。上記の派生過程を経て、「引用句・動詞・主語」の倒置語順が派生される。

表 2 で見た主語が代名詞の場合における SV 語順と VS 語順のバリエーションについては、Kemenade (1997)に従い、代名詞は動詞に付加する接語であると仮定し、その付加位置によって語順の違いが生じると主張する。すなわち、(11)に示すように、代名詞主語が動詞の左側に付加すれば SV 語順(cf. (11a))が、右側に付加すれば VS 語順(cf. (11b))が派生されることになる。

(11) a. [$_{CP}$ Quote **Pro**-V [$_{TP}$ $t_{Subj[i\varphi]}$ $t_{V[\text{u}\varphi][EPP]}$ [$_{v*P}$ t_{Quote} [$_{v*P}$ t_{subj} t_V [$_{VP}$ t_V t_{Quote}]]]]]
b. [$_{CP}$ Quote V-**Pro** [$_{TP}$ $t_{Subj\ [i\varphi]}$ $t_{V[\text{u}\varphi][EPP]}$ [$_{v*P}$ t_{Quote} [$_{v*P}$ t_{subj} t_V [$_{VP}$ t_V t_{Quote}]]]]]

次に、後期中英語期から初期近代英語期までの QC の派生を(12)に示す。Fischer, et al. (2000), Haeberli and Ihsane (2016)によれば、後期中英語期に V2 現象は消失した。したがって、それ以降の動詞の移動先は C ではなく T である。

(12) “Quote” + Verb + Subject
a. [$_{v*P}$ Subj$_{[i\varphi]}$ V [$_{VP}$ t_V Quote]]
b. [$_{CP}$ C [$_{TP}$ V$_{[\text{u}\varphi][EPP]}$ [$_{v*P}$ Quote [$_{v*P}$ Subj t_V [$_{VP}$ t_V t_{Quote}]]]]]
c. [$_{CP}$ Quote C [$_{TP}$ V$_{[\text{u}\varphi][EPP]}$ [$_{v*P}$ t_{Quote} [$_{v*P}$ Subj t_V [$_{VP}$ t_V t_{Quote}]]]]]

(10)と同様に、*v**P フェイズにおける派生は(12a)のようになる。ここでは、Alexiadou and Anagnostopoulou (1998)や Tanaka (2002)に従い、動詞屈折の豊かな言語は、V の T への顕在的な移動によって T の持つ EPP 素性を満たすことができるという仮定を採用する。この仮定に従うと、(12)では、T の持つ EPP 素性が V の T への顕在的移動によって満たされるため、主語が基底生成位置に留まることが可能となる。そのため、(12b)において、*v**に位置する V は T へと顕在的に移動する一方で、外項として併合された主語は *v**P の指定部の位置に残置する。したがって、V2 現象が消失した 15 世紀以降は、動詞が C まで移動しなくとも、主語が基底生成位置に残置することによって VS 語順が派生される。

最後に、後期近代英語期以降の QC の派生について考察する。(13)は SV 語順の派生、(14)は VS 語順の派生である。[4]

(13) $[_{CP}$ Quote C $[_{TP}$ Subj$_{[i\varphi]}$ $V_{[u\varphi][EPP]}$ $[_{v^*P}$ t_{Quote} $[_{v^*P}$ ~~Subj~~$_{[i\varphi]}$ t_V $[_{VP}$ t_V t_{Quote}]]]]]

(14) $[_{CP}$ Quote C $[_{TP}$ ~~Subj~~$_{[i\varphi]}$ $V_{[u\varphi][EPP]}$ $[_{v^*P}$ t_{Quote} $[_{v^*P}$ Subj$_{[i\varphi]}$ t_V $[_{VP}$ t_V t_{Quote}]]]]]

Fischer et al. (2000)や Nawata (20009)の観察に従うと、後期近代英語期までに動詞の屈折体系は豊かではなくなっていると考えられる。そのため、本稿では、この時期までに動詞移動によって T の持つ EPP 素性を満たすことができなくなったと主張する。したがって、T の持つ EPP 素性を満たすためには、T との φ 素性における一致操作の後、主語が TP 指定部へ移動することが必要になる。

後期近代英語期から生起数の増加が観察される QC における倒置の随意性は、音韻部門において発音対象となる主語のコピーの位置の相違に起因すると主張する。Chomsky (1995)によって提案された移動のコピー理論の下では、移動によって元位置に残されるコピーは移動した要素と同一の意味素性と音韻素性を持つと考えられる。3 節での仮定が正しいとすれば、QC では後期近代英語期以降も V が T まで顕在的に移動することが可能であるため、本提案の下では、音韻部門で発音される主語のコピーの位置に基づき、語順の相違が導かれると主張する。QC における VS 語順は、TP 指定部へ移動した主語のコピーを削除し、元位置である *v**P 指定部に位置する主語のコピーが音韻部門において発音対象として選ばれることによって派生される。その一方で、*v**P 指定部に位置する主語のコピーが削除され、TP 指定部に移動した主語のコピーが音韻部門で発音対象として選ばれる場合には、SV 語順が派生される。[5]

最後に、現代英語において容認度が極めて低い、(15)に見られる代名詞主語を伴う QC における VS 語順について議論する。本稿では、Diesing (1992)の Mapping Hypothesis を採用し、基底生成位置に残置する主語に与えられる解釈上の問題から、容認度の低下が説明されると主張する。

(15) a. ??"Don't snore," pleaded they.
b. ??"I've lost my key," said he.
(Collins and Branigan (1997: 7))

Diesing によると、*v*P 内、つまり、基底生成位置に残置する主語は、文における nuclear scope に写像され、焦点としての解釈を受ける。これは松原 (2019)によるインフォーマント調査から経験的にも支持される。それによると、QC が VS 語順の場合、主語に強声が置かれ、発話した人物が誰であるのかがより強調される。加えて、VS 語順は発話者が誰かを明確にするために使用される傾向があることも指摘されている。それゆえ、この調査は、VS 語順における主語が焦点の解釈を与えられるという考えを支持するもの

である。

これが正しいとすると、典型的に旧情報を表す代名詞主語は基底生成位置には残置せず、通常の主語位置である TP 指定部へと移動する必要があることになる。主語が TP 指定部へ移動するならば、本分析の下では動詞は T に位置するので、SV 語順が派生されることになる。その一方で、名詞句主語は基底生成位置に残置することによって焦点の解釈を受けることに問題はないため、主語が TP 指定部へ移動した場合は SV 語順が、主語が残置した場合は VS 語順が派生されることになる。したがって、名詞句主語の場合は 2 通りの語順の派生が可能である。

5. 結語

本稿では、歴史コーパスを用いて QC の歴史的発達を明らかにし、その派生に対し理論的説明を与えることを試みた。コーパス調査の結果から、QC はその発達過程において、最も規範的な伝達動詞 say を伴う VS 語順の形で使用され続けてきたことが観察された。また、近代英語期に文頭の引用句により動詞の意味の希薄化が生じた結果、動詞移動が消失されたとされる 18 世紀以降においても、QC においては動詞の屈折領域への移動が保持されている可能性を示唆した。さらに、現代英語において観察される QC における倒置の随意性は、音韻部門において発音対象となるコピーの違いから導かれると主張した。

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注

[1] 引用句を伴う文には、他にも(i)に示すようなタイプがあるが、これらは本稿の分析対象に含まれない。

(i) a. “In those days”, Sue admitted, “we were heavily in debt.”
(Huddleston and Pullum (2002: 1027))
b. Asked Harry: “When on earth will the fishing begin again?”
(Collins and Branigan (1998: 10))

[2] QC の歴史的発達について扱っている先行研究については Cichosz (2019)を参照。

[3] 本稿におけるコーパス調査において仮定する歴史的時代区分および、表に記載されている略語が示す期間は以下に示す通りである。古英語期 (700-1100): O1(-850), O2(850-950), O3(950-1050), O4(1050-1150), 中英語期 (1100-1500): M1(1150-1250), M2(1250-1350), M3(1350-1420), M4(1420-1500), 初期近代英語期 (1500-1700): E1(1500-1569), E2(1570-1639), E3(1640-1710), 後期近代英語期 (1700-1900): L1(1710-1779), L2(1780-1849), L3 (1850-1920).

[4] (13)と(14)における囲み線は発音対象となるコピーを、取り消し線は削除されるコピーを、それぞれ表している。

[5] この分析は、Bobaljik (2002)における繰り上げ構文に関する分析を拡張したものである。

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The Derivation of the Cognate Object Construction via Co-composition*

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Keywords: cognate object, Generative Lexicon, co-composition, qualia structure, resultant object

1. Introduction

This paper aims to provide a new theoretical account of the following three characteristics of the English cognate object (CO) construction in the framework of Generative Lexicon proposed by Pustejovsky (1995).

(1) a. Only unergative verbs can appear in the CO construction.
b. In the CO construction, the object must be a cognate of the verb.
c. In the CO construction, the object needs a modifier.

We will argue that these characteristics can be explained in terms of the well-formedness conditions for deriving this construction via co-composition between verbs and their COs.

This paper is organized as follows. Section 2 summarizes the three characteristics of the CO construction in (1). After reviewing the semantic transformation operation called *co-composition* in section 3, we apply it to the derivation of the CO construction in section 4. Section 5 gives an elucidation of the three characteristics in (1). Section 6 is the conclusion.

2. Characteristics of the CO Construction

We begin by defining the CO construction discussed in this paper. In particular, we first need to differentiate the following three similar constructions.

(2) True CO Construction
a. Mary laughed a hearty laugh.
b. John slept a sound sleep.
(3) Transitivising Object (TO) Construction
a. Sue sang a charming song.
b. Sam danced a merry dance.
(4) Adverbial CO Construction
a. The tree grew a century's growth within only ten years.
b. The stock market dropped its largest drop in three years today.

Massam (1990) argues that the true instance of CO construction is (2), where unergative verbs take their COs in object position, as distinct from the construction in (3), where transitive verbs happen to co-occur with their COs (see also Macfarland (1995)). In (4), unaccusative verbs appear to take their COs, but according to Nakajima (2006), they occupy adjunct position rather than object position.[1]

As we will see below, only the construction in (2) exhibits all the characteristics in (1). First, as shown in (5) and (6), only unergative verbs, not unaccusative verbs, can appear in the CO construction.[2]

(5) a. Bill sighed a weary sigh.
(Jones (1988: 89))
b. John screamed a terrifying scream.
(Moltmann (1989: 300))
c. Dorothea smiled a wicked smile.
(Massam (1990: 161))

d. Bob grinned a sideways grin.
(Kuno and Takami (2004: 105))

(6) a. * The glass broke a crooked break.
b. * The actress fainted a feigned faint.
c. * She arrived a glamorous arrival.
d. * The apple fell a smooth fall.
(Levin and Rappaport Hovav (1995: 40, 148))

From contrasting these examples, Massam (1990), Levin and Rappaport Hovav (1995), and Macfarland (1995), among others, have argued that the CO construction serves as a diagnostic for the unergative-unaccusative distinction.

Second, the object in the CO construction must be a noun phrase that is cognate with the verb. As shown in (7), noun phrases of different etymology from the verb cannot be an object in this construction.

(7) a. * He laughed a cynical grin.
b. * The dog howled fierce barks.
c. * Ellen sneezed a dry cough.
(Kuno and Takami (2004: 117))

The TO and adverbial CO constructions are different from the true CO construction in that they allow objects that are not cognate to the verb, as shown in (8) and (9).

(8) a. Sue sang {a lullaby/the part of Carmen}.
b. Sam danced {a jig/a piece from Swan Lake/something involving lots of pirouettes}. (b. from Jones (1988: 89))

(9) a. The tree trunk grew a century's expansion within only ten years.
b. The stock market dropped 250 points today. (Nakajima (2006: 676))

Third, the object in the CO construction needs a modifying phrase, such as an adjective. As shown in (10), COs without modifiers are basically unacceptable.

(10) a. * Willy sneezed a sneeze.
b. * Neil laughed a laugh.
c. * The actress smiled a smile.
(Rice (1988: 209))

Again, the TO construction differs from the true CO construction in that it does not require a modifying phrase for the object (e.g. *Sue sang a song*./*Sam danced a dance*.).

In summary, it can be seen that only the true CO construction has all the characteristics in (1), so this paper will focus on this construction and discuss its derivation.

3. Co-composition

Co-composition is a generative device for lexical creativity postulated in Pustejovsky's (1995) Generative Lexicon framework. It is at work through the derivation of syntactic phrases, where multiple elements within a phrase behave as functors, generating non-lexicalized sense for the words in composition.

For example, the verb *bake*, which is originally a change of state verb as in (11a), can be *co-composed* with the object *cake* in (11b) to generate a creation sense.

(11) a. John baked the potato.
b. John baked a cake.

According to Pustejovsky (1995), in order for co-composition to take place, the relation called *cospecification* must be established between the words to be composed. Suppose that the qualia structures of *bake* and *cake* are (12) and (13), respectively.

(12) **bake**

QUALIA = state_change_lcp

FORMAL = bake_result (e2, y)

AGENTIVE = bake_act (e1, x, y)

(13) **cake**

QUALIA = CONST = y

FORMAL = x

TELIC = eat (e2, z, x)

AGENTIVE = bake_act (e1, w, y)

Here, *bake* and *cake* can be co-specified in the agentive role of each qualia structure. In this situation, the function application with *qualia unification* in (14) may be applied instead of the usual one (Pustejovsky (1995: 124)).

(14) For two expressions α, of type <a,b>, and β, of type a, with qualia structures QS_{α} and QS_{β}, respectively, if there is a qualia value shared by α and β, then we can define the qualia unification of QS_{α} and QS_{β}, $QS_{\alpha} \sqcap QS_{\beta}$, as the unique greatest lower bound of these two qualia structures.

The result of co-composition involves a semantic representation at the VP level that is identical in structure to the lexical form for a creation verb as in (15).

(15) **bake a cake**

EVENSTSTR = E1= e1: process

E2 = e2: state

RESTR = $<_{\propto}$

ARGSTR = ARG1 = x: animate_ind

ARG2 = y: artifact

D-ARG1 = w: material

QUALIA = create_lcp

FORMAL = exist (e2, y)

AGENTIVE = bake_act (e1, x, w)

What this analysis suggests is that the conflated sense for the verb *bake* exists only phrasally, and only co-compositional operations can consist of the underlying sense of the verb to give rise to the new interpretation.

4. Derivation of the CO Construction

Now we apply this generative operation to the derivation of the CO construction.

To begin with, it should be noted that the CO construction has similarities in meaning with the light verb construction (see Quirk et al. (1985), Macfarland (1995), and Huddleston and Pullum (2002)). In fact, many CO constructions can be paraphrased into light verb constructions without changing their cognitive meaning.

(16) a. Marcy had a wonderful dream.
(cf. Mary dreamt a wonderful dream.)

b. Charlie gave his son a wry smile.
(cf. Charlie smiled his son a wry smile.)

c. I take a deep breath and try to relax.
(cf. I breathe a deep breath and try to relax.) (Höche (2009: 231, 244, 248))

What this means is that the object in the CO construction is an *event nominal* that describes the process of an event. By definition, the event expressed by an event nominal occurs when the action represented by the verb from which it is derived is performed, so the same agentive role is necessarily defined for both the verb and the noun derived from it. For example, the lexical semantic representations of the verb *laugh* and the noun *laugh* can be described as follows.

(17) **laugh (verb)**

EVENTSTR = E1 = e1: process

ARGSTR = ARG1 = x: human

QUALIA = AGENTIVE = laugh_act (e1, x)

(18) **laugh (noun)**

QUALIA = FORMAL = y: event

AGENTIVE = laugh_act (e, x)

In short, the verb and the object in the CO construction are always in such a semantic relationship that allows for co-composition. When co-composition applies, the verb phrase forms a structure that contains the same lexical conceptual paradigm as a creation verb, as in (19).

(19) **laugh a laugh**

EVENSTSTR = E1= e1: process

E2 = e2: state

RESTR = $<_{\bigcirc\propto}$

ARGSTR = ARG1 = x: human

ARG2 = y: event

QUALIA = create_lcp

FORMAL = exist (e2, y)

AGENTIVE = laugh_act (e1, x)

A direct consequence of this analysis is that CO is schematically a *resultant object* that results from the action denoted by the verb (Quirk et al. (1985), Macfarland (1995), Kuno and Takami (2004), Nakajima (2006)). In fact, as shown in (20) and (21), COs cannot be pronominalized in the same way as ordinary resultant objects, on the grounds that the same event never happens twice, nor can they be modified by definite articles, since resultant objects must not be definite.

(20) * John smiled a smile then Mary smiled it.
(cf. *John baked a cake and then I baked it.)
(Massam (1990: 181))

(21) * John screamed {this scream/every scream we heard today}. (Moltmann (1989: 301))

Thus, by considering that the CO construction is derived via co-composition between verbs and their COs, the semantics of this construction can be well captured.

5. Elucidation of the three characteristics

Given the derivation described in section 4, we can now understand the three characteristics of the CO construction listed in (1).

First, in order for co-composition between verbs and their COs to take place, object position must be syntactically vacant for the verb's non-lexicalized object: hence (1a). In the CO construction, the verb and its CO constitute a regular VP that is subject to *though*-attraction, as in (22a), and VP-preposing, as in (22b).

(22) a. Smile a happy smile though Chris did, (everyone could see that her happiness was forced). (Macfarland (1995: 103))

b. I wanted Chris to smile a happy smile that day, and smile a happy smile she did that way. (Macfarland (1995: 104))

In addition, as shown in (23), the verb and its CO must be adjacent to each other to allow for the function application given in (14).

(23) a. Let Ben run (*quickly) a little run.

b. Ben sneezed (*that way) a glorious sneeze. (Massam (1990: 166))

Second, in order for co-composition to apply, there must be cospecification between verbs and their COs. Therefore, they must be cognate so that they share the same agentive role in their qualia structure: hence (1b). A piece of evidence that semantic composition between verbs and objects has accomplished in the CO construction is the constraint that the personal pronoun of the

object, if any, must be the same as the subject.

(24) Gabriel sneezed {a/his/*her} hefty sneeze.
(Massam (1990: 173))

In our analysis, COs that *specify* the content of the action denoted by the verb (see Omuro (2000)), such as in (25), are no exception, as the events expressed by these objects can be thought of as a proper subset of those expressed by the main verb (i.e. cackle = laugh in a high-pitched voice, grin = smile showing one's teeth).

(25) a. Van Aldin laughed a quiet cackle of amusement.
(Agatha Christie, *The Mystery of the Blue Train*, cited in Omuro (1990: 76))
b. "Let's wipe our brows and smile a graduation grin," said Ms. Ator of Reisterstown.
(T. W. Waldron, *The Baltimore Sun*, cited in Macfarland (1995: 90))

Thus, even in these examples, the agentive roles of the verb and the object are the same, and we can assume that the specific manners of action (underlined above) are defined in the constitutive role of each object noun.

Finally, in order for co-composition to occur, there must be a linguistic reason (i.e. motivation) for it to occur. As we can see from (19), the event type of the verb phrase *laugh a laugh* is exhaustive ordered overlap ($<_{\bigcirc\infty}$) of "process" and "state." This is essentially the same as "process" alone expressed by the verb *laugh* in (17); *laughing* for ten minutes is semantically equivalent to *making a laugh* for ten minutes. Therefore, if there is no modifier on the CO, the CO construction is worthless in terms of the principle of economy: hence (1c).

Importantly, as shown in (26), modifiers of a CO do not have to be adjectives, as long as the principle is respected.

(26) a. She smiled a smile *without humor*.
(Horita (1996: 235))
b. Amy smiled a smile *to examine* closely in the mirror. (Massam (1990: 179))
c. He smiled *what I thought was* a cynical smile. (Kuno and Takami (2004: 118))

Also, if the absence of modification has special significance, the CO without a modifying phrase seems still acceptable.

(27) As he knew it must be another bibliophil he said nothing but smiled a smile.
(Omuro (2004: 146))

In (27), by contrasting with *he said nothing* in the preceding context, it is interpreted that the smile he gave was totally unremarkable. Our analysis can also provide a plausible explanation for the acceptability of these examples.

What our analysis implies is that the CO construction is an expression that focuses on the *situation* rather than the occurrence of an event. Then, it follows that in the CO construction, the content of the event cannot be asked in *what*, (28a), negation does not scope over the action, (28b), no manner adverbs can be added, (28c), and speaker-oriented adjectives cannot be modifiers of the CO, (28d).

(28) a. * What did Miss Marple smile?
(cf. How did Miss Marple smile?)
(Omuro (1990: 75))
b. # The old man did not smile a happy smile, that is, he did not smile.
(based on Iwakura (1976))

c. * Tom slept a sound sleep happily.
(Iwakura (1976: 60))

d. * Hans smiled an evident smile.
(cf. Evidently, Hans smiled.)
(Massam (1990: 174))

There is also evidence to suggest that the CO construction serves as a complement to adverbial modification of verbs. For example, (29) shows that manner adverbs cannot be layered, but modifying phrases on a CO can.

(29) a. * She smiled warmly happily.
(Omuro (1991: 68))

b. She smiled a warm happy smile.

Furthermore, there are examples, such as (30), where a CO is used to express a situation that cannot be expressed with an adverb.

(30) a. * He sneezed (most) tremendously.
(Dixon (1991: 125))

b. He sneezed a tremendous sneeze.

In light of these observations, it seems safe to conclude that COs are richer in modification function than adverbs to modify unergative verbs. More specifically, we can even speculate that the CO construction may have developed historically to cover those complex modals that cannot be expressed by adverbs in unergative sentences.

6. Conclusion

In this paper we have argued that the CO construction is derived via co-composition between verbs and their COs. We have shown that the three characteristics given in (1) can be accounted for in terms of the well-formedness conditions for this operation.

To conclude this paper, let us review the functional constraints imposed on the CO construction, as discribed in Kuno and Takami (2004: 129-130) as follows.

(31) A. In the CO construction,
i. the intransitive verb must represent an activity or event involving a temporal process, and
ii. the object NP must represent a specific state or event that belongs to the set of the possible states or events resulting from the activity or event.

B. The CO construction is a marked construction, and its use must be justifiable;
iii. the speaker's specific reference to the state or event represented by the CO must be either conventionally or contextually justifiable;
iv. in active sentences, if a CO does not have a modifier, as in *laugh laughs*, it is tautological and therefore, there is no justification for its use.

Although these constraints accurately describe the semantic properties of the CO construction, it has never been explained why such constraints exist. If the claims in this paper are correct, all the constraints in (31) can be rationalized, which means that we now have a better understanding of the CO construction in English.

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NOTES

[1] According to Nakajima (2006), adverbial CO constructions are also possible with unergative verbs, but in such cases, the modifiers attached to the CO express adverbial meanings such as duration, frequency, and extent of the action.

[2] The verb *die* is excluded from the discussion, since the phrase *die a ... death* has a different historical derivation process from other CO constructions (see Kuno and Takami (2004) for details).

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「説得する」類動詞と多重ニ格構文

(*Settokusuru*-Class Verbs and Multiple *Ni*-Constructions)

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キーワード:「説得する」類動詞, 多重ニ格構文, 素性継承, 格の上書き, 内在格

1. 導入

本稿では、(1)に見るような「説得する」等の動詞がとる構文間の交替現象を扱う。この類の被動者は、(1b)のように単独ではヲ格で現れるが、主題としてヨウ(ニ)節を伴う場合は、(1a)のようにヲ格・ニ格・ガ格の何れでも標示可能である。[1]

(1) a. 太郎が花子{を/に/が}進学するよう(に) 説得した。
b. 太郎が花子{を/*に/*が}説得した。

本稿の主な目的は、「説得する」類の動詞の VP 内構造を明らかにしつつ、(1)のパラダイムに説明を与えることである。

本稿の構成は次の通りである。2–5 節で被動者の構造的位置と位置付け、ヨウ節の外部・内部構造を検討した後、6 節で分析を提示する。7 節では分析をゲルマン語の二重目的語動詞に拡張する。8 節は結論である。

2. 被動者の構造的位置

幾つかの事実が、ヲ格被動者は主節、ガ格被動者はヨウ節の要素であり、ニ格被動者がその点で曖昧なことを示唆する。

例えば被動者の作用域を見ると、(2)のように、「だけ」により焦点化された被動者は、主節述語「説得」に対し、ヲ格なら高い、ガ格なら低い作用域のみをとり、ニ格の場合は両者の間で曖昧である。

(2) a. 太郎が花子だけを進学するよう説得した。 (だけ>説得/*説得>だけ)
b. 太郎が花子だけに進学するよう説得した。 (だけ>説得/説得>だけ)
c. 太郎が花子だけが進学するよう説得した。 (*だけ>説得/説得>だけ)

更に、擬似分裂文では、ヨウ節とともに焦点位置に置かれる場合、被動者は(3)に示す通りニ格・ガ格はとれ、ヲ格はとれない。[2]

(3) 太郎が説得したのは、花子{*を/に/が}進学するようにだ。

以上に基づき、ニ格被動者の構造的位置について考えてみると、(4)に見るように主節でニ格・ヲ格被動者が共起できない事実は、両者が同一の項であることを示唆する。一方、(5)のようにニ格被動者がヨウ節内でガ格被動者と共起できる事実は問題となる。ガ格被動者が埋め込み主語なら、ニ格被動者はヨウ節内でどのような位置を占めるのだろうか。

(4) * 太郎が{花子を息子に/息子を花子に/花子に息子を/息子に花子を} (粘り強く) 進学するよう説得した。
(5) 太郎が来年次郎に息子が留学するよう説得した。

3. 多重ニ格構文

3.1. 「自分」の束縛

注目されるのはニ格被動者の主語としての性質である。再帰詞「自分」は主語指向性を持つが(Katada (1991)等)、(6)のようにヨウ

節内のニ格被動者は「自分」の先行詞となれる。(7)で同一指示の代名詞によりヨウ節から排除された場合、ニ格被動者が自分を束縛できない事実は、主語性がヨウ節内のそれに限られることを示す。

(6) 太郎が花子$_i$に自分$_i$の息子が進学するよう説得した。
(7) 太郎が花子$_i$に[自分$_i$の息子が彼女$_{\{*i/j\}}$を尊敬するよう]説得した。

3.2. 尊敬一致

(8)からは、主語性の指標である尊敬一致が「説得する」類の埋め込みニ格被動者を標的とし得ることが分かる。代名詞として振る舞う「閣下」((9)参照)をヨウ節内に置くと、(10)に見るようにニ格被動者は埋め込み述語の尊敬一致を引き起こせない。つまりヨウ節内のニ格被動者のみが主語性を示す。

(8) 太郎は{先生/*花子のやつ}においでになるよう 説得した。
(9) a. * 大統領$_i$が閣下$_i$を嫌っておられる。
b. 大統領$_i$が[国務長官が閣下$_i$を嫌っていると] ご存じだ。
(10) 太郎が大統領$_i$に顧問の野郎が{*閣下$_i$/?議長}をご批判になるよう説得した。

3.3. 多重主語

従って、ニ格・ガ格被動者の両方がヨウ節の主語だと結論される。本稿では、ヨウ節内のニ格被動者は、(11)のような多重主語構文の高位の主語がニ格で具現したものだと提案する。(12)のように多重主語構文の主語のうち複数がニ格を担うことも可能であり、一般化は(13)に示すように、原理的には主語のうち最上位から任意の個数がニ格を、それ以降がガ格を担って現れる、というものである。

(11) 太郎が花子が息子が進学するよう説得した。
(12)a. 太郎が来年花子**に**教え子が息子が進学するよう説得した。
b.(?)太郎が来年花子**に**教え子**に**息子が進学するよう説得した。
(13) ... (〜に) [Subj Subj ... Subj ... 説得]
——ニ⟶|⟵ガ—

4. ヨウ節の構造的位置

次に、ヨウ節が補部か付加詞かを明らかにするため、そこからの抜き出し可能性を検討する。ヨウ節からの抜き出しは(14)に示すように被動者がヲ格なら悪く、ニ格なら良いことが分かる。

(14)a. 太郎が花子{を/に}ステージで 踊るよう説得した。
b. どこで$_i$ 太郎は花子{*を/に} t_i 踊るよう説得したのですか。
c. [Op$_i$ 太郎が花子{*を/に} t_i 踊るよう説得した]場所

また、逆にヨウ節の wh 島からの抜き出しを見ると、(15)のようにヨウ節の抜き出しは被動者がヲ格をとると容認性が低く、予期される非対称性が現れる。また、予測通り、補部と付加詞のヨウ節は(16)のように共起可能である。

(15) [進学するよう]$_i$みずきは[光男が朱莉{(?)?を/に}t_i説得したかどうか]尋ねた。
(16) 太郎が(天邪鬼の)彼女が進学しないよう花子{*を/に}進学するよう説得した。

5. ヨウ節の大きさ

更に、ヨウ節の大きさを検討する。(17)に見るように、ヨウ節内には様態副詞・時間副詞・主語指向副詞は生起可能、文副詞は不可能である。加えて、(18)–(20)のように提題話題は生起できず、対比話題や焦点句は生起で

きる。

(17) 太郎が花子{を/に/が} {急いで/来年/抜け目なく/賢明にも/*驚いたことに}留学するよう説得した。

(18) A: 花子のベンツ、どうしたの？
?? B: 太郎が花子{を/に} [ベンツは$_{AT}$息子が乗るよう]説得したって。

(19) A: ベンツもフォルクスワーゲンも息子さんが乗るって？
B: (確かに、)太郎が花子{を/に} [**ベンツは**$_{CT}$息子が乗るよう]説得したらしいけど。

(20) A: 太郎は、何を買うよう説得したの？
B: 太郎は花子{を/に} [***羽毛布団を***$_{F}$息子が買うよう]説得したんだよ。

Miyagawa (2017)に基づけば、日本語では提題話題が TopP 指定部に、対比話題は FinP 内にあると考えられる。更に(20)の適格性からすると、Rizzi (1997)の分離 CP 構造の下で、ヨウ節は FocP であり(21)の構造を持つと結論できる。

(21) [$_{FocP}$ ***羽毛布団を***$_{F}$ [$_{FinP}$ **ベンツは**$_{CT}$ [$_{TP}$ 息子が$_{Subj}$ [$_{vP}$ ...] T] Fin] Foc]

6. 分析

残る疑問は(22)に掲げる 2 つである。注目しておきたいのは、「説得する」類と「教える」の類似性である。(23)と(24)のパラダイムを比較されたい。つまり「説得する」類は、「教える」型に近い性質を持つ二重目的語動詞だと考えられる。

(22)a. 「説得する」類の動詞はどのような項構造を持つのか。
b. 「説得する」類の動詞による格付与はどのように行われるのか。

(23) 太郎が 子供たちに{自制を/[$_{Compl}$ 自制するよう]/?*[$_{Adjunct?}$ 自制するよう]}教えた。

(24) 太郎が花子に{?進学を/[$_{Compl}$ 進学するよう]/[$_{Adjunct}$ 進学するよう]}説得した。

6.1. 項構造

先ず(22a)について考える。(25a)が条件 C に違反しないことから、主節に顕在的に生起しないとき、ニ格被動者の統語的な投射は義務的でない。よって影山(1996)の枠組みの下で、「説得する」類に対しては、(26)のような語彙概念構造を基盤として、(27)に示す 3 通りの項構造への写像が認められ、対応して(28)のような統語構造を投射すると考えられる。

(25)a. 太郎が花子が進学するよう説得した。(但し「被動者＝花子」)
b. pro$_i$ [[$_{Compl}$ 花子が $_i$進学するよう] √説得] ➡条件 C 違反

(26) LCS: [*x* ACT] CAUSE [y_i BECOME [y_i BE [WITH [√説得(*z*) AT y_i]]]]
(BE [WITH] = HAVE)

(27)a. AS: x_{Agent}, <$y_{Patient}$, z_{Theme}>
b. AS: x_{Agent}, <z_{Theme}>
c. AS: x_{Agent}, <$y_{Patient}$>

(28)a. [$_{vP}$ <Agent> [*v*′ [√P <Patient> [√′ {DP/FocP}$_{<Theme>}$ √説得]] *v*]]
b. [$_{vP}$ <Agent> [*v*′ [√P {DP/FocP}$_{<Theme>}$ √説得] *v*]]
c [$_{vP}$ <Agent> [*v*′ [√P <Patient> √説得] *v*]]

6.2. 格

(22b)での問題は、ヨウ節内でのニ格付与の機序である。ニ格被動者の位置を特定するため、ヨウ節主語と対比話題の相対語順を見ると、(29)のように、対比話題への先行はガ格主語では不可能、ニ格主語では可能である。この事実は、(30)のようにニ格被動者が Fin 指定部にあり、その主要部 Fin がニ格付与子だとすれば理解できる。[3] ここでは、問題の格付与能力は主節動詞のニ格素性が節境界

を跨いでFinへと継承されることより獲得されると提案する。以上より、ヨウ節には(31)の構造が与えられる。

(29) A: ベンツもフォルクスワーゲンも息子さんが乗るって？
  a. B: (確かに、)太郎が花子に[息子{*が/?に}**ベンツは**$_{CT}$乗るよう]説得したらしいけど。
  b. B: (確かに、)太郎が花子に[**ベンツは**$_{CT}$息子{が/に}乗るよう]説得したらしいけど。

(30)a. ... [$_{FinP}$ 息子に[**ベンツは**$_{CT}$ [$_{TP}$ 息子が [$_{vP}$ ...] T] Fin]] ...
  b. ... [$_{FinP}$ **ベンツは**$_{CT}$ [息子に[$_{TP}$ 息子が [$_{vP}$ ...] T] Fin]] ...

(31) [[$_{FocP}$ (Focus) [$_{Foc'}$ [$_{FinP}$ Subj Subj ...
[$_{Fin'}$ [$_{TP}$ Subj Subj ...
[$_{T'}$ *v*P T]] [$_{Fin}$ *i*Case]]] Foc]] 説得 s-]
Inheritance

6.2.1. 格の上書き

次に、ヨウ節主語がニ格を担う機序を考える。ここでは、ヨウ節主語に付与されたガ格がニ格で「上書き」される可能性を追求し、(32)–(33)を提案する。ガ格を付与されたヨウ節主語は、(34)に示すように更にFinとAgreeして値D()を与えられ、結果ニ格で具現する。[4]

(32) Values of features are features.
(33) 格素性の値と形態的具現
  a. 主格＝ガ格: Case(N())
  b. 与格＝ニ格: Case(N(D()))
  c. 対格＝ヲ格: Case(N(D(A())))
(34) [... [$_{TP}$ [$_{DP}$ *u*Case(N(D()))] [$_{vP}$ ...]
Value
[$_{T}$ *i*Case(N())]] ... [$_{Fin}$ iCase(N(D()))]

6.2.2. ヲ/ニ交替と構造格・内在格

続いて受動化についての事実を検討する。(35a)を受動化した(36a)は問題無く容認可能であり、(35b)を受動化した(36b)についても疑問は無い。問題は(35c)の受動化で、一見被動者・主題の何れも主語となれるようだが、よく観察すると、DPが主題のとき、主題が主語の(36c)が同程度のやや低い容認性を示すのに対し、被動者を主語とする(36d)は完全に文法的である。(35c)と(36d)の差は軽微だが実質的なもので、動詞の語彙によっては、(37)–(38)のように明瞭な違いが現れる。

(35)a. 太郎が$_{Agent}$花子**を**$_{Patient}$説得した。
  b. 太郎が$_{Agent}$ {?進学**を**/進学するよう}$_{Theme}$説得した。
  c. 太郎が$_{Agent}$花子**に**$_{Patient}$ {?進学**を**/進学するよう}$_{Theme}$説得した。
(36)a. 花子が$_{Patient}$説得された。
  b. ?(花子の)進学が$_{Theme}$説得された。
  c. ?進学が$_{Theme}$花子**に**$_{Patient}$説得された。
  d. 花子が$_{Patient}$ {進学を/進学するよう}$_{Theme}$説得された。
(37)a. * 太郎が花子に遅刻を叱った。
  b. 花子が遅刻を叱られた。
(38)a.?? 太郎が花子に無礼をたしなめた。
  b. 花子が無礼をたしなめられた。

この状況は、「説得する」類が、潜在的には被動者と主題の両方をヲ格で標示し得るにも関わらず、実際には主題へのヲ格付与はPoser (2002)の言う「深層二重ヲ格制約」により、被動者がヲ格を付与されない場合に限られると考えると理解できる。つまり(36d)は(35c)ではなく(35a)の受動化であり、可能な格付与パターンは(39)･(40)の2通りである。

(39)a. <Patient>ヲ (<Theme>ヲ) 説得
  b. 太郎が花子を(*{進学を/進学するよう $_{Compl}$ })説得した。
  c. 花子が(進学を/進学するよう)説得された。

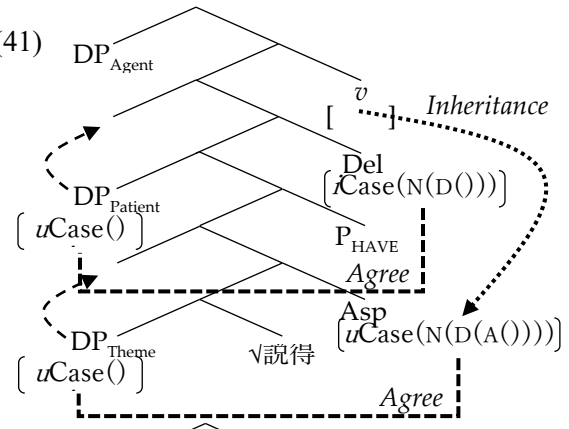
(40)a. (<Patient>ニ) <Theme>ヲ 説得

b. 太郎が(花子に) {?進学を/(次郎{が/に})進学するよう}説得した。

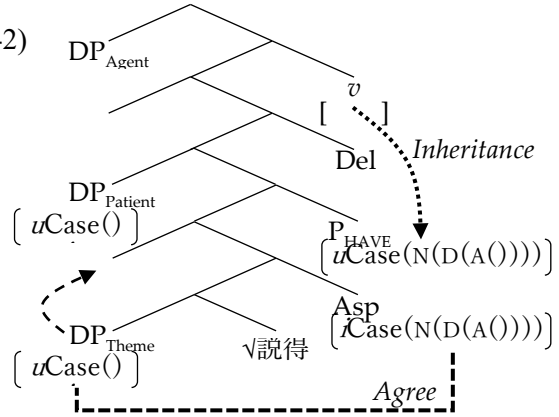
c. ? 進学が(花子に)説得された。

(39)–(40)を説明するため、本稿では Harley (2002)、Holmberg et al. (2019)及び Arad (1996)らに基づいて、二重目的語動詞一般に前置詞 P_{HAVE} と機能主要部 Asp 及び Del の投射を含む VP 構造を仮定し、Chomsky (2007 以降)の素性継承を採用する。この仮定の下で、(40a)のように被動者がニ格、主題がヲ格で標示されれば(41)の、(39a)のように両者ともヲ格で標示されれば(42)の構造が与えられる。(41)と(42)の違いは、前者では Del が内在ニ格、Asp が構造ヲ格素性を担うのに対し、後者では P_{HAVE} が構造ヲ格、Asp が内在ヲ格素性を担う点である。

(41)



(42)



しかし(42)の構造には問題がある。つまり、P_{HAVE} は被動者を c 統御しないので、それと Agree 関係が成立せず、格素性が付値されない。よって(64)の構造は実現不可能であり、(39b, c)の主題の生起不可能性が導かれる。この問題は、主題が統語的に投射しない場合には解消される。ここで Maezawa (2020)による(43)の提案を採用し、終端要素融合が主要部移動より経済的だとすると、主題を欠く場合(42)の構造は(44b)のようになり、被動者は P_{HAVE} の姉妹となって Agree が可能である。

(43) *Terminal fusion*

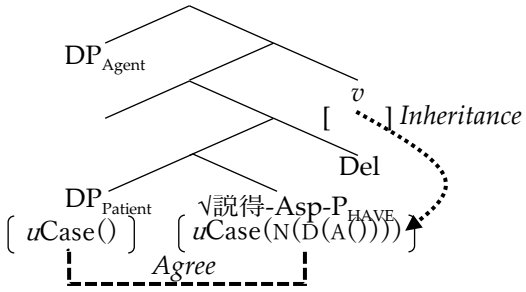
An SO that consists of a pair of terminals {X, Y} can be fused into a single terminal [X, Y] if X and Y are not incompatible in terms of feature composition.

(Maezawa (2020: 9))

(44)a. $[_{PP}\ DP_{Patient}\ [_{P'}\ [_{AspP}\ √説得\ \ Asp]\ P_{HAVE}]]$

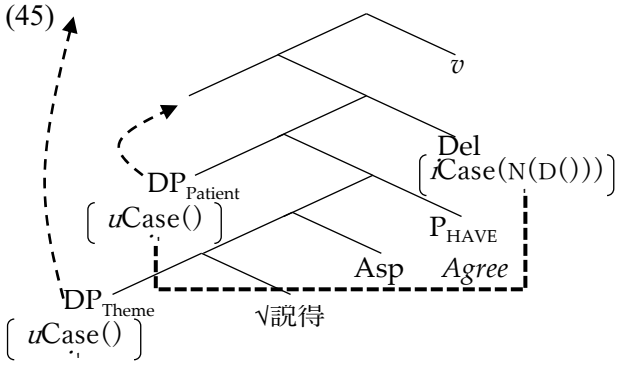
Terminal fusion

b.

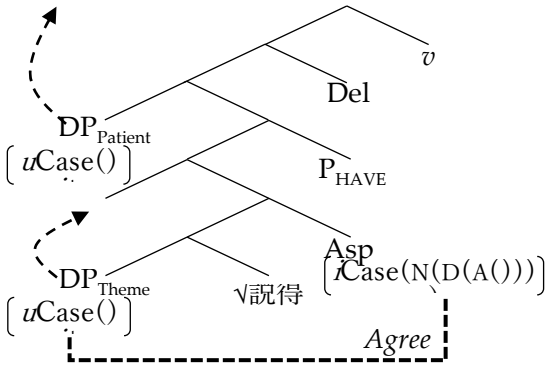


これらの構造に受動化を適用すると、(45)・(46)に示すように、格素性の値を Asp・P_{HAVE} から得られない主題・被動者は T と Agree し、(39d)・(40d)が派生される。重要なのは、(39b, c)と異なり(39d)が主題の生起を許す点で、これは、被動者は T によってガ格を付与されるため、P_{HAVE} との位置関係は最早問題とならないためである。

(45)



(46)



7. 二重目的語構文の受動化

以下では、分析を拡張してゲルマン諸語の二重目的語構文に於ける受動化可能性の違いに説明を与える。

二重目的語構文を有するゲルマン語に於いて、受動文の主語になれるのは、アメリカ英語等では被動者のみ、ドイツ語等では主題のみであり、ノルウェー語等では、主題・被動者の何れも主語となり得る。

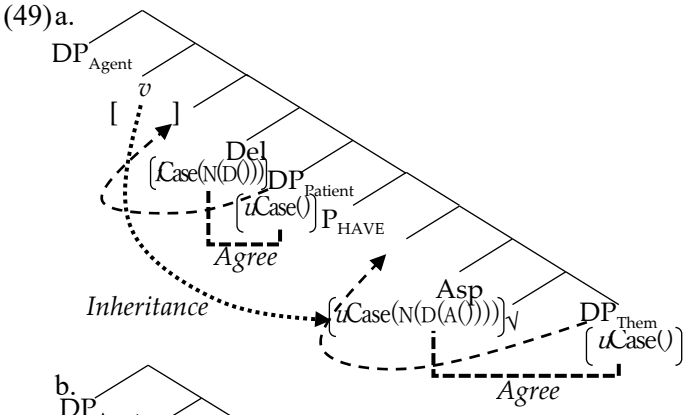
(46)a. John gave Mary a red bike yesterday.
b. Mary was given a red bike yesterday.
c. * The red bike was given Mary yesterday.
[American English] (Platzack (2005: 1))

(47)a. Ich habe den Männern den Wagen gegeben.
I have the men.DAT the car.ACC given
b. * Die Männer sind den Wagen gegeben.
the men.NOM is the car.ACC given
c. Der Wagen ist den Männern gegeben.
the car.NOM is the men.DAT given
[German] (Sprouse (2011: 330))

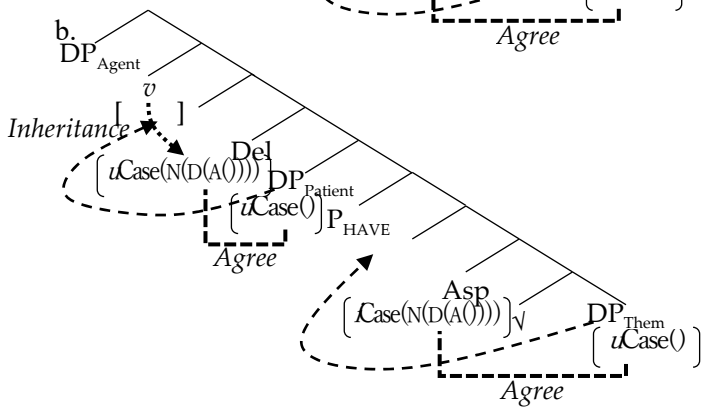
(48)a. Jeg har gitt mannen boken.
I have given man.DEF book.DEF
b. Mannen/Han ble gitt boken.
man.DEF/he.NOM was given book.DEF
c. Boken ble gitt mannen/ham.
book.DEF was given man.DEF/him.ACC
[Norwegian] (ibid.: 329)

本分析の下では、この違いは以下のように説明される。先ず、ノルウェー語型の二重目的語構文は、日本語と平行的に(49)の 2 通りの構造をとり得ると考えられる。(49a)では、Del が内在与格を被動者に付与する一方、Asp は構造対格を主題に付与する。(49b)では逆に、Asp が内在対格を主題を付与すると同時に、構造対格は Del によって被動者に与えられる。日本語との違いは、二重ヲ格制約の対応物を欠く点である。これは、当該言語では P_{HAVE} ではなく Del が構造対格を継承し、主題の有無に関わらず被動者を c 統御するためである。

(49)a.



b.



(49)の構造に受動化を適用した場合は、構造対格が吸収されるため、 (a)の主題と(b)の被動者は対格を得られず、後の段階で主格を付与される。一方、Del・Asp の内在格付与能力は維持されるため、結果(a)では主題を、(b)では被動者を主語とする受動構文が得られ、(48)の事実が導かれる。

次に、受動化によって主題のみが主語となれるドイツ語型の二重目的語構文は、常に(49a)型の構造をとると考えられる。ドイツ語

に少数存在する被動者が受動文主語となり得る動詞は例外的に(49b)型の構造をとると考えられ、その場合被動者は予測通り対格で現れる。

最後に、被動者のみが受動文主語となれるアメリカ英語型では、二重目的語構文は(49b)型の構造のみをとると考えられる。

8. 結語

本稿では、「説得する」類動詞の格付与特性に説明を与えることで(1)のパラダイムを導出した。更に、分析をゲルマン語の二重目的語構文へと拡張し、それらの受動化可能性の違いにも説明を与えた。

注

[1] この類に属すると思われる動詞としては、他に次のものが挙げられる: 諭す、促す、さそう、励ます、勧誘する、脅す、なだめる、…

[2] 他に、被動者と副詞の相対語順、否定極性項目の認可、量化被動者と量化副詞の相対作用域等からも同じ結論が得られる。

[3] この見解の下では、Fin と Agree した上位主語は押し込み(tucking in)操作によって語順を維持したまま Fin 指定部に移動すると考えられる。

[4] ガ格付与が随意的という可能性は排除されると思われる。(13)の一般化を説明するためには、基底位置が低いほど優先的にガ格を付与されるという不自然な仮定を採らねばならないからである。

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Indexical Structures of "Bound" Plurals*

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Keywords：bound plural pronouns, first person, shifty indexicals, partial binding, split binding

1. Issue and Goal

This study focuses on two kinds of phenomena involving the plurality of bound pronouns. One is *dependent plural* phenomena as in (1a), where the morphologically plural bound pronoun *they* appears to be interpreted as a singular bound variable, at least in one reading (1b). The other is *partial* or *split binding* as in (2), in which the pronoun *they* seems to be bound by more than one antecedent. Both examples are taken from Rullmann (2003: 243-244). The indices are shown below simply to express the intended readings. I do not presuppose their syntactic representation.

(1) a. All men$_1$ think they$_1$ are smart.
b. ∀x [man(x). x thinks that x is smart]

(2) Every woman$_1$ told [her$_1$ husband]$_2$ that they$_{1+2}$ should invest in the stock market.

These examples represent issues that date back to at least the 1980s. Fruitful discussions on examples like (1) and (2) can be found in the literature, such as Higginbotham (1985) and Partee (1989). However, the past two decades have seen a surge in interest for these phenomena (e.g. Heim (2008), Kratzer (2009), Sudo (2014)) largely due to the clarification of the problem by Rullmann (2003, 2004).

The issue may be summarized as follows. The most common view for dependent plural facts like (1) assumes that the bound plural pronoun is a minimal pronoun. It is born with no ϕ-features such as person, number and gender, and remains so even at LF. Its ϕ-features are transmitted from its binder by a purely syntactic operation, not affecting its semantic interpretation (Heim (2008), Kratzer (1998, 2009)).

Such an assumption seems to correctly predict the contrast between (3a, b).

(3) a. All men$_1$ think they$_1$ are the smartest person in the world.
b. #They are the smartest person in the world. (Rullmann (2003: 243))

(3b) is infelicitous based on the world knowledge that there could not be more than one smartest person in the world. However, when the same clause is embedded under *think* as in (3a), it becomes felicitous. This fact appears to follow naturally from the minimal pronoun approach: *they* in (3a) originates without a number feature and may be read as a singular variable regardless of its formally transmitted plural feature.

However, as pointed out by Rullmann (2003), this approach cannot be extended to split binding facts like (2). If *they* in (2) were to be generated ϕ-feature*less*, where would it get its plural number feature from? Both binders are singular.

It appears that not all variable pronouns are born as a minimal pronoun; some seem to enter the derivation with certain features. If so, we need to consider what kind of features variable pronouns may start their lives with. Various studies have proposed alternative or revised views, but we have yet to reach a consensus.

The goal of this study is to propose a systematic morphosyntactic account for these phenomena. The novelty of the analysis lies in its focus on the indexicality of the bound pronouns occurring under attitude verbs.

2. Bound *We* as Multiple-Author *We*

To begin with, this paper focuses on the bound *we*, as seen in (4a), and then extends the analysis to include *they*. The conclusion will be that the bound plural *they* enters the derivation with an internal structure that looks like the structure of certain instances of *we*.

The first-person plural *we* normally involves associative plurality. The plurality of *we* is construed differently from that of additive plurals such as *dogs*. *We* usually refers to the author of the utterance context and some non-authors. *Dogs*, in contrast, normally designates multiple dogs. In fact, the question of whether *we* could ever refer to multiple authors remains controversial to date.

Some linguists argue that the notion of multiple *I*s, or multiple-author *we*, is at least conceptually plausible (e.g. Cysouw (2003), Harbour (2016)). They take the choric use of *we* (e.g. football fans shouting *we are the champions* in synch) as an instance of multiple-author *we*. However, the classical view exemplified by Boas (1911: 39) holds that "A true first person plural [1+1] is impossible because there can never be more than one self." Harley and Ritter (2002) suggest a similar view that the multiple-author *we* is semantically *im*possible.

I mostly side with the latter classical view and do not consider the choric *we* as an instance of multiple-author *we*. This is because, for each person shouting *we* in chorus, there is only one author *I* and others joining in the shouting. Each person makes only one utterance, e.g., *we're the champions*, in which *we* refers to the utterer and others; no single utterance has *we* designating multiple authors.

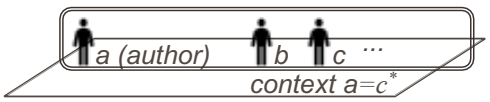
However, there are certain environments—which, to my knowledge, have not been covered in the literature—where the multiple-author *we* seems both semantically and syntactically feasible. This occurs in certain structural positions, including inside clauses embedded under attitude or communication verbs such as *think*, *hope*, and *tell*, as demonstrated in (4a).

(4) a. We each/all think *we*'re the smartest person in the world.
b. # We're the smartest person in the world. (Rullmann (2004: 161))

I assume that the embedded *we* in (4a) is an instance of multiple-author *we*, but the matrix *we* in (4a, b) is an associative-plural *we*. The contrast in the felicitousness between (4a) and (b) arises from the different kind of *we* appearing in each example. Roughly, the multiple-author *we* represents a plurality of authors in a plurality of attitude contexts, while the associative *we* designates the author and others in a single context. I follow Schlenker (2003) in assuming attitude verbs as quantifiers over contexts, where each context determines an author, a time, and a world (and sometimes an addressee) of thought, belief or utterance. The multiple-author *we* may occur felicitously only in attitude complements that describe the attitudes of multiple attitude holders in multiple contexts. Root clauses do not allow multiple-author *we* because they describe an attitude of the author of the actual utterance, in which there could not be more than one author. Thus, *we* in (4b) could only be an associative plural.

(4b) is infelicitous because it denotes a set of propositions which contradict one another. The *we* in (4b) is an associative *we*, as diagramed in (5a) with a denotation (5b). (4b) describes a situation where person *a*, who is a member of *we*, is the smartest; person *b*, another member of *we*, is the smartest; person *c*, yet another member of *we*, is the smartest; and so on. This brings about a contradiction because if person *a*, who may be the author, is the smartest, another person cannot be the smartest person in a single context (c^* stands for the actual utterance context).

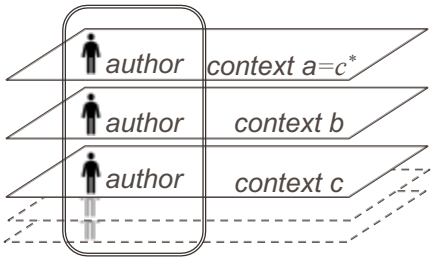
(5) a. Associative *we*



b. ⟦Associative *we*⟧$^{c^*}$
= a plurality of individuals inclusive of the author of c^* in c^*.

In contrast, (4a) with a multiple-author *we* describes a situation where each member of *we* is thinking *I'm the smartest person*. The minimal pronoun approach appears to account for this fact, but the present multiple-author view, illustrated in (6a, b), also predicts the same fact.

(6) a. Multiple-author (additive) *we*



b. ⟦Multiple-author *we*⟧^{C}
= the authors of *C* in *C*.

The multiple-author *we* quantifies over multiple authors of distinct contexts, such as contexts *a*, *b*, and *c*. It designates a cumulation of authors in multiple contexts. Crucially, this does not give rise to a contradictory reading since there is only one person who is the smartest in each self-ascriptive thought context. Nevertheless, it involves a semantic plurality in that it quantifies over pluralities of author-context pairs; the plural feature of the bound *we* in (4a) is not semantically null, nor is it just formally transmitted from its antecedent.

I must mention that the view represented in (6a, b) directly builds on LaTerza, Chacón, Johnson, Kramer, and Rood (2014), who present the denotation of the Amharic plural shifted indexical in a sentence like (7) as "the authors of C" (p. 267).

(7) ɨtʃ'tʃ'u-wotʃt-u
candidate-PL-DEF
ɨnn-aʃänf-all-än al-u
1PL-win.IMPF-AUX-1PL say.PF-3PL
'[The candidates]$_i$ said that WE$_i$ will win.'
(LaTerza et al. (2014: 259))

The multiple-author view partially solves the question of why (8) may not denote the same meaning as (4a). In addition, sentences like (9) pose a puzzle for the minimal pronoun approach since there is no plural antecedent; but it is unproblematic in the present framework because *we* in (9) is taken to be a plural in its own right, for being a multiple-author *we*.

(8) We all think I'm the smartest.
(9) Al and I both believed we were going to be elected president. (Rullmann (2004: 161))

3. Extension to *They*

This section extends the multiple-author view of *we* to the third-person plural *they*. Since

the early works on binding, such as Higginbotham (1985) and Heim, Lasnik, and May (1991), we have known that some instances of bound third-person plurals, such as *they* in our first example (1a), involve indexicality—the first-person*ness* or the second-person*ness*. For example, (10) allows for an I-reading, you-reading, and we-reading of *they*.

(10) John and Mary told each other that *they* should leave. (Heim et al. (1991: 64))

I take the intended reading of (1a)/(3a) to be analogous to the I-reading of (10), which in turn implies that it is analogous to the multiple-author reading of the embedded *we* in (4a). The minimal semantic contrast between *we* in (4a) and *they* in (3a) is that while the former designates the authors of a plurality of contexts inclusive of the author of the actual utterance context, the latter denotes the authors of multiple contexts exclusive of the author of the actual context as shown in (11a, b).

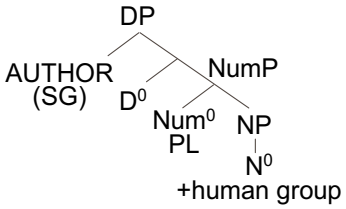
(11) a. $[\![\text{Multiple-author } we]\!]^C$
= the authors of C inclusive of the author of c^* in C.
b. $[\![\text{Multiple-author } they]\!]^C$
= the authors of C exclusive of the author of c^* in C.

4. Indexical Structures of Bound Plurals

The next question is: Where do the associative plural readings illustrated in (5a, b) and the multiple-author readings in (6a, b)/(11a, b) derive from? My proposal is that they arise from the internal structure of the pronouns.

First, building on the research of Vassilieva (2005), I propose (12) as a structure that gives rise to associative plural readings.

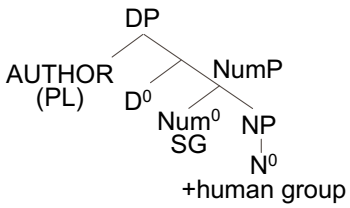
(12) Associative plural *we*/*they*



According to Vassilieva, associative plurals internally represent at least two nominals: one is an NP with a non-descriptive [+human] group reference, ranging over sets of individuals including both singletons and non-singletons. The other nominal is a Spec DP nominal, which specifies the group's most salient member, contributing to narrowing down the range of sets of individuals. More precisely, (12) exemplifies the structure of the exclusive associative *we* (i.e. *we* excluding the addressee) with the author at Spec DP as the most salient member of the group. The Spec DP nominal semantically behaves like a prenominal possessive; as a result, the entire associative DP is interpreted as an author's group. This properly captures the meaning of exclusive associative *we* and *they* which refer to the author and some others of a relevant context.

Extending these notions, I propose that the multiple-author readings (6a, b) and (11a, b), available for the embedded *we* in (4a) and for *they* in (1a) and (3a) arise from structure (13).

(13) Multiple-author *we*/*they*



In contrast to (12), this structure has a plurality of authors at Spec DP and a singleton NP, which is reflected in the singular feature on Num. While it may not make sense to have a plurality of salient

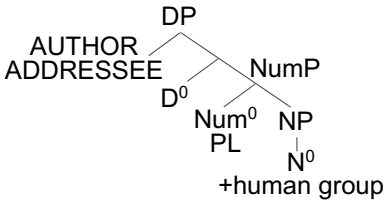
members for a singleton, this captures the notion shown in (6a, b). The entire DP picks out a single individual from each context, yet a cumulation of contexts amounts to designating a plurality of individuals. In a sense, the notion is analogous to the meaning of the reflexive *ourself* in sentences like "…we just have to do what's best for ourself," mentioned in Wallenberg (2005: 322).

The core idea is that the plurality and the indexicality of *they* are semantically interpreted due to its internal structure. A variety of indexical readings associated with the pronoun *they* are captured as structural ambiguities.

In this framework, the split bound reading of (2), repeated here as (14), is assumed to arise from the internal structure of *they* as in (15), which looks like that of the inclusive associative *we*, i.e. *we* designating I, you and optional others.

(14) Every woman$_1$ told [her$_1$ husband]$_2$ that they$_{1+2}$ should invest in the stock market.

(15) Inclusive associative plural *we*/*they*



This study suggests a different view from some well-known morphosyntactic analyses on personal pronouns, including Déchaine and Wiltschko (2002), that assume a smaller structure for variable pronouns. However, some pronouns seem to allow bound readings due to their indexical structure. Traditionally, indexicals may be viewed as *non*variables, but since their values are context-dependent, they covary with the context when the context behaves like a variable, typically in the complements of attitude verbs. This, in effect, creates indexical variables.

5. Implementation: Why Third-Person?

Then, why is the bound *they* with an author feature realized in third person? A crucial notion here is that the author feature is not equivalent to the first-person feature. I assume Late Insertion as in Halle and Marantz (1993); thus what is to be pronounced as *they* in the target sentences enter the derivation with one of the structures in (12), (13), and (15), though their *person* (first, second, or third) is not yet specified.

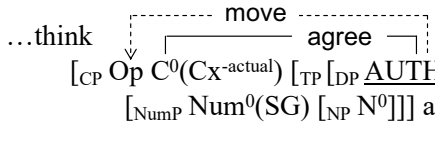
As suggested in Schlenker (2003), in English-type languages, the author feature is defined as first person, only when it is identified as the author of the actual utterance context. This implies that, in elsewhere cases where it is identified as the author of a shifted *non*actual context, it falls under third person (in contrast to context-shifting languages like Amharic (Schlenker (2003)). (16a, b) exemplify the pattern for English.

(16) a. author+actual context: 1st person
b. author+nonactual context: 3rd person

I assume that a C(omplementizer) head in the lower CP domain hosts a context parameter responsible for this person identification process. I posit two types of context parameters: $Context^{+actual}$ ($Cx^{+actual}$) and $Context^{-actual}$ ($Cx^{-actual}$). In canonical root clauses, the C head hosts $Cx^{+actual}$, which defines the actual utterance context with coordinates such as $author_{c^*}$, $addressee_{c^*}$, $time_{c^*}$, and $world_{c^*}$. In embedded attitude clauses, C hosts $Cx^{-actual}$ with coordinates such as $author_{c'}$, $addressee_{c'}$, $time_{c'}$, and $world_{c'}$ (as suggested in Bianchi (2003)). These coordinates do not necessarily shift in one fell swoop, requiring additional varieties of parameters for a more precise picture; however, for simplicity, I focus only on these varieties here.

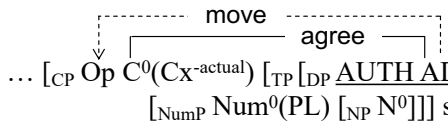
I propose (17) as a first approximation. It derives the multiple-author reading of (1a).

(17) All men$_1$ think they$_1$ are smart.



The C head with a nonactual context parameter *Cx*$^{-actual}$ agrees with the Spec node (author) of the embedded subject DP, determining its person. Simply put, DPs with an author Spec node are morphologically realized in third person when they agree with C hosting *Cx*$^{-actual}$; they are realized in first person when they agree with C that hosts *Cx*$^{+actual}$ (see Matsuda (2019) for related discussions). (18) represents the derivation of (2) with a split bound reading. Again, the Spec DP node agrees with C with *Cx*$^{-actual}$ making the subject appear in the third-person form.

(18) Every woman$_1$ told [her$_1$ husband]$_2$ that they$_{1+2}$ should invest in the stock market.



The null operator is presupposed for *de se*/*te* readings which seem obligatory for the relevant interpretations. Previous works on *de se* attitudes including Chierchia (1990) suggest that λ-abstraction over the subject creates a property-denoting CP, giving rise to a *de se* construal. Slightly revising this approach, I assume that the *de se*/*te* abstraction only targets the Spec DP node (see Matsuda (2019)).

6. Advantages and Remaining Issues

This study proposed that certain bound plurals have a structure similar to first-person plurals. One advantage of the proposed system is that it disallows crossed-readings without relying on multiple indices. In the system, the matrix argument(s) and the embedded subject are not bound to each other via the same index/indices. Their values covary by the matrix subject being the experiencer of an attitude and the embedded subject being the author of that attitude; or by the matrix subject and object being the source and goal of the reported speech and the embedded subject being the author and addressee of that speech. Another advantage is that person and number features of the bound pronouns can be determined without the computation of multiple features transmitted from the antecedents.

However, we evidently need more precise and generalizable accounts of C-level agreement. Presently, bound plurals at *non*subject positions are left unaccounted for. Furthermore, we lack hard evidence as to whether the intended readings of (1a) and (2) necessitate *de se*/*te* readings, even though this empirical question is crucial for the development of the proposed framework. These issues will be addressed in future research.

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As N as 構文の N*

（N in *as* N *as* Constructions）

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キーワード:as N as 構文, 転換, 上書き強制, 固有名詞の属性・性質

1.1. はじめに

本稿の目的は、as N as 構文における固有名詞 N の分析を通して、非段階的な固有名詞 N が、段階性を持つ形容詞的な語に、どのような原理で転換するのかを明らかにすることである。

本稿の構成は以下の通りである。2 節では、本稿の分析の中心である as N as 構文を定義する。3 節では、先行研究を概観し、明らかにすべき論点を改めて提示する。4 節では、先行研究で指摘されている以外の as N as 構文を取り上げる。5 節は、人称代名詞が比較級化・最上級化される事例を指摘する。6 節では、非段階的な固有名詞 N が、なぜ段階性を持つ形容詞的な語に転換するのかを明らかにする。7 節は結語である。

2. as N as 構文

松田 (2019) は as … as 構文の … の位置に、単独で固有名詞 N や人称代名詞（対格）が生起する言語事実を指摘している。

(1) If the first part of Trump's video sounds nothing like his usual style, then the last part is **as Trump as it gets**.
(*NBC News*, 2016/10/8) (松田 (2019: 218))

(2) Flavors like rhubarb-vanilla sorbetto and kaffir lime, pink peppercorn are about **as San Francisco as it gets**; […]
(*The New York Times*, 2014/6/3) (ibid.: 218)

(3) Pirates of the Caribbean is **as Disney as it gets**, and it never gets old! (ibid.: 218)

(4) John's haircut is **as 2019 as they come**. (ibid.: 219)

(5) This right here is me. 100% me. **As me as it gets**.[1] (ibid.: 219)

いずれも、as … as it gets（この上なく …）や as … as they come（この上なく …）の…に N が単独で生起している。[2] 松田 (2019: 219) は、as N as it gets / as N as they come 構文の N には、都市名、機関名、スポーツ名、季節、ブランド名、出来事、食物、年代を示す固有名詞が生起すると指摘する。このように as … as 構文の … に N が単独で生起する構文を、議論の便宜上 as N as 構文と呼ぶ。

3. 先行研究の概観

松田 (2019: 220) は、as … as it gets や as … as they come に N が修飾されることによって、as N as 構文の N が形容詞的に強調されていると指摘している。つまり、N を「形容詞的なもの」として判断していると思われる。

そこで、本節では、名詞から形容詞への転換が生じる事例を挙げている先行研究を概観する。

3.1. very N (いかにも N/とても N)

以下の例を見られたい。

(6) a. *They're **very Oxbridge***.
(Quirk *et al*. 1985: 248)
b. His accent is **very *Mayfair* (very *Harvard*)**. (ibid.: 1562)

Quirk *et al*. (1985) は、(6a, b) における *Oxbridge*、*Mayfair*、*Harvard* を、名詞から形容詞へ転換した語であると脚注で指摘している。

同様に、Huddleston and Pullum (2002) も、(7) における *Oxbridge* を名詞から形容詞へ転換した語と記述している。

(7) *He has a **very Oxbridge** accent* or *His accent is **very Oxbridge***.
(Huddleston and Pullum. 2002: 1643)

しかし、Quirk *et al*. (1985) と Huddleston and Pullum (2002) は、共に事実を単に規定するにとどまり、(6) と (7) はどのような仕組みの下で、非段階的な語である固有名詞が、段階的な形容詞へと転換されるのかという詳細な分析がない。

3.2. 上書き強制(coercion by override)

3.1.節で観察した事例は、強制 (coercion) という概念・事象に分類できると思われる。強制 (coercion) は、これまでに Pustejovsky (1995)、Jackendoff (1997)、Taylor (1998, 2002)、Audring and Booji (2016) などによって指摘されている重要な論点である。Taylor (2002: 287) によると、強制 (coercion) とは「ある（言語）単位が別の（言語）単位と結合したとき、隣接するその別の単位に影響を及ぼし、結果としてそれの（意味等に関する）指定に変化を引き起こす現象」を指すという（訳出は、西村 (編) (2018: 233) に従った)。また、Taylor (1998: 194) は、「ある語がある構文の構成要素として用いられた場合、その構文の意味がその構成要素の意味に影響を与え、その構文全体の意味に矛盾しないようにその構成要素の意味が（強制的に）変容を受けることである」と指摘している（訳出は、西村 (編) (2018: 233) に従った)。[3]

Audring and Booji (2016) は、さらに強制 (coercion) を、選択強制 (coercion by selection)、拡充強制 (coercion by enrichment)、上書き強制 (coercion by override) の 3 つのタイプに分類している(3つの用語の訳出は、住吉・鈴木・西村 (2019:10) に従った)。ここでは、本議論と関連する上書き強制 (coercion by override) の事例を確認する。[4]

(8) *This is **so 2013***.
(Audring and Booji (2016: 625, 632))

Audring and Booji (2016: 633) によると、形式上は、*2013* が *so* と結合されることによって、形容詞として機能すると指摘している。また、意味的には、*so 2013* を 'typical of 2013' であると分析している（必ずしも 2013 年に起こったことを示すとは限らない)。

(8) は、Quirk *et al*. (1985) と Huddleston and Pullum (2002) の事例と異なり、*2013* という年代が形容詞として転換される事例であることが興味深い。しかし、Audring and Booji (2016) においても、Quirk *et al*. (1985) や Huddleston and Pullum (2002) らと同様に、なぜ固有名詞から形容詞への転換が起こるのかという根本的な分析はなされていない。

3.3. 本稿の論点

Quirk *et al*. (1985)、Huddleston and Pullum (2002)、Audring and Booji (2016: 632) は、段階性を持たない固有名詞や年代が、very や so で強調される事によって、形容詞として転換する事実を指摘している。[5] しかし、前述したように、それらの先行研究は単なる言語事実の規定にとどまり、なぜ固有名詞 N が形容詞的な語へと転換されるのかという根本的な説明が欠けている。そこで、本稿ではその原理を分析する。

4. 松田 (2019) 以外の as N as 構文

3.3.節で問題提起した問いに答える前に、

松田 (2019) で指摘されていない as N as 構文をいくつか示す。

4.1. as N as possible / as N as (…) can be

程度性を強調するという点では、as … as it gets/as … as they come と近接した意味を持つ as … as possible (できるだけ…) や as … as NP can be (NP がなりうるだけの…) も同様に、… の位置に N を共起できる。本節では、人称代名詞が共起する事例を観察する。

(9) I thought in the moment, you know, better to be **as myself as possible**, […]
(COCA, Spoken 2019, PBS NewsHour)

(10) Michelle Obama: What I vowed is that I want to be **as me as I can be**.
(CNN, 2017/1/13, Live Event/Special)

それぞれ下線部の意は、(9)「できるだけ私自身でいる」、(10)「私がなりうるだけの私」である（as much me/myself as … のように、直前に much を生起させるインフォーマントもいる）。

4.2. as N as ever / John is as John as ever.

as … as ever (相変わらず…) の … の位置にも、N が共起する。

(11) She was as prosperous-looking as ever, as blond as ever, and **as California as ever**.
(B. Paul, *Good King Sauerkraut*)

(12) John is late again! He never changes! John is **as John as ever**.
(インフォーマント提供)

それぞれ下線部の意は、(11)「相変わらずカリフォルニア的だ」、(12)「相変わらずジョンはジョンだ」で、固有名詞 California と、as … as の間の John が、形容詞的なものとして上書きされている。[6]

4.3. John is as N as N. (N は同一)

以下の事例を見られたい（口頭発表の際には、取り上げていない）。

(13) John is **as Trump as Trump**.
（ジョンはトランプ大統領と同じくらいトランプだ）
(インフォーマント提供)

(12) とも関連するが、(13) における as … as の間の Trump は、トランプ大統領という人物そのものを指しているのではなく、トランプ大統領という人物から推察される様々な性質・属性を示していると思われる。したがって、ここでも形容詞的なものとして固有名詞 Trump が上書きされ、John はトランプな人物であると解釈される。

5. 人称代名詞の比較級化・最上級化

筆者の知る限り、これまで指摘されていないものの、人称代名詞（対格）や再帰代名詞が、比較級化したり、最上級化されたりする事例がある。

(14) "I'm **more me** than I've been for ages."
(COCA, Web 2012)

(15) In fact, over the weeks, Diane seemed to become **more herself**.
(COCA, Fiction 2006)

(16) And it's **the most me** I've ever felt in my whole life.
(*Grey's Anatomy*, Season 15, Episode 12)

(17) He said he felt **the most himself** when he was under the sky. (COCA, Fiction 2006)

上記のような人称代名詞（対格）や再帰代名詞は、臨時的に形容詞的な語として比較級化・最上級化したものである。[7] よって、これら事例も上書き強制 (coercion by override)

の一部とみなせる。

また、固有名詞も形容詞的な語として比較級化されることがある（口頭発表の際には、取り上げていない）。以下、2020 年度のアメリカ大統領選を戦うためには、トランプ大統領よりも、よりトランプな（より残酷な移民対策をとるような）候補者を立てないと選挙では戦えないという文脈の実例である。

(18) There will be forces in the party arguing that the only path to victory is to be even **more Trump than Trump**, […] (*The Washington Post* 電子版, 2019 /11/13, Paul Waldman 氏執筆)

ここでの *more Trump* の *Trump* も、固有名詞から形容詞的な語へと転換した事例である。

6. 固有名詞から形容詞への転換の原理

本節では、固有名詞が潜在的に持つ性質・属性という観点から、固有名詞 N から形容詞的な語へと転換がなされる仕組みを明らかにする。

6.1. 固有名詞が持つ増大な性質・属性

立川 (2020: 217) は、以下の図 1 が示すように、固有名詞は形容詞をいくつ重ねても定義し尽くせないほどの多数の性質・属性を内包していると指摘する。また、形容詞→普通名詞→固有名詞の順で属性の数が増大する一方、個体の数は減少するという。[8]

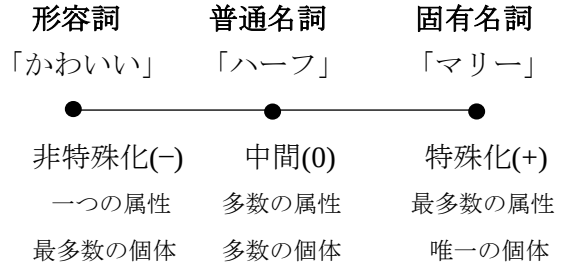

図 1　形容詞→普通名詞→固有名詞

(立川 (2020: 217)) (cf. 佐藤 2020: 61-62)

例えば、*Oxbridge* という固有名詞 1 つをとってみても、その 1 語には「権威のある、伝統のある、最高峰の」などの様々な属性・性質が入り込んでいる。したがって、Oxbridge が持つ多数の性質・属性に全体 (または一部) が強調されるような文脈が整えば、統語上形容詞が求められる位置にも、*Oxbridge* が生起できると考えられる。つまり、固有名詞の持つ増大な性質・属性そのものが、固有名詞から形容詞的な語へと転換する原理を支えているのである。なお、本稿では、固有名詞に加えて、人称代名詞（対格）や再帰代名詞も形容詞的な語へと転換する事例を指摘してきたが、そもそも、人称代名詞が指すものは、本来は固有名詞であるため、人称代名詞や再帰代名詞も、固有名詞と同様に、形容詞をいくつ重ねても定義し尽くせない性質・属性を持つと考えるのが自然であろう。

ただし、筆者は段階付けが可能な名詞であれば、その名詞が形容詞的な語へと転換できると論じてはいない点に注意されたい。例えば、success/problem のような普通名詞も、段階付けが可能である（詳細は Huddleston and Pullum (2002: 532) を参照されたい)。しかし、これらの普通名詞は、それぞれに対応する形容詞形 successful や problematic が存在する。したがって、その語に対応する形容詞形 1 語のみで、その性質・属性を記述することが十分に可能であるため、固有名詞ほどの多数の性質・属性を持っているとは言えない。したがって、段階性を持つ success/problem でも、名詞から形容詞への転換が起こらない。

(19) a. It was **as {*success/*problem} as it gets**.
b. It was **as {successful/problematic} as it gets**.

では、固有名詞の形容詞形が存在している事例を見てみよう。

(20) a. John is **as America as it gets**.
b. John is **as American as it gets**.
(松田 (2019: 220)

固有名詞 America には、それに対応する形容詞形 American が存在しているが、(19a) とは異なり、(20a) は容認される。松田 (2019: 220) は、形容詞 American は、「アメリカ人的な」という民族の意と、「アメリカ（合衆国）的な」という国家の意を併せ持つため、後者の意をより明確に示すために、名詞 America が選択される可能性があると、(20a) が容認される理由を分析している。

しかし、本節では、松田 (2019) と別の観点から、その理由を提示する。そもそも、(19a) の普通名詞 success/problem と異なり、(20a) は固有名詞 America が生起している点が重要である。既述のとおり、固有名詞は、形容詞をいくら重ねても記述し切れないほどの性質・属性を持つ。したがって、辞書に規定されているような形容詞形 American の性質・属性の数よりも、固有名詞 America の方がはるかに性質・属性の数を上回っている。そのように考えれば、(20a) が容認される正当性があると思われる。

以下の事例も、同様の説明で処理できる。

(21) a. This watermelon neck pillow is about **as summer as it gets**. [headline]
(松田 (2019: 218)
b. This watermelon neck pillow is about **as summery as it gets**.

season の下位語である summer は、固有名詞よりの名詞である。したがって、(21a) は容認される。

次節では、(19)-(21) に関連し、as N as 構文の N の位置に共起できない N を分析する。

6.2. as N as 構文に共起できない N

松田 (2019: 221) は、脚注で「おそらく、N 単独では抽象度が著しく高く、他者との間で典型例や象徴の概念を共有できない N、例えば temperature (温度)、version (… 版)、weather (天気)、time (時間) などは生起しにくいと思われる」と分析している。これらの名詞は、いずれも普通名詞であり、固有名詞よりも性質・属性の数が劣るため（図 1 参照）、as N as 構文の N には共起できない。

では、松田 (2019: 221) を基にして、as N as 構文に共起できない N を、より詳細に分析しよう。

(22) a. This is **as** {*world/*weather/*season/*something /*temperature/*time}**as it gets**.
b. This is **as** {*cm/*version/*edition}**as it gets**.

まず、(22a) で共起しているような N は、抽象度が著しく高い普通名詞である。次に、(22b) のような名詞は、直前に修飾語がなければ、その語だけでは性質や属性を捉えにくい。したがって、(22a, b) で示されたようなタイプの名詞は、他者との共通概念を共有できないため、as N as 構文の N には共起できない。もちろん、上書き強制 (coercion by override) もなされない。

7. 結語

以上の議論から、上書き強制 (coercion by override) により、非段階的な語である固有名詞が形容詞的な語へと転換する理由を、以下のように結論付ける。

[1] 固有名詞や人称代名詞は、形容詞をいくら重ねても記述し切れないほどの増大

な性質・属性を持つ。したがって、as N as 構文のような、ある一定の環境で N の内部にある性質・属性が強調されるような文脈が整えば、臨時的に N が形容詞的な語として転換し、上書き強制 (coercion by override) がなされる。

[2] [1] の主張の補強証拠として、形容詞 1 語でその性質・属性が十分に記述できる success/problem のような普通名詞は、as N as 構文の N の位置に共起することはできない。また、上書き強制 (coercion by override) もなされない。

以下、今後の検証すべき課題の一部を示す。

[3] 図 1 から、普通名詞もある程度の性質・属性を持つことが窺える。あるインフォーマントは、例えば、family (家族) は普通名詞であるものの、ある共同体内で共通した「家族」の概念・性質・属性が獲得されれば、as N as 構文に生起できるという見解を示している。よって、今後は普通名詞も視野に入れた分類を視野に入れる必要がある。

[4] 本稿では、N が形容詞化しているかどうかのテストを一切していない。よって、N に対する適切なテストを提示する必要があろう。

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注

[1] 口頭発表の際には、(5) ではなく、以下の事例の方がより好例と判断し、差し替えて提示した。いずれも「この上なく私（自身）である」という意である。

(i) The book itself is **<u>as me as it gets</u>**. Who chose the words? Who lived the life?
(J. Carswell, *Talk of Treasure*)

[2] 松田 (2019) は、NP be as N as it gets / NP be as N as they come 構文を、以下のように定義している。

> NP is a very typical type of someone or something found in N. / NP embodies the essence of N. (松田 (2019: 221))

[3] 八木 (1987: 49) も、「強制」という語そのものは用いていないが、同じ趣旨の記述がある（cf. 西村 (編) (2018: 233)）。

[4] 住吉・鈴木・西村 (2019:10) は、上書き強制 (coercion by override) を、「語の意味が言語使用の場面に応じてその場かぎりで変更されるもので、文脈や言語外の知識にもっとも強く依存するタイプである」と捉えている。

[5] very N や so N と同様に、too N の事例も以下に示しておく。

(ii) This city disappoints me. It's too **<u>New York</u>**: big buildings and taxicabs.
(COCA, Fiction 2002, *Literary Review*)

[6] ただし、単独で John is as John as ever. は使用しにくく、(12) のような、ある一定の文脈が必要である。なお、ここでは作例を提示したが、以下のような実例もある。

(iii) Nothing changed Tuesday. **<u>Washington is as Washington as ever</u>**.
(*The Washington Post* 電子版, 2017/6/13, Jerry Brewer 氏執筆)

[7] ただし、more - /most- による比較級化と最

上級化に限られ、-er / -est による変化はできない。

[8] 立川 (2020: 217) は、オットー・イェスペルセンの『文法の原理』(*The Philosophy of Grammar*) 基にして、図 1 を作成している。

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コーパス

Corpus of Contemporary American English (COCA)

英語の There 受動文が許容する語順パターンに関する通時的変遷と主語移動の適用可能性*

（The Diachronic Change in the Word Order Patterns of the Expletive Passives and the Applicability of the Subject Movement）

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キーワード: There 受動文, 通時的変遷, 主語移動, 義務的適用, 主語位置

1. はじめに

現代英語において There 受動文は、(1a)に示した主語要素が受動分詞に先行する「虚辞‐be‐DP‐受動分詞‐PP」語順と、(1b)に示した主語要素が文末に生起する「虚辞‐be‐受動分詞‐PP‐DP」語順を許容する。

(1) a. There were several large packages placed on the table.
b. There were placed on the table several large packages.
c. * There were placed several large packages on the table.
(西原 (2009: 209))

これらの統語派生をめぐっては、主語要素に重名詞句転移が適用されることで派生するとして、多くの先行研究で見解が一致している後者の語順パターンに対して、前者の語順パターンについては、これまで様々な分析が提案されてきている (cf. Chomsky (2001), 西原 (2009), 本多 (2015), etc.)。

また、当該構文を通時的に見てみると、現代英語で許容される二つの語順パターンに加えて、以下の(2)に挙げられている、「虚辞‐be‐受動分詞‐DP‐PP」語順を有した例も観察されることになる。

(2) a. (...) þere coude be founde no
(...) there could be found no
defaute in hem (...)
default in him (...)
(CMCAPCHR, 51.586/ 本多 (2015: 278))
b. And there was made a grete hale in
and there was made a great hall in
the palysse,
the palace
(CMGREGOR, 96.22/ 本多 (2015: 285))

(3) There 受動文に関する三つの語順パターンの生起頻度 (50 万語あたり):

語順パターン	M3	M4	E1
DP‐受動分詞‐PP	6.48	25.89	46.67
受動分詞‐PP‐DP	3.89	23.07	17.61
受動分詞‐DP‐PP	3.89	26.91	7.04

(本多 (2015: 281)による図表から一部抜粋)

この主語要素が受動分詞に後続する語順パターンの生起頻度に関して、本多 (2015)は(3)の表にまとめられているように、後期中英語期には、他の語順パターンと同様に観察されていたものの、初期近代英語期を境に著しく減少させたとしている。

本稿では、この英語の There 受動文における許容可能な語順パターンの通時的変遷を、主語移動の適用可能性の観点から捉えることを試みる。具体的には、当該構文が「存在」を表す本動詞 BE の補部として「結果的状況」が選択された複文構造を有し、その補文内で主語移動が適用されるとする派生を提案する (cf. 竹沢 (2000, 2001))。そして、後期中英語期まで非対格動詞を伴う従属節におい

て主語移動の適用が随意的であったとする田中 (2010)の分析に着目し、後期中英語期におけるThere受動文の語順パターンに関する多様性と初期近代英語期以降のその消失が、当該時期における主語移動の適用可能性の相違に還元されると主張する。

2. 英語における主語移動の義務的適用とその変遷

現代英語において、主語要素は動詞のタイプに関係なく、T の有する EPP 素性の要請を満たすために、TP 指定部へ義務的に主語移動を起こすとされる。一方、通時的にも多くの場合には主語要素が定形動詞に先行し、とりわけ他動詞文では現代英語と同じように、主語要素が TP 指定部へ義務的に移動すると考えられている。しかしながら、Kemenade (1997)や Ohkado (1998)によると、古英語と中英語において、受動動詞を含む非対格動詞を伴う従属節では、主語要素が定形動詞に後続する語順パターンも可能であったとされる。

(4) in a worshipful town wher [ ] *was*
in a worshipful town where was
o parysch church & tweyn chapelys
a parish church and two chapels
annexid
united
'in a worshipful town where a parish church and two chapels were united'
(KEMPE I. 58.265/ 田中 (2010: 91))

(4)では先行詞を伴う関係節において受動動詞が用いられているが、主語要素が be 動詞に後続しているのが確認できる。このことから、古英語と中英語では、少なくとも非対格動詞を伴う従属節において、主語移動の適用が義務的ではなかったと言える。

この事実を捉えるため、田中 (2010)は、英語において EPP 素性の要請の満たし方が通時的に変遷したとする分析を提案する。具体的には、Alexiadou and Anagnostopoulou (1998)に従い、一致形態素が豊かな言語では、T の有する EPP 素性の要請が V-to-T 移動を介して満たすことができると仮定する。英語において一致形態素は、古英語期と中英語期にはすべての動詞形に表れていたものの（特に過去時制では一致形態素と時制形態素が独立して具現していた）、初期近代英語期に入ると、三人称単数現在形、および二人称単数現在形と過去形を除く、すべての動詞形において消失したとされる。田中はこの動詞屈折接辞の通時的変化に着目し、一致形態素がある程度豊かであった後期中英語期までは、非対格動詞文において、T の有する EPP 素性の要請が統語対象の指定部位置への併合に加えて、動詞の主要部移動を介して満たすことが可能であったと主張している。[1] そして、初期近代英語期に入り、一致形態素が消失すると、V-to-T 移動の適用が不可能になったことで、T の有する EPP 素性の要請が主語要素（または虚辞）の指定部位置への併合によって満たされなければならなくなったと分析している。[2] すなわち、英語では初期近代英語期以降、EPP 素性の要請を満たすための手段が一本化されたことで、主語移動適用の義務化が生じたということになる。

3. There 受動文の複文構造分析と主語移動の適用可能性

本稿では、There 受動文の具体的な派生を提案するにあたり、竹沢 (2000, 2001)による日本語の「アル完了文」の分析を概観したい。以下の(5a)に例示される「アル完了文」において、動詞「アル」は他動詞の分詞形である「Vーテ」に後接し、完了相・結果相の解釈を生じさせるアスペクト補助動詞として機能するとされる。竹沢は、その動詞が主動詞に付加することで、他動詞の外項が抑制され、また対格付与能力も吸収されることから、当

該構文が統語的に、一種の受動文として捉えられるとしている。また意味的には、主動詞の表す動作によって引き起こされる「結果的状況（AspP）の存在」を表しているとし、(5b)に図式化された複文構造を提案している。

(5) a. 駐車場に車が止めてある（こと）

b. [$_{TP}$ 車が$_i$ [$_{VP}$ [$_{AspP}$ PRO [$_{Asp'}$

主語移動

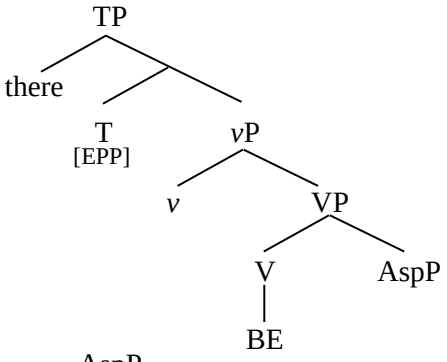
[$_{VP}$ 駐車場に t_i 止め-テ]

Asp]] アル] T]

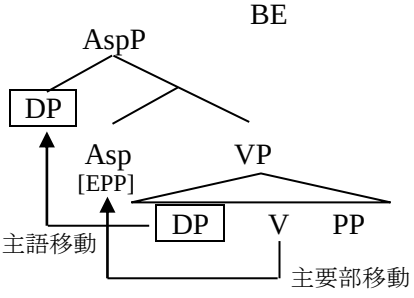
この複文構造において、主語要素は補文内に基底生成した後、主節の TP 指定部へ主語移動を起こすことになる。

本稿では、この「アル完了文」の複文構造分析を援用し、英語の There 受動文に関して、以下の(6a)に示されているような、「存在」を表す本動詞 BE がその補部として「結果的状況」を選択している複文構造を提案する。[3]

(6) a.



b.



そして、その補文内では、(6b)に図式化されているように、主語要素が Asp の有する EPP 素性の要請を満たすために、AspP 指定部へ主語移動を起こすと主張する。

この補文内での主語移動を伴う複文構造分析に、先に確認した主語移動の適用可能性に関する通時的変遷についての田中 (2010)の知見を組み込むと、後期中英語期における There 受動文の語順パターンに関する多様性と初期近代英語期以降のその消失は、以下の(7)にまとめられているように、当該時期の主語移動の適用可能性の相違に還元されることになる。

(7)

	～LME	EModE～
主語移動の適用	随意的	義務的
DP-受動分詞-PP	✓	✓
受動分詞-DP-PP	✓	*

すなわち、主語移動の適用が義務的となった初期近代英語以降は、主語要素の AspP 指定部への義務的移動を介して、必然的に主語要素が受動分詞に先行した「虚辞‐be‐DP‐受動分詞‐PP」語順のみが生成されることになる。それに対して、主語移動の適用が随意的であった後期中英語では、主語移動の適用を介して生成される語順パターンに加えて、主語移動が適用されない場合には、主語要素が受動分詞に後続する「虚辞‐be‐受動分詞‐DP‐PP」語順が生成されることになる。[4]

4. 「虚辞‐be‐受動分詞‐DP‐PP」語順の認可と主語移動の随意的適用の相関

前節では、後期中英語期に There 受動文が示していた語順パターンの多様性が、当該時期における主語移動の随意的な適用可能性から自然に導かれることを明らかにした。本節では、主語要素が受動分詞に後続した語順の例が観察されていた後期中英語期の文献を調査し、本分析の妥当性を立証する。

本稿が具体的な調査対象として取り上げたのは、本多 (2015)によるコーパス調査で「虚辞‐be‐受動分詞‐DP‐PP」語順の例が観察される文献として挙げられていた

『John Capgrave's Abbreuiacion of Cronicles』と『The Historical Collections of a Citizen of London in the Fifteenth Century』の二つである。そして、本稿の分析から予測される非対格動詞を伴う従属節における主語移動の随意的な適用可能性と V-to-T 移動の適用可能性、さらにはThere受動文が許容する語順パターンの多様性について確認作業を行った。

まずは、非対格動詞を伴う従属節における主語移動の適用可能性について考察したい。本稿では(6b)に図式化したように、主語要素が受動分詞に後続した「虚辞‐be‐受動分詞‐DP‐PP」語順は、補文内で主語要素の AspP 指定部への主語移動が適用されない場合に生成されると分析した。したがって、当該語順の例が観察される文献では、主語移動の随意的適用が容認され、その移動が適用されていないことを示唆する事例が存在すると予測されることになる。

(8) a. ... was a parlement at Norhampton,
was a parliament at Northampton,
where was reysid a grievous taske
where was raised a grievous task
'... was a parliament at Northampton, where a grievous task was levied'
(Capgrave 184.27-28)

b. þe Lord Spencer tok þe town
the Lord Spencer took the town
of Crotey, where were killed IIII.
of Crecy, where were killed four
hundred armed men
hundred armed men
'the Lord Spencer took the town of Crecy, where four hundred armed men were killed' (Capgrave 165.13-14)

事実、(8)の例では先に確認した(4)の例と同様に、関係節において受動動詞が用いられているが、主語要素が動詞に後続しているのが確認でき、主語移動が適用されていないことが示唆される。

次に、V-to-T 移動の適用可能性に関する議論に移りたい。田中 (2010)によると、T の有する EPP 素性の要請を満たす手段として、動詞の主要部移動が可能である場合に、主語移動の随意的適用が許容されることになる。したがって、主語移動が適用されない場合に生成される「虚辞‐be‐受動分詞‐DP‐PP」語順の例が観察される文献では、V-to-T 移動の適用を示唆する事例が観察されると予測される。この主要部移動の適用可能性は、動詞と否定辞の相対的位置関係から確かめられることになるが、英語における否定文の史的発達に関して、安藤 (2002)は、後期中英語期には、(9b)に示されている動詞が否定辞に後続する型よりも、(9a)に示されている否定辞に先行する型の方が優勢だったと指摘している (cf. Roberts (2007))。

(9) a. I say not : 14c 末-EModE
b. I not say (まれ) : 15c-EModE
c. I do not say : 16c-17c に確立
(安藤 (2002: 112))

そして、Pollock (1989)に従い、否定辞は TP と *v*P の間に基底生成するということを考慮すると、この事実は当時、動詞が否定辞を越えて T まで主要部移動を起こしていたと示唆することになる。この動詞と否定辞の相対的位置関係について文献を確認してみると、(10)に示されているように、動詞が否定辞に先行している例が観察されることになる。

(10) a. ... he asked why sche came not to
he asked why she came not to
soper
supper
'... he asked why she did not come to supper' (Capgrave 49.33)

b. for he sparyd not hyr malysse, nor
for he spared not her malice, nor
hyr falssenysse, nor gyle, ...
her falseness, nor gile,
'for he did not spare her malice, nor her falseness, nor wile, ...'
(Gregory 224. 28-29)

このことから、主語要素が受動分詞に後続する語順パターンの例が観察される文献では、実際に V-to-T 移動が適用されており、主語移動の随意的適用が許容される条件が満たされていたということになる。

最後に、There 受動文が許容する語順パターンの多様性について考察したい。本稿の分析に基づくと、「虚辞 - be - 受動分詞 - DP - PP」語順は、先の(7)の表で見たように、主語移動の随意的適用が許容される場合に生成されることになる。したがって、当該語順の例が観察される文献では、主語移動の適用を介して生成される「虚辞 - be - DP - 受動分詞 - PP」語順の例も同時に観察され、語順パターンの多様性が見られると予測される。

(11) a. There was he robbed of mech good
there was he robbed of much money
which he had gadered
which he had gathered
(Capgrave 243.7-8)

b. and there were cartayne personys
and there were quartan persons
done unto dethe,
done to death (Gregory 176.16-17)

そして、実際に文献を見てみると、(11)に示されているように、主語要素が受動分詞に先行する語順パターンの例も観察され、当該時期に二つの語順パターンが共存していたのが確認できる。

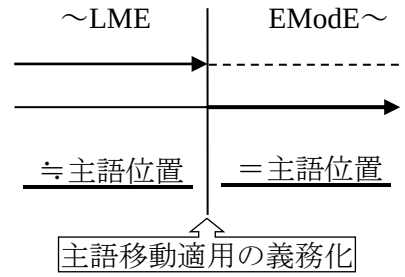
以上の観察から、「虚辞 - be - 受動分詞 - DP - PP」語順の生成と主語移動の随意的な適用可能性の間に強い相関性が存在するという本稿の主張は、経験的にも支持されることになる。

5. TP 指定部の「主語位置」としての位置づけの確立とその帰結

ここまで本稿では、英語の There 受動文が許容する語順パターンに関する多様性の消失が、後期中英語から初期近代英語への移行期に生じた主語移動の適用に関する義務化により生じたと主張した。

先に述べたように、現代英語では動詞のタイプに関係なく、主語要素が TP 指定部へ義務的に主語移動を起こす。したがって、当該位置は常に主語要素によって占められることから、いわゆる「主語位置」としての機能を確立していると考えられる。しかしながら、後期中英語期までは、非対格動詞文において主語移動の適用が随意的であるなど、TP 指定部が必ずしも主語要素によって占められていなかったということを考慮すると、その当時は主語位置としての機能を完全に有していなかったのではないかと考えられる。

(12)



そして、本稿の分析に基づくと、初期近代英語期以降、V-to-T 移動が消失し、主語移動の適用が義務化されたことで、TP 指定部が常に主語要素によって占められるようになり、現在の主語位置としての位置づけを完全に確立させたのではないかと考えられる。本節では、この英語における TP 指定部の主語位置としての位置づけの確立が、間接受動文の

史的発達を適切に捉えられる可能性を提示し、本分析のさらなる妥当性を立証したい。

現代英語において二重目的語構文は、以下の(13)の対比によって示されているように、間接目的語のみが受動化可能であるとされる。ここで論じる間接受動文とは、その間接目的語に受動化が適用された構文を指す。

(13) a. She was given a birthday present.
b. * A birthday present was given her.

(14) But me was toold, certeyn, nat longe agoone is, That ...
(Lit.)'But me was told, certainly, not long ago, that ...'
(Chaucer, *Wife of Bath's Prologue* 9-10/ 安藤 (2002: 104))

先行研究によると、14 世紀後半から観察されるようになった当該構文は、15 世紀後半まではその使用が一般的ではなかったとされる (cf. Denison (1993), 安藤 (2002), etc.)。また、それ以前には、(14)に示されているように、間接目的語が与格で具現されたまま、動詞の前位置を占めていたとされる。

この間接受動文の段階的な史的発達に関して、本稿の見方に基づくと、主語移動適用の義務化に伴い、TP 指定部が主語位置としての位置づけを完全に確立させた帰結として捉えることが可能になる。すなわち、後期中英語期に入ると、先行研究で指摘されているように、格の水平化とそれに伴う内在格の不認可により、動詞の前位置を占める名詞句が主格を帯びた主語要素として解釈されようになり、間接受動文が観察され始めることになる。しかしながら、この段階では、主語移動の適用が非対格動詞文で随意的であるなど、TP 指定部は主語位置としての位置づけを完全に確立しておらず、当該構文の使用も定着するには至らなかった。その後、初期近代英語へ移行する際、主語移動の適用が義務化され、TP 指部が主語位置としての位置づけを完全に確立すると、その指定部位置を占める統語対象についても主語要素としての特性を有していなければならないという強い統語的要請が生じることになる。その結果、TP 指定部を占める間接目的語についても「主語化」が進み、間接受動文の使用が一般的になったと説明されることになる。[5]

6. まとめ

本稿では、英語の There 受動文が「存在」を表す本動詞 BE の補部として「結果的状況」が選択された複文構造を有し、その補文内で主語移動が適用されるとする派生を提案した。そして、主語移動の適用が初期近代英語期を境に義務化されたとする史的事実に着目し、There 受動文が後期中英語期に示した語順パターンの多様性と初期近代英語期以降のその消失が、当該時期における主語移動の適用可能性の相違から自然に導き出せることを明らかにした。

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注

[1] 厳密に言うと、田中 (2010)は EPP 素性の PHON 素性と PRED 素性への分割を提案し、古英語と中英語では主要部移動により前者の要請のみが満たされ得ると主張している。

[2] Roberts (1993)等によれば、英語史において V-to-T 移動は、一致形態素の消失に伴い、16 世紀中に消失したとされる。

[3] 保坂 (2014)は、英語の beon 受動態に関して、「BE - 過去分詞」が「～された状態で存

在した」という意味を表し、BE 動詞が「存在」を表す本動詞として機能していた可能性について指摘している。

[4] 本稿では、「虚辞‐be‐受動分詞‐PP‐DP」語順の生成に関して、多くの先行研究と同様に、重名詞句転移の適用を伴う派生を想定しているが、その詳細な議論については、論を改めることとしたい。

[5] 間接目的語の「主語化」分析は、ほぼ同時期に生じた虚辞 there の主語化に関する史的事実からも支持される。その議論の詳細については、三上 (2019)を参照されたい。

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In-situ focus 文の構造*

（The structure of in-situ focus constructions）

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1. はじめに

日本語は、終助詞に代表されるように、CP の領域と関係づけられる要素を豊富に有する言語である。日本語は、主要部後行型の言語なので、語順を手掛かりにすれば、比較的容易に、CP に現れる主要部を特定できる。

しかし、ある要素が CP と関係を持つかどうかを検証するには語順を見るだけでは不十分である。このことは、In-situ focus 文と呼ばれる構文に現れる「の」とコピュラに関する事実から示唆される。「の+コピュラ」からなる構文は、節内に現れる特定の句または文全体を強調、焦点化する働きがあることから、In-situ focus 文と呼ばれる（Hiraiwa and Ishihara (2012)）。（In-situ と呼ばれるのは、この構文の派生に A'-移動が関与しないためである。）例えば、「彼が犯人だったの{だ/である}」という文は、「彼が犯人だった」という文に「の+コピュラ」が付くことで、それがない場合と比較して、文の内容がより強調されることになる。

「の」とコピュラは、語順を見る限り、時制辞より右側に現れている。また、CP の要素は談話に関係する特性を持つことも知られているので（Rizzi (1997)）、この二つの基準に基づいて、これらの語が CP の領域に生起すると考えたくなるかもしれない。しかし、CP の主要部を認定するには、より多くデータの観察を積み重ねて考察する必要がある。

本論では、この構文に現れる「の」とコピュラが CP の主要部なのかについて詳しく検討していく。最終的には、「の」は CP（FinP）の主要部だが、コピュラは CP の主要部ではなく、VP の主要部であると結論づける。

本論の議論は、以下のように進める。第 2 節では、先行研究の分析を概観する。第 3 節では、In-situ focus 文のコピュラは CP の主要部ではなく、VP 主要部であることを示す。第 4 節では、この構文の「の」は CP の主要部であり、カートグラフィーの枠組みのもとでは、FinP の主要部と考えられることを示す。第 5 節では、主語位置を同定することで、In-situ focus 文の統語構造を明らかにする。第 6 節は結語である。

2. 主要部の統語範疇をめぐって

生成文法の枠組みで In-situ focus 文を扱った文献には、Hiraiwa and Ishihara (2012)と Terada (1993)がある。(1a)に示しているように、Hiraiwa and Ishihara にとっては、「の」は TP を補部に取る Fin 主要部、「だ」は Foc 主要部である。「だ」が Foc を占めているのは、この構文が焦点化に関与すると考えられているからである。一方、(1b)に示すように、Terada (1993)にとっては、「の」は N 主要部であり、「だ」は V 主要部である。

(1) a. [$_{FocP}$ [$_{FinP}$ [$_{TP}$ …T] の $_{Fin}$] だ $_{Foc}$]
b. [$_{TP}$ [$_{VP}$ [$_{NP}$ [$_{TP}$ …T] の $_{N}$] だ $_{V}$] T]

これらの分析の対立は、少なくとも二つの問題を提起する。第一に、In-situ focus 文におけるコピュラは CP の主要部なのか、VP の主要部なのかを明らかにする必要がある。「だ」は時制辞よりも右側に現れるので CP

に現れると考えることもできるし、通常のコピュラとみなしてVPに現れると考えることもできる。第二に、この構文の「の」がNPの主要部か、CPの主要部かを議論する必要がある。「の」は形式名詞と呼ばれるが、生成文法の枠組みでどう捉えるべきかに関しては、共通した見解があるわけではない。次節以降では、これらの問題に関して議論する。

3. コピュラの構造位置

本節では、過去時制辞と副助詞の挿入・伝聞を表す「そうだ」への埋め込みに関するデータから、In-situ focus文に現れるコピュラの「だ」と「である」は、節の周縁部に現れる主要部ではなく、VPに現れる主要部であることを示す。加えて、派生のどの段階においてもCPと関係をもたないことを示す。

まず、過去時制の「た」は、CPに基底生成される要素に付かない。このことは、形容詞述語文に現れる丁寧語の「です」が過去時制の接続を許さないことから確認できる。(2)に示すように、丁寧語は、動詞述語文と名詞述語文では時制辞の左隣に表出し、形容詞述語文では時制辞より右側に表出する。

(2) a. 太郎は本を読み<u>まし</u>た。
b. 今日は雨<u>でし</u>た。
c. 花子はかわいかった{<u>です</u>/*<u>でし</u>た}。

形容詞述語文の「です」には時制辞の「た」が付かない（辻村(1967)）。これは、形容詞述語文の「です」がTPよりも上位の投射に生起していることによる。時制辞の「た」は、述語からなる句をその補部に取ることはできる。(2a, b)の動詞述語文と名詞述語文の丁寧語は、顕在的統語論の段階では述語の内部に含まれるので、過去時制が付けられる。しかし、(2c)の形容詞述語文では「です」がCPに現れる。T主要部はCPを補部に取らないので非文となる。このように、過去時制の接続は、主要部がCPに基底生起されるかどうかを確かめるための単純なテストとして有効である。

時制辞の「た」は、In-situ focus文のコピュラにも問題なく付く。(3a)では、過去の時制辞がコピュラの右隣に現れている。コピュラがあらかじめCPに生起するのであれば、(2c)と同じように非文になることが予測される。(3a)が文法的であるということは、これらのコピュラは、(2a, b)に現れている丁寧語と同じく、述語が投射する句の中に留まっていると言うことができる。

(3) a. 太郎が来たの{だ/であ}った。
b. 太郎は何も言わずにただ黙々と作業を続けるの{だ/であ}った。

ちなみに、Hiraiwa and Ishihara (2012)は、意味的な観点から、過去の時制辞が付くデータは、CP主要部分析にとって必ずしも問題とならないとしている。(3a)のような文が発話されるのは、話し手が「太郎が来た」ことを想起した場合に限られるので、この文は純粋な過去を表しているわけではない。このことから、Hiraiwa and Ishihara (2012: 155, footnote 16)は、この構文における「だった」をmodal particleと呼び、「た」はTPの主要部ではないとしている。だが実際には、In-situ focus文であっても、過去を表す用法が存在する（日本語記述文法研究会(編) (2003: 202)）。(3b)において、埋め込み節の時制は非過去であるが、主節のコピュラに過去時制が付くことで、文全体としては過去の解釈が可能となる。つまり、この文では、主節の「た」が時制の解釈を決定づける役割を担っているということである。

次に、副助詞の挿入と伝聞の「そうだ」への埋め込みのデータから、In-situ focus文のコピュラは、LFの段階においても動詞句内に留まったままになることを示す。過去時制

の「た」の接続の可否から顕在的統語論におけるコピュラの生起位置を確かめられることが明らかになったが、LF の段階で CP へと移動する可能性は排除できない。Miyagawa (1987)や Kishimoto (2013a)は、動詞述語文や名詞述語文に現れる丁寧語は、表層構造では TP より下に生起するが、LF 移動によって CP へ移動すると提案している。丁寧語が CP への LF 移動を受けることは、副助詞の挿入のデータから検証できる。(4)に示されるように、丁寧語に副助詞を付加することはできない（岸本秀樹先生、私信）。一般に、副助詞は動詞の連用形に付くことができる。丁寧語の「まし」と「でし」も連用の形を取っているので、形態的には副助詞が付いてもよさそうだが、事実としては非文と判断される。

(4) a. *太郎はその本を読みましさえ(し)た。
b. *太郎は優秀でしさえ(し)た。

日本語の否定辞研究を行った Kishimoto (2013b)は、副助詞が主要部移動を阻止することを論じている。日本語では、否定辞の作用域が TP まで拡がることから、否定辞の「ない」は FinP（CP）への主要部移動を受けるとしている。否定辞の「ない」は、形態的には形容詞と同じ活用をするので、「花子がかわいくさえある」のような形容詞述語文と同じように、副助詞が挿入できても良いように思える。しかし、「*花子がそれを食べなくさえある」のような文が非文であることから分かるように、否定辞に「さえ」などの副助詞を続けることはできない。このことは、副助詞が否定辞「ない」の CP への主要部移動を阻止することを示唆している。(4)の丁寧語も、否定辞の「ない」と同じように CP へ移動すると考えれば、否定辞に関するデータと共通の説明が与えられることになる。つまり、「さえ」が介在することで、丁寧語の主要部移動が阻止され、容認されない文となるのである。

(5)は、In-situ focus 文の「である」への副助詞の挿入が可能であることを示している。(5a)では、「で」と「ある」の間、(5b)では「である」の直後に「さえ」が挿入されている。(5)の事実は、この構文の「である」が LF 移動の適用を受けないことを示している。

(5) {a. 命が助かるのでさえあれば / b. 命が助かるのでありさえすれば}、あとはどうでもいい。

一方で、コピュラの「だ」の場合は、副助詞が挿入できない。例えば、「*命が助かるのだっさえすれば、あとはどうでもいい」という文において、コピュラの連用形の「だっ」に副助詞の「さえ」を続けることはできない。この文の容認性には、形態音韻的な要因が関わっている。副助詞が動詞句に付く場合、通常、音便化は生じない。動詞の「切る」は時制辞の「た」が直接付くとき促音便化によって「切った」となるが、副助詞の「さえ」が付くときは「切りさえした」となり、「*切っさえした」とはならない。要するに、副助詞が付くときは音便化が起こらない。「だ」の連用形には、「だっ」と「で」があり、前者は促音便化が起こっているので副助詞の付加を許容しない。「だっ」には、これに対応する（「だり」のような）促音便化しない形態が存在しないので、副助詞が挿入されると不適格になる。

「だ」が LF で主要部移動しているかどうかは確かめられないが、「だ」は、しばしば、「である」の縮約形であるとされる（Nishiyama (1999)など）。本論でも、「だ」を「である」の縮約形と考えることにする。

In-situ focus 文におけるコピュラの「だ」と「である」が CP と関係を持たないという仮説は、伝聞の「そうだ」に関する事実からも間接的に支持される。(6)に示すように、

伝聞の「そうだ」は、否定辞を含む FinP までを補部に取り、それより上の CP 要素は補部に取れない。FinP より上位の日本語の CP 主要部には「だろう」や「まい」のような CP モーダル、終助詞、丁寧語などがある。これらの要素は、(7)のように、FinP を補部にとる伝聞の「そうだ」に埋め込めない。

(6) 太郎が来なかったそうだ。
(7) a. *太郎が来るだろうそうだ。
b. *太郎が来るねそうだ。
c. *太郎が来ましたそうです。

(7c)の非文法性は、丁寧語のように、TP の下位に生起した後に、CP への LF 移動の適用を受ける要素であっても、伝聞を表す「そうだ」への埋め込みが不可能であるということを示している。伝聞の「そうだ」は FinP を補部に取るので、FinP より上位の投射と関係づけられる丁寧語に移動先を提供しない。このため、非文と判断される。

ちなみに、「だろう」のかわりにモーダル述語の「かもしれない」を伝聞の「そうだ」に埋め込むことは可能である。「太郎が来るかもしれないそうだ」のような文は容認される。これは、「かもしれない」が CP モーダルではないことによる。過去時制の「た」を伴って「太郎が来るかもしれなかった」のような文を作ることができるので、「かもしれない」は TP 内部に現れるモーダルである（Kishimoto (2013a)）。（「そんなことを言ったら泣いちゃうかもしれないだろう」のように、モーダルの共起も可能である。）

(8)に示されるように、In-situ focus 文を「そうだ」に埋め込むことは可能である。このことから、コピュラは、少なくとも FinP 以下に存在することが示唆される。さらに、これまで見てきた統語テストを考慮に入れると、コピュラは、CP 領域と関係を持たないと言うことができる。

(8) 大統領が来日したの{だ/である}そうだ。

本節で見てきた、過去時制辞と副助詞の挿入・伝聞を表す「そうだ」への埋め込みに関するデータを考慮すると、In-situ focus 文は以下のような構造を持つと言える。動詞句分裂の仮説（split VP hypothesis）に基づいて、コピュラは vP 内の要素であると想定する。「である」は、「で」と「ある」の間に副助詞を挿入できるので、両者を独立した別々の語であると見て、「で」を Cop 主要部とみなすことにする。構造は[$_{TP}$ [$_{vP}$ [$_{VP}$ [$_{CopP}$ [[$_{TP}$ …] *no*] *de*] V] *ar*] T]となる。（また、「だ」は「である」の縮約形として具現化される。）

本節では、三つの証拠から、In-situ focus 文のコピュラが CP 主要部ではなく、動詞句の主要部であることを示した。ここまでの議論でコピュラの構造位置は同定されたが、In-situ focus 文の「の」の統語範疇については別個の議論が必要である。第 4 節では、「の」が CP の主要部であることを示す。

4. 「の」の統語範疇

本節では、カートグラフィーの枠組みを用いて、In-situ focus 文における「の」は、FinP の主要部であることを示す。

第 2 節で概観したように、Terada (1993)は In-situ focus 文の「の」を NP の主要部としており、Hiraiwa and Ishihara (2012)は CP の主要部としている。もっとも、Terada (1993)では、「の」が N 主要部であることを示す証拠が提示されているわけではないが、「の」は形式名詞と呼ばれるので、このことから「の」を N 主要部とみなすことも不可能ではない。

しかし、「の」を NP であると仮定した場合、いくつかの問題が生じる。まず、In-situ focus 文においては、「が/の」交替が不可能である（三上 (1953: 234–235); 野田(1997); Hiraiwa and Ishihara (2012)）。(9a, b)の対比は、

「が/の」交替がこの構文では許されないが、「本」のような名詞を置き換える代名詞の「の」の場合は許されることを示している。

(9) a. 太郎{が/*の}来たの{だ/である}。
b. 君{が/の}読んだのを私に貸して。

次に、(10)は、In-situ focus 文における「の」節からの項の移動が複合名詞句制約に違反しないことを示している。一般に、複合名詞句内部からの要素の抜き出しはできない（Saito (1985)）。(10)では、ニ格項の「嵐山に」が「の」節の中から抜き出されており、どちらも文法的である。このことは In-situ focus 文の「の」が名詞句を形成しないと考えれば説明できる。

(10) a. 嵐山に$_i$太郎が[[花子が t_i 行った]の]だと思っている。
b. [[桃太郎が t_i 行った]の]だと信じられているのは鬼ヶ島に$_i$だ。

(9)と(10)の事実は、In-situ focus 文の中核をなす「の」は、補文標識化しており、名詞としての性質をすでに失っていることを示している。以上のことから、本論では、「の」が CP の主要部であるという立場を取る。

Hiraiwa and Ishihara (2012)は、In-situ focus 文に現れる「の」は FinP の主要部であるとしている。Rizzi (1997)の分裂 CP 仮説では CP 領域は[$_{\text{ForceP}}$ [$_{\text{TopP*}}$ [$_{\text{FocP}}$ [$_{\text{TopP*}}$ [$_{\text{FinP}}$ [$_{\text{TP}}$ …]]]]]]の階層をなす。FinP の主要部は、CP の最も低い構造位置に現れ、TP を補部に取る。しかし、Hiraiwa and Ishihara では Fin 主要部分析の証拠が示されていない。

ここでは、トピックの「は」のデータから In-situ focus 文の「の」が TopP よりも低い FinP の位置に現れることを示す。この構文には、トピックを生起させることができる。実際、「太郎はその本を読んだの{だ/である}」のような文は文法的である。日本語は主要部後行型の言語なので、文の左端に現れる句の構造位置を特定することが難しい。このため、上の例において、トピックの「は」が「の」節の内部にあるのか外部にあるのか、表面的な語の配列からだけではすぐには判別できない（cf. 野田(1997: 35, 62–63)）。

トピックが「の」節の内部に収まらないことは、「も」の等位接続を用いることで検証できる（Saito (2015)も参照）。(11)では、CopP 同士が「も」によって等位接続されている。(11a, b)の対比は、主格主語は CopP の内部に収まるが、トピックは CopP の内部に収まらないことを示している。一方、「太郎は部屋を片付けたのでも、ゴミを出したのでもない」のように、等位接続される CopP の外側に現れると文法的になる。ここでは、このトピックは主節の TopP 指定部に移動していると考えておく。

(11) a. [$_{\text{CopP}}$ 太郎が部屋を片付けたので]も[$_{\text{CopP}}$ 次郎がゴミを出したので]もない。
b. *[$_{\text{CopP}}$ 太郎は部屋を片付けたので]も[$_{\text{CopP}}$ 次郎はゴミを出したので]もない。

(11b)から分かるもう一つのことは、トピックが「の」節の内部に現れないということである。CopP の内部には「の」節が含まれるので、トピックが「の」節に収まるのだとすれば(11b)は文法的になるはずである。このため、In-situ focus 文の「の」は TopP よりも低い位置にある投射の主要部であるということになる。Rizzi (1997)の枠組みでは、Fin 主要部が唯一の候補となる。FocP や ForceP にはトピックが収まるが、TP を補部に取る Fin にはトピックが収まらないからである。

「の」の Fin 主要部仮説は、その補部にトピック以外の CP 主要部も生起できないことを予測する。この予測は正しく、「*太郎が来るだろうのだ」、「*太郎が来ますのです」、

「*太郎が来るねのだ」のように、それぞれ、CP モーダル、丁寧語、終助詞を埋め込んだ文は非文である（野田 (1997)）。一方、「太郎は来なかったのだ」のように、否定辞は表出できる。これは、否定辞の移動先となる FinP の主要部位置（「の」の起こる位置）が提供されるためである。

以上、本節では、In-situ focus 文の「の」は CP 主要部であり、カートグラフィーの枠組みでは、FinP の主要部であることを示した。

5. 非上昇構文

本節では、In-situ focus 文における主語位置について検討し、この構文の統語構造を示す。近年の研究では、複文構造をもつ構文の中には、ガ格主語が主節の TP 指定部まで上昇するものがあることが報告されている（Kishimoto (2012)）。これに対して、Terada (1993)は、In-situ focus 文の主語は、上位節まで移動せず、埋め込み節の TP 指定部に留まるとしている。本節では、二つの経験的証拠を挙げて、Terada (1993)の非上昇構文分析を支持する。

Terada (1993)では取り上げられていないが、非上昇構文分析を支持するさらなる証拠として、In-situ focus 文では、主節の動詞の主語尊敬語化が不可能である（関連する議論については、竹沢 (2016)を参照）。(12)は、埋め込み節の動詞は尊敬語化を受けることができるが、主節の動詞ではそれが許されないことを示している。

(12) a. 先生がお走りになったの{だ/である}。
b. *先生が走ったのでいらっしゃる。

Kishimoto (2012)によれば、主語尊敬語化のターゲットとなる名詞句は A-移動の際に vP 指定部を経由しておく必要がある。In-situ focus 文を非上昇構文だと考えると、(12b)が非文であるのは、主節の動詞の vP 指定部を経由して A-移動する要素がないからであると言える。（「先生は美人でいらっしゃる」のような文は文法的なので、コピュラを尊敬語化できないというわけではない。）

一方、複文構造をなし、上昇構文とされる「ている」構文の場合、埋め込み節の動詞も主節の動詞も尊敬語化が可能である。実際、「先生がお走りになっている」とも「先生が走っていらっしゃる」とも言うことができる。これは、尊敬の対象となる人物の「先生」が派生の途中で埋め込み節と主節の vP の両方を経由することによる。

次に、第 4 節で示した等位接続のデータからも、ガ格主語が主節に移動しないことが分かる。(11)で見たように、ガ格主語は「も」で接続される CopP の内部に収まる。主節の TP 指定部は CopP の外側にあるので、(11)のデータは、ガ格主語が主節の TP 指定部への A-移動の適用を受けないことを示している。もちろん、(13a)に示しているように、等位接続された句の内部にある動詞を尊敬語化することはできる。しかし、(13b)に示されるように、主節の動詞は尊敬語化できない。

(13) a. [$_{CopP}$ 山田先生が部屋をお片づけになったので]も[$_{CopP}$ 岡田先生がゴミをお出しになったので]もない。
b. *[$_{CopP}$ 山田先生が部屋を片付けたので]も[$_{CopP}$ 岡田先生がゴミを出したので]もいらっしゃらない。

これらの事実から、In-situ focus 文に現れるガ格主語は主節には移動しないという、Terada (1993)の分析が支持される。また、これまでに見てきた事実を踏まえると、In-situ focus 文の統語構造は、(14)のようになる。（「だ」は「である」の縮約形として実現する。）前節までに論じたように、この構文では、「の」は FinP（CP）の主要部であり、コピュラは vP を投射する主要部である。さ

らに、本節の議論からガ格主語は埋め込み節内の TP 指定部に留まると考えられる。

(14) [TP [vP [VP [CopP [FinP [TP SBJ…] *no*] *de*] V] *ar*] T]

本節では、ガ格主語の構造位置について議論するとともに、本論における In-situ focus 文の統語構造を示した。

6. 結語

日本語統語論における CP の研究では、語順や談話との関連性に基づいて、CP の主要部が認定されることがある。しかし、本論の議論から示唆されるように、この二つの基準からだけでは CP の主要部かどうかを判別することはできない。

本論では、In-situ focus 文における「の」は CP の主要部であり、コピュラは VP の主要部であることを論じた。このことを示すために、過去時制、取り立て詞の挿入、伝聞の「そうだ」、複合名詞句制約、等位接続などに関わるデータを提示した。さらに、尊敬語化と等位接続に関する事実から、この構文が非上昇構文であることを論じた。

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反応目的語構文(ROC)の統語的・意味的特徴について*

（A Syntactic and Semantic Analysis of Reaction Object Constructions）

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1. はじめに

英語には、(1)に示す反応目的語構文 (reaction object construction)、あるいは動作表現構文 (gesture-expression construction）と呼ばれる構文が可能である。

(1) She smiled her thanks.

本稿では、(1)に示す反応目的語構文 (以下、ROC)の統語的・意味的特徴について明らかにし、同族目的語構文(cognate object construction)(以下、COC)に類似した派生メカニズムを想定することで ROC の統語的・意味的特徴を捉えられることを明らかにする。また、ROC 内の動詞に後続する名詞句は項性を有し、セット併合かペア併合かの選択によって、二つの異なる語順が可能であることも明らかにする。

2. ROC の統語的・意味的特徴

ここでは、ROC の統語的、意味的特徴を概観する。ROC は、(2b)が示すように、本来自動詞である動詞に名詞句が後続する形式をとる。Reaction Object (以下、RO)は、(2)における PP 前方位置(動詞の直後)(2b)、PP 後方位置(2c)にも生じる。後述するが、ROC の基本語順は、(2b)であり、(2c)には重名詞句移動構文と同じ特性を示すことに注意が必要である。

(2) a. She smiled to him.
b. She smiled her thanks to me.
c. She smiled to me the heartfelt thanks I had been hoping for.

次に、自動詞と共に生じる RO の統語的特徴として他動詞の目的語のような項性を示すことを挙げることができる。重名詞句である(3b)の場合を除き、動詞と名詞句の間に副詞は介入できない。また、(4a)(4b)が示すように、付加詞と考えられる二つの句、すなわち across-句、at-句の語順変更は可能であるが、(4d)(4f)から明らかなように RO とこれらのいずれかの語句との語順変更は不可能である。つまり、重名詞句の場合を除き、RO が付加詞と考えられる語句よりも右側の位置に生じることはできない。これらの事実は、RO が他動詞の目的語と同じように項位置である目的語位置を占めていることを表している。

(3) a.*She smiled warmly her thanks / appreciation.
b. She smiled warmly the thanks we felt we deserved.
(4) a. She smiled across the table at her husband.
b. She smiled at her husband across the table.
c. She smiled her thanks at her husband.

d.*She smiled at her husband her thanks.
e. She smiled her thanks across the table.
f. She smiled across the table *her thanks / the thanks he felt he deserved.

また、他動詞文の目的語に適用可能な操作である Wh-移動、受動化、though 移動や do so 置換の適用が RO にも適用可能である。この事実を(5)〜(7)が示している。[1]

(5) a. What did he nod his agreement of?
b. What did he woof his agreement at?
(6) a. After a delay, her reluctant approval was finally smiled in our direction, and we began the work immediately.
b. A heartfelt thanks was smiled by Mary.
(7) a. Smile her thanks though she did, I didn't recognize it.
b. She smiled her thanks to me, and I did so, too.

上記の事実は、RO が他動詞の目的語に近いものであり、項性を持ち合わせていることを示している。この事実をさらに支持するものとして、COCA からの用例(8)を挙げることができる。(8)は、RO が return の目的語として共有されていることを示すものである。

(8) Buddy spotted John and smiled a hello, which John returned ▲.

(3)〜(8)の事実と特徴に加えて、ROC に生起する動詞が名詞化された場合、動詞の目的語に相当する名詞句が of の後に生じることが可能である。また、Levin & Rappaport (1986)では、他動詞とその目的語の関係にある場合、動詞が受動分詞化して名詞句を修飾することが可能であることが指摘されている。これらの事実が、ROC に生起する動詞が名詞化された場合、RO との間にも見られることを (9)(10)が示している。これらの事実も ROC において動詞に後続する名詞句が目的語同様、項性を有することを示していると言える。

(9) a nod / smile / murmur of thanks / approval
(10) a half-smiled thanks / a warmly smiled thanks

次に、ROC、及び RO の意味的特徴について見ていきたい。Jespersen (1928)、Levin (1993)によると、意味的特徴として ROC は(11)の意味を持つと考えられている。

(11) "express (a reaction) by V-ing," where "V" is the basic sense of the verb.
(Levin (1993: 98))

Levin(1993)によれば、非言語的表現動詞類、wink 動詞類、発話様態動詞類が ROC に生じる。[2] これらの動詞に加えて、(11)の意味を持つことが可能な音創出動詞 tut-tut、woof、voice、hum、eco、bark なども ROC に生じることができる。(12)がこの事実を示している。

(12) a. Seed tut-tuts his thanks.
b. Atlas woofed his agreement. (COCA)
c. They barked our good mornings.

つまり、ROC は、話者の表情や音などを通して話者の態度や意見、気持ちなどを伝える構文だと言える。ROC が持つ意味的特徴として(11)を満たす必要があるが、相手に伝えられる内容は動詞が表す行為によって制限が加えられると考えられる。[3] 動詞 nod は容認・同意する内容、理解、満足感、感謝、励ましなど様々なことを伝えることが可能であるが、動詞 laugh、shrug は、選択制限が nod よりも厳しいという事実が存在する。COCA からの例である(13)が示すように、動

詞 laugh は、容認とコメント、動詞 shrug は、不確かさ、無関心、謝罪などしか表すことができないように思われる。また、動詞の意味によっては、ひとつの行為によって二つのことを相手に伝えることも可能である。 (14)では、お礼と受け入れの表明がうなずきによって伝えられている。ここで見た制限は、動詞が指定する名詞句の意味素性としてある種の指定がなされていると考えられる。

(13) laugh: approval, comment
shrug: apologies, helplessness, indifference, uncertainty
(14) ...nodded his thanks and acceptance of her present.
(https://www.cs.cmu.edu/~spok/heidi/heidi.html)

さらに、ROC の意味的特徴として次の事実を挙げることが可能である。通例、RO は ROC に生起する動詞の行為の結果を表す目的語であり、ROC の解釈は有界であると考えられる。しかしながら、動詞が表す意味、及び後続する名詞句の意味によっては非有界の解釈が可能になることを(15)が示している。

(15) a. She smiled her appreciation / *her thanks again and again.
b. He came into the room just as she was smiling her appreciation.
c. She smiled her appreciation repeatedly / for several minutes (until he finally noticed).
d. The bookman smiled his thanks while he followed the craftsman's scrutiny of the pages.
(Cable (2012), *The Flower of the Chapdelaines*)

お礼の言葉を伝えるという発話行為は、一度口にするとその行為は終了すると考えられるが、感謝の念は何度でも笑顔に乗せて伝えることが可能だと考えられる。したがって、appreciation の場合は、結果として、again and again と共起できることになる。また、ROC に進行相が可能であるということ(15b)、非有界を表す for-句や while- 句と共起可能であるという事実を示す(15c)(15d)は、ROC の解釈に関して非有界の解釈が可能であることを示している。

ここでジェスチャー動詞に触れておきたい。(16a)のジェスチャー動詞も一見すると ROC に生起する動詞に類似しているように見える。ジェスチャーにより、話者の考えや気持ちを伝えることが可能である。しかしながら、(16b)から明らかなように、(11)の意味に合致しないことから ROC とみなすことはできないと思われる。

(16) a. He gestured his agreement.
b. Barkinflas gestured his agreement by clenching a large fleshy fist.
(COCA(下線は、筆者))

前節で RO は、統語的に項性を持つことを指摘したが、動詞と RO の密接な関係を副詞の解釈の点からも触れておきたい。(17)の文に含まれる副詞は、うなずきによって嫌々ながら同意したことを示すものである。(17)の文は、 (18)の解釈を持ち、(11)の意味に合致している。

(17) a. He reluctantly nodded agreement.
b. He grudgingly nodded agreement.
(18) He expressed reluctant agreement by nodding.

最後に、RO の意味的特徴として指示的であるという事実がある。(2c)(3b)から明らかなように、RO には形容詞や関係詞節などの

修飾語句がつき、RO は指示的である。 ここで注意すべきは、ROC の場合、COC とは異なり、V-Adj-DP(動詞・形容詞・名詞)の連鎖では形容詞は後続する名詞句を修飾する解釈のみが可能となるという点にある。つまり、次節で取り上げる COC 内に生起する形容詞が持つ二つの解釈の両方を有してはいない。換言すると、RO に非指示的な解釈は容認されないことになる。

(19) a. He nodded enthusiastic agreement.
b. He gently nodded enthusiastic agreement.

(19a)において形容詞が名詞句を修飾し、動詞を修飾していないことは(19b)から明らかである。

3. COC との類似点

この節では、同族目的語構文（以下、COC）との類似点を考察する。まず、COC の場合も(20)(21)から明らかなように、(2b)(2c)と同じ語順が可能である。また、COC の場合、重名詞句移動が適用された(21b)の場合を除き、動詞と同族目的語 CO との間に副詞は介在できない。

(20) a. She smiled at him the most beautiful smile he had ever seen.
b. She smiled her most radiant smile at him.
(Flesler and Wanner (2001:7))
(21) a.*She lived happily a life.
b. She lived happily a life that most people might consider boring.

さらに、 (5)~(7)で観察した事実、Wh-移動、受動化、though 移動や do so 置換などの操作が CO にも適用可能であることが(22)~(24)からわかる。これらの操作が適用可能であるという事実は、CO と RO との統語的類似性を強く示すものである。

(22) ?What kind of smile did Chris wonder whether Lee smiled? (大庭 (2013:62))
(23) Smiles were smiled, goodbyes were waved, and a good time was had by all.
(Wanner (2009: 72))
(24) a. Smile a happy smile though Chris did, no one questioned her energy.
b. Chris smiled a happy smile, and Mary did so, too.
c. Chris smiled a happy life, and Mary did so, too. (大庭 (2013:62))

次に、COC の意味的特徴について RO と並行的に捉えられる事実を確認することにする。大庭 (2013)によれば、COC においても有界･非有界の解釈が可能である。大庭は、Tenny (1994)が指摘している(25)をもとに、COC においても有界・非有界の解釈が可能であることを述べている。for-句と共起可能なことから COC が表す出来事は非有界(atelic)であるとし、また、in-句と共起可能なことから出来事は有界の解釈が可能であるとしている。

(25) a. Mary laughed a mirthless laugh for hours / in an hour.
b. Josie danced a silly for hours / in one hour. (Tenny (1994: 39))

また、大庭 (2013)は、CO には形容詞や of-句などの修飾語句がつくと CO の内容はより具体的になり、指示的になると述べている。これは、1 節で RO に関して見た事実と同じである。しかしながら、ここで RO と CO の違いについて触れておきたい。CO は RO とは異なり、非指示的である場合が許されるという特徴を持つ。大庭 (2013)によると、(26a)の問いに対する答えである(26b)では、CO は

指示的でなく、形容詞は様態の副詞のように解釈できる。この点は、先に見た(19)が示す事実とは異なることに注意したい。他方、(27a)の質問に対する応答である(27b)は、COは指示的になる。RO と CO に関するこの違いは、3 節において ROC の派生を考察する際に違いとして反映させることになる。

(26) a. How did Catherine smile?
b. She smiled a {sudden / *thin-lipped} smile.

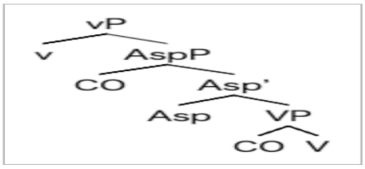
(27) a. What sort of smile did Catherine smile?
b. She smiled a {*sudden / thin-lipped} smile. (Horita (1996: 238-239))

4. ROC の派生

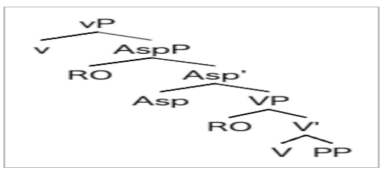
ここでは1節及び2節で指摘した事実をもとに、COC を分析した大庭 (2013)の分析を一部援用し、ROC の派生を考える。大庭(2013)では、COC の構造として(28)が仮定されている。また、(28)は、(29)の意味構造を反映するものとして捉えられている。(28)(29)をもとに ROC の構造、及び派生は、(30)(31)であると考える。

(28) [$_{vP}$ v [$_{AspP}$ CO [$_{Asp'}$ [Asp] [$_{VP}$ [CO] [V]]]]]

(29) a. [x CAUSE [y BECOME EXPRESSED]] BY [x verb]
b. [x CAUSE [y_i BECOME EXIST]] BY [x verb]$_i$

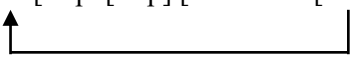


(30)



(31)

[vP v [AspP RO [Asp' [Asp] [VP [RO]



[V'[V][PP]]]]

大庭(2013)によれば、(28)の構造における機能範疇 small v と AspP は、Travis (2012)の分析の援用であり、それぞれ(29)の意味構造の CAUSE と BECOME に対応している。また、Large V は EXIST / EXPRESSED を表すと分析されている。この仮定は、本来自動詞であるものが EXIST / EXPRESSED の述語に語彙的に従属化することによって目的語をとる他動詞になるという Massam (1990)の分析を取り込んだものである。また、CO が指示的である場合は元の位置から AspP の指定部位置へ移動し、そこで有界的な出来事の解釈が与えられると分析されている。さらに、大庭(2013)は Marantz(2005)にしたがい、small v に動詞の root を直接的に併合し、この操作が語彙従属化の効果をもち、「手段」の解釈がなされると分析されている。ROC の派生に関しても大庭(2013)が採用している Massam (1990)、Marantz (2005)の分析を援用することにする。また、1 節で見た統語的特徴をもとに、ROC の基本構造は(30)であると仮定する。さらに、AspP には、[±telic]という素性を仮定し、RO は AspP の指定辞へ移動すると考える。この移動を駆動するのは small v に付与される[±telic]という素性だと仮定する。[4] この移動により V-DP-PP の語順配列になる。また、動詞が[±telic]素性のどちらを選択するかで有界、非有界のいずれかの解釈が決定されると仮定する。

ここで問題になるのが、(2c)(3b)(4f)における語順である。文末における名詞句は重名詞句移動 (Heavy NP Shift)が適用された例と類似の特徴を示す。つまり、重名詞句でないと V-PP-DP の語順を取ることは容認されない。これまでの研究から重名詞句は付加部の位

置にあることが指摘されている。この事実を併合という操作に当てはめて考えると、派生のある段階で名詞句をペア併合する派生の選択肢があると考えられる。(20a)から分かるように、このオプションは COC にも存在すると考えられる。文末の位置を占める重名詞句は、情報構造上、焦点が置かれる。この事実から、ペア併合による派生オプションは、英語の文末焦点の原理にしたがうオプションとして存在していると考えることができる。

この節では、(29)の下に示した構造、及び(30)(31)で示したROの移動からROが動詞に直接後続する語順の文が派生されると分析した。また、重名詞句との関係からペア併合の適用を受け、RO が右側の文末の位置を占める語順を含む文が派生されると分析した。

5. 結語

本稿では、ROC の統語的、意味的特徴を概観し、COC との類似性に触れ、ROC の構造と派生について提案を行った。両構文の動詞に後続する名詞句には項性が観察され、意味的には有界的な出来事、非有界の両方を表すことが可能であること、名詞句がセット併合される派生とペア併合される派生が存在することを明らかにした。さらに、CO と RO が示す解釈の違い、RO は常に指示的であるという事実はROのASspPの指定辞への移動にあると分析した。

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注

[1] 受動化が適用できるかどうかは、受動文の主語がトピックとして機能できるかどうかの問題であり、文法性は意味的・語用論的な要因に影響を受けると考えられる。下記の例は、(6)に挙げた用例の判断とは異なり、不適格であるとみなされている例である。

(i)*Her assent was smiled.
(Huddleston and Pullum (2002:305))
(ii)*A cheerful welcome was beamed by Sandra.
(Levin (1993: 98))

[2] 非言語的表現動詞類としては、frown, sigh, chuckle などが挙げられる。

[3] ROC に同じ動詞を用いていたとしても男女間で生起できる名詞句に違いが見られる場合がある。また、名詞句の前に形容詞が生じやすい場合とそうでない場合がある。これらの特徴は、大変興味深い事実であり、詳細については、今後の研究の課題としたい。

[4] AspP の指定辞への移動は small v 内の素性が駆動するという分析は、大庭の分析とは異なる。

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Interpretive Economy and Presuppositions*

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Keywords：Interpretive Economy, presuppositions, comparison, *compared to*

1. Introduction

The goal of this study is to argue that the amount of presuppositions is subject to Interpretive Economy, an economy principle proposed by Kennedy (2007). Evidence is obtained from (un)available readings of *compared to* comparison in English.

There are at least two types of phrasal comparison constructions in English. One is the standard *more than* comparison as shown in (1), and the other is *compared to* comparison as shown in (2). They appear to have similar interpretations.

(1) John is older than Mary.
(2) Compared to Mary, John is older.[1]

However, careful observation reveals that the two types of comparison behave differently. For example, (3) is nonsensical, while (4) is sensible and intuitively makes a comparison between John's grade and Mary's.

(3) #John's grade is better than Mary.[1]
(4) Compared to Mary, John's grade is better.

In other words, *Mary* in (4) intuitively refers to Mary's grade. Of course the same interpretation can be obtained with *Mary's*, but the point of (4) is that the comparison with Mary's grade is still possible with *Mary*. *Compared to* comparison allows such flexible interpretations. However, it comes with restrictions. The example in (5) intuitively makes a comparison between John's brother's age and Mary's age, and it never draws a comparison with Mary's brother's age.

(5) Compared to Mary, John's brother is older.

The lack of comparison with Mary's brother is puzzling. We have observed in (4) that *Mary* intuitively refers to Mary's grade. In (5), however, *Mary* never refers to Mary's brother.

The case of (5) suggests that syntactic analysis is not a good option. One may analyze the case of (4) with a deletion, as in *Mary~~'s grade~~*. However, *~~'s grade~~* is not even a constituent to begin with. Even if we assume such deletion of non-constituents, it is difficult to explain why similar deletion of *Mary~~'s brother~~* is not possible for (5).

We should instead pursue a semantic analysis that is flexible enough to provide a comparison with Mary's grade in (4) while being constrained so as not to allow a comparison with Mary's brother in (5). How is this possible?

In this study, I will argue that the key to solving this puzzle is Interpretive Economy (Kennedy 2007), which requires truth conditions to be made with minimal contextual information. I will adopt the semantics of *compared to* comparison in the manner of Hohaus (2015), which relies heavily on context. I will then show that in the case of (5), the comparison between John's brother and Mary's brother requires more contextual information than that between John's brother and Mary. Thus, Interpretive Economy

bans the former and allows only the latter.

The organization of this paper is as follows. Section 2 reviews the frameworks of *more than* comparison and *compared to* comparison, and observes how the contrast between (3) and (4) arises. Section 3 analyzes the (un)available interpretations of the *compared to* comparison in (5). I will argue that the possible readings are governed by Interpretive Economy. Section 4 attempts to discuss what is considered economical by Interpretive Economy and clarify issues for further research. Section 5 provides concluding remarks.

2. Semantics of Two Types of Comparison

This section reviews the basic frameworks of *more than* comparison and *compared to* comparison and shows how the contrast between (3) and (4) arises.

I will first review Heim's (1985) semantics of phrasal *more than* comparison for the purpose of our discussion. The LF structure of (3) is given in (6). The antecedent *John's grade* and DegP undergo movement, which leaves a predicate of <d,<e,t>>. The semantics of the comparative morpheme for phrasal comparatives by Heim is shown in (7). I assume that gradable predicates are type <d,<e,t>>, as exemplified in (8) (Cresswell 1976, von Stechow 1984). The truth conditions give in (9) end up being a nonsensical comparison between *John's grade* and *Mary* herself.

(6) [[$_{NP}$ *John's grade*][[$_{DegP}$ *–er than Mary*][2[1 [t_1 *is* t_2-*good*]]]]]

(7) ⟦*-er*⟧ =$\lambda y_{<e>}.\lambda p_{<d, et>}.\lambda x_{<e>}$.MAX($\lambda$d. p(d)(x)) > MAX($\lambda$d. p(d)(y))

(8) ⟦*good*⟧ =$\lambda d_{<d>}.\lambda x_{<e>}$ x is d-good

(9) MAX(λd. good(d)(John's grade)) > MAX(λd. good(d)(Mary))

A sensible comparison of John's grade and Mary's grade is not possible in (3). Such interpretation requires the LF structure given in (10). *John* needs to move out of the NP, which is ruled out by the left branch condition (Ross 1967).

(10) [*John* [[$_{DegP}$ *–er than Mary*][2[1 [[$_{NP}$ t_1-*'s grade*] *is* t_2-*good*]]]]]

I now explore the semantics of *compared to* comparison.[2] Unlike *more than* comparison, there are not many proposed frameworks for *compared to* comparison. Hohaus (2015) is the only option to my knowledge that is explicit enough to adopt. According to her framework, the LF structure of (2) will be as in (11).

(11) [[$_{FrameP}$ FRAME *Compared to Mary*] [3[[$_{DegP}$ *–er* d_7][1[*John is* t_1-*old* s_3]]]]]

The *compared to*-phrase is part of FrameP on top of the structure. Crucially, it is not an argument of the comparative morpheme. The argument of the comparative morpheme is d_7, a free variable of degree.

The meaning of the main clause *John is older* is calculated normally. The comparative morpheme given in (12) makes a comparison with a free variable of degree, the value of which is determined by the context.

(12) ⟦*-er*⟧ =$\lambda d_{<d>}.\lambda D_{<d,t>}$. MAX(D)>$d_c$

What, then, is the contribution of *Compared to Mary*? Hohaus argues that it contributes presupposition that a comparison in the main clause must be made with a grade related to *Mary*. Put differently, it narrows down situations so that no other comparison takes place. A

similar idea has been proposed by Beck et al. (2004) for the role of *yorimo* 'than'-phrases in Japanese. However, Hohaus crucially assumes that *compared to*-phrases are part of the LF structure and contribute presuppositions, while neither of these is assumed by Beck et al.

The compositional semantics of FrameP is shown in (13) through (16). *Compared to Mary* refers to some kind of degree comparison with Mary as shown in (13). FRAME operator, defined as in (14), takes a frame setting phrase such as a *compared to* phrase and adds its meaning as a presupposition in a minimal situation. The minimality operator is defined as in (15). Given these ingredients, the FrameP in (11) contributes a presupposition that a relevant degree comparison with Mary takes place in a minimal situation as in (16).

(13) ⟦*Compared to Mary*⟧ $=\lambda s_{<s>}.\exists x_{<e>,} \exists \mu_{<s,<e,d>>}[\mu(s)(x)\geq \mu(s)(\text{Mary})]$

(14) ⟦FRAME⟧ $=\lambda p_{<s,t>}.\lambda q_{<s,t>}.\lambda s:\text{MIN}(p)(s).q(s)$ (Hohaus (2015:68))

(15) ⟦MIN⟧ $=\lambda p_{<s,t>}.\lambda s.p(s) \ \&\ \neg\exists s'[s' \prec s \ \&\ p(s')]$ (Hohaus (2015:68))

(16) ⟦FrameP⟧ $=\lambda q_{<s,t>}.\lambda s:\ s\in \text{MIN}(\lambda s^*.\exists x_{<e>,} \exists \mu_{<s,<e,d>>}[\mu(s^*)(x)\geq \mu(s^*)(\text{Mary})])$

The truth conditions of (2) are given in (17), which roughly means that the sentence is defined if a situation is small enough to only have a degree comparison with Mary. When defined, the sentence is true if and only if John's age is greater than a contextually given degree. The contextually given degree is naturally understood as the age of Mary, as shown in (18), due to the presupposition. Put more formally, μ in the presupposition serves as a function that takes an individual and maps to the age of the individual.

(17) $\lambda s:s\in \text{MIN}(\lambda s^*.\exists x_{<e>,}\exists \mu_{<s,<e,d>>}$ $[\mu(s^*)(x)\geq\mu(s^*)(\text{Mary})])$. $\text{MAX}(\lambda d.\ \text{John is d-old in s})>g(7)$

(18) $[\![d_7]\!]^g = g(7)\approx$ the age of Mary in s

We can now explore how the sensible reading of (4) is obtained. The LF structure of (4) is given in (19).

(19) [[$_{\text{FrameP}}$ FRAME *Compared to Mary*] [3[[$_{\text{DegP}}$ *–er* d_7][1[*John's grade is* t_1-*good* s_3]]]]]

The semantics of FrameP is the same as in (16). The truth conditions of the sentence are given in (20). When defined, the sentence is true if and only if John's grade is better than a contextually given degree. The contextually given degree is naturally understood as the grade of Mary, as shown in (21), because of the presupposition. In this case, μ in the presupposition serves as a function that takes an individual and maps to the grade of the individual. This flexibility of μ is the secret behind the sensible reading of (4).

(20) $\lambda s:s\in \text{MIN}(\lambda s^*.\exists x_{<e>,}\exists \mu_{<s,<e,d>>}$ $[\mu(s^*)(x)\geq\mu(s^*)(\text{Mary})])$. $\text{MAX}(\lambda d.\ \text{John's grade is d-old in s})>g(7)$

(21) $[\![d_7]\!]^g = g(7)\approx$ the grade of Mary in s

This section reviewed the semantics of the two types of comparison and how the contrast between (3) and (4) arises. The semantics of *compared to* construction relies on contextual information, namely presuppositions and free variables of degree. This contextual dependency gives *compared to* comparison some flexibility in its interpretation.

3. *Compared to* Comparison and Interpretive Economy

We have seen that *compared to* comparison enjoys flexibility that is not available for *more than* comparison. Nevertheless, *compared to* comparison is not a magic bullet—it comes with some restrictions. We have already seen that (5) makes a comparison with Mary herself, and it never makes a comparison with Mary's brother. Why is that the case?

I propose that there is an economy principle that governs (un)available interpretations of *compared to* comparison, namely Interpretive Economy by Kennedy (2007) as cited in (22).

(22) Interpretive Economy
Maximize the contribution of conventional meanings of the elements of a sentence to the computation of its truth conditions. (Kennedy (2007: 36))

This means that this principle allows "contextual dependent truth conditions only as a last resort" (Kennedy (2007:4)). Presuppositions are a type of contextual information. Therefore, Interpretive Economy is expected to choose an interpretation with less presuppositions among multiple candidates. This is why *compared to* comparisons have unavailable interpretations despite their flexible mechanism.

Let us now return to the case of (5), where a comparison is made between John's brother's age and Mary's age, not between John's brother's age and Mary's brother's age. This is because the truth conditions of the former involve less presupposition than those of the latter.

First, consider the LF structure and the truth conditions of the available interpretation given in (23) and (24), respectively. The presupposition requires that a relevant degree comparison involves Mary. The free variable of degree is understood as the age of Mary, as shown in (25), which satisfies the presupposition.

(23) [[$_{\text{FrameP}}$ FRAME *Compared to Mary*] [3[[$_{\text{DegP}}$ *–er* d_7][1[*John's brother is* t_1*-old* s_3]]]]]

(24) $\lambda s{:}s \in \text{MIN}(\lambda s^*.\exists x_{<e>}, \exists \mu_{<s,<e,d>>}$ $[\mu(s^*)(x) \geq \mu(s^*)(\text{Mary})])$.
$\text{MAX}(\lambda d.$ John's brother is d-old in $s) > g(7)$

(25) $[\![d_7]\!]^g = g(7) \approx$ the age of Mary in s

This means that μ in the presupposition serves as a function that takes an individual and maps to the age of the individual. This is more formally presented as in (26)

(26) $\mu = \lambda x_{<e>}.\lambda s_{<s>}.$ the age of x in s

Second, consider the interpretation of the unavailable reading, namely a comparison of John's brother's age and Mary's brother's age. The LF structure is the same as in (23). As for the relevant truth conditions given in (27), the assertion part is the same as that of (24). The difference appears in the presupposition. For the sake of comparison, let us retain the meaning of μ as in (26). In that case, the presupposition in (27) requires an additional function β, i.e., a function that takes an individual and maps to the brother of the individual. With this extra β function, the free variable of degree is understood as the age of Mary's brother, as shown in (28).

(27) $\lambda s{:}s \in \text{MIN}(\lambda s^*.\exists x_{<e>}, \exists \mu_{<s,<e,d>>}$ $[\mu(s^*)(x) \geq \mu(s^*)(\beta(\text{Mary}))])$.
$\text{MAX}(\lambda d.$ John's brother is d-old in $s) > g(7)$

(28) $[\![d_7]\!]^g = g(7) \approx$ the age of Mary's brother in s

This means that the truth conditions in (27) require two functions in their presupposition as listed in (29).

(29) $\mu=\lambda x_{<e>}.\lambda s_{<s>}$. the age of x in s
$\beta=\lambda x_{<e>}.\lambda s_{<s>}$. the brother of x in s

When we compare (29) with (26), (29) comes with an extra function, namely β. Because of this extra function, a comparison with Mary's brother requires more contextual information than a comparison with Mary herself. Thus, the truth conditions given in (27) is banned by Interpretive Economy.

In summary, the combination of Hohaus (2015) and Kennedy (2007) captures the (un)available readings of *compared to* comparison. The semantics of *compared to* comparison proposed by Hohaus (2015) enjoys flexible interpretations that are not allowed for *more than* comparison due to its context-dependent semantics. Nevertheless, it comes with a restriction, namely Interpretive Economy as proposed by Kennedy (2007), which requires truth conditions to involve minimum context-dependent information.

4. What is Considered Economical by Interpretive Economy

This section discusses what is considered economical by Interpretive Economy. The discussion in this section remains quite underdeveloped at this time partly because of the lack of research on Interpretive Economy. To my knowledge, Interpretive Economy has very little supportive phenomena thus far, and its nature is yet to be explored. I hope that this section will be the first step toward a better understanding of Interpretive Economy.

One state that is considered economical by Interpretive Economy is that an interpretation does not require context-dependent semantics. Kennedy discusses a difference between relative gradable adjectives and absolute gradable adjectives in proposing Interpretive Economy. Let us see an example. *Short* is a relative gradable adjective, and *bent* is an absolute gradable adjective. The semantics of *short* in its positive form is context dependent. Thus, whether or not (30) is true depends on its utterance context. Even a person with a height of 180cm can be considered short in a basketball team. On the other hand, the semantics of *bent* in its positive form is not context-dependent. *Bent* comes with a lower closed scale (Kennedy and McNally 2005)—any non-zero degree of being bent counts as bent. Kennedy argues that relative interpretation of *bent* in its positive form is possible in principle, but it is blocked by Interpretive Economy because of its context-dependent semantics.

(30) X is short.
(31) X is bent.

Another state that is considered economical by Interpretive Economy is that an interpretation requires less contextual information than others. This is what I have proposed in this paper. When we have no option but to choose from context-dependent interpretations, one with the least context dependence is chosen by Interpretive Economy. Thus, (5) allows only a comparison between the age of John's brother and the age of Mary.

The above-mentioned two cases are reasonably clear. However, identifying and measuring contextual information can be a challenging task. In the case of (5), for instance, the amount of contextual information that I

discussed is limited to that in a minimal situation. However, contextual information can be added outside such minimal situations overtly or covertly.[3,4] The issue of identifying and measuring relevant context information that is subject to Interpretive Economy is left for future research.

5. Conclusion

I have argued that (un)available readings of *compared to* comparison are governed by Interpretive Economy, which requires minimal involvement of context in truth conditions. When multiple interpretations are possible for a *compared to* comparison, one with the least presupposition is chosen by Interpretive Economy. To my knowledge, this is the first case in which an economy constraint is proposed for *compared to* comparison. Additionally, it provides further support for Interpretive Economy, which has very little empirical support at this time. Nevertheless, the challenging task of identifying and measuring contextual information is left for future research.

It is worth noting here that the analysis in this paper does not exclude the possibility of syntactic deletion. In the case of (32), for instance, the syntactic deletion of *grade* is very likely. It's truth conditions will be calculated by Hohaus's framework.

(32) Compared to Mary's ~~[$_{NP}$ grade]~~, John's grade is better.

The contrast between *more than* comparison and *compared to* comparison discussed in this paper has an implication for cross-linguistic research. Comparisons that behave like *compared to* comparison are very likely not to be equivalents of *more than* comparison. For instance, at least some phrasal *bi*-comparatives in Mandarin behave more like *compared to* comparison rather than *more than* comparison (Oda 2020). More cross-linguistic research is to be conducted.

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NOTES

[1] The judgment can be '*' as it is semantically ill-formed.

[2] It is important to note that all examples of *compared to* comparison discussed in this paper involve adjectives in main clauses in comparative forms rather than positive forms. The corresponding sentences with positive forms exemplified in (i) have "vague" semantics, and they have very different semantics from the data in this paper. See Sawada (2009) for details.

(i) Compared to Mary, John is old.

[3] Takeo Kurabuji (p.c. 2020) raised an interesting issue of how the interpretation of relevant free variables of degree can be affected. For instance, I have argued that β, the brother function in (24), is blocked by Interpretive

Economy. However, the same information can be overtly added as in (i), for instance.

(i) If Mary has a brother, John's brother is older compared to Mary.

Whether or not a comparison with Mary's brother can be enforced is an interesting issue. However, relevant judgements are not available yet, and I leave the issue for further research.

[4] An important question was raised by Yusuke Kubota (p.c. 2020). Though I do not have a clear answer yet, it will be useful to state the question here for further research: How do semantics and pragmatics interact in determining possible readings? For instance, (i) out of the blue compared the degree of Peter's advisor and that of Mary.

(i) Compared to Mary, Peter's advisor is more competent.

However, native speakers may have different intuition when good context is provided. For instance, imagine a situation in which people are talking about advisors of graduate students, and Peter and Mary both have their own advisor. In that situation, the pragmatically normal reading, that is, a comparison of two academic advisors, could be enforced, and a relevant free variable degree can be understood as the degree of competence of Mary's advisor. Similar data in (ii) was suggested by Takeo Kurafuji (p.c. 2020).

(ii) Compared to Germany, the capital city of Tokyo has more population.

Unfortunately, the facts have not yet been confirmed, and I will leave this issue for further research.

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A Consideration on Pair-Merge of Arguments: From a Perspective of Experiencers and Superiority Effect*

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Keywords : Experiencer, Pair-Merge, Superiority Effect

1. Introduction

Recent theoretical research in Minimalist Program has examined set-Merge that results in a set of two arbitrary items (Chomsky et al. (2019)). However, another merger operation called pair-Merge has been less investigated. This research seeks to demonstrate usefulness of pair-Merge by assuming that it is applicable not only to adjuncts but also arguments (Otsuka (2017)) from the "Experiencer" perspective, which is underlined in (1).

(1) John seems to Mary to be honest.

2. Theoretical Background

2.1. Free Merger

Recent theoretical research concluded that merge operations were not triggered, but it could be freely applied under "Free Merger" framework (see Chomsky (2015)) to both external merge and internal merge, which used to be known as Move. Namely, the two operations are interwoven when forming syntactic structures.

However, under this framework, the syntax is basically capable of producing any type of structures, including undesirable ones. One factor to limit this type of over generation is the Labeling Algorithm in the next section.

2.2. Labeling Algorithm

Chomsky (2013) introduces the minimal search-based operation called the Labeling Algorithm (henceforth "LA"). The LA requires that any syntactic constituent be labeled to allow for interface interpretation, with unlabeled constituents being regarded as "uninterpretable."

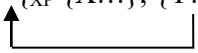
In the process of the LA, minimal search explores a structure, detects the nearest head in each relevant set, and then determines the head as its label. When a set involves one head and one set, the process is simple, as in (2a), as the LA uniformly determines the label based on the nearest head, X. However, the procedure becomes more complicated when a set contains two sets, as shown in (2b), in which the two involved heads are equidistant, which means that the LA is unable to determine the label.

(2) a. $\{_{XP}$ X, {Y⋯}$\}$
b. $\{_{??}$ {X⋯}, {Y⋯}$\}$

Chomsky (2013) proposes two solutions for this situation. The first one is via sharing some prominent features between the two equidistant heads, as shown in (3a), with the LA uniquely determining the label for the relevant set from the shared features of the two heads. The second solution is to internally merge either of the two heads, as shown in (3b), which is based on the assumption that a part of a chain is invisible to the LA, with the head that remains in its position not undergoing any internal merge becoming the label for the set.

(3) a. $\{_{<f, f>}\ \{X[\underline{f}]\ldots\}, \{Y[\underline{f}]\ldots\}\}$

b. $\{_{XP}\ \{X\ldots\}, \{\sout{Y\ldots}\}\}$



However, there is another way to circumvent the "XP-YP" situation in (2): pair-Merge shown in the next subsection.

2. 3. Pair-Merge

Chomsky (2004) introduces an operation called pair-Merge, which is defined as a merger operation subclass. The motivation for the introduction of pair-Merge is to explain the unique status of adjuncts. Pair-Merge creates an ordered pair and ensures that either of the items in the pair can remain visible in the syntactic component, with the other rendered invisible. Therefore, syntactic operations, such as extraction, are not applicable to the invisible item in the pair, which explains the asymmetric status of adjuncts including adjunct islands.

However, if a pair-Merged item remains invisible until the interfaces, it is unperceivable and violates the Full Interpretation condition. This leads to a proposal for an operation called SIMPL(ification) to "reveal" the invisible item at the interfaces. Therefore, pair-Merge ensures that either of the pair-Merged items is invisible only within the syntactic component. This resolves the "XP-YP" problem exemplified in (2b), as either of the merged items can become invisible to the LA.

Chomsky (2004) proves that pair-Merge can accommodate examples such as (4). Given that pair-Merge renders an item invisible only within the syntax, the pair-Merged relative clause in (4) is invisible in its base-generated position (represented as *t*). Nevertheless, it comes back into sight when SIMPL is applied at the end of the derivation after internal merge of the relative clause. Therefore, *John* within the relative clause does not violate condition C in its base-generated position, but it does at the final landing position. This is why *He* in the matrix clause cannot co-refer to *John* and *he* in the embedded clause can.

(4) He_i asked which picture of Bill [that $John_{i*/j}$ liked] he_j bought *t*.

(Chomsky (2004: 117-118)

(Indexes added by TO)

3. A Brief Consideration on "Superiority"

"Superiority" basically stipulates that an item cannot be displaced over another item from the same category. As the examples for the double object construction in English in (5) exemplify, while the indirect object can be the subject of the sentence in passives, the direct object cannot. This "Superiority" effect is based on the premise that the higher item c-commands the lower one, as shown in (6).

(5) a. John was sent *t* the book.

b.*The book was sent John *t*.

(6) a. I showed Mary herself (in the mirror).

b.*I showed herself Mary (in the mirror).

c. I gave every $worker_i$ his_i paycheck.

d.*I gave its_i owner every $paycheck_i$.

(Barss and Lasnik (1986: 347-50))

However, how can "Superiority" be formalized under the Free Merger framework, in which both a displacement operation, namely, internal merge, and external merge are freely applicable? More specifically, Attract Closest (Richards (2001)) and Relativized Minimality (Rizzi (1990)) are no longer tenable under the framework that has no triggers for merger operations.

Unfortunately, while this paper cannot offer a full proposal to reformulate "Superiority," it does suggest a possible direction to proceed, as there is a possibility to embed the chain-formation process into the LA. Assume that it is not that the LA cannot see a part of a chain, as claimed by Chomsky (2013), but that the LA can see one category only once, with all other items from the same category being treated as copies of the first detected item in the same chain. Moreover, the head the LA searches out in an NP-label determination is not N but *n* as Chomsky (2007) argues. Hence, the LA cannot refer to lexical information on N and cannot distinguish two different NPs within one domain. Therefore, there is a possibility that the LA could incorrectly treat multiple NPs within the single LA domain as one chain and produce a "gibberish" chain that includes different NPs. The results in such a "gibberish" chain could then lead to a reformulation of "Superiority" within the syntactic component under Free Merger.

This assumption is preliminary and needs further elaboration. However, what should be emphasized is that Superiority" can have an effect even under Free Merger. Hence the subsequent discussion is based on this presumption.

4. Problem

4.1. Phenomenon

It is standardly assumed that the subject in the raising construction undergoes the raising from within the complement clause. In English, this raising process takes place beyond the Experiencer. Nevertheless, given that the Experiencer is an argument like the subject, this raising process needs to be regarded as a "Superiority" violation. Of course, as "Superiority" presupposes a c-command relationship between the relevant items, if there were no c-command relationship between the subject and the Experiencer, there would be no problem. Empirical facts, however, guarantee the c-command relationship, as exemplified in (7) by virtue of conditions A, B, and C. (7) indicates that the subject c-commands the Experiencer, and the Experiencer c-commands the complement clause, from which the subject launches.

(7) a. John_i seems to himself_i *t* to like cheese.
b.*It seems to him_i that John_i likes cheese.
(Lebeaux (2009: 32))

Therefore, a contradiction arises; although the Experiencer c-commands the subject in (7) in its base position, the subject can be dislocated to a higher position than the Experiencer, without causing a "Superiority" violation. This contradiction has attracted the interest of several studies, which are briefly presented in the next subsection.

4. 2. Previous Studies

Due to space limitations, this subsection roughly sketches two positions without going into the detailed mechanisms. The first position is represented by Kitahara (1997) and Epstein et al. (1998) and basically claims that the Experiencer in English does not c-command the subject in its original position but ends up c-commanding the complement clause only after the subject is raised. The other position from Boeckx (1999, 2008) argues that although the Experiencer in English c-commands the subject in the base-generated position, subject raising is permitted. This paper basically takes the former position in the later discussion. For other

previous studies, readers can consult Arano (2017), who succinctly reviews relevant issues.

What is notable here, however, is that most previous studies are not compatible with the recent Free Merger framework, in which the subject raising is not triggered by anything but is applied freely as one instance of free merger operations. As no other arguments in any other constructions other than the Experiencer ignore "Superiority" and because it is confined to English (as shown in 5.2.), the phenomenon investigated here could be seen to be an "exceptional" case. Therefore, it is ideal to accommodate this "Experiencer paradox" without the need to introduce special apparatuses.

5. Analysis

5.1. Solving the Paradox

As was touched on in the introduction, this research assumes that pair-Merge is also applicable to arguments. Therefore, under this assumption, any argument can in principle undergo both set-Merge and pair-Merge. Note, however, that this does not lead to overgeneration because other factors limit possible derivations. For instance, if the subject is pair-Merged in a standard tensed sentence, it becomes syntactically invisible and therefore cannot deal with the u-Phi features on T, which also means the u-case feature on the subject remains unvalued as well. Similarly, if the object participates in a derivation vie pair-Merge, the u-Phi features on R and the u-case feature on the object remain unvalued; therefore, in the derivations for normal sentences, the pair-Merge invisibility always causes u-Phi and u-case feature problems.

(8) a. <$Subj_{[uCase]}$, {$T_{[uPhi]}$…}>

b. <$Obj_{[uCase]}$, {$R_{[uPhi]}$…}>

(The shading represents an invisible status)

If an argument does not relate to u-Phi or u-case feature valuing, it is compatible with pair-Merge, which is the case for the Experiencer in English. Note that as the infinitival T in English is standardly assumed to lack u-Phi features, no problem with the u-Phi features is expected. Moreover, if the Experiencer in English has its u-case feature valued by the preposition *to* (or the u-case feature somehow receives a default value), there is also no problem with the u-case feature. Rather, if the Experiencer in English set-Merges, the "XP-YP" situation shown in 2.2. emerges and the labeling always fails. Therefore, in summary, the Experiencer in English may in principle set-Merge or pair-Merge, but labeling succeeds only when it pair-Merges. This indicates that in a convergent derivation, the Experiencer is always invisible within the syntax, which then means that no "Superiority" violation arises.

(9) a. <$_{TP}$ to Experiencer, {to…}>

b. {$_{??}$ to Experiencer, {to…}}

(Shading represents an invisible status)

(10) John seems to Mary *t* to be honest.

ok

After SIMPL, the Experiencer returns to a visible status and the desirable c-command relationship holds in the C-I Interface. This sufficiently explains (7).

More importantly, the approach here accounts for the "exceptional" status of the Experiencer without having to introduce additional apparatuses: the Experiencer in

English is exceptional because it pair-Merges even though it is an argument, and pair-Merge is an independently motivated operation to explain the unique status of adjuncts rather than being ad hoc device.

The next subsection expands the approach here to different languages.

5. 2. Expansion of the Analysis

The discussion so far has led to an expectation of the following three logical possibilities.

(11) The Experiencer:
a. always set-Merges.
b. always pair-Merges (=English).
c. may set-Merge or pair-Merge.

As shown, (11b) is the case for English. However, as shown later, the other possibilities accommodate cross-linguistic facts, with (11a) corresponding to some Romance languages (including Catalan, Galician and Romanian), which here is represented by Spanish, and (11c) being the status for Italian. Following the classification in Arano (2017), this research surmises that (11a) may also include Insular Scandinavian languages and (11b) may involve Mainland Scandinavian languages. Due to space limitations, however, the discussion in this subsection is confined to Spanish and Italian.

5. 2. 1. Spanish

Spanish has a unique phenomenon called Clitic Doubling, as in (12), where the Experiencer appears with a clitic.

(12) Les parecio (a mis amigos)
to them seemed (to my friends)
que Maria estaba cansada.
that Maria was tired.
'Maria seemed to my friends to be tired.'
(Treggo (1996: 106))

Interestingly, even when the experiencer is not overt, the clitic is observed. Therefore, the existence of a clitic implies the presence of an overt or covert Experiencer. Therefore, the clitic here is not actually a type of pronoun but a type of marker to indicate the existence of the Experiencer. Then, consider (13).

(13) a. Me parece que este taxista
to me seems that this taxi driver
esta cansado.
is tired
'It seems to me that this taxi driver is tired.'
b.*Este taxista me parece
this taxi driver to me seems
estar cansado.
to be tired
'This taxi driver seems to me to be tired.'
c. Este taxista parece estar
this taxi driver seems to be
cansado.
tired
'This tax driver seems to be tired.'
(Treggo (1996: 105))

(13a) is a case with a covert Experiencer but without subject raising, which is grammatical. (13b) indicates that the subject cannot move to the sentential "subject" position when the covert Experiencer exists. In (13c), the Clitic Doubling is not observed, which means that an Experiencer is not present, and the sentence is grammatical with the subject raised to the "subject" position. Therefore, as can be seen,

subject raising is always banned when an (overt or covert) Experiencer exists in Spanish.

Intriguingly, Toreggo (1996) argues that Clitic Doubling occurs to license the case of the Experiencer. If this intuition is correct, this can be reanalyzed in the present framework as follows: the Experiencer in Spanish should always be syntactically visible; otherwise the u-case valuation would fail. It could be further assumed that the clitic in the Clitic Doubling supports the labeling process for the "XP-YP" situation created by the Experiencer and its merged set (TP, RP or whatever).

In summary, the Experiencer in Spanish needs to be syntactically visible so that labeling and the u-case valuation succeed. Hence, if it pair-Merges, the derivation does not converge and therefore, it must always set-Merge. As the Experiencer in Spanish is necessarily visible, the "Superiority" effect is observable in Spanish, and the fact is fully captured.

5. 2. 2. Italian

The examples in (14) show typical Experiencer behaviors in Italian. When the Experiencer appears as a full noun phrase, subject raising is not permittable; however, when it is a clitic, the subject successfully moves to the "subject" position.

(14) a.* Gianni sembra a Maria essere stanco.
Gianni seems to Maria to be ill
'Gianni seems to Maria to be ill.'
(Bošković (2011: 4))

b. Gianni gli sembra essere stanco.
Gianni to her seems to be ill
'Gianni seems to her to be ill.'
(Boeckx (2008: 150))

The explanation is quite straightforward, as follows. When the Experiencer is a full NP, it set-Merges, and when it is a clitic, it pair-Merges. Thus, only when the Experiencer is a full NP is a "Superiority" effect produced. The reasoning here presupposes that the labeling does not fail because of the "XP-YP" situation formed by the Experiencer and the infinitival TP. This is presumably because the Italian infinitival T has u-Phi features, and thus, if the Experiencer exists to the left of the infinitival clause, the labeling succeeds via the prominent Phi feature sharing. Further, as Chomsky (2015) argues, as the Italian T itself is strong enough to be a label, labeling is still possible even if the Experiencer moves out from the left of the infinitival TP to some higher position. Therefore, in the following grammatical examples, no labeling problems arise, and, even though the Experiencer is an NP, it does not intervene between the base and moved subject positions, that is, there is no "Superiority" violation.

(15) a. A Maria$_j$, Gianni$_i$ sembra t_j
to Maria Gianni seems
[t_i essere stanco].
to.be ill
'To Maria, Gianni seems to be ill.'

b. A chi$_j$ sembra Gianni$_i$ t_j [t_i essere stanco]?
to whom seems Gianni to.be ill
'To whom does Gianni seem to be ill?'
(Bošković (2011: 4))

6. Conclusion

This research revealed that the assumption to permit pair-Merge of arguments can account for the idiosyncratic behaviors of the Experiencer in English. Furthermore, this approach can be extended to cross-linguistic explanations of

Experiencer behaviors, which was exemplified for Spanish and Italian.

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形と意味の“ミスマッチ”を考える：認知文法からみたVすぎる構文*

(Revisiting the Syntax-Semantics “Mismatch” in Japanese V-*sugiru*: A Cognitive Grammar Perspective)

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キーワード：認知文法, -すぎる, ミスマッチ

1. はじめに

日本語の「動詞の連用形＋すぎる」という形式で、何らかの過剰性を表す構文 (以下、V すぎる構文) には、形式と意味の間にいわゆる「ミスマッチ」があると考えられてきた。

(1) a. 美しすぎる (too beautiful)
b. 静かすぎる (too quiet)
(2) a. 働きすぎる (work too long)
b. 早く食べすぎる (eat too early)

(1a) は形容詞「美しい」の表している性質が過剰であることを示し、(1b) では形容動詞「静か」が表している性質の過剰を表していると解釈され、「ミスマッチ」はないとされる。一方で、V すぎる構文である (2a) は「働く」ことそれ自体というよりも「働く時間の長さ」などが、(2b) は副詞の「早く」が表す関係が過剰だと解釈される。このように V すぎる構文では「-すぎる」が形態的に結合するのは前項の動詞 (V１) であるにもかかわらず、意味的には他の要素に結びついているとされてきた。先行研究では基本的に、「過剰」の意義素 (TOO) が V１の作る補文の概念構造内に存在する「段階性のある要素」を意味作用のターゲットとして選択すると考えられている (由本 1997, 2005, Nakamura 2003, Kikuchi 2013, 東寺 2018 他)。

本稿は認知文法の観点から V すぎる構文を再検討することにより、V すぎる構文において、「-すぎる」は意味的にも動詞と結合していることを示し、これまで主張されてきた「形態的には V１と結合しているが、概念構造ではそうではないというミスマッチ (由本 2005: 265)」は、無反省に受け入れられてきた恣意的な前提によるものであることを明らかにする。

2. 先行研究

由本 (1997, 2005) は、影山 (1993) の複合動詞の分類に従い、「-すぎる」は統語的複合動詞 (V すぎる) の後項動詞であるとする。影山は、日本語の複合動詞は、レキシコンで形成される「語彙的複合動詞」と、統語構造において形成される「統語的複合動詞」に区別されると主張しており、V すぎる構文は補文構造をとる統語的複合動詞とされている。

そして、前節でも触れた通り、V すぎる構文の意味は「-すぎる」が表す過剰の意義素 TOO がなんらかの要素と結びつくことにより決まるとされる。由本 (2005: 246) は「この TOO はその意味からして、段階性を有する要素と結び付かねばならない。しかし、形態上は、「過ぎる」自体は動詞と結合するのだから、TOO は結合する動詞の LCS の中から、段階性が認められる要素を探し出してそれをターゲットとして選択し、その要素に対して「過剰」の意味を付加すると考えられる」と述べ、V すぎる構文における「-すぎる」の働きを次のように規定している。

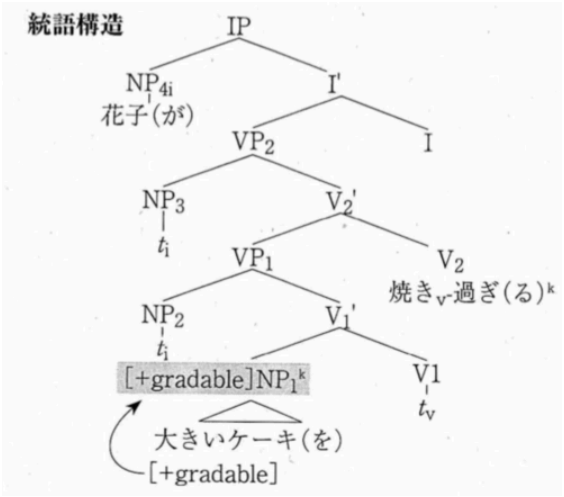
(3) 「「過ぎる」は統語構造内において統率する要素の中から [+gradable] 素性を探し、それをターゲットとし

て選択する。」　(由本 2005: 264)

例えば (4) の場合、(5) の統語構造を持ち、統語構造内で [+gradable] を持つ要素として「大きいケーキ」が選択される。そして、概念構造においてはその名詞句の持つ段階性のある素性 [+gradable] を持つ性質に TOO が付与されると考える ((6) を参照) 。

(4)　花子が大きいケーキを焼き過ぎた。　(由本 2005: 265)

(5)



(6)

概念構造：

$$\begin{bmatrix}\text{HANAKO CAUSE[BECOME}\begin{bmatrix}\text{CAKE}\\ \text{TOO}[_{\text{property}}\text{BIG}]\\ \text{[+gradable]}\end{bmatrix}\text{BE[AT[EXISTENT]]]}\end{bmatrix}$$

このようなVすぎる構文の構造的な規定、そして TOO を付与するという分析に対して (たとえ理論的前提が異なっていたとしても) 異論を唱えている先行研究は見当たらない。先行研究で論点となるのは主に、「-すぎる」が統語構造上のどの程度の深さまでの要素を選択できるかといったことである。しかしながら、以上の分析では以下に示す事実を適切に説明することができない。

2.1. 先行研究の問題点①

次の (7) (8) が、難しさの過剰を表していると仮定し、由本の分析に従うと、どちらも段階性のある要素「難しい」が TOO のターゲットになり、概念構造は同一となると予測される。しかしこのような説明には、(少なくともこれだけでは) (7) で「わざと」を用いることは極めて不自然であるという事実を説明できないという問題がある。

(7)　教授は (*わざと) 難しい問題を出しすぎた　(Nakamura 2003: 489)

(8)　教授は (わざと) 難しすぎる問題を出した　(Nakamura 2003: 489)

2.2. 問題点②

(9) のように段階性を持つ副詞が複数ある例、もしくは (10) のように副詞が明示されていなくとも、過剰である要素の候補となるものが複数存在している例は観察される。そしてその要素全てが実際に過剰であり、それが原因で腰痛になるのだと解釈することは不可能ではない (例えば運ぶ時間が長いことと、頻度と荷物の数が多いことは両立する) 。このように複数の段階性のある要素が過剰になることはあり得るが、その場合どのようにターゲットが選択されるのか不明である。

(9)　早くたくさん食べすぎた。

(10)　彼は荷物を運びすぎて、腰痛になった。

3. 認知文法による記述

以下では、認知文法の観点から V すぎる構文に分析し、上記の問題は全て解消されることを示す。

3.1 V すぎる構文の特性

認知文法では、典型的に、２つの成分構造 (component structures) が組み合わされて合

成構造 (composite structure) が成立する場合、一方の構造に他方の構造によって精緻化される (詳細が特徴づけられる) schematic な部分があると考えられている。そのような部分のことを elaboration site (以下 e-サイト) と呼ぶ (Langacker 2008: 198) 。

「-すぎる」の分析に入る前に、強調などに用いられる英語の DO (e.g. I DO have that!) の分析を紹介する。この DO は意味内容のうちほとんどの部分が e-サイトとなっている (図 1 左下網掛け) と考えられる (Langacker 1991: 137) 。DO の e-サイトは本動詞 (e.g. I DO love you であれば love) の意味によって精緻化されるため、合成構造の概念内容における独自の貢献は見られないが、それでも高度に抽象的な意味は持っていると考えられる。

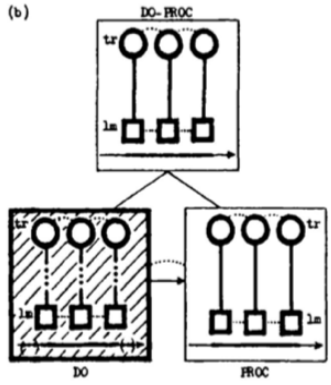
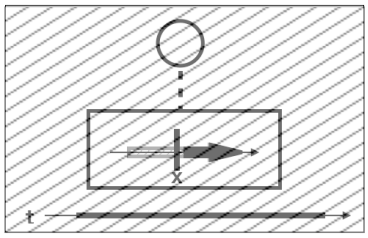


図 1 DO の意味表示 (Lagnacker 1991: 137)

「-すぎる」の性質はこの DO と類比的である。由本 (2005: 222f.) は「-すぎる」は文脈さえ整えば、どんな V 1 とも結合するほど生産性が高く、どのような動詞に後接しても意味機能は「過剰の付与」で一貫していると主張している。これは「-すぎる」が DO のように「過剰の付与」以外では表現の概念内容に貢献していないという直感を反映したものと考えられる。しかしながら、概念内容に貢献していないことが確かだとしても、それだけでは「過剰の付与」以外に意味を持たないとまでは言えないだろう。「-すぎる」を強調の DO のような高度に抽象的な意味を持つ要素と見なすことで、単に「過剰」の意味を付与するだけではなく、強調の DO と同じように、動詞によって精緻化される schematic な意味を持つと考えることができる。認知文法の観点からは、「-すぎる」は単なる「過剰の付与」ではなく、抽象度が高く、構成要素によって精緻化される必要がある意味を持つ要素だと説明することができるのである。

「-すぎる」の意味は図 2 のように表示できる。網掛けは e-サイト、t→は時間の推移を表す。四角の中の太い矢印は行為・状態に含まれる何らかの側面が過剰となっていることを表している (太い矢印の色が薄くなっている部分はスケール上を過剰になる地点まで推移する過程がベースとして存在することを簡略化して表している)。[1]X は一種のスケールの基準点 (期待される値) であり、これも他の要素によって精緻化される。V すぎる構文における「-すぎる」は動詞によって精緻化されることで機能するのである。



-すぎる

図 2 「-すぎる」の意味

2.1 節で指摘した通り、先行研究に従い、「-すぎる」は「TOO の付与」のみを行なっていると考えるだけでは、 (7) 「教授は (*わざと) 難しい問題を出しすぎた」と (8) 「教授は (わざと) 難しすぎる問題を出した」の違いを説明できない。TOO が付与されるのはどちらの文でも「難しい」であり、概念構造は同一になってしまうはずである。「-すぎる」の意味は TOO の付与のみである

と考えるならば、この問題を解決することは不可能である。ありうる応答として、「-すぎる」には「非意図」という素性 (たとえば [-intention] とでも表示されるような要素) も含まれており、それも過剰の意味とともに動詞に付与されていると考えることで、認知文法の分析を持ち込まなくともこの問題を解決できるという考えが予想される。しかし、(7) における「出しすぎる」では、「出す」という行為自体は「意図的」に行われているのであり、単純に「出す」に非意図性を付与するという解決策を取るわけにはいかないように思われる。「出す」ことではなく「出しすぎる」ことが非意図的であることを示す説明が必要になる。

前述のように、「-すぎる」の schematic な意味を認め、V すぎる構文の意味が（多くの場合）「わざと」となじまないのだと考えることでこの問題は解消される。[2]「-すぎる」の意味は「素性の付与」に尽きるのではない。

また、先行研究では、段階性のある要素に、TOO が付与されて意味が決まると考えるため、 (7) (8) は意味的に同一であると仮定されていたが、認知文法では複合的な表現がどのように組み合わされるのか (compositional path：以下 CP) をも含めた全体を複合的な表現の意味と考えるため、 (7)・(8) に見られる意味の違いを CP の差異として自然に捉えることができる。同一の状況を表していても、CP が異なっていれば、複合的な表現の意味において、相違が生じることは全く不思議ではない。

3.2 run too much はミスマッチ？

そもそもどのような経路で伝達される意味にたどり着くのが慣習的かは言語によって (１つの言語の内部でも) 異なりうる。例えば、以下の (11a) は too が副詞の前に置かれることによって、到着の早さの過剰を意味する。英語では過剰を表す副詞である too は意味的に結びつく副詞や形容詞の前に現れることが慣習化しており、(11b) のように動詞に直接結びつくことはできない。一方日本語では同じ状況を (12a) で表すことができるが、一方で (12b) のように「-すぎる」が副詞に直接後接することはできない。仮に英日語における伝達内容が等しい (たとえば真理条件的に等価だ) としても、CP は同一ではないのである。[3]

(11) a. you’ve arrived too early
b. *you’ve too-arrived early
(12) a. 早く着きすぎた
b. *早くすぎる着いた

何らかの行為・状態が過剰であること自体に概念的問題があるわけではない。実際、日本語では、走ることの過剰を表すために「走りすぎる」のように動詞に直接「-すぎる」が後接する表現を用いることができる。一方で英語では同様の意味を表すために run too much のように too が何らかの副詞と組み合わされた表現を用いなければならない。これは、日本語から見れば「ミスマッチ」であることになってしまうだろう。つまり、V すぎる構文で取り上げられてきた「ミスマッチ」は「-すぎる」の意味は (おそらくは英語の too の意味と等しいと考えられているであろう) 意義素 TOO (に尽きるの) であり、意味的に結びつくのは形容詞や副詞のはずだ、つまり英語と日本語は同様に働くはずだという前提に立ったことによって生じたのだと言える。[4]

3.3 副詞を伴う V すぎる構文の事例

認知文法の立場からは、副詞に TOO が付与されると考えられてきた例についても、ミスマッチはなく、むしろ自然な形での実現として捉えることができる。図 3 に示すように、副詞は、「何らかの関係」をトラジェクター

とした非時間的な関係をプロファイルするとされる (Langacker 2008: 116) 。(動詞、形容詞、前置詞などによって表される) トラジェクターとなる関係は、他の要素によって精緻化される e-サイトである。すなわち、動詞を修飾する副詞は動詞と結びつくことで e-サイトが精緻化される。そして、V すぎる構文は (副詞による修飾を伴った) 動詞が表すプロセスのある側面が過剰となっていることを表している。

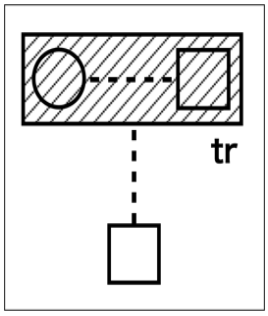


図 3 副詞

図４は副詞を伴う V すぎる構文の意味を表している。要素をつなぐ矢印は精緻化の関係を表し、点線は一致関係を表す。動詞は、副詞の e-サイトを精緻化し、同時に「-すぎる」の e-サイトを精緻化している。動詞が副詞によって修飾されている場合、その「修飾を受けた動詞」が「-すぎる」を精緻化している。もしくは、「V すぎる」が表すプロセスによって副詞の e-サイトが精緻化されると言える。

このような関係によってこの表現が構成されることを考慮すると (9) の「早くたくさん食べすぎた。」のように複数の副詞が動詞を修飾していても問題はないことがわかる。V すぎる構文で焦点化される過剰の意味はあくまで前項の動詞の意味によって精緻化された結果生じるものであり、その時いくつの副詞が動詞を修飾していても問題はないのである。

3.4 フレーム内の要素の焦点化

ここまで見てきたように特定の副詞的な要素にのみ「-すぎる」の意味が結びついていると考えるべき理由はない。では、V すぎる構文の過剰の意味はどのようにして決まるのだろうか。

認知言語学では、そもそも「一般に言語表現の (慣習化したものを含む) 意味の成立には、狭義の言語的 (「辞書的」、「意味論的」、「コンテクスト中立的」) な要因のみではなく、通常言語外的とされる (「百科事典的」、「語用論的」、「コンテクスト依存的」な) 要

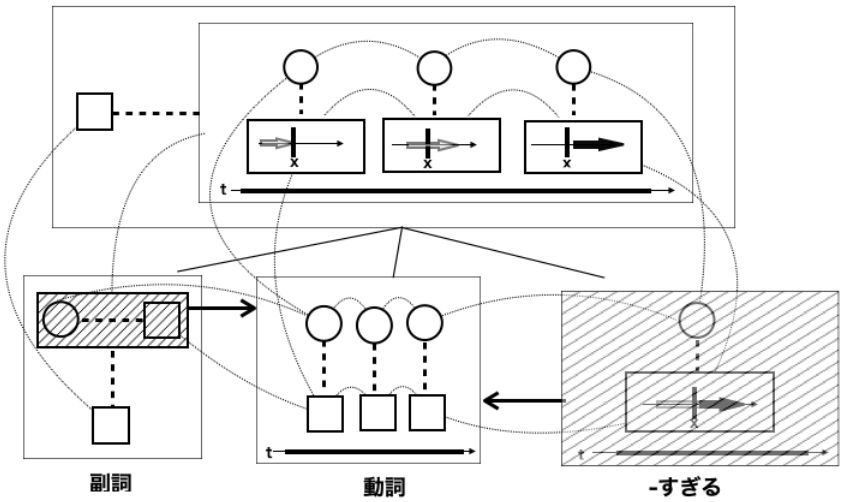


図 4　副詞を伴う V すぎる構文の意味

因も決定的に関与しており、いわゆる言語的な意味の多くは、実際には、言語外的な知識を基盤としてはじめて成立しうる」 (西村 2007: 654) と考える。これはもちろんVすぎる構文に限ったことではない。

西村 (2007: 654) は、「特集: 形と意味のミスマッチ」において換喩を取り上げ、以下のように述べている。ある表現の複数の用法間に換喩的な関係がある場合の多くは、百科事典的な知識のまとまり全体、すなわちフレームにアクセスした上で、その異なる局面や段階に焦点を合わせる能力が関与している。例えば「村上春樹を読む」の理解には〈村上春樹〉のフレーム全体にアクセスした上で「読む」という動詞の意味と整合する局面［村上春樹の作品］に焦点を合わせるプロセスが含まれていると考えられる。

Vすぎる構文の意味も、動詞の喚起するフレームを考慮しなければ導かれないものである。段階性のある要素にのみ「-すぎる」の意味が結びついていると考えるべき理由はなく、また、何が過剰であるのかを特定の素性に限定するような枠組みであっても、実際には無意識に百科事典的知識を参照した上で特定の組成と過剰の関係を構成しているものと考えられる。例えば、 (9) 「彼は荷物を運びすぎて、腰痛になった。」を理解するためには、「腰痛になる」要因になるような仕方で「運ぶ」という事態が過剰であったのだと解釈することが必要である。先行研究において主張されているように、運ぶ時間の長さが過剰だったのだと解釈することも可能であるが、仮に荷物があまりに軽ければ腰痛になる可能性は低いだろうし、荷物の運び方も腰に負担がかかるような仕方で、少なくとも身体を使って運んでいなければ腰痛になることはないため、ただ時間が長いと解釈するだけでは不十分である。また荷物を運ぶ時間の長さは腰への負担と (概ね) 比例するという知識に言及しなければ、「時間の長さ」が過剰だと解釈される理由を説明することができない。この文は「荷物を運ぶこと」の一般的な知識のフレームを参照して初めて適切に解釈できるものであり、そのような情報を度外視して、なんらかの段階性 ([+gradable] 素性) のある要素への過剰の付与と説明して済ませることなど到底できないだろう。[5]

V すぎる構文において過剰として解釈されるスケールは以上のようにフレームの中で焦点が当てられる側面であって、由本のいう「段階性のある要素」では説明しきれない多くの情報を含むものである。由本 (2005: 355) は「たとえば、「走りすぎた」や「パンを作りすぎた」といっても、走った時間あるいは距離や作ったパンの量が、何を超えて行き過ぎているのかは表現されないのが普通で、その判断の基準は文脈から読み取られているか、あるいは、社会通念としての「標準」として解釈されているのである」と述べており、段階性のある副詞的要素の「標準」に関しては百科事典的知識の必要性を認めている。しかしながら V すぎる構文において表現される事態のどのような側面が過剰となっているのかということも「文脈」や「社会通念」なしには解釈不可能である。フレーム全体にアクセスした上で、文脈と整合するように過剰となる内容に焦点を合わせると考えると、その内容の豊かさに制限はない。

4. おわりに

日本語の V すぎる構文は、動詞の意味のフレームから導かれる特定の行為ないし状態が何らかの点で過剰であることを表すために用いられる構文である。Vすぎる構文の意味は要素が持つ素性の単なる総和ではなく、どのように構成されるのかも含む形で構成されているのだと考えると、複数の副詞が現れる文の解釈も、真理条件的に等価と思われる文同士の違いも明確に捉えることがで

きる。

「-すぎる」が意味的にも動詞と複合していると考えることにはなんら問題はない。Vすぎる構文の「ミスマッチ」は、過剰は意義素 TOO によって表示されるという日英語の差異を無視した根拠のない前提から生じた幻影にすぎない。

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注

[1]「何らかの側面」の特定には動詞と結びついたフレームを参照する必要があることは 3.4 節で述べる。

[2] 文脈や動詞によって「わざと」が共起できるかどうかの判断は異なり (e.g. うちの猫は毛玉を吐くためにわざと食べすぎる) 、どのような条件で「わざと」と共起できないのかについてはより詳細な観察が必要である。

[3] 「早く着きすぎる」と「着くのが早すぎる」は容認度に差があり、また、情報構造が異なる。認知文法では、情報構造も意味の一部に含めるため、両者の意味は異なると言える。これについて詳しくは別稿に譲る。

[4] Kikuchi (2013) は統語構造内に DegP という副詞的要素を仮定し、「-すぎる」は必ずそれに結合するのだとしている点でこの前提を強く推し進めていると言える。

[5] より厳密にいうならば、「運ぶ」もしくはそこで登場するあらゆる概念に関する「典型的な物語」 (野矢 2011) を参照しなければ、意味にたどり着くことは難しい。名詞に「-すぎる」が後接する N すぎる構文についても同様のことが言える (佐藤 2019) 。

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A Syntactic Analysis of Japanese Compounds with the Labeling Algorithm

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Keywords：Japanese compounds, Labeling Algorithm, categorial feature sharing

1. Introduction

Kageyama (2001, 2009, 2013) groups Japanese compounds into three types: lexical, post-syntactic, and Word$^+$ compounds. The first type is formed in the lexicon. The second type is formed after syntax, namely in phonology. The third type shows the intermediate behavior of the two. The purpose of the paper is to develop Kageyama's analysis by proposing the syntactic structures with the Labeling Algorithm in Chomsky (2013, 2015).

The next section overviews Kageyama's observation. Section 3 proposes the structure of the compounds based on the Labeling Algorithm. Section 4 shows a new analysis of the compounds. In section 5, I present further consequences of the analysis. Section 6 concludes the paper.

2. Kageyama's (2001, 2009, 2013) Observation

This section shows the behavior of three types of compounds.[1] First, post-syntactic compounds have the corresponding clauses, but lexical and Word$^+$ compounds do not (in their intended meanings).

(1) a. Shinkon ryoko
newly.wed travel
b. *Shinkon de ryoko
newly.wed as travel

(2) a. Yakinikuten keieisha
barbecue-shop owner
b. *Yakinikuten wo keieisha
barbecue-shop ACC owner

(3) a. Sotsugyoshiki shuryo go
graduation-ceremony finish after
b. Sotsugyoshiki ga shuryo
graduation-ceremony NOM finish
go (ni)
after (at)

The phrase (1b) corresponding to the lexical compound (1a) does not have the intended meaning. You can say (1a) without actually traveling, but (1b) describes an actual event. In addition, as the ungrammaticality of (2b) shows, the Word$^+$ compound (2a) has no counterpart in the first place. On the other hand, the post-syntactic compound (3a) has the corresponding phrase with the same meaning, as shown in (3b).

Secondly, as shown in the bracketed parts in (4), subject honorification does not occur in lexical (4a) and Word$^+$ (4b) compounds, but it does in postsyntactic compounds (4c).

(4) a. *Sensei wa [sinkon-*go*-ryokoo]
teacher TOP [newly.wed-HON-travel]
ni dekake rareta
to went.out
"The teacher went for his honeymoon."
(Shibatani and Kageyama (1988: 474))
b. *?[tyoki *go*-taizai-keikaku]
[long-term HON-stay-plan]
"the plan for a long-term stay"
(Kageyama (2001: 249))

c. sensei-ga
teacher-NOM
[Yooroppa *go*-taizai] no
[Europe HON-stay] GEN
ori
occasion
"while the teacher stayed in Europe"
(Kageyama (2001: 249))

As shown in the ungrammaticality of (4a) and (4b), lexical and Word^{+} compounds cannot include polite words such as italicized *go*, while as shown in (4c), post-syntactic compounds can without problems.

Third, the three types of compounds show differences in accent. While lexical compounds have only one accent overall, Word^{+} and postsyntactic compounds can have two or more accents overall. The "|" in (5) indicates a phonetic boundary.

(5) a. yama | nobori
mountain | climbing
"mountain climbing"
(Shibatani and Kageyama (1988: 459))
b. zenkoku | nodoziman-taikai
all-Japan singing-contest
"All-Japan amateur singing contest"
(Kageyama (2001: 247))
c. Amerika | hoomon (-tyuu)
America visit
"(middle of) visiting America"
(Shibatani and Kageyama (1988: 459-460))

For example, the lexical compound (5a) has only one accent as a whole, while the Word^{+} (5b) and post-syntactic compounds (5c) have an accent on each of the elements separated by the "|." That is, (5b) has accents both on *zenkoku* and *nodoziman-taikai*, while (5c) has accents both on *Amerika* and *hoomon*.

Fourth, as shown in (6), lexical and Word^{+} compounds form "anaphoric islands," while postsyntactic compounds do not.

(6) a. *Teitoku ha
admiral TOP
kampo shageki no
naval bombardment GEN
ori, sore ha jidaiokure
when it TOP obsolete
dato i tta.
COMP say PAST
"When they fired from the sea, the admiral said that it is obsolete."
b. *Teitoku ha
admiral TOP
hushin sen shageki
suspicious ship bombardment
junbi no ori, sore ha
preparation GEN when it TOP
supai sen dato i tta.
spy ship COMP say PAST
"When they prepared to fire on a suspicious ship, the admiral said it is a spy ship."
c. Teitoku ha
admiral TOP
hushin sen shageki no
suspicious ship bombardment GEN
ori, sore ha supai sen
when it TOP spy ship
dato i tta.
COMP say PAST
"When they fire on a suspicious ship, the admiral said it is a spy ship."

(6a) shows that the constituent *kampo* of the lexical compound *kanpo shageki* cannot be referred to by the pronoun *sore*. Similarly, (6b)

shows that the constituent *hushin sen* of the Word^{+} compound *hushin sen shageki junbi* cannot be referred to by the pronoun *sore*. On the other hand, as shown in (6c), it is possible to refer to the constituent *hushin sen* of the postsyntactic compound *hushin sen shageki* by the pronoun *sore*.

3. A Proposal Based on the Labeling Algorithm

To explain the facts that we have seen thus far, this section presents a new analysis using the Labeling Algorithm in Chomsky (2013, 2015). The labeling algorithm is the algorithm shown in (7), which is used to determine labels for syntactic elements.

(7) a. If XP and Y merge: Y becomes the overall label.
b. If XP and YP merge:
(i) If XP is dislocated, Y is the overall label.
(ii) If XP and YP have a common feature F, then F is the overall label.
c. The English T and root cannot participate in label determination.

Furthermore, Saito (2016) argues that the Case particle in Japanese is an anti-labeling feature λ, and elements with this feature do not participate in label determination.

Now, in Distributed Morphology, a "word" is considered to be formed from a root (R) and a functional head (categorizer) which determine the category. If a compound is formed by merging a root and nominalizer (n), then the two ways of formation in (8) are expected.

(8) a. (R + R) + n
b. (R + n) + (R + n)

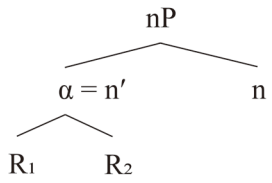
There are two possibilities: first, the two roots (Rs) are merged and then, the nominalizer n is merged. The other possibility is that each root R is first merged with the nominalizer n, and then the complex is merged. Note that n is a functional head that determines the category, so n cannot be merged with each other.

In addition, since a Case particle is an element that combines with a complete word/phrase, a lambda feature can be added to the internal structure of (8b), which forms a noun at the part indicated by "( )." Thus, two more possibilities arise, shown in (9).

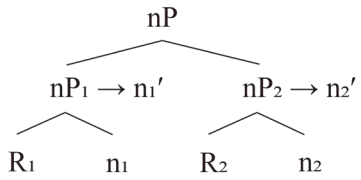
(9) a. The possibility of not adding a lambda feature to the resulting syntactic object (8b)
b. The possibility of adding a lambda feature to the resulting syntactic object (8b)

I argue that (8a), (9a), and (9b) correspond to Japanese lexical, Word^{+}, and postsyntactic compounds, respectively. More specific structures are shown in (10). In (10), the label α and subscripts are added for explanatory purposes.

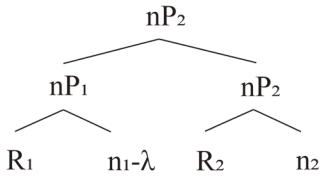
(10) a.



b.



c.



In (10a), R_1 and R_2 are first merged to form a complex α. Since R cannot participate in label determination, the label of α is undetermined at this point. α is further merged with n. Since only n has label determination capability at this point, the overall label is nP. Subsequently, α is interpreted as n′. In (10b, c), R_1 and R_2 are merged with n_1 and n_2, respectively, to form nP_1 and nP_2. Then these nP_1 and nP_2 are further merged. In (10b), the feature that $n(P)_1$ and $n(P)_2$ have in common at this point is nominal features. Therefore, following (7b-ii), the entire label is determined to be nP by sharing the nominal feature. Subsequently, nP_1 and nP_2 are interpreted as n_1' and n_2', respectively. On the other hand, in (10c), since n_1 has λ, n_1 cannot participate in label determination and $n(P)_2$ is chosen as the overall label.[2]

4. An Analysis

In this section, I show how the facts in (1)-(6) can be explained based on the proposals in the previous section.

First, the facts in (1)-(3) that post-syntactic compounds have the corresponding clause but lexical and Word$^+$ compounds do not is explained by the presence or absence of λ features. The structure of the (a) examples in (1)-(3) are shown in (11).

(11) a. $[_{nP}\ [_{\alpha = n'}\ [_R$ shinkon$][_R$ ryoko$]]$ n$]$

b. $[_{nP}\ [_{nP \rightarrow n'}\ [_R$ yakinikuten$]$ n$]\ [_{nP \rightarrow n'}\ [_R$ keieisha$]$ n$]]$

c. $[_{nP}\ [_{nP}\ [_R$ sotsugyosiki$]$ n-$[_{\lambda}$ ga$]][_{nP}\ [_R$ shuryogo$]$ n$]]$

As shown in (11), lexical and Word$^+$ compounds do not contain λ features inside. Therefore, Case particles are not realized. On the other hand, post-syntactic compounds contain a λ feature in them. If it has a phonological feature, a phrase is formed. If it does not, a postsyntactic compound is formed.

Second, the fact in (4) that subject honorification words do not occur in lexical and Word$^+$ compounds, but are allowed in postsyntactic compounds is explained by the general property that such words can only occur at word/phrase boundaries. As is evident from (12), the number of nPs that exist within lexical and Word$^+$ compounds is 0 while the postsyntactic compound has two nPs.

(12) a. $[_{nP}\ [_{\alpha = n'}\ [_R$ shinkon$][_R$ ryoko$]]$ n$]$

b. $[_{nP}\ [_{nP_1 \rightarrow n_1'}\ [_R$ choki$]$ n$]\ [_{nP_2 \rightarrow n_2'}\ [_R$ taizaikeikaku$]$ n$]]$

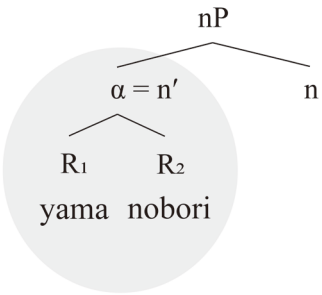
c. c. $[_{nP_2}\ [_{nP_1}\ [_R$ Yooroppa$]$ n-λ$][_{nP_2}\ [_R$ taizai$]$ n$]]$

Note that nP_1 and nP_2 in (12b) are eventually interpreted as n_1' and n_2', respectively. Therefore, in (12a, b), the number of nPs that exist inside is 0. Hence, the number of clause boundaries is also 0. On the other hand, there can be multiple nPs in a postsyntactic compound. (12c) has two nPs, nP_1 and nP_2. Therefore, there is a single clause boundary within this postsyntactic compound and thus a subject honorification word can occur.

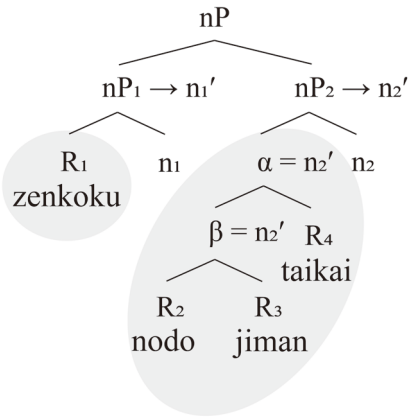
Third, the fact in (5) that there are differences in the accents of the three types of compound words is explained in terms of the number of n. Following Marantz (2001), Arad (2003), and Anagnostopoulou (2014), let us assume that the functional categories that determine the categories form a phase. Then, n's

complement forms a transfer domain. Since the transfer domain is the domain that is transferred to the phonological form, it is assumed that accent assignment occurs in each of these domains. Now, consider the internal structures of (5) shown in (13).

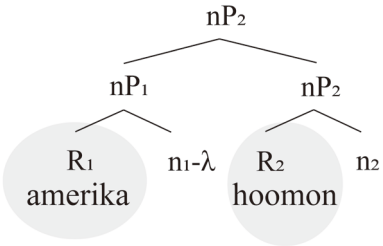
(13) a.



b.



c.



In the lexical compound (13a), the number of n is 1 and consequently, the transfer domain is also 1 (the shaded area). Therefore, only one accent is assigned. On the other hand, Word^{+} and post-syntactic compounds can have more than 1 n in their structures. This means that they can have more than 1 transfer domains where accents are assigned. In the case of (13b, c), there are two n's in each case, and two transfer domains are formed accordingly (the shaded areas). Therefore, these Word^{+} and postsyntactic compounds can have two accents.

Fourth, the fact in (6) that lexical and Word^{+} (but not post-syntactic) compounds form an "anaphoric island" can be explained by assuming that pronouns can refer to only nP. Pronouns can basically refer to only a "word" or "phrase," not its internal elements. Therefore, it is reasonable to assume that only a "word" nP can be referred to. The (parts of the) structures of (6) are given in (14).

(14) a. *[$_{nP}$ [$_{\alpha = n'}$ [$_{R}$ kampo]$_i$ [$_{R}$ shageki]] n] no ori, sore$_i$ ha jidai okure da to i tta.

b. *[$_{nP}$ [$_{nP \rightarrow n'}$ [$_{R}$ hushin sen] n]$_i$ [$_{nP \rightarrow n'}$ [$_{R}$ shageki junbi] n]] no ori, sore$_i$ ha supai sen da to i tta.

c. [$_{nP}$ [$_{nP}$ [$_{R}$ hushin sen] n-λ]$_i$ [$_{nP}$ [$_{R}$ shageki] n]] no ori, sore$_i$ ha supai sen da to i tta.

As is clear from the structures in (14), lexical and Word^{+} compounds do not contain an nP in their structure. Note in particular that the nP in (14b) is eventually interpreted as n′. Therefore, these internal elements cannot be antecedents for the pronouns. On the other hand, the post-syntactic compound in (14c) contains an nP, so that this nP can act as an antecedent for the pronoun.

5. Further Consequences

This section shows further consequences of the present analysis. First, based on the analysis, we can explain the differences in interpretation. Lexical compounds, unlike Word^{+} compounds and post-syntactic compounds, have non-compositional interpretations. For example, the lexical compound *shinkon ryoko* "honeymoon" can be said without actually

traveling, but the Word^{+} compound *yakinikuten keieisha* "barbecue restaurant owner" and the post-syntactic compound *sotsugyosiki syuryogo* "after graduation ceremony" can only be used if the person actually owned a barbecue restaurant and the graduation ceremony was completed.

This fact is explained in terms of the difference in the number of n's and the associated number of transfer domains. The lexical, Word^{+}, and postsyntactic compounds have the structure in (15). The shaded area in (15) indicates the transfer domain.

(15) a. $[_{nP}\ [_{\alpha = n'}\ [_{R}$ shinkon$][_{R}$ ryoko$]]$ n$]$
b. $[_{nP}\ [_{nP_1 \rightarrow n'}\ [_{R}$ yakinikuten$]]$ n$]$ $[_{nP_2 \rightarrow n'}\ [_{R}$ keieisha$]]$ n$]]$
c. $[_{nP}\ [_{nP_1}\ [_{R}$ sotsugyosiki$]$ n-λ$][_{nP_2}\ [_{R}$ shuryogo$]$ n$]]$

As is clear from (15), there is only one transfer domain for the lexical compound (15a) while the Word^{+} and postsyntactic compounds have two transfer domains. Since transfer domains are the area to be transferred to the logical form, I assume that the interpretation is determined by this area. Then, the structure is interpreted only once in (15a) and twice each in (15b, c). In other words, in (15b, c) the interpretation process proceeds step by step. This explains why lexical compounds have non-compositional interpretations, whereas Word^{+} and postsyntactic compounds have compositional ones.

Second, the present analysis explains why there are no postsyntactic compounds in English as there are in Japanese. It is known that there is an English counterpart (16) to Japanese (17),

(16) a. He was the groundsman, handyman, **if-there's-any-sort-of-difficulty-ask-William-and-he'll-fix-it-for-you person** about the place.
b. We've got a **what-the-unions-will-allow-us-to-print press**.
c. The old **manage-somehow-on-a-shoestring days** were definitely gone.

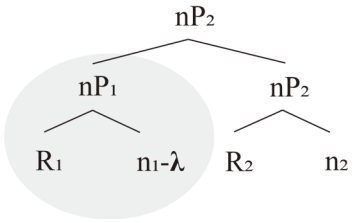
(Bauer, Lieber, and Plag (2013: 489), boldface in the original)

(17) a. ryoko ni iko kyampen
trip DAT let's-go-on campaign
"the let's-go-on-a-trip campaign"
b. jitaku de shigoto shiyo
home at work let's-do
gekkan
month-long-campaign
"the let's-work-at-home
month-long-campaign"

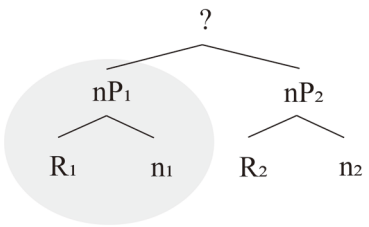
However, there is no counterpart to the postsyntactic compounds that we have seen thus far. This fact itself has often been pointed out in previous studies, but the reasons for this have not been seriously considered.

If the present analysis is correct, then a λ feature is needed to form a postsyntactic compound. This λ feature originally corresponds to Case markers. Since Japanese is a language that uses Case markers to indicate Case, we can use the implicit Case marker, the λ feature. On the other hand, English does not use Case markers. Therefore, it cannot use the implicit Case marker, λ feature. Thus, English cannot form post-syntactic compounds. This is shown in (18), where (18a) and (18b) show Japanese and English, respectively.

(18) a.



b.



In (18b), it would be possible to share nominal features and determine the overall label as nP, which would form a Word^{+} compound. However, I will not go any further into English Word^{+} compounds in this paper, as their existence itself needs to be examined in more detail.

6. Conclusion

The paper has given a new analysis of three Japanese compounds using Chomsky's (2013, 2015) Labeling Algorithm, and we have also shown the consequences of the analysis. If the present analysis is correct, it can provide a principled explanation for the differences between the three types of compounds.

NOTES

[1] I adapt for consistency the notations in the example sentences cited in this paper.

[2] Note that the bar levels in (10) are different from the traditional bar levels of the X-bar theory. I treat as bar levels those that do not fall into traditional heads or maximum projections.

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Explanatory-Resultative Effects Involved in the Present Perfect Progressive: A Cognitive Grammar Approach*

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Keywords：Present Perfect Progressive, Explanatory-resultative effects, Cognitive Grammar

1. Introduction

The Present Perfect (PP) and the Present Perfect Progressive (PPP) in English are said to refer to "past involving the present" in the previous studies (cf. Comrie (1976), Leech (2004)); they are both associated with the notion of current relevance and thus denote a past situation related to the speech time. Put differently, when a speaker uses these perfect tenses, he/she is concerned with the relation between the present and past situations.

Some previous studies have claimed that the perfect tenses are divided into two major uses (cf. Declerck (1991) and Depraetere and Reed (2000)). One is the continuative use, which describes a situation or a habit that started in the past and continues up to the present, as in (1).

(1) a. I've lived in this neighborhood since I was a kid. (Leech (2004: 36))
b. I have been working in the garden since 8 o'clock. (Declerck (1991: 100))

The other use is the indefinite use, which describes a situation occurring at least once before the speech time, as in (2). This use includes the "experiential" and "resultative" uses.

(2) a. The taxi has arrived. (Leech (2004: 39))
b. Be careful! John has been painting the door. (Araki and Yasi (1992: 1126))

It should be noted that the PPP in (2b) describes the occurrence of John's painting the door in the past and may further imply, as a resultant state, that the paint on the door has not dried yet at the speech time.

Thus far, the PPP has generally been analyzed in the same way as the PP and only a few studies have directed attention to the PPP. However, a certain use of the PPP has some properties which cannot be found in the PP (cf. Depraetere (1999), Depraetere and Reed (2000)). For example, the indefinite use of the PPP can be used to "explain" the present state by referring to its cause in the past.

(3) A: You look tired.
B: Yes, I've been working too hard lately. (Declerck (1991: 164))

In (3), by using the PPP, Speaker B "explains" the state of his/her feeling tired now by referring to his/her hard work as a cause. (2b) can also be analyzed in the same way. Based on the term proposed by Declerck (1991), I refer to this phenomenon as "the explanatory-resultative effects."

The effects cannot be analyzed in terms of lexical aspects. Depraetere (1999) touches on them in light of telicity, but there is no correlation between the effects and telicity,

because both a telic predicate, as in (2b), and an atelic predicate, as in (3), are used in the PPP implying the explanatory-resultative effects.

The effects in question seem not to appear in the indefinite use of the PP, as in (4), and the continuative use of the PPP, as in (5).

(4) I have worked the whole day.
(Radden and Dirven (2007: 217))

(5) I have been shampooing this poodle for half an hour [and I'm still trying to rinse the soap out of its fur]. (Declerck (2006: 236))

(4) indicates that the speaker finished working, focusing on the resultant state deriving from the completion of the event. (5) expresses the situation of shampooing the poodle, which continues into the speech time. It seems that these perfect tenses do not "explain" the present state in the same way as the indefinite use of the PPPs in (2b) and (3).

A question, then, arises as to why the indefinite use of the PPP denotes a situation with the explanatory-resultative effects. As far as I know, there is no systematic explanation about this point. In order to explain it, I attempt to analyze the PPP in the Cognitive Grammar approach, based on which I will construct the cognitive schemata of the continuative and indefinite uses of the PPP, and claim that the schema of the indefinite use can evoke the explanatory-resultative effects.

2. Cognitive Schemata of the Progressive Aspect and the Present Perfect

This section overviews the *cognitive schemata* of the progressive aspect and the Present Perfect (PP) in the Cognitive Grammar approaches adopted in Langacker (1991, 2001, 2008) and De Wit (2017). In this paper, the term *cognitive schema* is defined as the schematization of each component's properties from the perspective of Cognitive Grammar.

Langacker (2001) proposes that, when a conceptualizer (i.e., a speaker or hearer) construes a situation, it is divided into two types in terms of whether it includes the beginning and end points (temporal boundaries) or not: a perfective or imperfective situation. The former is a situation whose temporal boundaries are included in the range of the conceptualizer's consciousness. Therefore, when this situation is described, he/she construes the beginning, process and end of the situation involved. On the other hand, the latter is a situation whose temporal boundaries are not contained in the range of the conceptualizer's consciousness. When this situation is denoted, he/she pays attention only to the process of the situation.

These situations are described by the relation between the concepts of scopes and profiling. As for the former, Langacker claims that two types of scope are necessary to interpret a situation. One is the maximal scope (MS), which embraces an overall content relevant to the situation (including the background knowledge). The part within the MS corresponds to the "background." The other is the immediate scope (IS), which subsumes the selected segment of the MS that is directly involved with the situation. Therefore, the part within the IS corresponds to the "foreground." Moreover, the part within the IS that can attract more attention and be more salient is the profile and such an operation is called profiling. A situational type is determined by the interaction among the two scopes and profiling.

2.1. The Progressive Aspect

Let us now turn to the progressive aspect,

which constitutes the core meanings of the Preset Perfect Progressives (PPPs). By using the analytical tools introduced above, I will show how the progressive aspect can be treated.

Langacker (2001) argues that the progressive aspect serves as zooming in on a dynamic situation. In other words, when expressing a situation in the progressive aspect, the conceptualizer construes it from the internal viewpoint and is not conscious of its beginning and end points.

(6) I'm writing a letter. (Leech (2004: 24))

(6) describes the situation of the speaker's writing a letter, an ongoing situation at the speech time. Because the progressive aspect involves the role of taking an internal viewpoint, the conceptualizer focuses his/her attention on the process of the situation.

These observations are reflected in Figure 1; the IS is put on the middle of a perfective situation and excludes the temporal boundaries. This is because the progressive aspect turns a perfective situation into an imperfective one.

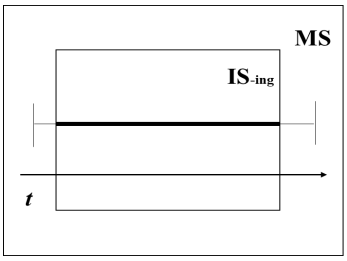

Figure 1 Progressive Aspect
(cf. Langacker (2001: 259))

The property of the progressive aspect, i.e. the function of zooming in, is represented by the IS, and such a scope is referred to as the $IS_{\text{-ing}}$.

While the $IS_{\text{-ing}}$ covers the middle part of the situation involved, the MS embraces the whole content related to it. The conceptualizer pays more attention to the process of the situation, i.e. the process is the target of this situation, so the part within the $IS_{\text{-ing}}$ is profiled. In this figure and elsewhere, the concept of profiling is represented by a bold line; the timeline is represented by an arrow with *t*.

2.2. The Present Perfect

Along the same lines, De Wit (2017) attempts to illustrate the cognitive schemata of the Present Perfects (PPs). As we saw in the introduction, the PP describes a prior situation relevant to the present state (i.e. current relevance). Therefore, when a conceptualizer utilizes the PP, he/she is concerned with the present state. This induces De Wit to suggest that the PP imposes the IS on a portion of the present state. Hereafter, the IS associated with the property of the PP is referred to as the IS_{have}. Based on these observations, she constructs the schemata of the continuative and indefinite uses of the PP.

Firstly, let us observe the continuative use, as in (7), which expresses that the conceptualizers became acquainted with each other several years ago and their relationship still lasts at the speech time.

(7) We've known each other for years.
(Leech (2004: 36))

The continuative use of the PP is schematized in Figure 2. As with the progressive aspect, the MS embraces the whole context relevant to the situation involved. On the other hand, the IS_{have} is imposed on the portion of the situation holding at the speech time (represented by the zigzag part). Because the conceptualizer focuses on the state holding at the speech time, the IS_{have} occupies the same portion covered by the IS_T, which is profiled (i.e., $IS_{\text{have}} = IS_T$).

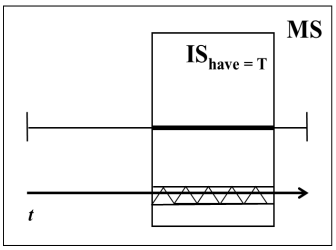

Figure 2 The continuative use of the PP (cf. De Wit (2017: 34))

Next, the indefinite use describes a prior situation, which was completed before the speech time. Moreover, it can imply an "entailed" resultant state, which is derived from the completion of the situation, or an "implicated" resultant state, i.e. a state inferred from or triggered by the prior situation involved.

(8) Someone has broken her doll.

(Leech (2004: 39))

In (8), the speaker represents the situation of someone's breaking her doll and focuses on the entailed resultant state, which was caused directly by this event, that is, her doll is still broken at the speech time. The indefinite use is schematized in Figure 3.

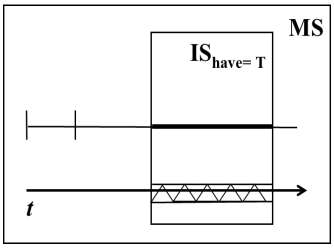

Figure 3 The indefinite use of the PP (cf. De Wit (2017: 33))

As with the continuative use, the IS_{have} subsumes a portion of the resultant state holding at the speech time. Because of current relevance, the indefinite use is concerned with the resultant state holding at the speech time, so the area covered by the IS_{have} coincides with that covered by the IS_T. In addition, the conceptualizer pays attention to the state at the speech time, that is, the state within the $IS_{have=T}$, which is profiled.

Based on the above cognitive schemata, in the following section, I will schematize the two uses of the Present Perfect Progressive (PPP).

3. The Cognitive Schemata of the PPP

In this section, in terms of the interaction between the scopes and profiling, I will construct the schemata of the two uses of the PPP. I assume that the PPP has both the property of the progressive aspect and that of the PP, and the two uses reflect them. Thus, the PPP has two immediate scopes, $IS_{\text{-ing}}$ and IS_{have}. What type of cognitive schema a PPP represents depends on how the $IS_{\text{-ing}}$ operates interactively with the IS_{have}.

3.1. The Schema of the Continuative Use

Firstly, let us observe the continuative use of the PPP. This use denotes a situation that occurred in the past and leads up to the speech time or beyond. However, this use of the PPP is different from that of the PP in that the PPP can use a non-stative predicate to express the situation in question, while that of the PP basically cannot.

The semantics of the continuative use of the PPP can be analyzed in terms of the properties of the progressive aspect and the PP. By taking an internal viewpoint, the perfective situation is re-interpreted as the imperfective one. In other words, the conceptualizer is concerned only with the process of the situation involved. By virtue of the property of the PP (i.e. current relevance), he/she focuses on the situation especially holding at speech time.

The schematization of this use of the PPP is illustrated in Figure 4, where the properties of the progressive aspect and the PP are reflected in

the $IS_{\text{-ing}}$ and IS_{have}, respectively: the $IS_{\text{-ing}}$ covers a middle portion (process) of the perfective situation, while the IS_{have} and IS_T occupy the same portion as the speech time. Note that in the case of the continuative use the IS_{have} covers the portion within the $IS_{\text{-ing}}$ which is profiled.

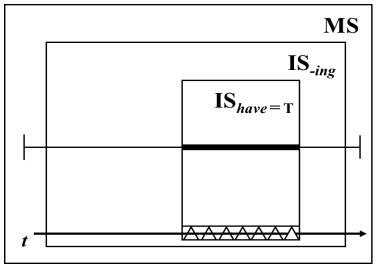

Figure 4 The continuative use of the PPP

The schema in Figure 4 expresses that the PPP can use a non-stative predicate for the continuative use.

3.2. The Schema of the Indefinite Use

Secondly, let us turn to the indefinite use of the PPP. This use expresses a situation that occurred before the speech time, as with the PP. However, the difference between the two perfect tenses is that the PPP focuses more on the prior situation and can only express an implicated resultant state, which can be inferred from the prior event.

Consider (2b) again. The speaker focuses on the prior situation (i.e. *John's painting the door*) and can denote an implicated resultant state triggered by the prior situation, i.e. the paint of the door has not dried yet in this case. Based on these observations, we can say that by virtue of the property of the PP, the indefinite use of the PPP is concerned with the present state, while by virtue of the property of the progressive aspect, we pay attention to the process of the prior situation. Therefore, in this use, our attention is paid to both situations.

These semantic properties of the indefinite use are schematized in Figure 5.

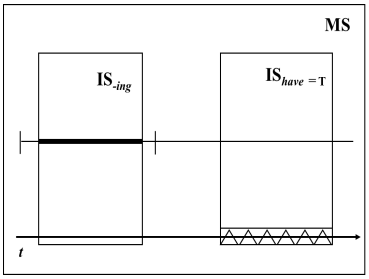

Figure 5 The indefinite use of the PPP

The $IS_{\text{-ing}}$ and IS_{have} occupy different time ranges. As with the continuative use, because of current relevance, both the IS_{have} and the IS_T occupy the same range as the speech time, in which some resultant state holds. In other words, the resultant state holding at the speech time is salient, so the conceptualizer is concerned with it. On the other hand, the $IS_{\text{-ing}}$ is imposed only on the process of the prior situation and turns the perfective situation into an imperfective one, which reflects the property of the progressive aspect. Thus, only the internal part of the situation covered by the $IS_{\text{-ing}}$ is paid attention to and emphasized. Therefore, this cognitive schema guarantees only an occurrence of the situation involved, so the resultant state within the IS_{have} is interpreted as an implicated resultant state.

In addition, it should be noted that the process (middle part) of the prior situation receives more attention because it is profiled. This is because this use of the PPP is intended to represent what cannot be expressed by the indefinite use of the PP, where the present state is profiled.

In the next section, by utilizing these cognitive schemata of the PPP, I will provide an answer to the question of why the indefinite use of the PPP, but not the indefinite use of the PP and the continuative use of the PPP, denotes a situation with the explanatory-resultative effects.

4. The Explanatory-Resultative Effects

I will claim that the differences between the cognitive schemata of the three perfect tenses play a crucial role. Let us first consider why the indefinite use of the PPP can be accompanied by the explanatory-resultative effects. The cognitive schema in Figure 5 merely guarantees the occurrence of the situation, not the completion of it, and the resultant state captured by the IS_{have} is an implicated resultant state, which is triggered by the situation involved. Furthermore, because of current relevance, a conceptualizer is concerned with the relation between the present state and the prior situation, both of which are salient, while the process of the prior situation is profiled and is the most prominent part. Thus, the profiled portion of the past situation within the $IS_{\text{-ing}}$ is described in reference to the present resultant state within the IS_{have}, and one infers from the implicated resultant state that the prior situation is the cause of that resultant state. Since the resultant state is not derived from the completion of the prior situation but triggered by its occurrence, one has to infer the relation of the two situations and thus reasoning comes into play. Hence comes the "explanation" function of the indefinite use of the PPP. This is why the indefinite use of the PPP can be accompanied by the explanatory-resultative effects.

By contrast, the cognitive schema of the indefinite use of the PP (cf. Figure 3) only has the IS_{have}, so the prior event is not covered by any IS and thus it is not emphasized. Therefore, although the indefinite use of the PP has current relevance, it cannot evoke the effects in question. With respect to the continuative use of the PPP, there is no boundary between the present and past situations (cf. Figure 4) and thus an inferencing process like the one for the indefinite use of the PPP is not in operation. Thus, the explanatory-resultative effects do not happen.

As a consequence of this analysis, it is possible to account for why some instances of what Declerck (2006) calls the "up-to-now" use have the explanatory-resultative effects. This use has both semantic properties of the continuative use and the indefinite use and describes a situation or a set of situations holding in a certain period of time ranging from the past to the present but excluding the speech time, as in *Your little boy has been jumping and shouting for the whole morning* (Chen (1982: 183)). In this example, the speaker "explains" why he/she is irritated now by describing the situation involved as the cause of his/her present state.

In our cognitive approach, the $IS_{\text{-ing}}$ and the IS_{have} of this use each ocuppy the distinct portions, as in Figure 6.

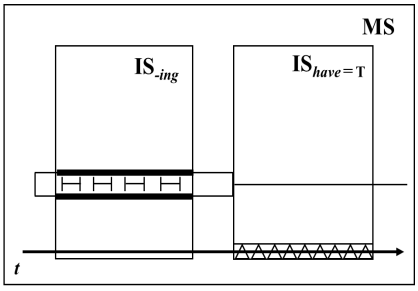

Fig. 6 The up-to-now use of the PPP

All the situations which occurred repetitively before the speech time are regarded as a whole. In the same way as the other uses of the PPP, the up-to-now use imposes the $IS_{\text{-ing}}$ on the middle portion of the situation (i.e. a set of situations), and the part within the $IS_{\text{-ing}}$ is profiled. In addition to this, the IS_{have} subsumes a state at the speech time, an implicated resultant state triggered by the prior situation, since the situation involved does not continue into the speech time.

By assuming this schema, the conceptualizer is concerned with the resultant state at the

speech time, but more with the process of the prior situation; since the portions of the ISs of the two situations occupy different time ranges, he/she can reason that the occurrence of the prior situation is a cause for the present state. Therefore, as with the indefinite use, the up-to-now use can evoke the explanatory-resultative effects.

5. Conclusion

In this paper, I have analyzed the PPP under the cognitive approaches developed by Langacker (2001) and De Wit (2017), based on which I constructed the cognitive schemata of the continuative and indefinite uses of the PP and the PPP. The reason why only the indefinite use of the PPP can show the explanatory-resultative effects is due to its cognitive schema (Figure 5). Because of the similarities of the cognitive schemata, the up-to-now use of the PPP can also show the same effects, which supports our analysis.

* I would like to express my gratitude to the audience at the conference. I would also like to thank Naoaki Wada for valuable comments on this paper. Of course, any errors in this paper are my own responsibilities.

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収束性を伴うフェイズ*

（On Phases with Convergency）

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1. はじめに

本稿の目的は収束性にもとづいたフェイズ理論において、(1)と(2)で示した ECM 構文や多重 WH 疑問文がどのように派生されるのかを説明することである。

(1) Who did you expect your mother all to meet at the party? (McCloskey (2000: 70))
(2) Who remembers where we bought which book? (Baker (1970: 215))

2. 収束性を伴うフェイズ

英語において、(3a)のような埋め込み節からの取り出しは節境界(clause-boundary)を超えることになるため、非文となる。しかし、(3b)のように、当該名詞句の主語が束縛代名詞の場合は、取り出しが可能となる。

(3) a. *The book is too dear for Jim to claim [$_{CP}$ that Mary lent __ to Ann].
b. The book is too dear for Jim$_1$ to claim [$_{CP}$ that he$_1$ lent __ to Ann].
(Grano & Lasnik (2018: 481))

Grano & Lasnik (2018)(以下(G&L))では、この現象には補文の目的語位置からの演算子移動があると仮定し、説明のため、以下のような提案を行った。

(4) a. Unvalued features on the head of the complement to the phase head keep the phase open.
b. The locality domain for the phenomena that give rise to the bound pronoun effect is the phase.
c. Bound pronouns optionally enter the derivation with unvalued φ-features.
(Grano & Lasnik (2018: 482))

(3a)では、CP 内の主語 Mary と時制要素 T の φ 素性の一致により、T の値を持たない φ 素性に値が与えられる。T はフェイズ主要部 C の補部の主要部であるため、(4a)に従うと CP フェイズが完成する。その後、CP フェイズから演算子が取り出されると、(5)で示したフェイズ不可侵条約の違反になるため、(3a)は非文となる。

(5) Phase Impenetrability Condition
In phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.
(Chomsky (2001: 108))

一方、(3b)の CP 内の主語は束縛代名詞 he であり、(4c)に従うと、φ 素性は値を持たずに派生に導入される。この場合、he が持つ φ 素性は T が持つ φ 素性に値付けできないため、CP フェイズが完成しない。したがって、演算子は CP を超えて移動が可能であり、(3b)が問題なく派生される。

しかし、G&L では説明できない事実が２つ存在し、その１つが ECM 構文における補文からの取り出し可能性についてである。

(6) I believe John to be the winner.
(Chomsky (1986: 189))
(7) John is believed to be the winner.

(6)は ECM 構文であり、(7)はその受動文である。ECM の補文不定詞節の範疇は一般的に TP であると考えられてきた。しかしながら、McCloskey (2000)や Boskovic (2007)は次のような例から、ECM 補文不定詞節は CP と分析している。

(8) What all do you think (all) that he'll say (all) that we should buy (all)?
(McCloskey (2000: 62))
(9) a. Who did you arrange [all for your mother to meet at the party]?
b. *Who did you arrange [for your mother all to meet at the party]?
(McCloskey (2000: 70))
(10) Who did you expect your mother [all to meet at the party]? (McCloskey (2000: 70))

(8)に示したように、what を修飾する浮遊数量詞 all は CP 指定部位置に残留する。また、不定詞構文を含む場合は、(9a)のように、all は不定詞節の補文標識とされる for の直前に現れることができる。しかし、(9b)では all が埋め込み節内の CP と TP の間に位置しており非文となっている。

これらのことを考慮して(10)を考えてみる。all は(9b)と同様の位置にあるように見えるが、非文とならない。この事実は all が補文の CP 指定部に存在し、your mother が主節の *v**P に移動していると考えることで説明ができる。

以上のことから、従来 TP と考えられてきた ECM 補文は CP であることがわかる。

しかし、G&L に従うと、(10)の文法性が説明できない。Chomsky (2001)では、ECM 構文の補文不定詞節の T は T_{def} であり、φ 素性は[person]素性のみを有し、それ以外の素性は欠けていることが示唆されている。もしこの仮定が正しいとすると、(10)の your mother には値のある φ 素性が存在するため、T_{def} の φ 素性に値を与えることになる。したがって、G&L の提案(4a)に従うと、CP フェイズが完成し、ECM の補文主語である your mother の取り出しが不可能となる。(7)のような補文主語が受動化されている場合においても同様の理由で取り出しができなくなることが予測されるが、事実と合っていない。

さらに２つ目の問題点として、(2)((11)として再掲)の多重 WH 疑問文があげられる。(12)は(11)が持つ多重 WH 疑問文の特徴を示したものであり、Pair-List 読みが可能であることがわかる。

(11) Who remembers where we bought which book? (Baker (1970: 215))
(12) John remembers where we bought the physics book and Martha and Ted remember where we bought *The Wizard of Oz*. (Baker (1970: 215))

Chomsky (2015)では、WH 句には値を持たない Q 素性が存在することが示唆されており、C と一致関係を作ることで、C からの値付けが行われる。(12)の Pair-List 読みが可能であることを考慮すると、(11)では who と同様に which book が広い作用域をとり、その両方が主節の C からの Q 素性の値付けを必要とする。埋め込み節の we の φ 素性は T の φ 素性と一致関係を作り、T の φ 素性に値付けが行われる。この場合、G&L の提案(4a)に従うと、CP フェイズが完成することになる。which book はそのフェイズ内に存在しているため、主節の C が which book の Q 素性に値付けを行うとフェイズ不可侵条約の違反となる。したがって、G&L の分析では、誤った予測をすることになる。

3. 分析

Chomsky (2008)以降、値を持たないφ素性はCや*v**に含まれており、それぞれTやVに素性が継承されると考えられている。

(13) "… C and *v** are the phase heads, and their Agree-feature is inherited by the LI they select." (Chomsky (2008: 15))

本稿では(13)をもとに、フェイズに一致の概念を加えた(14)を提案する。

(14) Agreement Phase
機能範疇Tや語彙範疇VとDPの間でφ素性に関する完全な一致関係が作られるとすぐにフェイズが完成し、Phase Headの補部が転送される。

(14)で用いられている、「完全な一致関係」とは、φ素性に含まれる[person]素性と[Number]素性が単一のDPが持つφ素性と一致することである。以下、[person]素性と[Number]素性の両方持つφ素性をφ-completeと記す。[1] この提案を用いて、問題となっていたECM構文に観察される事実や多重WH疑問文のPair-List読みの可能性を再考する。

3.1. ECM構文とその受動化

2節において、G&LのECM構文の受動文や数量詞残留現象を説明することができないと指摘した。本節では、まず、ECM構文における補文主語の受動化の派生を考えてみる。

(15) John is believed to be the winner.
a. [$_{CP}$ C [$_{<\varphi,\varphi>}$ John [$_{TP}$ to be the winner]]]
b. [$_{CP\neq Phase}$ C [$_{<\varphi,\varphi>}$ John [$_{TP}$ to be the winner]]]
c. [John … … [$_{CP\neq Phase}$ C [$_{<\varphi,\varphi>}$ t_{John} [$_{TP}$ to be the winner]]]]

上述した通り、ECMのTはT_{def}であり、[person]素性以外の素性が欠けている。したがって、ECM主語であるJohnはTと一致関係を作り、Tのφ素性に値付けを行う。しかし、φ-completeの一致ではないため、(14)に従うとCPはフェイズにならない。その結果、その後の派生において、Johnは主節のTP指定部に移動可能であるため、(15)の受動文が問題なく派生される。

数量詞残留が起こるECM構文に関しても同様の説明が可能となる。

(16) Who did you expect your mother all to meet at the party?
a. [$_{CP}$ C [$_{<\varphi,\varphi>}$ your mother [$_{TP}$ to [$_{v^*P}$ $t_{your\ mother}$ [$_{v^*P}$ meet who all]]]]]
b. [$_{CP\neq phase}$ C [$_{<\varphi,\varphi>}$ your mother [$_{TP}$ to [$_{v^*P}$ $t_{your\ mother}$ [$_{v^*P}$ meet who all]]]]]
c. [who all [$_{CP}$ C [$_{<\varphi,\varphi>}$ your mother [$_{TP}$ to [$_{v^*P}$ $t_{your\ mother}$ [$_{v^*P}$ meet $t_{who\ all}$]]]]]]
d. [$_{<Q,Q>}$ who [……[$_{v^*P}$ v* [$_{<\varphi,\varphi>}$ your mother [$_{VP}$ expect [$_{CP}$ t_{who} all [$_{CP}$ C [$_{<\varphi,\varphi>}$ $t_{your\ mother}$ [$_{TP}$ to [$_{v^*P}$ $t_{your\ mother}$ [$_{v^*P}$ meet $t_{who\ all}$]]]]]]]]]]]

(16)において、ECM主語のyour motherとTの間で一致関係が作られるが、φ-completeの一致ではない。したがって、(14)を考慮すると、フェイズが完成しないため、your motherは主節のVPに移動可能となる。また、その移動によってexpect-your-mother-all-toという語順になることも説明可能となる。

3.2. 多重WH疑問文

2節において、G&Lの分析では多重WH疑問文のWH-in-situに値付けができないと指摘した。ここでは、その問題に対して説明を行う。

(17) Who remembers where we bought which book? (Baker (1970: 215))

(18) John remembers where we bought the physics book and Martha and Ted remember where we bought *The Wizard of Oz*. (Baker (1970: 215))

(17)では埋め込み節内の which book は可視的に移動していないが、(18)の返答が可能であることから、who と共に解釈されることを示している。補文内の主語は補文の T 主要部と完全な一致関係を作っているため、(14)により補文 CP はフェイズとして機能する。したがって which book が移動しないことに対しては説明が与えられるが、主文の C による値付けが行われず、Q 素性の値付けに関しては問題が残ったままである。そこで、本稿では以下のような Q 素性の細分化を提案する。

(19) Q_S-Feature と Q_L-Feature
  a. Q_S-Feature は統語部門で Q 素性の一致を要請する。
  b. Q_L-Feature は LF で Q 素性の一致を要請する。

(19b)の [Q_L]素性は統語部門において、値が与えられずに残っていたとしても、フェイズの完成に影響を与えないと考える。

この提案を用いて(17)を再考する。(17)では who には[uQ_S]素性が存在し、which book には[uQ_L]素性が存在すると仮定する。[uQ_S]素性は統語部門での一致を要請するため、主節の CP 指定部まで移動する。一方、which book は埋め込みの CP フェイズに含まれており、統語部門において操作を加えることができない。しかし、which book は[uQ_L]素性を持ち、LF での値付けを要請するものであるため、フェイズ内に含まれていても問題が生じない。主節の C が who と一致関係を作り、その後 LF に転送された段階で[uQ_L]素性が C と一致関係を作り、C が持つ Q 素性から値が与えられる。その結果、主節の who が広いスコープを取ると同時に、which book も広いスコープを取ることが可能となる。

また、LF において、主節の who と which book が演算子合併を行うことで、(18)のような Pair-List 読みが出ることから、(17)の派生が正しく行われていることになる。

4. 帰結

4.1. 弱フェイズ

Chomsky (2000)以降、他動詞文で用いられる *v**P はフェイズと考えられてきた。その理由として、それぞれの動詞が持つべき θ 役割の全てがそれぞれの項に与えられると、命題を成すと考えられてきたからである。

しかし、受動文や非対格文で用いられる *v*P の場合でも、同様に、それぞれの動詞が持つべき θ 役割の全てがそれぞれの項に与えられていることから、フェイズを成すと考えられる。

このことから Chomsky (2000)では CP と *v**P は強フェイズ、*v*P を弱フェイズと仮定し、弱フェイズはフェイズ不可侵条約の影響を受けないという提案を行なった。この弱フェイズを用いた受動文の派生は以下の通りである。

(20) John was hit.
  $[_{TP}$ John was $[_{vP=weak\ phase}$ hit t_{John}]]

目的語である John が主語の位置である TP 指定部に移動している。もし *v*P が強フェイズであれば、John の取り出しはフェイズ不可侵条約の違反になるため、問題となる。しかし、*v*P は弱フェイズであるため、John が取り出されたとしても問題が生じることはない。したがって、受動文の派生がうまくいくことがわかる。

しかし、Simplicity の観点から、２つのフェイズを仮定することには疑問が生じる。そこで、本稿での提案を用いると、弱フェイズを独立して仮定しなくても、その効果を演繹的に導き出せることを示す。

Chomsky (2001)や Gallego (2010)では、受動文や非対格文の生成の際に用いられる *v* は v_{def} であり、[person]素性が欠けているということが示唆されている。これを考慮した上で、受身文の派生を見ていく。

(21) John was hit.
a. [$_{vP\neq phase}$ hit John]
b. [$_{TP}$ John was [$_{vP\neq phase}$ hit t_{John}]]

(21)では *v* から V に素性が継承され、John と V の間で一致関係が作られる。しかし、*v* から V に継承された素性は φ-complete ではないため、(14)に従うとフェイズが完成しない。したがって、John に *v*P 外部から操作を加えることが可能となり、T が派生に導入された段階で、その指定部に移動することが可能となる。

ちなみに、Richards (2004)では、弱フェイズが Spell-Out や PIC と関係ないのであれば、フェイズとする必要はないと主張している。

(22) “If they are irrelevant for Spell-Out and the PIC then they are not phases at all in any useful, meaning sense. A weak phase is simply a non-phases; all phases must be ‘strong’.” (Richards (2004: 66))

以上のことから、これまで受動文や非対格文で仮定されていた弱フェイズを独立して仮定しなくても、本稿の提案を用いるとその効果を演繹的に導き出せることがわかる。

4.2. 島の制約と問い返し疑問文

次に、(19)を用いれば、島を含む文に関する事実も説明が可能となる。

(23) a. *What did Ann go home [after Mary read t]? (Grano & Lasnik (2018: 494))
b. *Who does Phineas know a girl [who is working with t]? (中島 (2016: 111))
c. *What did Mary believe the fact [that John had stolen t]? (江頭 (2019: 42))

(23a)は付加部の島、(23b,c)は複合名詞句から WH 句が抜き出された例である。付加部は主節とは別のワークスペースで生成されると考えられるが、これが主節と併合される時期については Wurmbrand (2014)の提案を採用する。

(24) Merge at Transfer
“Two objects can undergo a ‘last minute’ Merge after the two structures have been transferred (after syntactic structure building is completed), but before they are spelled-out.” (Wurmbrand (2014: 154))

(24)は統語対象物が、転送された後、Spell-Out される前の段階で併合される操作である。

この操作を用いると、(23)の付加部は主節とは別のワークスペースで生成され、それぞれが転送された後に(24)が適用される。しかし、この時、付加部内に存在する WH 句には[uQ$_S$]素性が存在し、すでに転送されているため、統語部門での一致の要請を満たすことができない。したがって、[uQ$_S$]素性の値付けが行われないまま派生が終わり、インターフェイスにおいて Full Interpretation により破綻してしまうため、(23)は非文となる。

また WH 疑問文には WH 句が島の内部に残っているような現象も存在する。

(25) a. Who likes books that criticize who?
b. Who got jealous because I speak to who?

(Fiengo, Huang, Lasnik & Reinhart (1988: 81))

(25a)は複合名詞句制約、(25b)は付加部の島の例である。これらの文では、それぞれの付加部内に WH 句が含まれており、これらが持つ[uQ]素性に値付けを行わなければならない。この場合、付加部の中に含まれる who は[uQ_L]素性を持つと仮定すると説明が可能となる。付加部は主節とは別のワークスペースで生成され、Merge at transfer の段階で併合される。[uQ_L]素性は LF での一致を要請するため、転送後に主節の C と一致関係を作ることで、付加部内に存在する WH 句にも Q 素性の値付けが正しく行われる。その結果(25)が正しく派生される。

また興味深いことに、問い返し疑問文では、島の制約が弱まるということが挙げられる。

(26) a. U: Mary left [after John met (mumble)].
EQ: Mary left [after John met who_E]?
(Chernova (2015: 185))
b. U: I was surprised at the rumor [that he bought the parachute].
EQ: You were surprised at the rumor [that he bought $what_E$]?
(Inada and Imanishi (2003: 233-234))

(26)の U は Utterance、EQ は Echo Question の略である。島の内部に含まれる WH 句の[uQ]素性には値付けを行わなければならないが、島は CP フェイズを成しており、[uQ]素性への値付けはフェイズ不可侵条約の違反となり、問い返し疑問文の派生に問題が生じる。しかし、これらの WH 句には[$uQ_{(EQ)L}$]素性が存在すると仮定すると説明できる。島は付加部であるため、主節とは別のワークスペースで生成され、転送後に Merge at Transfer で主節と併合される。転送前の段階では WH 句の[uQ_L]素性には値がついていないが、LF での一致を要請するため、転送後に主節の C から値が与えられることになる。したがって、Q 素性の値付けが問題なく行われることになる。

また、問い返し疑問文には、(27EQ)のように WH 句が移動しない場合と(27EQ')のように WH 句が移動する場合がある。

(27) U: Mary had tea with Cleopatra?
EQ: Mary had tea with who_E?
EQ': Who_E did Mary have tea with?
(Sobin (2010: 132))

(27EQ')の場合、WH 句に[$uQ_{(EQ)S}$]素性が存在すると仮定する。このように考えると、WH 句は統語部門で連続循環的に移動し、C の指定部で一致関係を結び、Q 素性の値が与えられることになる。したがって、移動を起こす問い返し疑問文に関しても、細分化された Q 素性を用いることで説明が可能となる。

5. まとめ

本稿では「一致によるフェイズ」を提案し、ECM 構文の派生、さらには弱フェイズの効果が自動的に出てくることを説明した。さらに、Q 素性の細分化を行うことで、多重 WH 疑問文や島の制約、問い返し疑問文の派生に対して説明を行なった。

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注

[1] 英語では、[Gender]素性は動詞との一致現象

に関与しないため、本稿ではφ素性に含まれないと仮定している。

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近代英語における借用語動詞の受容について　－persuade に焦点を当てて－

（Remarks on Verbs Borrowed in Modern English: With Special Reference to *Persuade*）

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1. はじめに

現代英語[1]では order, encourage を含む多くの動詞で目的語コントロールの「名詞句[2]＋to 不定詞」補文が見られる。

(1) a. I ordered *him to go.*
　　b. I ordered *him* [PRO *to go*]

(1) では目的語 him が‘to go’の主語として仮定される音形を持たない代名詞 PRO の先行詞である（稲田 (2000: 第５章)）。

目的語コントロールの「NP＋to 不定詞」補文は、歴史的観点からは二種類に分けられる (Los (2005)) 。次に OE の例を挙げる。[3]

(2) On hwilcum godum tihst þu
　　in which gods urgest thou
　　us to gelyfenne?
　　us$_{ACC}$ to believe$_{TO\text{-}INF}$
　　<ÆLS (George) 148>
　　‘Which gods do you urge us to believe in?’

(3) ða ðincg ðe ic bebeode
　　those things that I order
　　eow to gehealdenne
　　you$_{DAT}$ to hold <ÆCHom II, 21 181.47>
　　‘those things that I order you to hold’
　　((2), (3), Los (2005:53-54))

(2) は「駆り立て」の動詞 tihst が「NP＋to 不定詞」補文を取る例である。NP が対格となっていることに注意されたい。(3) の「命令・許可」の動詞 bebeode が「NP＋to 不定詞」を取る例では NP が与格である。「駆り立て」の動詞と「命令・許可」の動詞は使役に類似した意味を表す点で共通するが、OE ではこのように NP の格に違いがある。この違いは NP と to 不定詞に与えられる意味役割の違いを反映していると考えられる (Los (2005)) 。

(4) *Seocum mannum, and cildum*,
　　Sick man$_{DAT}$, and children$_{DAT}$,
　　we ne bebeodað nan fasten.
　　we not order no fast <HomM 7 23>
　　‘We do not order sick people and children to fast.’

(5) Nu ic bebeode *beacen ætywan*,
　　Now I order portent$_{ACC}$ appear$_{INF}$,
　　<And 727>
　　‘Now I order a portent to appear’

(6) tihte þæt halige mæden$_{ACC}$
　　urged the holy maiden
　　to þæra deofla offrungum
　　to the$_{GEN}$ demons$_{GEN}$ sacrifice$_{DAT}$
　　<ÆLS (Lucy) 57>
　　‘urged the holy maiden to sacrifice to demons’　((4)-(6), Los (2005:53-55))

(4) では「命令・許可」の動詞が二重目的語構文で使われている。二重目的語構文は授受の動詞で典型的に見られ、与格 NP の‘Seocum mannum and cildum’は受領者項であり、対格 NP の‘nan fasten’は主題項であると考えられる。つまり、「命令・許可」の動詞

は、命令や許可という情報の授受、すなわち伝達を表すと考えられる。「命令・許可」の動詞の受領者項は、(5) に見るように随意的である。(6)では「駆り立て」の動詞が主題を表すと考えられる対格 NP に加えて *to*-PP を取る。この PP は to の意味から着点項であると考えられる。

PE でも類似の違いが観察される。

(7) a. John *ordered Tom to leave immediately*.
b. He *commanded us patience*.
c. John *ordered the prisoner to be transferred to the prison hospital*.
((7a, c), Chiba (1985)[4])

(8) a. John *persuaded Tom to leave immediately*.
b. *He *persuaded the Town Hall to be demolished*.
c. He persuaded John { *into going to see the doctor* / *to a doctor }.
((8b, c), Los (2005:251))

(7a, b) を観察すると、PE の「命令・許可」の動詞は OE の (3), (4) と同様に「NP＋to 不定詞」補文を取り、二重目的語構文が可能であることが分かる。(7c) は目的語の‘the prisoner’が意味的に受領者とは考えられず、OE の (5) と同様に「NP＋to 不定詞」補文が全体として主題であると考えられる。(8) は「駆り立て」の動詞の「NP＋to 不定詞」補文が「命令・許可」の動詞のそれとは異なる性質を持つことを示す。(8a) に見るように、「駆り立て」の動詞も「命令・許可」の動詞と同様に「NP＋to 不定詞」補文を取るが、(8b) は被説得者が随意的でないことを示す。そして (8c) から、被説得者は着点へ移動する主題であることが窺われる (Los (ibid.)) 。ただし、PE においては、OE と異なり着点が *to*-PP で具現しない。

以上から、OE と PE の両方で「駆り立て」の動詞と「命令・許可」の動詞が項の意味役割で区別されうることが明らかになった。これら二種類の動詞が OE と PE で同様の性質を示すのであれば、少なくとも本来語ではその間に変化がなかったと想定される。しかし、「駆り立て」の動詞の１つとして挙げられる persuade は ModE の借用語である。借用語であることが理由で本来語とは異なる性質を見せるのだろうか。本論は persuade に焦点を当て、その借用当時の調査・分析を行う。具体的には、*The Oxford English Dictionary* (2nd edition)（以下、OED2）の引用例から資料を収集し、借用元言語であるラテン語（以下 L）の対応語の性質と比較しながら、資料を検討する。そして ModE は PE と異なり、persuade が「命令・許可」の動詞としての用法と、「駆り立て」の動詞としての特徴を併せ持ったことを明らかにする。

2. 資料

本節では、まず、L における persuade の対応語の性質を概観する。その後、ModE における persuade の性質を観察する。

2.1. L における対応語の性質

Persuade の L の対応語 persuadeo は Lewis and Short (1879)（以下 LS）によれば次の意味を持つという。

(9) a. ‘to bring over by talking, to convince of the truth of any thing, to persuade’
b. ‘to prompt, induce, prevail upon, persuade to do any thing’ (ibid. s.v. *persuadeo*)

これらは PE persuade でも見られる。意味は L から大きく変化していないようである。次に対応する例文を観察する。

(10) mihi persuaderi numquam
me be-persuaded never
potuit, animos ... vivere, etc.

can soul to-be-alive
'I was persuaded that soul can never be alive'

(11) numquam tamen haec felicitas
never still this fortune
illi persuasit neglegentiam
him persuades negligence
'This fortune still never persuades him of negligence'

(12) persuasit ei tyrannidis finem facere
he-persuaded him tyranny to end
'he persuaded him to end tyranny'
((10)-(12), LS)

(10), (11) は (9a) に対応する例文である。(10) は被説得者 mihi が与格であり、説得内容 'animos ... vivere' が不定詞付き対格である。(11) は説得内容 neglegentiam が対格で、被説得者 illi が与格で具現する二重目的語構文である。(12) は (9b) に対応する。被説得者 ei は (10) と同様に与格である。説得内容 'tyrannidis finem facere' は不定詞である。(12) は一見したところ PE の「NP＋to 不定詞」補文に対応するように見えるが、(12) に後続する文脈を参照すると、PE と異なり L では含意性 (Karttunen (1971)) がない（遠峯 (2020)）。

2.2. ModE の資料

本節は ModE persuade の特徴を見る。[5]

(13) c1595 CAPT. WYATT R. *Dudley's Voy. W. Ind.* (Hakl. Soc.) 9 Wee had sight of a saile..the which *wee weare perswaded was one of our consorts*.

(14) 1553 KENNEDY *Compend. Tract*. in *Wodrow Soc. Misc*. (1844) 105 The Jewis *perswaded circumcisioun to be necessare with Baptime*.

(15) a1555 RIDLEY *Lament. Churche* (1566) B viij, They *are perswaded it to be truth*.

(13) は「NP＋that 節」補文の例、(14), (15) は「NP＋to 不定詞」補文の例である。(13) から (15) より、説得内容は that 節や「NP＋to 不定詞」で具現することが分かる。被説得者は (13), (15) において NP で具現する。

(16) 1675 WOOD *Life* (O.H.S.) II. 332, I persuaded the society to set it above the arches, but I was not then heard.

(17) 1593 SHAKES. *3 Hen. VI*, III. iii. 176 ... to *perswade me Patience*?

(16) は「NP＋to 不定詞」補文の例である。これは一見したところ PE に見られる「NP＋to 不定詞」補文と同じであると思われるが、but 以下を参照すると、PE と異なり含意性がないことが分かる。(17) は二重目的語構文の例である。

(18) a1643 LD. FALKLAND, etc. *Infallibility* (1646) 97 *The grossest errours*, if they..be but new, may be *perswaded to the multitude*.

(19) 1588 PARKE tr. *Mendoza's Hist. China* 128 There was none that better coulde..*perswade with His Majestie the great importance of that ambassage*.

(20) 1565 T. STAPLETON *Fortr. Faith* 59 S. Augustin *persuadeth with him to leaue ...*

(21) 1553 T. WILSON *Rhet*. (1580) Pref., These..*perswaded with them what was good*, what was bad, and was gainfull for mankinde.

(22) 1656 RIDGLEY *Pract. Physick*. 44 Physicians *perswade that..the Artery shall be cut...*

(18) から (21) では被説得者が to もしくは with で導かれる前置詞句である。説得内容は、

(18), (19) のように NP であったり、(20) のように to 不定詞であったり、(21) のように間接疑問であったりする。(22) は被説得者がないことに注意されたい。

(23) 1560 J. DAUS tr. *Sleidane's Comm*. 408 b, Ambassadours... might *...perswade them to peace*.
(24) 1865 DICKENS *Mut. Fr*. I. vi, Be *persuaded into being respectable and happy*.
(25) a1657 R. LOVEDAY *Lett*. (1663) 22 The neezing-powder I take constantly, but have much adoe to *perswade it to make me neeze*.

(23), (24) は着点項を含むと判断できる例である。PE では (8c) に見るように不可能な着点が *to*-PP で具現するパターンは、ModE では (23) のように可能であった。(25) は「NP＋to 不定詞」補文の例だが、NP が無生物であり、被説得者とは考えられない。

3. 考察

3.1. ModE persuade の性質

本節では L persuadeo と ModE persuade の補文パターンの比較を交えて ModE persuade の性質を検討する。まず L persuadeo は、(11), (12) に見るとおり、被説得者が与格であり、説得内容は不定詞や対格 NP であった。(16), (17) に見る ModE でもこれらの性質が観察される。この類似から、ModE persuade は L persuadeo の性質を引き継いでいると考えることができる。加えて、被説得者が与格となるのは、ModE persuade が (3) に見られる「命令・許可」の動詞の性質を持ったことを示唆する。

L に由来すると考えられる ModE persuade の性質としてさらに２点挙げることができる。１つは、(18) から (21) に見るような、二重目的語構文と対応する与格構文である。与格構文は二重目的語構文と史的に競合関係にあるが (Colleman and De Clerck (2011))、persuade においても L に由来する二重目的語構文と並んで与格構文が見られる。さらに、(22) のように与格項が現れない例に注意されたい。Landau (2000:157-160) は、PE と現代イタリア語の例を挙げて、主題項（対格項）と異なり、受領者項（与格項）は必ず具現する訳ではないと指摘する。

(26) a. Mary forced *(John) [PRO to sing]
b. John convinced *(Mary) [PRO to believe him].
(27) a. John said (to Mary) [PRO to listen to him]
b. Mary helped (John) [PRO (to) do the dishes]
(28) a. Lo psichiatra (gli) ha detto [di PRO parlare di se stessi].
'The psychiatrist said (to him) to speak about himself.'
b. Il generale ha ordinato (ai soldati) di partire.
'The general ordered (to the soldiers) to leave.'
((27)-(29), Landau (2000:158, 161))

(26), (27) は PE の例である。Force, convince の目的語は対格項であり、具現が義務的である。これに対して、say, help は目的語が与格項であり、具現が随意的である。(28) は現代イタリア語の例である。与格項を取る動詞 detto, ordinato では与格項の具現が随意的である。与格項の随意性は PE とイタリア語のいずれでも見られるものであり、意味役割によって規定される普遍的な現象であると考えられる。従って、(22) のように与格項が具現しない例は、ModE persuade が与格項を取る「命令・許可」の動詞であることの傍証であると見做すことができる。

もう１つLに由来すると考えられるModE persuadeの性質は、説得内容の項が不定詞付き対格になることである。(10), (14), (15) を参照されたい。不定詞付き対格を取ると言う性質も、(5) と (7c) に見るように「命令・許可」の動詞に見られる。

ModE persuadeが「命令・許可」の動詞として情報の伝達を表したことは、説得内容が間接疑問の(21) からも窺われる。Huddleston and Pullum (2002: 976) は、間接疑問を補文に取る述語としてtell, informなどTELLINGの意味を持つものを挙げる。このことは ModE persuadeがTELLINGの意味を持つ「命令・許可」の動詞としての性質を持ったことを示す。

このように、ModE persuadeは、Lでの性質を引き継ぐ「命令・許可」の動詞としての性質を見せたが、それと同時にLには見られない性質をも持った。(23), (24) に含まれるtoやintoで導かれるPPは着点項であると考えられる。また、(25) は、(16) と同様に「NP＋to不定詞」補文を取るが、(16) と異なり、NPは無生物であり、NPを受領者と見なすことは難しい。以上の点から、(23) から (25) のpersuadeは、Lの性質に由来しない、着点項とその着点へ移動する主題項を取る「駆り立て」の動詞の特徴を示していると考えられる。この「駆り立て」の動詞の用法はOE以来見られる「駆り立て」のパターンを踏襲して成立した可能性がある。

本節ではModE persuadeがPEと異なり、「命令・許可」の動詞としての用法と、「駆り立て」の動詞としての特徴を併せ持ったことを明らかにした。

3.2. ModEからPEでの変化

Persuadeは、ModEに見られた「命令・許可」の動詞の特徴をPEまでに失い、「駆り立て」の動詞の用法が残した。Persuadeにおいて「命令・許可」の動詞の用法が失われ、「駆り立て」の動詞の用法が残ったということは、persuadeの目的語NPが対格項になったことを意味する。これはpersuadeが (26) に例示したconvinceに近づく変化していることを意味する。

なお、(25) のようにpersuadeが無生物の目的語を取るのは、「命令・許可」の動詞で受領者項が具現しない不定詞付き対格の補文（(5) を参照）と類推が働いたことによるかもしれない。ModEは変化の過渡期であり、「命令・許可」の動詞と「駆り立て」の動詞の間で相互に影響があったとしても不思議ではなかろう。

4. まとめ

本発表ではModEで英語に借用された動詞persuadeの受容過程を特に補文に注目して観察しその特徴を明らかにした。ModE persuadeは「命令・許可」の動詞の特徴と「駆り立て」の動詞の特徴を併せ持ったことを明らかにした。

このようにModE persuadeは二面性を持ったが、「命令・許可」の動詞としての側面は「駆り立て」の動詞としての側面に駆逐された。これは被説得者が対格になる変化であり、次のような例にその結果が見られる。

(29) 1555 EDEN *Decades* 93 To *persuade hym of the..munificence..of owre men*.

(29) で被説得者が対格であることに注意されたい。

本論の最後に今後の課題を４点挙げる。まず、L persuadeoの資料調査と検討が課題の一つとして挙げられる。本論ではModE persuadeがL persuadeoの性質の性質を引き継いで「命令・許可」の動詞の性質を示したとした。この見解が妥当であるなら、persuadeoがLにおいて「命令・許可」の動詞の性質を示したことが予想される。この点を実証的に検討する必要がある。

次に、ModE で含意性を持たなかった persuade が PE までにどのようにして含意性を獲得したか明らかする必要がある。その際に、PE では二項動詞で含意性がないことに注意を払う必要があると思われる。

(30) I persuaded him, but *he wouldn't do it*.
（多々良・谷・八木橋 (2012)）

この事実は persuade の含意性が語ではなく句レベルで実現している可能性を示唆する。

次に「命令・許可」の動詞について検討を深める必要がある。「命令・許可」の動詞は英語史を通して受領者項の具現が随意的であった。この随意性は (5) や (7) のように補文に不定詞付き対格が現れる例だけでなく、目的語がなく主題を表す to 不定詞のみが見られる例でも観察される。

(31) 1745 P. Thomas *Jrnl. Anson's Voy*. 294 He *ordered to nail up such of the Cannon as could be fought*.

このパターンはPEでは容認度が低い (Chiba (1985:87), Jackendoff and Culicover (2003:530)) 。

(32) *John { a) commanded b) ordered } to leave immediately. (Chiba (ibid.))
(33) ??The authorities order/advise/encourage not to shoot oneself.
(Jackendoff and Culicover (ibid.))

このパターンが廃れた要因として「駆り立て」の動詞の影響で目的語が義務的になった可能性が考えられるが、今後詳細に検討する必要がある。

最後に、persuade と同様に ModE で L から借用され、persuade とは対義的な関係にある dissuade について考察をする必要があることを指摘する。

(34) a1577 Sir T. SMITH *Commw*. ii. ii. (1584) 40 The speaker hath no voice in the house, nor they will not suffer him to speake in any bill to mooue or *disswade it*.
(35) 1605 CAMDEN *Rem*. (1637) 246 Some *disswaded him to hunt that day*; *but he resolved to the contrary*.
(36) 1555 EDEN *Decades* Sect. i., Peter Martyr's Dedication (Arb. 63) Ascanius..*dissuaded me from my purpose*. But seeing that I was fully resolued to departe..required me to wryte vnto hym.

ModE の dissuade は、(34) に見るとおり説得内容を NP で取り、(35) に見るとおり PE と異なって非含意的である。これらは ModE の persuade に見られた特徴であり、persuade と dissuade が PE までに同様の変化を経たことが推測される。また (36) に見るとおり、PE に見られる「NP＋from＋NP」のパターンも見られるが、これも PE と異なり含意性がないのは興味深い。

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注

[1] 以下 PE とする。450 年から 1100 年までの英語を古英語 (OE)、1100 年から 1500 年の英語を中英語、1500 年から 1900 年までの英語を近代英語 (ModE)、1900 年以降の英語を PE とする。

[2] 以下 NP とする。

[3] 以下の例で使われる下付きの ACC, DAT, GEN, TO-INF はそれぞれ「対格」、「与格」、

「属格」「to 不定詞」を表す。

[4] Chiba (ibid.:89-91) は (7c) のような受領者がないタイプの例が PE で容認度の揺れを見せると観察する。この点についての史的観点からの考察は今後の課題としたい。

[5] 以降の例文で出典の示されていないものは OED2 からの引用である。

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英語における主格ゼロ関係節の通時的発達について*

（On the Diachronic Development of Subject Zero Relatives in English）

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キーワード：主格ゼロ関係節、pro、EPP

1. はじめに

現代英語において、主格の定形関係節は(1)に示すように顕在的な関係詞によって導かれる必要があり、主格ゼロ関係節(Subject Zero Relatives、以下 SZR)は通常許されない。しかし、初期英語では SZR が一定の頻度で観察されることが知られている。(2a)の古英語、(2b)の中英語の例において、それぞれ角括弧で示される関係節は顕在的な関係代名詞や補文標識に導かれていないゼロ関係節であり、かつ主語が空所となっている。

(1) I met the woman *(that/who) saw John.
(Douglas (2017: 1))

(2) a. & þæs oðres þone mæstan dæl
and the other's the most dale
hi geridon butan þam cynge
they reached against the king
Ælfrede [little werede unyðelice
Alfred little observer uneasily
æfterwudum for]
after woods went
'and they reached the other's best valley against King Alfred who went easily with little observer behind woods.'
(cochronE,ChronE_[Plummer]:878.1.1209)

b. ich knewe hym in þat trauail [is
I knew him in that hard work is
to-fore me]
prior me
'I knew him engaging in that harder work than me.' (CMEARLPS,87.3828)

本稿の目的は、(2)のような初期英語における SZR が、現代英語では容認されなくなった理由を明らかにすることである。近年の研究によって、初期英語では空の代名詞主語 pro が許されていたことが明らかになっており、pro が SZR も同様に認可していたと主張する。また、この主張は歴史コーパスによる調査に基づき、英語史における pro の分布と SZR の分布が並行的であるという事実から支持されることを示す。具体的には、SZR は空主語 pro が関係節内の T が持つ EPP 素性と解釈不可能な φ 素性を満たすことにより派生されていたが、英語史において pro が認可されなくなったため、SZR が消失したと主張する。

2. 英語史における pro と SZR

初期英語において、pro が許されていたかどうかは議論が分かれているが、Gelderen (2000)は古英語において pro が認可されていたと主張している。Gelderen は(3)の例において、下線の引かれた節は主語が空となっているが、動詞 ongan の屈折から、3 人称男性単数の指示的な代名詞が脱落しており、pro が許されていたと主張している。

(3) Forþa ic nu wille geornlice to Gode
therefore I now want earnestly to God
cleopian *pro* Ongan þa giddien
speak began then sing
'Therefore, I now want to speak to God earnestly. Then he began to sing.'

(Alfred, Boethius 9.28–9/Gelderen (2000: 131))

Gelderen の主張の妥当性は、Walkden (2013)のコーパスを用いた調査によって裏付けられている。また、縄田 (2012)は中英語に関するコーパス調査を行い、初期中英語期まで pro が認可されていたことを観察している。Gelderen、Walkden、縄田の調査において、古英語期から初期中英語期における pro の分布について、(4a-c)の特徴が見られることが報告されている。

(4) a. pro の生産性はテクストによって異なる。
b. pro は従属節よりも主節において高い頻度で観察される。
c.（古英語に関して）pro の解釈に関する人称分離現象が認められる。
(cf. 縄田 (2012: 102-103))

(4a)に述べたように、pro が生産的であるか否かはテクスト間で差があることが知られている。また、pro が従属節よりも主節において高い頻度で観察されるという(4b)の特徴は、初期中英語期まで見られる傾向である。(4c)における pro の解釈に関する人称分離とは、3 人称代名詞の脱落は多く見られるのに対し、1 人称または 2 人称代名詞の脱落はまれであることを意味する。これは動詞の屈折から主語の人称が判断可能な古英語期に見られる特徴である。(2)のような SZR においても、(4)と同様の特徴が見られるかどうかを検証するために、歴史コーパス(The York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE) 、The Penn-Helsinki Parsed Corpus of Middle English, Second edition (PPCME2)、The Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME)、The Penn-Helsinki Parsed Corpus of Modern British English (PPCMBE))を用いて、主格関係節における関係代名詞の分布について調査を行った。

現代英語では一般に SZR は許されないが、特定の環境において容認されることが知られている。(5a-c)に示されるように、主に口語において there や here で始まる存在構文の関連要素、および本動詞 have の補部に後続する位置では SZR が容認される。したがって、(5)のような環境に生起する関係節とそれ以外の関係節を区別して調査した。

(5) a. There was something broke in him.
b. Here’s the one’ll get it for you.
c. We had a client came in about two weeks ago. (Erdmann (1980: 149))

また、Lambrecht (1988)によれば、(5c)のような have の補部に SZR が後続する場合、その補部名詞句は不定である一方で、その主語は代名詞になる傾向がある。本稿では、(5c)のような SZR が後続する本動詞 have の補部名詞句は、there 構文などの存在構文における関連要素と同様に、情報構造上の焦点要素であると仮定する。そして、新情報を表す焦点要素に後続する(5a-c)のような SZR は口語に限られるが、現代英語でも容認されるという点で、(2a, b)のような純粋な SZR とは区別すべきであるとする立場をとる。そして、現代英語だけでなく通時的にも、焦点要素に後続するタイプとそれ以外のタイプでは分布が異なることを調査から示す。

調査に際して、空主語 pro と顕在的な代名詞主語の割合を調査した Walkden (2013)や縄田 (2012)の方法に従い、古英語の場合はゼロ関係節と顕在的な指示詞によって導かれる関係節の割合、中英語以降ではゼロ関係節と wh 関係代名詞を伴う関係節の割合を調査した。調査を並行的にするため、古英語期の不変化詞 þe によって導かれる関係節や、中英語期以降の補文標識 that によって導か

れる関係節は調査から除外している。また、初期英語では関係代名詞と補文標識が共起する二重詰め COMP の配列が可能であったが、これらも調査から除外する。

また、古英語では指示詞が関係代名詞として用いられていたため、当該の節が主節か関係節のどちらであるのかを判断するのが難しい場合がある。具体的には、(6)のような例では、太字となっている指示詞 se が指示代名詞と関係代名詞のどちらであるのかが、形態統語的に曖昧である。したがって、本調査では指示詞によって導かれる節が関係節であることを保証するために、(6)のような例を除外し、従属節において優勢な語順であった、定形動詞が節の末尾に生じる節のみを数値に含めることとした。

(6) soðlice nu þu on innoðe geeacnast and
Truly now you in womb conceive and
sunu censt and his naman hælend
son beget and his name savior
genemnest; **Se** byð mære and þæs
name who/he is great and of the
hehstan sunu genemned.
Highest Son called
'Truly, you will become pregnant and give birth to a son, and you will name him Jesus. He will be a great and will be called the Son of the Highest.'
(Gospel, Luke 1. 31-32/Hosaka (2010: 66))

まず、表 1 は焦点要素に後続しない、つまり純粋な SZR の生起状況を示し、(7)に具体例を挙げる。表の 2 段目は SZR の生起数、3 段目は主格関係節の総数を示す。この数値には、SZR と顕在的な指示詞または wh 関係代名詞によって導かれる主格関係節が含まれる。4 段目はその総数に対する SZR の割合である。(7a, b)では、括弧内の関係節の主語が空所となっており、顕在的な関係詞に導かれていない。

表 1：焦点要素に後続しない SZR[1,2]

	EOE	LOE	M1	M2
SZR	9	21	8	2
SR	277	267	29	48
割合	3.2	7.9	27.6	4.2
	M3	M4	E1	E2
SZR	3	9	8	9
SR	155	487	1135	1745
割合	1.9	1.8	0.7	0.5
	E3	L1	L2	L3
SZR	8	1	0	1
SR	1655	1034	1352	944
割合	0.5	0.1	0	0.1

(7) a. & ðu meaht þe unyð
and you may yourself uneasily
onberan þæs [ðe onbecymeð]
on-bear that you accesses
'and you may hold on that yourself uneasily, which accesses you.'
(codicts,Prov_1_[Cox]:1.70.129)
b. Soðfeste men [heom kepten on
genuine men them care about on
nihtes;] sæidon,
nights said
'genuine men who care about them at night said that…'
(CMPETERB,50.245)

次に、表 2 は焦点要素に後続する SZR の生起状況を示し、(8)に具体例を挙げる。(8a, b)において、角括弧で示される SZR は there 構文の関連要素を修飾している。

表 2：焦点要素に後続する SZR[3]

	EOE	LOE	M1	M2
SZR	1	0	0	0
SR	6	7	0	6
割合	16.7	0	0	0
	M3	M4	E1	E2
SZR	6	23	28	44
SR	24	85	227	434
割合	25.0	27.1	12.3	10.1
	E3	L1	L2	L3
SZR	430	7	10	5
SR	14.9	185	252	213
割合	0.5	3.8	4.0	2.3

(8) a. For ther is a versifiour [seith that ‘the
For there is a poet says that ‘the
ydel man excuseth hym in winter by
idle man excuses him in winter
cause of…]
because of…
‘for there is a poet who says that the idle man excuses him in winter because of…’
CMCTMELI,233.C2.639)

b. There was another of my neighbours [had his wife much troubled]
(GIFFORD-E2-H,B1V.96)

表 1 と 2 における 2 種類の SZR の分布には大きな差がある。まず、表 2 に示されるように、存在構文などの焦点要素に後続する SZR は後期中英語期に見られるようになり、後期近代英語まで生産的であることが分かる。また上述したように、現代英語でも口語において容認される。中英語期以降に増加した理由は、there 構文がこの時期にその用法を拡大させたことが原因であると考える。その一方で、表 1 における純粋な SZR に関して、Walkden (2013)や縄田 (2012)に従い、2 パーセントを超えることが文法性の基準であるとすると、M2 期までは文法的だが、M3 期以降は非文法的になったと考えられる。これは縄田が主張する pro の消失時期と一致する。さらに、(4a)で見たテクストによる生産性の差も同様に観察された。 (9)に縄田の調査で pro が見られたテクストと、本稿の調査で SZR が観察されたテクストを提示する。pro と SZR 両方を許すテクストを太字で示している。

(9) pro と SZR を認可するテクスト
a. pro: **Ancrene Riwle**, Hali Meidhad, St. Juliana, **St. Katherine**, **The Lambeth Homilies**, **The Peterborough Chronicle**, Sawles Warde, **Trinity Homilies**, Kentish Sermons
b. SZR: **Ancrene Riwle**, **St. Katherine**, **The Lambeth Homilies**, **The Peterborough Chronicle**, The Ormulum, Vices and Virtues, **Trinity Homilies**, Ayenbite of Inwyt

表 1 における M1、M2 期の SZR 計 10 例の内、7 例は(9)の太字で示したテクストからの例であり、両者を許すテクストが重複していることが分かる。以上の観察に基づき、初期英語において認可されていた pro が関係節内で生起し、SZR が派生されていたという仮説を立て、次節で構造分析とその妥当性を議論する。

3. 分析

本節では、焦点要素に後続する SZR と純粋な SZR はいずれも従属ではなく、並列の統語構造を持っていたと提案する。また、提案する構造により、前節で提示したデータが説明されることを示す。

3.1. 焦点要素に後続する SZR

there 構文などに生じる SZR の先行研究である、Erdmann (1980)、Lambrecht (1988)、中

澤 (2006)らは文全体が従属構造でなく、並列構造を持つと主張している。例えば、Lambrecht は(10a)の文が概略(10b)の構造を持つと提案している。

(10) a. There was a farmer had a dog.
b. [$_{CP}$ [$_{TP}$ there was [$_{NP}$ a farmer$_i$ (Focus)]] [$_{TP}$ [$_{NP}$ a farmer$_i$ (Topic)] had a dog]]

Lambrecht は、there 構文が導入する関連要素と同一指示の NP が関係節内にも生起する構造を提案し、このような構造を持つ文を提示的関係節構文と呼んでいる。(10b)では、a farmer が 2 つの節において多重支配されている。また、重要なのは 2 つの TP は並列の関係にあり、それぞれの TP が独立した命題ではなく、文全体として 1 つの命題を表すという点である。そして、多重支配されている NP の内、片方のみが発音されると仮定されている。本稿では、焦点要素に後続する SZR に関して(10b)のような構造を仮定し、この構造が現代英語だけでなく英語史を通じて保持されていると考える。

3.2. 純粋な SZR

次に、(1a, b)のような焦点要素に後続しない純粋な SZR も、(10b)と類似した(11)の構造を持つと提案する。2 つの TP が並列されているという点では(10b)と同じであるが、2 つ目の TP において pro が主語位置を占めているという点において(10b)とは異なる。

(11) [$_{CP}$ C [$_{TP}$ Subj$_{[\varphi]}$ T$_{[\text{EPP},\text{~~}\varphi\text{~~}]}$ …] [$_{TP}$ pro$_{[\varphi]}$ T$_{[\text{EPP},\text{~~}\varphi\text{~~}]}$…]]

(11)において、2 つ目の TP 内における T が持つ EPP 素性と解釈不可能な φ 素性は pro によって照合される。M3 期以降、pro が認可されなくなると、T の EPP 素性と解釈不可能な φ 素性が照合されず、(11)の派生は破綻するようになる。したがって、この時期に純粋な SZR が非文法的になったという事実が説明される。さらに、(11)では 2 つの TP が従属関係にあるのではなく、共に主節として並列されている。したがって、本節の分析は pro が主節において高い頻度で観察されるという(4b)の事実とも合致する。

また、(12)に示されるように、古英語期では指示詞が関係代名詞としても機能しており、指示詞は 3 人称の代名詞である。ここでの分析では、純粋な SZR は関係節を形成せず、TP が並列された構造であるため、実際に省略されているのは関係代名詞ではなく指示代名詞である。したがって、(4c)で見た 3 人称代名詞の場合に脱落が起こりやすいという観察とも矛盾しない。したがって、(4a-c)の pro の分布に関する特徴と SZR の分布に関する特徴は並行的であることが示された。

(12) buton ge me secgan þæt [þæt soð
Without you me said that that true
is be þisum,]
is by this
'Without you said that, which is true about this' (coaelhom, Hom_22:378.3503)

最後に、ここで提案された SZR の構造のみが TP までしか投射されない一方で、SZR 以外の関係節は CP 構造を持つことを示す。まず、that 関係節、および対応する古英語期の þe 関係節の派生は(13)のようになる。

(13) I met the woman [$_{CP}$ Op$_i$ that [$_{TP}$ t_i saw John]]

関係節内の T が持つ EPP 素性と解釈不可能な φ 素性は空演算子によって照合される。これまで見てきた SZR の構造との違いは、that 関係節は顕在的な補文標識の存在によって、CP まで投射されることが保証されている点

である。一方、(11)の SZR の場合、顕在的な補文標識が無く、また演算子の移動がないため、CP 構造を持つことを示す証拠がない。

また、目的語が空所となる関係節の構造は以下の通りである。

(14) a. I met the man ø Mary saw

b. [$_{CP}$ C [$_{TP}$ $I_{[\varphi]}$ T $_{[\text{~~EPP~~}, u\varphi]}$ [$_{DP}$ the man] [$_{CP}$ Op_i C [$_{TP}$ Mary $T_{[\text{~~EPP~~}, \text{~~u~~}\varphi]}$ t_i]]]]

関係節内の T が持つ EPP 素性と解釈不可能な φ 素性は主語により照合される。また、関係節内には空所があり、演算子移動によって関係節が CP まで投射されることが保証さる。そのため、SZR の場合のみ CP 構造を持つ証拠がなく、TP までしか投射されない。その一方で、SZR 以外の関係節については、演算子移動、または顕在的な補文標識により CP 構造を持つことが保証される。

4. 結語

本稿では、英語における SZR を焦点要素に後続するものとしないものに区別し、コーパス調査に基づき通時的発達の違いを明らかにした。英語史における SZR の分布は pro の分布と並行的あることを示し、純粋な SZR は pro を伴う構造を持っていたと主張した。2 種類の SZR の構造については、両者とも TP が並列された構造であると提案した。そして、現代英語では許されない純粋な SZR が消失したのは、初期中英語において pro が認可されなくなり、関係節内の EPP 素性と解釈不可能な φ 素性が照合されなくなったからであると主張した。

* 本稿は日本英語学会第 38 回大会での口頭発表に基づくものである。発表の準備段階では、大室剛志先生と田中智之先生から多くの貴重なご指摘やご助言を頂いた。また、研究発表の際には、伊藤隆男先生、縄田裕幸先生、林愼将氏から、大変有益なご指摘やご助言を頂いた。この場を借りて感謝を申し上げたい。なお、本稿における不備は全て執筆者によるものである。

注

[1] YCOE、PPCME2、PPCEME、PPCMBE の時代区分は O1 (-850)、O2 (850-950)、O3 (950-1050)、O4 (1050-1150)、M1(1150-1250)、M2(120-1350)、M3(1350-1420)、M4 (1420-1500)、E1 (1500-1569)、E2 (1570-1639)、E3 (1640-1710)、L1 (1710-1779)、L2 (1780-1849)、L3 (1850-1920)である。本稿では O1 と O2 を合わせて EOE(初期古英語)、O3 と O4 を合わせて LOE(後期古英語)としている。

[2] 表 1 では、M1 期において SZR の割合が他の時代と比べて高くなっているが、これは初期中英語では指示詞の関係代名詞としての用法が衰退し、加えて wh 関係代名詞も未発達であったため、総数自体が少ないことが原因であると考えられる。中英語のコーパスである PPCME2 では関係節を導く that はすべて補文標識としてタグ付けされており、M1 期の主格関係節の 29 例は、that 以外の形態で生じた指示詞の関係代名詞、および wh 関係代名詞を伴う関係節の総数である。M1 期は動詞の屈折が完全には消失していない例もあり、動詞の屈折と中性単数としての that が一致していないとは言い切れないことも事実である。このような例における that が補文標識ではなく、関係代名詞である可能性もあるが、本稿ではコーパスのタグ付けに従い、M1 以降の that を補文標識としてみなす。

[3] Breivik(1983)などで詳しく調査されているように、古英語期には there 構文以外の存在構文もあるが、これらは調査から除外している。

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二重目的語構文が表す事象構造と所有代名詞の指示の関係について*

（Ditransitive Event Structures and the Reference of Possessive Determiners）

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キーワード：二重目的語構文, 事象構造, 所有格代名詞, 参照点構造, 内在的関係

1. はじめに

本稿では、英語の二重目的語構文の直接目的語に所有格代名詞が生じる事例を取りあげ、所有格代名詞の照応関係について論じる。具体的には(1)のような事例が当てはまる。

(1) Alice handed Beth her letter.

(1)の例を英語母語話者に提示し、her の照応を尋ねると、her は主語の Alice を指す読みと間接目的語の Beth を指す読みがあるという。この言語事実はありふれたものであり、特に注目するには値しないであろう。ところが(2)で示すように、一見したところ(1)と同じ形式を持つ事例の中には主語しか指せないもの、あるいは間接目的語しかさせないものが存在する。

(2) a. Alice gave Beth her worried look. (her =✓Alice / *Beth)
b. Alice gave Beth her look at the document. (her = *Alice /✓Beth)
c. Alice envied Beth her success. (her = *Alice /✓Beth)

(2a)の her は主語を指すことができないのに対して、(2b, c)の her は関節目的語しか指すことできない。

文内における代名詞の照応関係は生成文法では統語構造の問題として扱われてきたが、(2)に示す事例の統語構造に差はないと考えられ、別の要因に説明を求める必要があると考えるのが自然である。

本稿では、認知文法（Langacker (1987, 1991など)）の枠組みで照応関係を体系的に扱っている Van Hoek (1997)に従い、この問題に取り組む。Van Hoek によると、代名詞とその先行詞の関係は参照点モデル（reference point model）（Langacker (1993)など）によって捉えられるという。Van Hoek は、(3)の引用箇所が示すように、代名詞の先行詞はその支配域（dominion）内で参照点（reference point）として機能するほどに認知的な際立ちが高くなければならないとしている。

(3) The antecedent for a pronoun must be sufficiently salient (i.e., distinct and prominent) within the context in which the pronoun appears that it can plausibly be construed as a reference point with the pronoun in its dominion. (Van Hoek (1997:57))

認知的な際立ちはさまざまな要因によって決まるが、節内においては profiling や trajector/landmark の関係が関わる。(4)の対比も認知的な際立ちから説明できるという。

(4) a. I gave Sam_i his_i book.
b. *I gave him_i Sam_i's book.

二重目的語構文の間接目的語と直接目的語を比較すると、Langacker による分析（e.g., Langacker (1991b:331-332)）では、間接目的語に生じる recipient は「主体的に関わる参与

者（active participant)」と見なされ、直接目的語よりも際立ちが高い要素となる。すると、(4a)に示すように、間接目的語 Sam が直接目的語内の所有格代名詞 him の先行詞になることは問題ないが、(4b)のように、際立ちの低い直接目的語内に生じている所有格名詞 Sam が間接目的語 him の先行詞になることはできない。

以上の理論的道具立てを整えたところで、(2)に立ち戻ると、どのような時に間接目的語は所有格代名詞の先行詞になれるくらいに際立っていると捉えられるのかという問題が浮かび上がる。本稿では、(2)の各文が持つ事象構造にその答えがあることを示す。

2.「所有格代名詞+名詞」と内在的関係について

所有格代名詞を伴う名詞句は定的（definite）な表現であり、所有格代名詞と主要部名詞の間の意味関係は厳密な意味での所有関係以外の関係を表すことができることが知られている（cf. Heine (1997), Taylor (1989)など）。また、所有格代名詞と主要部名詞の間の関係が成立する時間は主動詞が指し示す時と一致するとは限らない。たとえば(5)では、お茶を入れる前からすでにそのお茶の「所有者」が決まっている。

(5) ... she started cooking his tea in the kitchen. (*Tell it to the Bees,* 下線部筆者)

このような特徴は二重目的語構文の直接目的語に所有格代名詞が生じる場合でも当てはまる。さらに注目したいのは所有格代名詞と名詞の間の関係である。典型的な二重目的語構文は所有変化を表すが、ひとえに所有変化といっても実際には複数の関係が関わる。Oehrle (1976)の考察にもとづくと、(6)では直接目的語の自転車に対して 2 種類の関係が関わる。

(6) John gave Harry his bicycle for the day: but the bicycle just sat there the whole day, I guess Harry didn't need it. (Oehrle (1976:24))

1 つはジョンと自転車の関係、もう 1 つはハリーと自転車の関係である。ジョンは自転車に対して本来的な所有者であるのに対して、ハリーは自転車を一時的に利用できる関係となる。ここで直接目的語に生じている所有格代名詞に注目すると、所有格代名詞は本来的な所有者であるジョンを指し、一時的な利用者であるハリーを指すことはない。所有者の手元を離れてもなお所有者のものであり続ける関係と言い換えることができる。このように、物理的近接性に影響を受けることなく、不変的に成り立つ関係を内在的な関係と呼ぶ。二重目的語構文の直接目的語に生じる代名詞と主要部名詞の関係は内在的な関係になるということがこの後の議論で重要となる。

3. 使役の事象構造と所有格代名詞の照応について

3.1. 所有変化に含まれる 2 つの関係

使役の事象構造について論じる前に、その前提となる所有変化を見ておこう。二重目的語構文が表す所有変化は Langacker の分析によると、図 1 のように捉えられる。

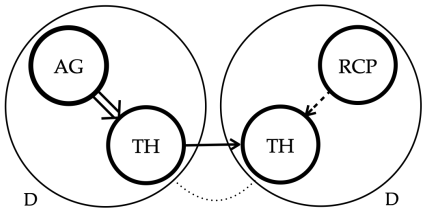

図 1 典型的な所有変化の事象構造

この事象構造には 2 つの過程が含まれていることが見てとれる。1 つは agent（AG）が theme（TH）を recipient（RCP）の支配域（D）

に移動させる過程であり、もう 1 つは RCP が TH を受けとる過程である。一般的にダイナミックな過程である AG からの移動が知覚的に顕著なため AG からの移動の過程が前景化されやすいが、RCP の側の過程が含まれるというということは、この過程にも光が当てられる可能性があるということである。その点を窺い知ることができるのが offer の事例である。英語学習者用辞書の 1 つである LDOCE の定義を見ると、offer は(7)にあるように手の中のものを相手に差し出すことで、相手がとれるようにするという行為を表すことができる。

(7) to hold something out to them so that they can take it. (LDOCE, 下線部筆者)

次の事例を例にとってみよう。

(8) He held out his hand and offered me a sweet.

(8)は AG が RCP に手を差し出し、RCP が TH を受け取れるようにするという行為を表す。一見すると、ありふれたやりもらいを表すように思われるかもしれないが、AG が行ったことは手の中のものを RCP がアクセスできるようにするまでの過程であり、RCP の支配域に TH を取り込むことは最終的には RCP に委ねられる。つまり、AG がその支配域内にアクセスできるようにしたという点がここでの議論の要となる。

植田 (2018a, b,)および Ueda (2019)では、Talmy (2000)の force dynamics の知見にもとづき、第三者が AG の支配域にアクセス可能にするために障壁を取り除くモデルを提案している（図 2）。図 2(i)では、RCP は TH にアクセスできない状態を表し、(ii)では障壁が取り除かれた結果、RCP が TH を自らの支配域に取り込んだ状態を表す。

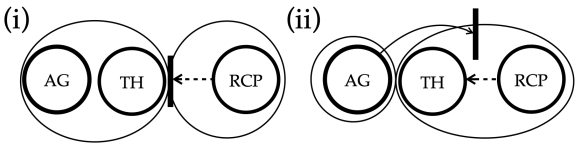

図 2 RCP の側から TH を受けとる過程

これが 3.2.2 で見ることになる間接使役の経験的な基盤となる。

3.2. 直接使役と間接使役で前景化される関係の違い

所有変化をもととして比喩的に拡張した二重目的語構文の意味に使役がある。二重目的語構文は直接使役、間接使役の 2 とおりの関係を表すことができる。[1] ここでいう直接使役、間接使役という用語は、間接目的語と直接目的語の間の関係を表すために用いる。具体的には、(9a)が直接使役の例、(9b)が間接使役の例となる。

(9) a. She gave him a look.
b. The other man shook his head, held up his paper, and shouted out, 'Can anybody read this?'
'Give me a look at it,' Cameron shouted back. (BNC:A0N 351-352, 下線部筆者)

(9a)では、間接目的語 him は見られる客体として a look の目的語のように解釈され、(9b)では、間接目的語 me は見る主体として look at it の主語のように解釈される。Shibatani and Pardeshi (2002) が言う patient causee と agentive causee に近いものと言えよう。

ここで(2a-b)に立ち戻ると、直接目的語の所有格代名詞が主語しか指せない場合は直接使役の事例に相当し、間接目的語しか指せない場合は間接使役に相当することに気づく。では、なぜこのような差異が生じるのだろうか。次節では事象構造という観点からこ

の差異について説明を試みる。

3.2.1. 直接使役

直接使役は、所有変化に含まれる 2 つの過程のうち Agent からの移動が前景化され、CAUSATION IS TRANSFER メタファーによって使役の事象構造に写像されたと考えられる（cf. Kövecses (2010)）。(9a)の事象構造は図 3 のような構造であると考えられる。

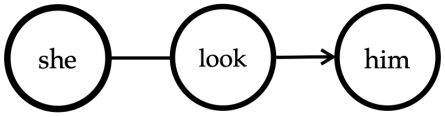

図 3 (9a)の事象構造

この構造では間接目的語に生じる him が action chain の終端に位置づけられ、典型的な他動的な事象構造に近いものとなる。Langacker (1991:324-329)に従えば、間接目的語に生じる意味役割は主体的な関わる参与者である。しかし、直接使役では、間接目的語に生じる参与者からはそのような主体性に関わる特徴は消えると考えられる。その点は、(10)にあるように、視線を受ける側はその視線を主体的に所有するわけではないことから示される。

(10) *She gave him a look, and he still has it.

図 3 に戻ると、この事象構造では、action chain の性質上、look よりも上流にある主語が際立ちの高いものとみなされる。すると、同様の構造を持つと考えられる(2a)の場合、所有格代名詞の先行詞は action chain の上流に来る主語しか指さないことになる。さらに、所有格代名詞を伴う名詞句における所有格代名詞と主要部名詞の関係は内在的な関係が成り立つことを 2 節で見たが、(2a)の her worried look は彼女がいつも見せる心配な表情という意味であり、表情の主である所有格代名詞に内在するものと見なすことができる。内在的な関係も成り立っていることを指摘しておきたい。

3.2.2. 間接使役

次に、(9b)を取りあげたい。(9b)が表す事象構造では、「その書類を見ること」が主語である男性から間接目的語であるキャメロンのところへ移動するとは考えにくく、男性はキャメロンが書類を見ることを可能にするという関係が成り立っていると考えるのが自然である（cf. Cattell (1984)）。この関係を植田 (2018a, b)および Ueda (2019)では、キャメロンと、彼女が書類を見るという関係は、当該関係の成立を阻害する障壁を取り除くことで成り立つモデルを提案した。そのモデルを図式化したものが図 4 となる。

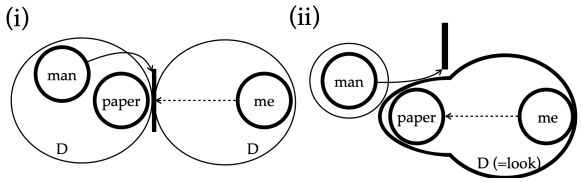

図 4 (9b)の事象構造

図 4(i)では、見る人と書類の間に障壁が存在することで書類にアクセスできない状態にあるが、(ii)に示すように、障壁を取り除くことで書類にアクセス可能な状態になる。この構造は、所有変化に潜在する RCP が受けとる過程をもととして、CONTROL IS HOLDING メタファーによって写像されたものであることを Ueda (2019)で提案した。なお紙幅の都合、詳細については Ueda (2019)を参照されたい。

図 4(ii)では、直接目的語 look は間接目的語 me の支配域と一致し、me と it（=書類）の関係を名詞化して表現している。look と me の関係は、行為とその参与者の関係として捉えることができ、look は＜見る行為主体＞に内在すると言うことができる。

以上をふまえて(2b)に戻ると、(2b)の事象構造は図 4(ii)に類似するものと考えることができる。すると、look が示す領域内において認知的に際立つのは間接目的語のみとなる。さらに 2 節で見たように、所有格代名詞と主要部名詞の間の関係は内在的なものであり、(2b)の her と look の関係にも当てはまる。以上から、(2b)の所有格代名詞は間接目的語のみを指す解釈になると説明される。

4. 属性を表す表現

二重目的語構文としては特異な意味を持つ envy や begrudge などから成る構文クラスは transfer を表さないことが知られている（cf. Shibuya and Nozawa (2008)、Tsuji (2017)など）。このクラスの構文は直接目的語が間接目的語の属性を表す。[2]

(11) a. He envied the prince his fortune. (Goldberg (1995:132))
b. You surely don't begrudge him his happiness. (OALD)

定量的な分析をしたところ、envy と begrudge は興味深いふるまいを示した。BNC で所有格代名詞が間接目的語を指す事例数を調査したところ、give の場合、無作為抽出で得た 1 万例のうち、二重目的語構文の件数が 4,215 例見つかったが、その中で該当する事例が 142 (3.4%) であった。これに対して、envy の場合、二重目的語構文の全事例数である 49 件のうち該当数が 34（69.4%）であり、begrudge の場合、33 例中 15 例（45.5%）が該当した。この事実は envy と begrudge の事象構造と深く関わりがあると考えられる。

envy を例にとってさらに詳しくデータを見ると、(12a-b)の対比が示すように、直接目的語は定的でなければならない。(12c)が示すように、所有格代名詞が生じない場合には、代わりに the などが用いられる。

(12) a. Kate envied her mother her good looks.
b.* Kate envied her mother ø good looks.
c She envied them the sense of occasion and togetherness that they had. (BNC:HJH 1265)

このような特徴は＜羨み・妬み＞を表す事態では当然のものと思われる。羨み・妬みは、羨んだり、妬んだりする以前から他人が何らかの属性を有している必要がある（図 5(i)）。この関係に対して、羨む・妬む主体が心的接触をするのである（図 5(ii)）。

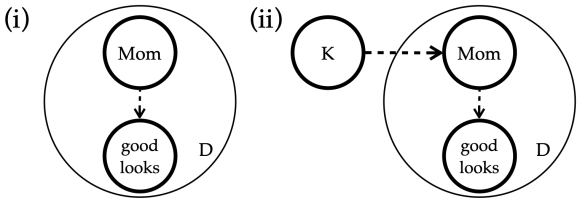

図 5 (12a)の事象構造

つまり、属性は羨まれたり、妬まれたりする以前からその持ち主に内在的に属し、それゆえ定的なものと見なされる。このような羨み・妬みの事象構造の特徴が定量的な調査の結果に反映されていると考えられる。また、本稿の主目的である所有格代名詞の照応について言えば、羨み・妬みの事象構造では、属性はそれを有する間接目的語の支配域に含まれるものであり、その中において認知的際立ちが高い間接目的語が所有格代名詞の唯一の先行詞となるのである。

属性を表す表現は envy や begrudge に限られるものではなく、give でも表現することが可能である。直接目的語が所有格代名詞を伴い、内在的な関係にある場合、属性は動詞が指し示す時よりも前に成立していることが次の例から観察できる。なお、この点については所有格代名詞とその主要部名詞の関係が成立する時と主動詞が指し示す時がずれる場合があることを思い起こされたい。

(13) a. It's the thyme that gives the local mutton its superb flavour. (BNC:HHA 2800)
b. It's the thyme that gives the local mutton a superb flavour.

(13)の例はともに地元のマトン料理がおいしいことを述べている点では共通するが、細かな解釈の違いがある。直接目的語が所有格代名詞を伴っている(a)の場合、envy・begrudge の例でも観察したように、間接目的語と直接目的語の間の内在的な関係が先に成り立つことになる。つまり、おいしい地元のマトン料理には必ずタイムが付きものであることになる。一方、(b)では、間接目的語と直接目的語の間の関係が最初から成立しているわけではない。地元のマトン料理にもともとタイムは使われていないが、タイムを加えるとおいしくなるという解釈である。

これまで envy や begrudge が典型的な事例とは異なることが観察されてきたが、典型的な事例との関連性について十分に議論されてきたとは言えなかった。本稿での議論は、典型的な事例と envy 等の事例が所有格代名詞の機能や参照点構造にもとづく事象構造の点で連続的に関係があることを示唆的に示すものである。

5. *lose*

二重目的語動詞 lose の直接目的語に所有格代名詞が生じる場合、所有格代名詞は間接目的語しか指すことができない。

(14) the mistakes which lost him his kingdom (LDOCE)

大橋 (2004)はこの lose の用法について、直接目的語を間接目的語の支配域から外に移動させる意味であることを観察している。大橋の知見をふまえると、lose には envy・begrudge と類似する特徴があることが分かる。lose の場合、主動詞が指し示す時よりも前に関節目的語が直接目的語を所有する関係が成立しており、その関係に対して原因を表す主語が直接目的語に影響を及ぼすことになる。したがって、所有格代名詞の先行詞は間接目的語の支配域において決定されることになる。

6. おわりに

本稿では、二重目的語構文の直接目的語に生じる所有格代名詞が、主語しか指せない事例や間接目的語しか指せない事例を取りあげ、その理由を force dynamics と参照点構造にもとづく事象構造、および所有格代名詞と主要部名詞の間の関係から説明した。

本稿の議論は Van Hoek の枠組みを補完するものであり、照応関係が認知言語学的の道具立てによって体系的に扱えることを補強するものである。

* 本稿のもととなった口頭発表は、Ueda (2019)の一部を修正し、発展させたものである。口頭発表の際にコメントを下さった岩田彩志氏に感謝を申し上げたい。

注

[1] 岩田彩志氏より用語の使用が不適切であるという指摘をいただいたが、本稿では発表時の用語をそのまま使うこととする。

なお、岩田氏より間接使役は「許可」と言うべきであるという指摘をいただいたが、permission が生じる事例は所有格代名詞の照応が、本稿で間接使役と呼ぶ事例とは異なるため「許可」とは言いがたい(e.g., I'll give you {my/*your} permission to go.)。この点を考慮すると、本稿で間接使役と呼んでいる事例は「可能」と言った方が適切かもしれない。

[2] (11a)の his fortune は the prince の属性を表していると言えないと思われるかもしれな

い。しかし、莫大な富を持っていることが王子の経済的な状態を特徴づけることから、ここではこのような事例も属性を表すものとして扱う。

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アメリカ英語における fixing to の発達*

（The Development of *Fixing To* in American English）

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キーワード: 南部アメリカ英語、アフリカ系アメリカ英語、近接未来表現、文法化

1. 導入

「～しようとしている」という近接未来の意で使用される FIXING TO[1] はもっぱらアメリカ英語に特徴的な口語表現であり、南部方言に由来するとされる。20 世紀後半以降のその社会言語学的特徴については、オクラホマ州を調査した Bailey et al. (1993) によると、若い世代や都市部での使用拡大が観察されるという。アメリカ英語の一般的傾向として南部方言以外への拡大が見られるとされる一方で (Gilman (1994: 449), Peters (2004: 209))、特に容認性が高いのは南部方言であることも報告されていることから (Staub and Zentz (2017))、依然として地域差は存在するようである。用法の特徴については Ching (1987) がインフォーマント調査を行い、不定詞で表される行為の実現までわずかな遅れがある、その実現までに何らかの準備的行動が伴う、不定詞部の解釈は瞬間的であり継続的ではない、といった点を挙げている。

通時的発達を扱った研究には、Smith (2009) と Myers (2014) がある。両者とも、FIXING TO の起源は「意思を定める」の fix であるとする (Smith (2009: 13), Myers (2014: 46))。これは、「準備する」の fix からであるとする OED (s.v. *fix* v. 16.a.) や DARE (s.v. *fix* v 3) の見解とは異なる。形式面の発達について、Myers (2014: 43-53) は、初期近代の be fixed to do/upon doing といった「意思」や「未来」のニュアンスを含んだ形式、18 世紀の fix for doing/to do といった形式を経て、19 世紀の南部アメリカ英語での fixing to の文法化に至ったとしている。さらに、近年のアフリカ系アメリカ英語 (AAE) では、finna 等の縮約形として使用される (Green (2002: 70-71), Myers (2014: 42))。

用法の発達について、Smith (2009: 15-16) は 1924 年以前の南部文学のコレクション Library of Southern Literature[2] から集めた初期の用例とインターネット上で収集した現代の用例を比較し、不定詞が有界動詞から非有界動詞 (特に状態動詞) を含むように変化したとしている。加えて形式による用法の違いについて、fixing to, fixin' to, finna の 3 形式と私的動詞 think, believe, know のコロケーションを検索すると、finna とのコロケーションがもっとも多いので、finna が未来表現としてもっとも一般化した意味をもっているとしている。Myers (2014: 52) は、(1) に引用する Smith (2009: 13, (4)) を論拠に、fixing to が認識用法として近接未来を指し始めたのは 19 世紀中頃からであるとしている。

(1) "Yes, an' looks like a thunder-storm **a-fixin' to** gether this minute," added a voice outside the door. (Stuart (1897) *In Simpkinsville* [Smith (2009: 13, (4))])[3]

ここに挙げた先行研究は、たとえば OED のような辞書の記述に比べ、より詳細な議論を提供しているものの、それでも不十分な点を含んでいる。Smith (2009) と Myers (2014) の議論はどちらも限られたデータに基づいており、特に通時的側面についてはそれが顕著である。Smith (2009) が依拠した初期の用

例は 14 例のみであり、現代の用例もインターネット検索の結果であるため再現性に欠ける。Myers (2014) も、ほとんどが OED や DARE, Wentworth (1944) といった辞書の用例に立脚しているため、包括的な調査とは言いがたい。

本研究では、先行研究に認められるデータの不足や偏りを補い、特に次の 2 点を扱う。

1. 19 世紀から現在に至るまでの fixing to の用法の変遷。特に、近接未来用法の拡大や定着の程度。
2. 形式の違い (fixing to, fixin' to, finna) による差違について先行研究 (Smith 2009) の検証。

2. 手法

本研究では、COHA と COCA を使用し、19 世紀以降のアメリカ英語から用例を収集した。検索語には fixing, fixin('), a-fixing, a-fixin('), finna の 5 つを指定した。fixing は右側 5 語以内に to を含む用例から該当例を、それ以外は各形式に不定詞が後続している用例を手作業で抽出し、およそ 1000 件を得た。なお finna は COHA でヒットしなかった。またその他の縮約形 fixina, fixna, fitna (Green (2002: 70)) は COHA, COCA 共にヒットしなかった。

3. 結果と考察

3.1. 用法の発達

無生物主語や非対格動詞、状態動詞など、「意思」の意味から離れて近接未来を指す用例は 1920 年代から観察され始める。(2a) は体調の変化、(2b) は木からの落下、(2c) は出来事の発生、(2d-e) は自然現象という文脈である。(2c) では going to と同義に用いられている。

(2) a. "Look out—catch him, Quinlan!" cried Mr. Geltfin. "Look at his face—he's **fixing to** faint or something." The prime intent of this recital, as set forth at the beginning, was to tell why Mr. Max Lobel had an attack of apoplexy. (Cobb (1922) *Sundry Accounts* [COHA])

b. A faint call was heard, the girl in the distant magnolia.... "Hurry, she's **fixin' to** fall," said Pauly. ... They made fast to the tree and took in the girl and her goat. (O'Donnell (1935) Jesus Knew, *Harper's Magazine* [COHA])

c. "Only I saw the track before they tore it up. I saw where it was going to happen." "But you didn't know hit was **fixing to** happen when you seed the track. So nemmine that. I heard. And I reckon they ain't gonter git that away from me, neither." (Faulkner (1936) Raid, *The Unvanquished* [COHA])[4]

d. When he awakened the sun was near to the mountains, **fixing** soon **to** sink from sight. (Guthrie (1947) *The Big Sky* [COHA])

e. Dick broke into Evans' thought, saying, "**Fixin' to** storm, west." Not till then had Evans paid any mind to the cloud that had risen low over the hills. "That the way storms come from here?" (Guthrie (1949) *The Way West* [COHA])[5]

there 存在文での使用は、(3) のように 21 世紀に入ってから初めて観察される。

(3) "There's **fixing to** be some tough love. There's **fixing to** be some guys who won't end up in this room...." (*USA Today*, 2015 [COCA])

Myers (2014: 52) は、19 世紀半ばの認識的用法への発達として、(1) のような天候に関す

る文脈での用例を強調しているが、そのような用例は周辺的である。COHA で確認できた天候に関する用例は (2e) を含めた 7 例のみである。[6]

文法化の進んだ用例が 19 世紀から存在したことは事実であっても、そのような用法が広まりを見せたのは 20 世紀に入ってからとするのが妥当であろう。現代でも「有生物主語 (人) + 動作動詞」が典型的であり、FIXING TO は依然として「意思」を指す用法がメインである。

3.2. 形式による比較

まず、COHA と COCA のデータを用いて、各形式の分布を通時的、共時的に概観する。表 1 は COHA のデータを形式別に年代で比較したものである。FIXING TO の初出は 1855 年であるため、表 1 に 19 世紀前半は含めていない。また、ほぼフィクションにのみ生起しているため、ジャンルでの比較は行っていない。20 世紀前半以降、全体の使用頻度に大きな変動は認められないが、優勢な形式が 20 世紀前後半で逆転している。20 世紀前半までは fixin(') to が、後半からは fixing to が優勢となる。[7] 表 2 は COCA のデータを形式別にジャンルで比較したものである。どのジャンルでも fixing to が優勢であり、これは COHA のデータとも符合する。また、口語寄りのジャンルに分布が偏っていることも読み取れる。

表 1 および表 2 のデータは、Smith (2009: 15-16) の示すシナリオと異なる。Smith は fixing to, fixin' to, finna と音声的に縮約が進むほど文法化の程度も進んでいると述べているが、少なくとも最初の 2 つの形式については、それとは反対の通時的変化が認められるからである。以下では、まず、fixing to と fixin(') to の関係について詳細を論じ、その後 finna の特徴について考察する。

表 1: COHA における FIXING TO

	1850-1899	-1949	-1999	2000-	合計
fixing to	3	54	95	19	171
fixin(') to	14	86	44	8	152
a-fixing/ a-fixin(') to	0	4	6	0	10
合計	17	144	145	27	333
per mil	0.332	1.206	1.159	0.916	

表 2: COCA における FIXING TO

	TV	MOV	SPOK	BLOG	WEB
fixing to	28	116	70	24	12
fixin(') to	19	54	6	10	7
finna	19	39	0	3	3
a-fixing/ a-fixin(') to	1	1	1	0	1
合計	67	210	77	37	23
per mil	1.051	3.269	0.604	0.295	0.177

	FIC	MAG	NEWS	ACAD	合計
fixing to	109	25	27	1	412
fixin(') to	48	4	10	0	158
finna	0	0	0	0	64
a-fixing/ a-fixin(') to	1	0	0	0	5
合計	158	29	37	1	639
per mil	1.322	0.228	0.301	0.008	

優勢な形が fixin(') to から fixing to に交替したことは、fixin(') to の使用文脈と関係があるようである。19 世紀の fixin(') to の用例は 14 例中 13 例が、(4) のように AAE の発音を忠実に記述しようとした Joel Chandler Harris (Green (2002: 170-171)) による、Uncle Remus シリーズからのものである。

(4) Co'se Brer Rabbit know de game dat Brer

Fox wuz **fixin' fer ter** play, en he 'termin' fer ter outdo 'im, (Harris (1895) *Uncle Remus, His Songs and His Sayings*)

20 世紀に入ると特定の作品や作家の影響は認められないものの、fixin(') to は AAE の特徴が反映された文脈での使用が多く観察される。COHA のコンコーダンスラインを目視した範囲では、20 世紀前半で 76.7% (66/86 例)、後半で 77.3% (34/44 例) がそのような文脈での使用である。(5a-b) のように、極端にも見える程度まで発音によって AAE を表しているものも見受けられる。[8]

(5) a. "Well, Ah wasn' **fixin' to** tell M'lissy," he acknowledged. "Know you not that that so good little woman would r-rather be hungr-ry than have you give her money that you gained by br-reaking the law?" "Well, Ah wasn' **fixin' to** give hit to her." (Smith (1903) *A Tar-Heel Baron*)

b. Boy! You got nawthin' to do all day but stand in mah path? You **fixin' to** get y'se'f soaked? (Algren (1956) *A Walk on the Wild Side*)[9]

fixing to も上と同様に集計すると、20 世紀前半で 14.8% (8/54 例)、後半で 18.9% (18/95 例) が AAE の特徴が見られる文脈である。fixin(') to とは異なり、過度に発音に頼った表し方をする文脈は見当たらない。(6a-b) は文法的特徴 (you/we was, how you been, 二重否定など) で AAE を表示している。

(6) a. She waved and called, "Hey, you two in green there! Was you **fixing to** sneak past my house?" "No such thing," Crunch grinned, looking upward. "No such thing, ma'am. We was just asking for directions." "Look like you got directed right. Julia, how you been, child? ..." (Baldwin (1979) *Just Above My Head*)[10]

b. "Can't say. But it was in her room. Get what I mean? And I saw her up there before naked as a worm when I was **fixing to** put up the tree. She jumped back, but didn't do no good. She don't know I got eyes in the top of my head...." (Morrison (1981) *Tar Baby*)[11]

以上を踏まえると、優勢な形式が fixin(') to から fixing to に変わったことに用法の変化や文法化が関係しているとは言えない。むしろ、20 世紀を通じて AAE の表し方の変わったことが関わっているようである。20 世紀アメリカ文学作品において AAE を含む方言の表し方が、発音よりも文法や語彙などに頼るものになったという文体上の変化が指摘されており (Green (2002: 197); Preschler (2003))、fixin(') to の使用が減ったこともその影響によるものと考えられるだろう。

その傍証となる用例を見ていきたい。19 世紀の fixin(') to が AAE を表記したものであることを (4) で見たが、20 世紀前半でも fixin' to と AAE が結びつけられているケースが見つかる。(7a-b) に引用する *Gone with the Wind* の連続した会話部分は象徴的である。(7a) は主人公 Scarlett (白人) の、(7b) は Mammy (黒人) の発話である。Scarlett の発話は標準的な綴りで示されている一方、Mammy の発話は非標準的な綴りであり、この文脈における fixing to と fixin' to の違いは話者の出自を示すための使い分けと解釈できよう。[12]

(7) a. "... Are you going to argue with me about a little matter of Mother's curtains when that trash Emmie Slattery who killed Mother is **fixing to** move into this house and sleep in the bed Mother slept in?"

(Mitchell (1936) *Gone with the Wind* [COHA])

b. “Who is you **fixin’ ter** git money frum dat you needs a new dress?” (ibid.)

とはいえ、fixin’ to と AAE を結びつける表記ばかりではない。William Faulkner の作品 (COHA に収録されている限り) では、登場人物の人種に関わらず fixing to が使用されている。(2c) は黒人の Ringo による発話であるが、(8) の Ratliff は白人である。[13]

(8) “That’s right,” Ratliff said. “All I wanted was jest a note for it. But he insisted on making me a partner. And I’ll tell you something else we’re **fixing to** do. We’re **fixing to** open a wholesale.” (Faulkner (1957) *The Town* [COHA])

(6a-b) に引用した用例とも合わせて考えると、20 世紀中頃以降、書き言葉では話者の人種にかかわらず fixing to の綴りを用いることが一般的になっているようである。[14]

書き言葉における -in(’) (-ing の [ŋ] が [n] となる形式) 全体の減少もそのさらなる傍証となるだろう。[15] 図 1 に示しているのは、-in(’) の語尾で表記される動名詞・現在分詞 (“*in_v?g*” で検索) の時代別頻度である。そこから明らかなように、20 世紀前半に頻度のピークがあり、後半にかけて減少する傾向がある。[16] fixin(’) to の減少もこの一般的な変化と軌を一にしたものと解釈できよう。

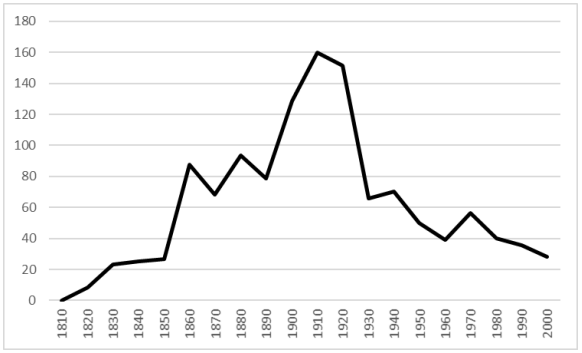

図 1: COHA における -in(’) で終わる動名詞・現在分詞 (per mil)

最後に finna の用法に注目したい。表 2 に示した COCA の 64 例中、finna と私的動詞の共起は皆無である。また COCA の関連する全用例内で比較しても、fixing/fixin(’) to より finna の方が状態動詞と多く共起するとは言えず、Smith (2009: 16) の主張は確認できない。つまり finna を文法化の進んだ形と考えるのではなく、Green (2002: 71) の述べるとおり、fixing to と finna の主な差違は発音上のものと捉えるのが妥当であろう。

COCA のデータを見ると、finna の使用される文脈は極めて限られているようである。ジャンル別分布 (表 2) を見ると TV, MOV に集中しているが (19+39/64 例)、その中でも *A Madea Family Funeral* (2019; MOV) (17 例)、*Legends of Chamberlain Heights* (2016-2017; TV) (9 例) のように、一部の作品に偏っている。また、集中して finna が現れるのは 2010 年代以降で、finna の (少なくとも文字化される文脈への) 出現は極めて最近のことであることが分かる。finna を fixing to と言い直している (9) は、その新規性について示唆的である。

(9) I’m ready, First Lady, ma’am. I been training mighty hard, and I’m **finna** beat you this time.
“**Finna**,” Elvis? “**Finna**”?
’Scuse me, ma’am. I meant “**fixing to**.”

(*Family Reunion*, 2019 [COCA: TV])

このやりとりで “First Lady” と呼びかけられている Amelia は信心深く古風な女性であり、Elvis はその孫娘に恋心を持つ少年である。[17] この二人の世代差が finna の使用、また、それに対する (おそらくは) 規範主義的態度の有無に現れていると見ることも可能であろう。

4. 結論

本研究では、COHA および COCA から収集した用例を元に、FIXING TO の発達について先行研究の主張を検証した。「意思」から独立して「近接未来」を表す文法化の進んだ用法について、Myers (2014) は 19 世紀中頃から始まったとしているが、COHA のデータの示すところでは、そのような用法が拡大し始めるのは 1920 年代以降であることが明らかになった。また、形式による用法の違いについて、Smith (2009) の主張を裏付けるようなデータは確認されなかった。むしろ、Smith (2009) の主張に基づくと高くなると予想されるであろう fixin(') to の使用頻度は、20 世紀後半以降、fixing to よりも低くなっていることが明らかになった。この背景には、アメリカ文学における AAE を含めた方言の表現法の変化という文体的な要素が考えられる。

* 本研究は JSPS 科研費 JP19K13230 の助成を受けたものである。

注

[1] 以下、綴りの異なる形式を含めた代表形を FIXING TO と表記する。

[2] <https://docsouth.unc.edu/southlit/>

[3] 用例中の太字は筆者によるものである。以下同様。

[4] COHA の書誌情報によるとこの用例の出典は Barnes (1938) *Wisdom's Gate* であるがこれは誤りである。本調査では COHA で誤った書誌情報が付されているケースが他にも多く見つかった。以下の引用例では可能な限り原典を調査し、COHA で誤った書誌情報が付されている場合はその旨を注記する。

[5] COHA の書誌情報では Jackson (1949) *Lottery, or the Adventures of James Harris* である。

[6] このうち 3 例が Lytle (1957) *Velvet Horn* に “a-fixing up to rain” という形で生起する。

[7] 表 1、表 2 には 100 万語当たりの換算値を付しているが、この数値は南部方言のテキストがコーパスの各時代・ジャンルに含まれる割合に影響され得ることに注意が必要である。

[8] このような表示が AAE の実際の特徴をどれほど正確に反映しているかの問題には立ち入らない。

[9] COHA の書誌情報では Roberts (1956) *Boon Island* である。

[10] COHA の書誌情報では Kemelman (1978) *Thursday the Rabbi Walked Out* である。

[11] COHA の書誌情報では Gray (1981) *World Without End* である。

[12] この作品 (または映画版) に対してたびたび指摘される黒人への差別的描写の問題については立ち入らないが、fixing と fixin' の綴りの使い分けにそのような背景が存在する可能性も十分考えられるだろう。

[13] 登場人物の情報は The Digital Yoknapatawpha Project <https://faulkner.drupal.shanti.virginia.edu/> による (2020 年 12 月 30 日閲覧)。

[14] Bernstein (2003: 115-116) は *Linguistic Atlas of the Gulf States* (Pederson et al. (1986-1992)) のデータをまとめて、20 世紀後半の南部では、fixin to が黒人・白人で同程度に用いられていると報告している。ただし、この fixin to という綴りが、話し言葉では一様に語末が [n] という発音で終わることを示しているのか、それ以外の発音も含む代表

形なのかは不明である。

[15] このように [ŋ] が [n] と発音されることは AAE の特徴であるとはいえ、AAE にのみ限られる訳ではないことに注意が必要である (Green (2002: 121-122))。

[16] CQPweb <https://cqpweb.lancs.ac.uk> を用いて Brown と Frown を同様に検索すると (検索語には "*in_V*G" を指定)、110 例 (Brown) から 58 例 (Frown) に減少する。なお、Brown では 110 例中 64 例 (58.2%) が 1 つのテキストに集中して生起する。

[17] 登場人物の情報は英語版 Wikipedia の当該ページ <https://en.wikipedia.org/wiki/Family_Reunion_(TV_series)> による (2020 年 12 月 30 日閲覧)。

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コーパス

British National Corpus (BNC)

Brown University Standard Corpus of Present-Day American English (Brown)

Corpus of Contemporary American English (COCA)

Corpus of Historical American English (COHA)

Freiburg-Brown Corpus of American English (Frown)

辞書

Dictionary of American Regional English (DARE), Belknap Press of Harvard University Press, Cambridge, MA.

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<Special Lecture Report>

動的文法理論とその展開—語法文法研究から理論へ

（Grammatical Dynamism and Its Development: In Search for a Theory through the Studies of Grammar and Usage）

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キーワード：動的文法理論, 反証可能性, 説明理論

1. Case Studies

4 つの事例研究を簡単に見ていく。

1.1 The English head-internal relative clauses: (Nakazawa 2018a, 中澤 2018b)

Peculiarity of the construction: the head inside the relative clause

1.2 The *Dungeon* construction: A syntactic hapax legomenon: (Nakazawa 2018a)

Peculiarity of the construction: *with* followed by theme/subject/agent

1.3 The post-nominal modifier *combined*: (中澤 2017)

Peculiarity of the construction: all basic features missing

1.4 The verb *allege* as a semi-auxiliary verb: (中澤 2020)

Peculiarity of the construction: emergence of the semi-auxiliary use of *allege*

2. Grammatical Dynamism (aka. Dynamic Model of Grammar)

Kajita の動的文法理論と修正理論を見る。

2.1 Kajita (1977, 2002): K-Model

(1) If the grammar of a language L at stage i, G(L,i), has property P, then the grammar of the language at the next stage, G(L,i+1), may have property P'. (Kajita 2002: 161)

(2) The Kajita Format (K-model)

If *A*, then *B* is possible (= If *A*, then *B* or ~*B*).

Problems with K-Model

(i) "How far it goes" and "When to stop"

(ii) Tautology

2.2 Revised model: R-model (cf. Nakazawa 2018a)

(3) The Revised Format (R-Model)

If *B*, then *A*.

(i) Accidental Gap/Accidental Hap

(ii) R-Model: ~tautology (cf. falsifiability)

(iii) Explanation

3. Advantages of R-Model

3.1 The vowel in *money*

3.2 On 'peculiarity': How and why the construction is peculiar

3.2.1 K-Model: [[P]] + *p* = [[P']].

The problem: why is it the case that this very ***p*** and no other is added to [[**P**]] to derive [[**P'**]]? Why not otherwise?

3.2.2 R-Model: [[P']] – [[P]] = *p*.

The peculiarity: it just happens that the difference between [[**P'**]] and [[**P**]] is ***p***.

(a) head in HIRC: how peculiar! (cf. §1.1)

(b) "command" in the *Dungeon* construction (cf. §1.2)

(c) scaffolding in *combined* construction (cf. §1.3)

(d) verb type change of *allege* from *believe*-type to *want*-type (cf. §1.4)

3.3 Multiple motivations for extension

K-Model: [[**P**]] + {p_1 & p_2} = [[**P'**]] (Are two or more motivations possible? Why and how is this very {p_1 & p_2} chosen?)

R-Model: [[**P'**]] – [[**P**]] = p (p = {p_1 & p_2}, {p_1 or p_2}, or whatsoever. No such 'why' problems arise.)

3.3.1 *allege* (cf. §1.4)

3.3.2 Nomura (2019a, b)

3.3.3 N. Nakazawa (2006)

4. Postscript

(4) この障壁を打ち破るためには、「可能な文法」の限定の仕方について、発想を根本からあらためねばならない。（梶田 1984（3））

(5) Chomsky argues for the instantaneous model.

Kajita argues against the instantaneous model, and proposes a dynamic model, i.e. K-Model.

Nakazawa argues against K-Model, and proposes a revised model, i.e. R-Model.

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<Special Lecture Report>

歴史語用論の歩み：
分類・射程・拡がりから見える分野の特徴*

（Review of *Historical Pragmatics*: Features Captured from Its Classification, Range, and Development）

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キーワード：歴史語用論, 意味機能変遷, 間主観的から接続的機能へ

0. はじめに

本講演の前半で、「歴史語用論」分野の歩み、射程となるテーマ、分類から見えてくる特徴を報告した (1-3)。後半では、講演者の「意味機能変遷のもう 1 つの傾向？: 間主観的から接続的機能へ」という通時的語用論研究について報告を行った (4)。

1. 歴史語用論の歩み

1.1. 1995 年創設説

言語学において歴史語用論という下位分野が創設されたのは、通説では 1995 年、Zurich 大学の Andreas H. Jucker 教授が論文集 *Historical Pragmatics: Pragmatic Developments in the History of English* を刊行した年とされる。

1.2. 1995 年より以前

しかし、1995 年以前にも実は歴史語用論と呼べる研究が行われていたことは事実であるため、その点を振り返った。英語研究では、1960 年に Brown and Gilman による論文 The pronouns of power and solidarity があり、欧州 T-V 言語の人称代名詞の使用と社会的要因「力関係と親疎」の関係についての考察の基礎を築いている。ドイツ語研究では、そもそも語用論的・社会言語学的関心が高かったと思われるが、1970 年代には既に歴史語用論という呼び方が用いられていた。また、日本語研究においては、特に国語学の流れの中に、敬語史・待遇表現史と呼べる伝統が早くからある（山田 (1924)・時枝 (1941)）。

世界的な通説から最初の論文集とされる Jucker (1995)（前出）の冒頭言でも「歴史語用論が全く新しい名称であるとか、新しい領域を描くということではない」(Jacobs and Jucker (1995: 26)と述べている。

ただ Jucker 氏が「歴史語用論」という名を用い、領域を明示的に立ち上げたことで、それまで各個別言語で別々に行われてきた研究を 1 つの土俵に上げやすくなった。例えば、歴史語用論というまとまりの下に、アラビア・日・英・伊・ネワール語研究者が一堂に集い、議論・発信したりする機会が増えたことは利点であろう。

2. 日本における歩み

日本では 2005 年に、初めて「歴史語用論」ワークショップが行われた。金水敏氏がオーガナイズ、福元広二氏・小野寺・森山由紀子氏がパネリストとして「談話標識の通時的発達（前者 2 名）・敬語の通時的発達（森山氏）」について報告した。こうした初期のトピックは、現在も多くの観察が続けられている。

日本でも、共同・個別の科研費によるプロジェクトをはじめとして、研究が蓄積され、現在までに歴史語用論という冠を配した 3 冊の論文集が刊行された。最初の『歴史語用論入門』(2011)から今年でちょうど 10 年が経ち、増刷された。『歴史語用論の世界』(2014)、『歴史語用論の方法』(2018)と続いている。

国内外の関連研究会として、HiSoPra 研究会・日本語用論学会、IP r A・DiPVaC・East

Asian Pragmatics の存在についても報告した。

3. 歴史語用論分野の位置づけ・特徴

近代の言語研究史における歴史語用論の位置づけを、堀田(2017)を参照して行った。I. 19 世紀に言語の中心領域に対する歴史的研究（比較言語学・文献学）がなされ、II. 20 世紀に非歴史的研究（構造主義や生成文法）がなされた。III. 20 世紀後半に、周辺領域（社会・語用）の非歴史的研究（社会言語学・語用論）が発達し、最後に空いていたスロット IV.で、周辺領域の歴史的研究（歴史語用論/社会言語学）が興ったという経緯を報告した。

歴史語用論の分類は、まず、語用論的フィロロジーと通時的語用論に分けられる。そして、通時的語用論はさらに通時的「形式－機能対応付け」と通時的「機能－形式対応付け」に分類される(Jacobs and Jucker 1995; 高田他 2018:7 の図式参照)。語用論的フィロロジー研究と通時的語用論研究では、見る対象・研究成果の性質が全く異なる。前者では、例えば、特定時代の特定の国家全体におけるイデオロギー・文化の変容といった、マクロな視点からの描写が可能である。一方、後者の代表的研究トピックに文法化・構文化があるが、人のコミュニケーションの最もミクロな場面に視点を置き、一言語形式(例:英語接続詞 *while*)の通時的発達を見るという具合である。

上の、語用論的フィロロジーと通時的語用論の性質の異なりは、そもそも語用論に対するヨーロッパ的/アングロアメリカ的捉え方の違いに由来することを説明した。前者は、社会全体のコンテクストに基盤を置く語用論であり、社会言語学と重複すると言っても良い。後者は、グライス理論等を基礎に、含意や場面における意味を中心に取り扱う。Jucker 氏が、この両地域の考え方を含めたところも、歴史語用論分野の射程の広さ・言語学一般に与える示唆の大きさの源になっていると思われる。

4. 意味機能変遷のもう 1 つの傾向？：間主観的から接続的機能へ

最後に講演者の現在の研究を報告した。意味変遷研究において、Traugott (1982, 1989) が提案した「命題的＞接続的＞表出的（のちに（間）主観的に置き換えられる）」という機能変化の方向性は、分析の大きな指針となり、多言語において実証されてきた。ところが、最近になってこの方向の逆向きとも取れる「間主観的＞接続的へ」という変化が複数言語で報告されるようになった。

他者への働きかけである間主観的機能が、談話をつないでいく接続的機能の動機づけとなっているようで、英日伊露中語ほかの言語から報告が寄せられている。

意味変遷では、上記の Traugott 提唱の方向の他にも、様々な傾向・方向性があるのかもしれない。現在、通言語的に検証中である。

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<Workshop Report>

統語領域における copy をめぐる諸問題-copy 派生メカニズムの単純化*

（Some Issues on the Syntactic Notion Copy: Deriving Simplest Copy Formation）

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キーワード：コピー形成、格、解釈規則、最小計算の原理、局所性

1. はじめに

copy は極小理論の誕生とともに、痕跡に置きかわるものとして提案されて以来、統語計算及び音声・意味の解釈の根本を成すものとして、必然的に存在するものである。しかし、可能な操作が併合（Merge/MERGE）のみとする昨今の理論では、別途に copy を算出するものは存在しえない（Chomsky 2020）。この問題に対して、5 人の講師が各々の視点から copy の導出及び解釈に関係する提案を行い、指定討議者の豊島講師も加わり、現状における copy 形成について、最適解を追い求め、理論に寄与するものである。

2. copy の役割と copy 個体集合の認定

極小理論では、Chomsky (1995) が痕跡に代わるものとして、copy を導入して以来、移動は copy を含む操作だと考えられてきた。

(1) a. Which picture of himself did John see?
b. [$_{CP}$ [Which picture of himself]$_i$ did John$_j$ T John$_j$ see [which picture of **himself**]$_j$?

(1b) では、which picture of himself が移動先である CP-Spec において演算子としての役割を果たし、元位置では see の目的語として、Theme の意味役割を担い、2 つの copy によって which picture of himself が担う解釈が表されている。又、himself は John に束縛される必要があるので、元位置で解釈され、copy によって束縛の関係性が保証されている。又、以下の二文を区別するには、A 移動である受け身文において、copy の関係が形成される必要があり、(2b) の文では Pop$_i$ と Pop$_j$ は区別される必要がある。そして、(1b)/(2a) ともに移動先の copy が発音される保証がある。

(2) a. [$_{TP}$ Pop$_i^1$ is [$_{VP}$ loved Pop$_i^2$]].
b. [$_{TP}$ Pop$_i^1$ T [$_{v*P}$ Pop$_i^2$ loved Pop$_j^3$]

しかし、Chomsky (2020) を中心に、移動に関与する併合は句を組み合わせるだけの構造を組み立てる操作であり、copy を作り出す余地はない。又、inclusiveness condition により、統語計算の途中で copy の関係を保証する連鎖や痕跡を導入することは禁止されている。Collins & Groat (2018) が指摘するように、統語計算に必須である copy の形成 (もしくは導入) を標的にした別個の操作及び道具立ては認められない。すなわち、copy 個体集合の形成は、併合及びインターフェースの解釈原理、もしくは一般的な最小計算などの原理、語彙項目・構造の性質から導き出される必要があり、言語の特性を明らかにす

るには、このジレンマを解く必要がある。

3. 宗像: 統語派生メカニズムにおける Copy と素性一致のミニマリスト的最適性について

昨今のラベリング仮説から、copy 個体集合の同定の必要性を指摘し、ラベリングにはφ素性の一致が必須なことに言及した。このφ素性の一致の際に、格付与が伴うので、最上位の copy 個体は認可された格を有し、他の copy 個体は格が欠落することに着目し、copy 個体の集合形成は phase ごとに格素性に基づいて行われると主張した。

4. 林: 反 Self-MERGE としての反局所性

copy 個体の解釈を二種類に分け、i. 統語領域内で決定される copy の集合形成と ii. インターフェース上で解釈規則によって決定される二種類があることを示した。特に、i において、copy 個体の形成が阻害される例として、反局所性の現象をあげ、同一の語彙項目が続けて直上に併合を適用された場合、統語計算上、構造として認識されないものであると主張した。又、ii では、What did you buy what and sell what? の ATB 構文のように、phase を越える場合、インターフェースの解釈規則の相互作用によって、copy 個体の集合が同定されると主張し、再述代名詞など音が異なっても意味的に copy とみなせるものにも分析が適用できることを示した。

5. 北原: MERGE に基づく copy の概念について

Chomsky (2020) の枠組みのもと、併合は、語彙項目・統語構造ではなく、統語作業領域（Workspace WS）に適用され、新たに集合が 1 つ加わることで、WS を更新する操作に改訂された。その適用は、WS の terms への access を保証する No Tampering Condition と WS の accessible terms の増加を最小限にとどめる Resource Restriction を満たす手続きであり、copy の概念はこの併合適用手続きの帰結として捉えられると主張した。

6. 石井・後藤: ATB 解釈に寄与する格の役割

併合の曖昧な適用を排除する Determinacy を概観し、copy 個体集合の同定が重要な役割を果たす ATB 構文を分析した。併合による copy 個体集合の同定とは別に、phase を越えた copy 個体集合の同定では θ 役割及び格が関わっていることを示した。ATB 構文の wh 要素が[+Case, +θ-role]の場合、同一解釈しか許容されないが、[+Case, +θ-role]以外の場合は copy 個体集合が分離される非同一解釈が許容されることを示した。

* 本ワークショップ開催にあたり、準備段階から貴重なご助言をいただき、尽力して下さった内堀朝子氏に大いに感謝する。又、ワークショップに参加し、議論に貢献した聴衆の皆様に深い謝意を表するものである。なお、本ワークショップで研究発表した各研究は、以下の助成を受けている。日本学術振興会科学研究費補助金（特別研究員奨励費 20J11905 (林愼将)、基盤研究 (C) 19K00612 (北原久嗣)、基盤研究 (C) 18K00666 (石井透)、基盤研究(C) 19K00692 (後藤亘)、基盤研究 (C) 18K00543 (豊島孝之))

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<Workshop Report>

Case Alternations

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Keywords：topic, abstract case, change of location, dative subject

1. Introduction

This workshop discussed case alternations in Japanese from various areas of linguistic studies: pedagogy, syntax, semantics and typology.

2. Discussant 1 "A study of translation of Japanese and English subjects: *wa*/*ga* alternation" (Shao Tianxiao)

For native speakers of Mandarin Chinese, a language without case-marking, the choice between *wa* and *ga* can be challenging when translating from English. In information structure, the sentential subjects can be classified into four classes—topic, contrast, exhaustive listing and neutral description (Kuno 1973).

(1) A: What did Mike do?
B: Mike played basketball.
(Maiku-wa basukettobooru-o yatta)

(2) A: Who played the ball?
B: Mike played basketball.
(Maiku-ga basukettobooru-o yatta)

(3) A: Did Mike and Kim play the ball?
B: Mike played basketball, but Kim *didn't.*
(Maiku-wa basukettobooru-o yatta-ga Kimu-wa yaranakatta)

(4) A: What happened?
B: Mike played basketball.
(Maiku-ga basukettobooru-o yatta)

Even though the responses in English are identical in (1)(2)(4), there occur *wa/ga* alternations in Japanese, due to the different types of subjects. This study overcomes challenges in translation by utilizing such functional concepts in translation processes. The results of the questionnaire survey showed that this method is effective for Chinese students.

3. Discussant 2 "*Ga/no* conversion and the abstract case assignment in Japanese" (Hisako Takano)

This paper reexamined the syntactic environment where so called *ga/no* conversion (Harada 1971) occurs, not to propose any new analysis, but rather to widen the scope of discussion by pointing out an apparently coinciding phenomenon, which has not been much discussed in the relevant literature, i.e., the unavailability of a topic NP. For seeking a case assignment system which can explain both phenomena, two Japanese complementizers, *no* and *to* were examined with respect to the distribution of the structural cases. It was argued that Japanese genitive case, *no*, nominative case *ga*, and topic case *wa* are structurally assigned by the head, N, Infl(T), and Comp to its spec NP respectively, independently from the theta assignment of the verb. Finally this study in

general provided some argument to defend the abstract/structural case assignment in Japanese as opposed to those analyses of Japanese cases being morphological ones (Aoyagi 2006).

4. Discussant 3 "***Ni/e* alternations and change of location in Japanese**" **(Sumiyo Nishiguchi)**

Nishiguchi discussed two classes of verbs in Japanese: (i) verbs that allow alternations between *ni* "dative/locative" and *e* "goal" case markers, and (ii) verbs without *ni*/*e* alternations.

(1) Karen-ga eki-ni/e it-ta (koto)
Karen-NOM station-DAT/LOC go-PAST fact
"Karen went to the station."
(2) Inu-ga kainushi-ni/*e ni-ta (koto)
dog-NOM owner-LOC/LOC resemble-PAST fact
"The dog resembled the owner."

She claimed that noun phrases with *ni* "DAT"/*e*"LOC" phrases are arguments of the achievement verbs, often of transfer, that allow *ni/e* alternation. In contrast, *ni* "LOC" /*e* "LOC" marked phrases are adjuncts with stative unaccusative or transitive achievement verbs without *ni/e* alternations. *E* is more concerned with the physical direction towards the goal (Kaiser et al. 2001) although *ni* and *e* are often interchangeable (Tanaka and Matsumoto 1997). While the allative case marker *e* entails change of location and does not entail arrival, *ni* refers to a goal/location and entails arrival.

5. Discussant 4 "**The dative subject construction in Japanese and Romanian**" **(Daniela Caluianu)**

Using the contrastive analysis of the Dative Subject Construction (DSC) in Japanese and Romanian as a case study, this presentation offered some reflections on how the choice of categories affects the results of linguistic investigation. An initial analysis, using Haspelmath's comparative concepts 'dative' and 'subject' (Haspelmath, 2010) suggests that the two languages exhibit similar cross-linguistic tendencies. A more fine-grained examination on language specific constructions indicates that the Romanian DSC is closer, both in its extension and intension, to the Japanese double nominative construction. The differences come down to the language specific properties of the dative case. The Japanese dative is a locative marker and the DSC involves viewing the experiencer as a location for a particular state or judgment. In Romanian, the dative case is closely associated with possession, prototypically with inalienable possession, and DSC implies a more intimate relation between an experiencer and the object of the experience. This raises the issue of the role of the language specific properties of the dative morpheme for the semantic interpretation of DSC and the balance between universalism and particularism in linguistic inverstigation.

6. Summary

Although case alternations may puzzle language learners, they shed light on the information and syntactic structures, and semantic distinctions. Experiments proved functional approach to be useful for the choice between topic and nominative markers in Japanese. Syntactically, nominative-genitive case alternation in Japanese implies structural case assignment instead of morphological one. The presence or absence of case alternations coincide with syntactic and semantic differences. A typological comparison between dative subjects in Romanian and dative-nominative alternation in Japanese revealed semantic similarity and variance.

[II]

Thirteenth International Spring Forum

Short-Distance Movement in *That*-Relative Clauses*

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Keywords : *that*-relative clause, short-distance, long-distance, idiom, labeling

1. Introduction

A *that*-relative clause (henceforth, RC) can be made from idioms. Examine the following sentence:

(1) The *beans* ***that*** Mary *spilled* caused a scandal.

The example involves the idiom *spill the beans* meaning 'to tell somebody something secret', and maintains the idiomatic reading. The *that*-RC in (1) derives in the short-distance environment. With this in mind, examine the following sentence:

(2) The *beans* ***that*** John thought that Mary *spilled* caused a scandal.

The idiomatic reading is unavailable in (2). The use of the *that*-RC in the long-distance environment brings about the unavailability of idiomatic reading.

The current paper argues that there is a difference between a short-distance and a long-distance *that*-RC, mainly focusing on availability or unavailability of idiomatic reading. Then in order to explain the difference, a functional head F is introduced in a derivation of short-distance *that*-RCs. Moreover, the proposal makes it possible to solve a labeling problem between a moved head nominal and CP (RC), which is in a {XP, YP} configuration.

This paper is organized as follows. Sections 2 briefly summarizes two analyses regarding *that*-RCs. Section 3 shows core data concerning idioms in a short-distance and a long-distance *that*-RC. Section 4 proposes a new analysis, employing a functional head F to explain a peculiarity in a short-distance *that*-RC. Section 5 is a conclusion.

2. Two Analyses in RCs

Aoun and Li (2003) claims that a *that*-RC derives through raising of a head nominal (promotion analysis) while a *wh*-RC motivates a relative pronoun movement (*wh*-movement analysis). Examine the following sentences:

(3) a. The *headway* ***that*** Mel *made* was impressive.
b. ?? The *headway* ***which*** Mel *made* was impressive.
(4) a. The careful *track* ***that*** she's *keeping of* her expenses pleases me.
b. ?? The careful *track* ***which*** she's *keeping of* her expenses pleases me.
(Aoun and Li (2003: 110))

The examples involve idioms *make headway* and *keep track of*, meaning 'to progress' and 'to know about something' respectively. The *that*-RCs maintain the idiomatic readings, but the *wh*-RCs do not. If the head nominals *headway* and *track* move from inside the RCs after establishing a relation with the verbs *make* and *keep* to obtain the idiomatic interpretation,

the promotion analysis nicely explains the grammaticality. In the *wh*-RCs, the relative pronoun *which* is first generated as the object of the verbs *make* and *keep*, then moved to Spec,CP. The head nominals *headway* and *track* are assumed to be base-generated in the main clauses. Consequently, there is no relation between the verbs and the nouns, and hence, the ungrammaticality.

The validity of the promotion analysis is confirmed in Japanese, too. Consider the following sentences:

(5) Raibaru-wa [John-ga mizukara *e hotta*] rival-TOP -NOM himself dug *boketu-o* totemo yorokonda.
grave-ACC very happy.
'(Lit.) The rival was very happy about the grave that John himself dug'
'The ruin John himself brought about made his rival happy' (Kitao (2009: 33))

(6) Sono eiga-wa [Mary-ga *e watatta*] that movie-TOP -Nom crossed *abunai hasi-o* migotoni dangerous bridge-ACC elegantly. Saigensita.
reconstructed
'(Lit.) That movie elegantly reconstructed the dangerous bridge Mary crossed'
'That movie elegantly reconstructed the dangerous action Mary committed'
(Morita (2013: 120))

The examples involve the idioms such as *boketu-o horu* (grave-ACC dig) and *abunai hashi-wo wataru* (dangerous bridge-ACC cross) meaning 'to bring about one's own ruin' and 'to make a risky attempt' respectively. As argued in the explanation for (5) and (6), considering a close relation between the verbs and the nouns, *boketu-o horu* (grave-ACC dig) and *abunai hashi-wo wataru* (dangerous bridge-ACC cross), the object position of the verbs has to be occupied by the nouns in the derivation of the RCs. The idiomatic reading in RCs supports the promotion analysis in Japanese.

3. A Comparison between a Short-Distance and a Long-Distance *That*-RC

This section will show core data concerning idioms to demonstrate a difference between short-distance and long-distance *that*-RCs. Again, examine the following sentences:

(7) = (1)
The *beans* ***that*** Mary *spilled* caused a scandal.

(8) = (2)
The *beans* ***that*** John thought that Mary *spilled* caused a scandal.

The promotion analysis predicts (7) to have the idiomatic reading meaning 'to tell somebody something secret' ; however, this is unavailable. Namely, a scandal was caused by some beans, not secrets, in (8). Japanese analogous examples are as follows:

(9) Raibaru-wa [Mary-ga [John-ga mizukara rival-TOP -NOM -NOM himself *e hotta*-to] omotta] *boketu-o* totemo dug-COMP thought grave-ACC very yorokonda.
happy
'The rival was very happy about the grave that Mary thought that John himself dug'

(10) Sono eiga-wa [John-ga [Mary-ga *e*
that movie-TOP -NOM -NOM
watatta-to] omotta] *abunai*
crossed-COMP thought dangerous
hasi-o migotoni saigensita.
bridge-ACC elegantly reconstructed
'That movie elegantly reconstructed the dangerous bridge that John thought that Mary crossed'

(9) and (10) derive through taking the RCs in (5) and (6) as a complement of the *to*-clause (*that*-clause) respectively. In these long-distance cases, idiomatic reading disappears. Instead, they possess a reading where an entity has a physical existence. In (9), the rival was happy about the physical grave, not the ruin committed by John, and in (10), the movie reconstructed the physically dangerous bridge, not the risky attempt. Examples (8), (9) and (10) imply that short and long-distance *that*-RCs are derived differently.

In the present section, I have shown that a head nominal made from idioms cannot move long-distance. Idiomatic reading is available only in short-distance *that*-RCs.

4. A Derivation of a Short-Distance *That*-RC with a Functional Head F

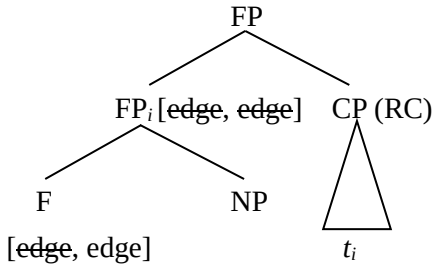
This section will illustrate how *that*-RCs are derived in short-distance movement.[1] I propose the following structure for the head nominal:

(11) [$_{FP}$ F NP]

In this structure, I argue that the functional head F with two edge features takes the head nominal as its complement. Following Chomsky (2008), edge features permit a lexical item to be merged with syntactic objects. One of the features enables F to be merged with NP in (11). F itself is a pure functional item employed when merging two SOs such as NP and CP (RC) in the derivation of *that*-RCs.

Then FP comprised of F and the head nominal moves upward to Spec,CP. Though FP is not a lexical item, the other edge feature of F motivates merge with CP. According to Chomsky (2000), a selector or probe projects. Thus, when the head nominal moves to Spec,CP, FP that selects CP projects, which results in short-distance movement of the head nominal. This derivation is schematically represented as follows:

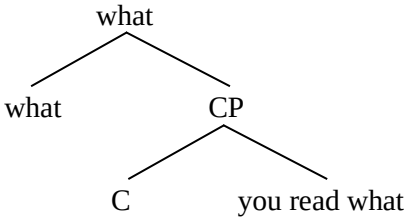
(12)



The derivation explains why idiomatic reading is unavailable in long-distance *that*-RCs. Once FP merges with CP (RC), the FP decides the label. FP cannot move along with NP stranding CP (RC) because FP forms a constituent as a whole.

The idea that a moved element projects is not new. Cecchetto and Donati (2010) and Donati and Cechetto (2011) argue that free-relatives are derived through projecting movement by a lexical item. The derivation is as follows:

(13) I read [what you read.] (slightly modified)



(Donati and Cechetto (2011: 523))

According to them, the lexical item *what* provides the label. Donati and Cechetto (2011) applies the analysis to a phrasal head nominal in RCs. After projecting movement by a lexical item, syntactic objects are late-merged to the lexical item. In the derivation, no labeling problem between a head nominal and CP occurs because the moved head nominal always serves as a lexical item, which is in a {X, YP} configuration.

The derivation seems attractive, but raises a problem with idioms. As argued in Section 2, RCs made from idioms maintain idiomatic reading. In order to obtain idiomatic reading, an object position of a verb has to be occupied by a specific noun. Considering the idiom involving an adjective phrase like *abunai hashi-wo wataru* (dangerous bridge-ACC cross) meaning ‘to make a risky attempt’ from (6), the modifier also plays an important role for the idiomatic interpretation. The idiomatic reading is unavailable without *abunai* although the modifier is late-merged in Donati and Cechetto (2011). Therefore, it is natural to derive the head nominal as a phrase that can involve a modifier. In (11), I propose a phrasal head nominal. Furthermore, FP comprised of F and NP projects with an edge feature when merged with CP (RC). This makes it possible to solve the labeling problem between a moved phrasal head nominal and CP (RC), which is in a {XP, YP} configuration, without assuming late-merge.

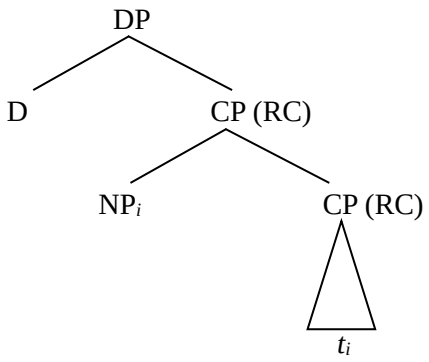
Regarding word order in Japanese, a head nominal follows its RC. A functional head F with two edge features can explain the fact on the basis of head-parameter. F and FP take NP and CP as a complement respectively. In Japanese, a head (lexical item) follows its complement, so NP precedes F. FP is not a head, but an edge feature enables FP to function like a head. As a result, FP follows CP in accordance with head-parameter. As argued, FP is made from F and NP. Thus, a head nominal follows its RC as shown below:

(14) CP (RC) >> [$_{FP}$ NP >> F]

In this manner, correct word order for Japanese RCs is obtained.

In the previous research of RCs by Kayne (1994), Bianchi (2000), including Aoun and Li (2003), they posit the premise that D selects CP (RC). Observe the following structure for *that*-RCs in their framework:

(15) (abstracting away from the irrelevant details)



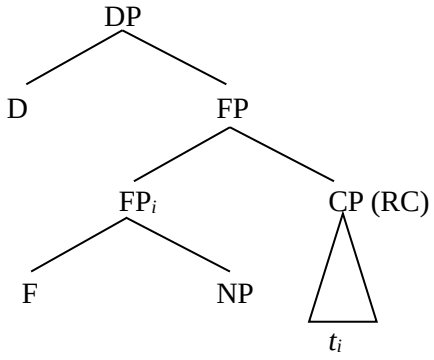
They assume that the head nominal moves to Spec,CP in accordance with the promotion analysis, and CP is selected by D. Here, a question arises of whether D can select CP or not. Kayne defends the structure (15), noting the following example:

(16) a. *the Paris
b. the Paris that I knew
(Kayne (1994: 103))

He claims that a proper noun cannot cooccur with *the*, but it is not true when used in RCs. The consequence is directly drawn from the structure (15) because D *the* does not select NP *Paris*, but does CP (RC) instead. Additionally, Bianchi (2000) argues that D turns CP (RC) into a nominal phrase which can occupy an argument position in a main clause.

As for my proposal, examine the following structure:

(17)



The selectional problem between D and CP (RC) does not occur because D selects FP. The structure correctly expects the grammaticality of (16)b in line with the explanation by Kayne (1994). As argued above, F is merely a functional item, which is different from CP in the possession of many discourse-related properties such as force, topic, focus, finiteness, etc. Superficially, it seems as if D selects CP; however, it is an apparent affinity.

Semantically, the head nominal is interpreted as an intersection of two sets NP and CP (RC). If that is the case, D *the* makes it possible to choose one reference out of the intersection. FP corresponds to the intersection in (17). Specifically, examine the following sentences:

(18) F: λ P λ Q λ x [P (x) & Q (x)]

(19) a. Mary bought the *book* ***that*** John wrote.
b. λ x [$_{FP}$ book (x) & John wrote (x)]

The functional head F is semantically described in (18). Following the description, the head nominal in (19)a is represented with & in (19)b. This representation predicts the restriction of movement like Across-the-Board. Accordingly, the movement of either NP *book* or CP *John wrote* is prohibited in short-distance *that*-RCs employing the functional head F. This also explains unavailability of idiomatic reading in long-distance *that*-RCs.

Besides, (17) prevents D from having a specific function by Bianchi (2000) such as category-changing from CP (RC) to DP. In (17), D does not select CP in the first place. Therefore, there is no need for D to have the function.

Lastly, a problem what triggers movement of head nominals in *that*-RCs remains unsolved. On the point, Kayne (1994) mentions that D which selects CP (RC) requires head nominals be in a position governed by it. Assuming that minimizing the role of D is on the right track, Free Merge by Chomsky (2004) is a promising solution. Free Merge permits iterative merge of syntactic objects in derivations, which involves no configurational checking. Movement of head nominals driven by Free Merge allows a simplified derivation in *that*-RCs.

5. Conclusion

The present paper has argued that the functional head F with two edge features is employed when deriving the short-distance *that*-RCs. It first merges with NP, secondary with CP (RC), moving upward to Spec,CP. In accordance with Chomsky (2000), F that selects CP (RC) projects. In the following derivation, D

selects FP that is considered to be the intersection of the two sets NP and CP (RC).

Moreover, this paper has indicated that there is a difference between a short-distance and a long-distance *that*-RC on the basis of availability or unavailability of idiomatic reading. The distinction is crucial to investigate the nature of *that*-RCs.

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NOTES

[1] Due to the limited space, the derivation of long-distance *that*-RCs is omitted.

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Two Types of Germanic Suffixes Forming Relational Adjectives in English*

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Keywords: denominal adjective, derivation, inflection, transposition, suffixal status

1. Introduction

There is an extensively discussed topic in the field of morphology: whether the two morphological domains *derivation* and *inflection* are clearly separated or are continuous in nature (see e.g. ten Hacken (2014), Štekauer (2015)). Such a 'continuity', for example, can be observed in 'mixed categories', which stems from category changing such as from action nominalisations. Consider *destroying* in (1).

(1) {The Government's/Their} systematically *destroying* all the evidence appalled us.
(Spencer and Nikolaeva (2017: 80))

The form *destroying* in (1), like a noun, has a possessive form specifier *The Government's* / *Their*. Given that derivation is canonically responsible for category changing, *destroying* in (1) appears to be a derivative. However, it retains the verbal properties and is not quite different from the verb *destroy*; like a verb, it is modified by an adverbial modifier (i.e. *systematically*) and directly takes a grammatical object (i.e. *all the evidence*). Spencer and Nikolaeva (2017: 80) explain that *destroying* is a form of the lexeme DESTROY and not a distinct lexeme from its base verb. In other words, the lexeme DESTROY is forced to occur in the gerundive form as in (1) due to the syntactic environment; it fulfils the function of grammatical subject, which is required to be a noun. In this sense, *destroying* in (1) is like inflected words. Such mixed categories can thus be continuous between the two morphological domains, namely, derivation and inflection.

Category mixing is also found in category changing from Noun to Adjective. Spencer and Nikolaeva's recent series of studies on nominal modification argue that denominal adjectives are divided into two groups, according to whether they are outputs of (normal) derivation or those of category-changing inflection (Spencer and Nikolaeva (2017), Nikolaeva and Spencer (2020)), as will be shown in Section 2. They particularly focus on relational adjectives (RAs), a subtype of denominal adjectives. RAs (in English, e.g. *industrial*, *wooden*, *algebraic*) differ from qualitative adjectives (e.g. *beautiful*, *picturesque*, *nervous*) in that they inherit the nominal properties of their base nouns such as lack of gradability (e.g. **very industrial*) and predicability (e.g. **the output is industrial*) (see Levi (1978) and Bisetto (2010) for other properties). Spencer and Nikolaeva (2017) reveal that while Uralic and Altaic languages have RAs in the realisational forms of their base noun lexemes like *destroying* in (1), English has RAs as distinct lexemes from their base noun lexemes. In this way, RAs are in fact divided into two types: the inflected word-type RAs, as in Uralic and Altaic languages, and the

derivative-type RAs, as in English.

The present study, however, points out in Section 3 that the English RAs containing *-en* (e.g. *wooden*, *woollen*, *oaken*) behave not only as derivatives for some speakers but also as inflected words for others, which raises the question why there is such dual behaviour. We answer this question in Section 4 by considering the properties of *-en* as a Germanic suffix and the diachronic change in English from a synthetic language to an analytic language. These factors crucially determine whether an RA is a derivative-type or an inflected word-type in English morphology. Our own analysis leads to the conclusion that the dual behaviour of RAs with *-en* reflects the transition of the suffix in its function between the two morphological domains, namely, from inflection to derivation.

2. Category Mixing in Denominal Adjectives

2.1. Transpositional Lexeme and True Transposition

This subsection introduces the criterion for the dichotomy of denominal adjectives in Spencer and Nikolaeva's studies. One striking difference between derivation and inflection is that derivation, but not inflection, is concerned with the formation of new words; derivation forms a new lexeme from a given existing lexeme and inflection realises a word form of a lexeme appropriate for the syntactic environment where the lexeme appears. Spencer and Nikolaeva's studies demonstrate that some denominal adjectives are new lexemes, distinct from their base nouns (i.e. derivatives) and others are word forms that nominal lexemes take in the syntactic environment of attributive modification (i.e. inflected forms).

Nikolaeva and Spencer (2020) use the term *transposition* to refer to the process that alters the syntactic category of a lexeme without forming a new and distinct lexeme (i.e. the category changing in inflection). They especially call the denominal adjectives, *true transpositions*—as the outputs of transposition—to distinguish them from *transpositional lexemes*, the outputs of derivation. The term 'transpositional' is used here because they are similar to true transpositions in that the processes related to both types of adjectives do not add some new meanings to the relevant base nouns (Spencer and Nikolaeva (2017: 84)). For example, the expression *industrial output* (RA-Noun) is fully synonymous with *industry output* (Noun-Noun) (Levi (1978: 4)). The significant difference between true transpositions and transpositional lexemes lies, not in semantics, but in morphology; the latter are distinct lexemes from their base nouns but the former are not.

To judge whether a denominal adjective is a transpositional lexeme or a true transposition, Spencer and Nikolaeva rely on some properties of lexical integrity (see also the Atom Condition of Williams (1981)), which states that syntactic processes and operations do not have direct access to the internal structure of words. Spencer and Nikolaeva (2017: 82) focus particularly on the *Base Noun Modifiability Property* (hereafter, BNMP) of given forms. That is, when a denominal adjective is a derivative, it contains the base noun as its part, which thus cannot be accessed by another modifier (i.e. attributively opaque). In this case, the derivative is a completely different lexeme from its base noun, namely, a transpositional lexeme. On the other hand, when the word in question is an inflected form of the base noun or a true transposition, the word remains the same single lexeme and the relevant noun is accessible to attributive

modification (i.e. attributively transparent).

Let us consider this property in uncontroversial instances of derivatives and inflected words. In *trusted friendless*, for example, *trusted* cannot modify *friend*, a part of *friendless*, and so the expression fails to mean 'without trusted friends' (Spencer and Nikolaeva (2017: 82); hence, *friendless* is a different lexeme from its base *friend*. In *trusted friends*, however, *trusted* successfully modifies *friend*; namely, *friends* is just an inflected form of the lexeme FRIEND, not a distinct lexeme from FRIEND.

On this basis, Spencer and Nikolaeva adopt the BNMP as a strong test for identifying whether denominal adjectives are transpositional lexemes or true transpositions.

2.2. Two Types of Denominal Adjectives

Nikolaeva and Spencer (2020) find the denominal adjectives as true transpositions in Uralic and Altaic languages based on the fact that they show the BNMP. Let us observe the example in (2) from the Southern Tungusic language, Udihe.

(2) gaŋa sele-me tada
hard iron-RA arrow
'an arrow made of hard iron'
(Nikolaeva and Spencer (2020: 95))

The RA *sele-me* 'iron' can be modified by the adjective *gaŋa* 'hard' and the whole expression means 'an arrow made of hard iron'.

Unlike the RAs in Udihe, English RAs do not show the BNMP, which means that they are transpositional lexemes. For instance, let us consider the case of the RA *tidal*, which is derived from the noun *tide*. *High* in (3a) cannot modify the base noun *tide* and the nominal phrase does not have the meaning in (4a), but only has the meaning in (4b). In contrast, (3b) with the base noun of the RA has both readings in (4a) and (4b).

(3) a. high tidal fluctuations
b. high tide fluctuations
(4) a. 'fluctuations at high tide'
b. 'high fluctuations in the tide'
(Nikolaeva and Spencer (2020: 291))

This fact indicates that the RA *tidal* is a lexeme, distinct from its base noun *tide*.

Similarly, RAs with *-en* behave in the same way as those with *-al* in terms of the BNMP (Spencer (2018)). For example, *Brazilian* in (5a) cannot modify the base *wood* of the RA *wooden* and (5a) does not denote (6a) but only (6b), whereas (5b) has both interpretations in (6).

(5) a. a Brazilian wooden bow
b. a Brazilian wood bow
(6) a. 'a bow made of Brazilian wood'
b. 'a wooden bow made in Brazil'
(Spencer (2018: 267))

Note that not all denominal adjectives in English are transpositional lexemes. Denominal adjectives with *-ed* show the BNMP and are counted as true transpositions. For instance, *blue* in (7a) can modify the base *eye* of *eyed*, yielding the reading of (8) in the same way as in (7b).

(7) a. a blue-eyed boy
b. a blue-eye boy
(8) 'a boy who has blue eyes'
(Spencer (2018: 266))

Nikolaeva and Spencer (2020: 35), in fact, do not clearly state that English *-ed* adjectives are

instances of true transpositions because of "the meagre morphology" of Present-day English, but the BNMP observed in (7a) persuades us to at least claim that *-ed* adjectives can be regarded—rather than as transpositional lexemes—as true transpositions.

Accordingly, the BNMP test tells us that RAs with *-al* and *-en* belong to transpositional lexemes, while *-ed* adjectives are attributed to true transpositions.

3. RAs with *-en* as True Transpositions?

Given the discussion so far, *-ed* seems to be an exceptional suffix in English. This section, however, points out the possibility that there is another similar suffix.

Interestingly, our survey shows that, depending on the speaker, RAs with *-en* can also show the BNMP. We find that the expression in (5a), for instance, can mean 'a bow made of Brazilian wood' in (6a), in which case *wooden* shows the BNMP. Importantly, RAs with *-en* are more likely to show the BNMP than those with *-al* or *-ic*, which do not normally show the property.[1] Similar judgements are confirmed in the following additional data, where the notation '%' indicates that not all speakers accept the given reading:

(9) a. stale oaten loafs
   % 'loafs made of stale oat'
   b. stale oat loafs
   'loafs made of stale oat'

(10) a. coarse woollen stockings
   % 'stockings made of coarse wool'
   b. coarse wool stockings
   'stockings made of coarse wool'

(11) a. carved oaken screens
   % 'screens made of carved oak'
   b. caved oak screens
   'screens made of carved oak'

Note that the judgements by the informants are highly consistent; that is, the BNMP of RAs with *-en* here is not concerned with any stylistic or rhetorical effects of the relevant expressions in (9)–(11). If a speaker only accepts (5a) in the meaning of (6b), (s)he judges the other examples in the same way; if a speaker answers that (5a) has the meaning of (6a), (s)he can interpret all other examples in the same way.

This result implies that the morphological status of RAs with *-en* varies amongst speakers; for those who interpret (5a) only as 'a wooden bow made in Brazil', the adjectives are transpositional lexemes, while for those who allow the (6a)-interpretation, they are true transpositions.[2] In other words, *-en* is different from other suffixes in that it functions as a derivational suffix like *-al* in some speakers, but like *-ed* in others. In the next section, we propose a possible analysis of such a peculiarity of *-en*.

4. Analysis

4.1. The Origin of the Suffix *-en*

First, let us consider why RAs with *-en*, as well as *-ed* adjectives, can behave as true transpositions. What groups *-en* with *-ed* and distinguishes the two from *-al* are their origins; while *-al* is a Latinate suffix, *-en* and *-ed* originate in Old English (OE). The difference in the origin between Latinate suffixes and Germanic suffixes can be assumed to be specified in the Lexicon in the form of the feature [±Latinate].

The effects of the feature distinction of [±Latinate] on morphological processes can be observed in deverbal nominals. Deverbal nominals are divided into two types based on the

extent to which they retain the verbal properties of their base verbs. Compare *destroying* in (1), an example of verbal gerunds, and *assignment* in (12), known as a complex event nominal (Grimshaw (1990)).

(12) The constant *assignment* of unsolvable problems must be avoided.
(Grimshaw (1990: 50))

Recall from Section 1 that *destroying* in (1) is still verbal while it functions as a noun in the sentence and that it is considered as a form of the lexeme DESTROY. Importantly, these verbal properties are observed only in gerunds, but not in complex event nominals. As shown in (12), they are totally nominalised in that they are modified by adjectives, and not adverbs, and they cannot directly take grammatical objects of the base verbs; namely, they are distinct from their base verbs. Here, focussing on their suffixes, we recognise that *-ment* is a suffix with the [+Latinate] feature and *-ing* with the [–Latinate] feature (cf. Giegerich (1999)). The contrast observed in deverbal nominals, together with that found in denominal adjectives, indicates that the feature specification of [±Latinate] plays an important role in determining which type of word can be formed by a given suffix. If the suffix has the [+Latinate] feature, it yields a lexeme distinct from the base (e.g. see (3a) for RAs; see (12) for deverbal nominals) and in contrast, if the suffix has the [–Latinate] feature, it yields true transpositions (e.g. see (7a) for *-ed* adjectives; see (1) for verbal gerunds).[3]

Then, one question arises: although the suffix *-en* belongs to the [–Latinate] class, why does it not exhibit the BNMP for some speakers? Let us discuss this in the next subsection.

4.2. The Loss of Inflectional Suffixes and the Status of *-en*

The above consideration indicates that *-en* can be an inflectional suffix in that it is involved in an adjectival form of a noun lexeme required by the syntactic environment of attributive modification. Importantly, Spencer and Nikolaeva's (2017) observation suggests that languages having RAs of true transposition-type are typically agglutinative and rich in inflectional elements. Given that OE was an inflection-rich language, though not agglutinative, and both *-en* and *-ed* originated in OE, it is reasonable to assume that they originally have inflectional roles for nouns and maintain the roles in some Present-day English speakers. An indication of the inflectional status of *-en* can be found in south-western dialects of British English, where "the suffix is of common occurrence, being added without restriction to all nouns denoting the material of which anything is composed, as in *glassen*, *steelen*, *tinnen*, *papern*, etc." (*OED*, s.v. *-en* (*suffix4*)). The above assumption enables us to explain why RAs with *-en* do not show the BNMP for some speakers, especially when we consider the diachronic change in English.

It is a known fact that English has lost its rich inflection system over time (i.e. in OE, adjectives agreed with nouns in gender, number, and case), and it has been relying on word order to represent grammatical relations instead. This change may affect the suffixal status of *-en*. The *OED* states that "[f]rom 16th century onwards there has been in literary English a growing tendency to discard these adjectives for the attributive use of the noun, as in 'a gold watch'; […]" (cf. *a golden watch*). This may be considered as a part of the diachronic change of English (i.e. from a synthetic

language to an analytic one), where many inflectional elements have been disposed of. If so, the role of *-en* has been changing and has begun to acquire the status of a derivational suffix for nouns. Speakers recognising RAs with *-en* solely as transpositional lexemes, which do not show the BNMP, have *-en* as an exclusively derivational suffix for nouns. The inconsistent behaviour of RAs with *-en* amongst speakers reflects the transition of *-en* from an inflectional element to a derivational one.[4]

One might ask why *-en* is losing its inflectional function while *-ed* is not. We provide a possible answer to this question by considering the difference in productivity (more precisely, profitability) of the two suffixes. As explained by Marchand (1969: 264), the suffix *-ed* "has been productive at all times, chiefly with concrete, less often with abstract substantives". As for *-en*, "it is only in a few cases (e.g. *wooden, woollen*, *earthen*, *wheaten*) that these words [i.e. RAs with *-en*] are still familiarly used in their lit[eral] sense" (*OED*, s.v. *-en* (*suffix4*)). Thus, since *-ed* is more productive than *-en*, it has more chance of being used with its original function as an inflectional suffix; *-en* has been limitedly used and turned gradually into a derivational one available for certain nouns.

5. Concluding Remarks

This study shows a kind of continuity between derivation and inflection in English morphology by giving a possible explanation to the question of why the RAs with *-en* show dual behaviour in terms of the BNMP. On the basis of the discussion by Spencer and Nikolaeva, our analysis can be supported by considering the origin of the suffix and its suffixal status. The discussion so far indicates that the continuity observed in English RAs with *-en* can be attributed to the two types of *-en*, which is specified as [–Latinate] (i.e. Germanic): *-en* as an inflectional suffix and as a derivational suffix.

Lastly, our analysis has an interesting implication. If *-en* is originally an inflectional suffix, we can safely assume that it may have had a wider semantic range (e.g. polysemy) in old times than it has in Present-day English. In other words, if *-en* adjectives are just inflected forms of the relevant nouns, it is not surprising that they have the potential to denote many relations between the nouns and their modifying nouns. Given this assumption, it can be implied that its broad sense has been gradually restricted to a certain specific meaning such as a quality of material (e.g. *wooden* 'made of wood', *silken* 'made of silk'). If our analysis is correct, the suffix's 'semantic' transition also needs to be studied in future research.

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NOTES

[1] The RAs from some lexicalised expressions such as *generative grammar*, however, show the BNMP, as in [[*generative gramma*]-*tical*]$_{RA}$ *studies* 'studies of generative grammar'

(#'generative studies of grammar').

[2] One may doubt whether RAs with *-en* are outputs of transposition, because the process does not add some new meanings to the inputs, but they actually express 'made of/consisting of' the base nouns. It is true that transposition does not enrich the semantics of the inputs, but this is a typical case. Spencer and Nikolaeva (2017: 83) state that "some transpositions can be associated with additional semantic content". When we regard RAs with *-en* as true transpositions, they can fall under 'meaning-bearing transpositions'.

[3] Note that *-ing* can also produce complex event nominals. What is important here is that *-ing* can, but [+Latinate] suffixes such as *-ment* never, form gerunds. See Nishiyama and Nagano (2020: Ch. 2) for the relevant discussion.

[4] Note that we are not arguing that *-en* behaves inconsistently *in a single speaker*. The results of our informant survey show that the judgements of a single speaker are perfectly consistent, as stated in Section 3.

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Restricting Accessibility to MERGE
- A Deterministic Theory of Movement -*

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Keywords : MERGE, Resource Restriction, Determinacy

1. Introduction

Chomsky, Gallego, and Otto (2019) discuss the basic properties of human language, i.e. discrete infinity and displacement, claiming that any linguistic theory must assume a computational system that constructs hierarchical structures with displacement. Chomsky (1995) claims that the simplest possible formulation of a structure-building operation is a set-formation that takes syntactic objects (SOs) X and Y, and forms {X, Y}, which is called Merge. Chomsky (2019, 2020) and Chomsky, Gallego, and Ott (2019) argue, however, that when we form exocentric constructions like the subject-predicate construction, Merge must be allowed to construct SOs in parallel and bring them together somewhere. This tacitly presupposes that there is a workspace (WS). They propose that the right and simplest version of Merge should be on WS not on SOs, reformulating Merge as MERGE, an operation on WS: MERGE maps WS = [X, Y] to WS' = [{X, Y}].

Chomsky (2019) gives seven desiderata that any computational operations for human language including MERGE should meet in accord with the Strong Minimalist Thesis. The desiderata restrict what MERGE can do, maintaining a narrow concept of Merge, i.e. External Merge (EM) and Internal Merge (IM), while ruling out extensions of Merge like Parallel Merge, Late Merge, and Sidewards Merge. One of the desiderata is the principle of Determinacy (1) (Chomsky 2019: 275), though its exact formulation and consequences are left untouched:

(1) The Principle of Determinacy
If the structural conditions for a rule holds for some workspace, then the structural change must be unique.

Goto and Ishii (2018, 2019, 2020) explicate the principle of Determinacy, proposing that Determinacy should be formulated as a condition on the *input* of MERGE. We have argued that the input-based principle of Determinacy coupled with the Phase Impenetrability Condition (PIC) gives us a unified account of various movement phenomena, which have been explained by different constraints or principles. This paper focuses on presenting conceptual support for Goto and Ishii's deterministic theory of movement, thereby showing that our approach is desirable not only empirically but also theoretically. The organization of this paper is as follows. Section 2 overviews Goto and Ishii's (2018, 2019, 2020) input-based principle of Determinacy and its consequences. Section 3 presents conceptual support for our approach. Section 4 makes concluding remarks.

2. Goto and Ishii's (2018, 2019, 2020) principle of Determinacy

Goto and Ishii (2018, 2019, 2020) propose

the input-based principle of Determinacy (2):

(2) Goto and Ishii's (2018, 2019, 2020) principle of Determinacy
Determinacy applies at the *input* of MERGE.

According to the principle of Determinacy (2), if there is an ambiguous rule application at the *present* stage of a derivation, a Determinacy violation occurs. Suppose that MERGE takes WS1 = [{a, {b, c}}, d] as its input and maps it to WS2 = [{**c**, {a, {b, c}}}, d], which is the case of IM of *c*. The input-based principle of Determinacy (2) applies at WS1. Since there is only one copy of *c* in WS1, we have only one option to create WS2, i.e. to move *c* in the base position. There is no ambiguous rule application at the *present* stage of the derivation; this does not violate the principle of Determinacy (2). Suppose further that MERGE takes WS2 as its input and then maps it to WS3 = [{**c**, {c, {a, {b, c}}}}, d], i.e. multiple applications of IM to *c*. We have two copies of *c* at WS2, which is the input of MERGE. We have two options to create WS3, i.e. either to move the higher copy of *c* or the lower copy of *c*. Note that according to general recursion, any syntactic object once generated in WS is accessible to MERGE. This ambiguous rule application violates the principle of Determinacy (2). We would predict that no successive cyclic IM is ever allowed, which is an undesirable result.

Goto and Ishii argue that such an ambiguous rule application problem induced by multiple applications of IM can be resolved by the PIC as illustrated in (3):

(3) **What** did you say that John bought ***t***?
a. [RP **what** [R(BUY) what]]
b. [CP **what** [C [TP John [T [*v*P John [*v*-R(BUY) [RP what [R(BUY) what]]]]]]]]
c. [*v*P you [*v*-R(SAY) [RP **what** [R(SAY) [CP what [C-that [TP John [...
d. [CP **what** [C-that [TP you [T [*v*P you [*v*-R(SAY) [RP what [R(SAY) [CP what ...

(3) represents successive cyclic IM of the *wh*-phrase *what*. In (3a), we apply IM to *what*, moving *what* from its base position to the Spec of Root (R). In (3b), we apply IM to *what* again. We assume with Chomsky (2015) that *v* becomes invisible because of pair-Merge with R. R inherits phasehood from *v*; R-complement undergoes Transfer. Although there are two copies of *what*, i.e. the one in the Spec of R and the other in the base position, the latter, which is within R-complement, is not accessible due to the PIC. There is only one accessible copy of *what*, i.e. the copy in the Spec of R; there is no Determinacy violation. In (3c), we apply IM to *what* again. Only the copy of *what* in the Spec of C is accessible and all the other copies of *what* are not accessible due to the PIC; there is no Determinacy violation. Hence, the PIC resolves ambiguous rule application problems induced by multiple applications of IM.

Goto and Ishii argue that the input-based principle of Determinacy (2) coupled with the PIC gives us a unified account of various movement phenomena like the subject condition, no vacuous topicalization, *that*-trace effects, the freezing effects with topics, further raising, no superfluous steps in a derivation, and anti-locality effects, which have been accounted for by different constraints or principles. Due to limitations of space, I will only look at the subject condition and the *that*-trace effect (see

Goto and Ishii (2018, 2019, 2020) for more consequences of the input-based principle of Determinacy coupled with the PIC).

2.1. The Subject Condition

The subject condition effect (4a) and its cancellation with an expletive (4b) (Stepanov (2007: 92)) follows from the principle of Determinacy (2) coupled with the PIC as represented in (5a) and (5b):

(4) a.* **Who** did [pictures of ***t***] please you?
b. Who is there [pictures of *t*] on the wall

(5) a. [CP **who** [C-did [TP [pictures of who] [T [*v*P [pictures of who] [*v* …
b. [CP **who** [C-is [TP there [T [*v*P [pictures of who] [*v* …

In (5a), when we are to move *who* to the Spec of C, there are two accessible copies of *who*, i.e. the one in the Spec of T and the other in the Spec of *v*; this violates Determinacy. In (5b), on the other hand, since the Spec of T is occupied by the expletive *there*, there is only one copy of *who*, which is within the Spec of *v*; there is no Determinacy violation. Unlike extraction out of a subject, extraction out of an object such as (6) is allowed:

(6) **Who** did you see [a picture of ***t***]?

(7) a. [RP [a picture of **who**] [R(SEE) [a picture of who]]]
b. [CP **who** [C-did [CP you [T [*v*P you [*v*-R(SEE) [RP [a picture of who] [R(SEE) [a picture of who]]]]]]]]

The principle of Determinacy (2) together with the PIC correctly predicts this subject-object asymmetry with respect to extraction. The derivation of (6) is represented in (7). In (7), when we are to move *who* to the Spec of C, there are two copies of *who*, i.e. the one is within the Spec of R and the other within the complement of R. The latter, however, is not accessible due to the PIC after R-complement Transfer; there is no Determinacy violation.

The principle of Determinacy (2) together with the PIC also accounts for the absence of the subject condition effect in Japanese as shown in (8) (see, among others, Kayne (1984), Lasnik and Saito (1992), and Ishii (1997, 2011)):

(8) ?**Dare-ni** [John-ga [[Mary-ga ***t*** atta] koto]-ga mondai-da to] omotteru]
who-Dat John-Nom Mary-Nom met fact-Nom problem-is C think Q
Lit. 'Who, John thinks that [the fact that Mary met *t*] is a problem.'

In (8), where *dare-ni* 'who-Dat' is scrambled out of the subject phrase. If we assume with, among others, Fukui (1986) and Kuroda (1988) that subjects in Japanese stays in the Spec of *v*, the derivation of (8) is represented in (9):

(9) [CP **dare-ni** [C [CP T [*v*P [Mary-ga dare-ni atta koto]-ga [*v** [...
who-Dat Mary-Nom who-Dat met fact-Nom

In (9), there is only one copy of *dare-ni* 'who-Dat' within the Spec of *v*; there is no Determinacy violation.

2.2. The *That*-trace Effect

The *that*-trace effect (10) follows from the principle of Determinacy coupled with the PIC as represented in (11):

(10)***Who** do you think that ***t*** saw Bill?

(11) [CP **who** [that [TP who [T [*v*P who [*v* …

In (11), when we are to move *who* to the Spec of C, there are two accessible copies of *who*, i.e. the one in the Spec of T and the other in the Spec of *v*; this violates Determinacy. If the complementizer *that* does not appear, the *that*-trace effect is canceled as shown in (12). We assume with Chomsky (2015) that when the complementizer *that* does not appear, C is deleted and *v*P undergoes Transfer via phasehood inheritance from C to T. The derivation of (12) is represented in (13):

(12) **Who** do you think ***t*** saw Bill?
(13) [RP **who** [R [CP C → Ø [TP who [T [*v*P who [v …

In (13), when we are to move *who* from the Spec of T to the matrix Spec of R, there is only one accessible copy of *who* in the Spec of T; there is no Determinacy violation.

Our analysis of the *that*-trace effect can subsume Rizzi and Shlonsky's (2007) skipping strategy. When an expletive appears in the Spec of T, the *that*-trace effect is canceled as shown in (14) (Rizzi and Shlonsky (2007: 126)):

(14) a.* **What** do you think that ***t*** is in the box?
b. **What** do you think that there is ***t*** in the box?

In French, if the complementizer is *qui* instead of *que*, the *that*-trace effect is canceled (Rizzi and Shlonsky (2007: 131)):

(15) a.* **Quelle étudiante** crois-tu que
which student believe-you that
t va partir?
go leave

b. **Quelle étudiante** crois-tu qui
which student believe-you that
t va partir?
go leave
Lit. 'Which student do you believe that is going to leave?'

As advocated by Rizzi and Shlonsky, if the suffix *-i* of the complementizer *qui* in French (15b) behaves like the expletive *there* in English (14b), the derivations of (14b) and (15b) are represented in (16) and (17), respectively:

(16) [CP **what** [C-that [TP there [T-is [*v*P what [*v* [...
(17) [CP **quelle étudiante** [C-que [TP i [T [*v*P
which student that
quelle étudiante [*v* [...
which student

In (16), since the Spec of T is occupied by the expletive *there*, there is only one copy of *what* in the Spec of *v*; there is no Determinacy violation. Likewise, in (17), since the Spec of T is occupied by the suffix *-i* of the complementizer *qui*, there is only one copy of *which student* in the Spec of *v*; there is no Determinacy violation.

The principle of Determinacy (2) coupled with the PIC also accounts for the absence of the *that*-trace effect in Italian and Japanese. It is well-known (see, among others, Rizzi (1990)) that Italian lacks the *that*-trace effects as shown in (18) (Rizzi and Shlonsky (2007: 127)):

(18) **Chi** credi [che ***t*** vincerà]?
who think that win
'Who do you think that *t* will win?'

If we assume with Rizzi (1990) that *pro* appears in the Spec of T, the derivation of (18) is

represented in (19):

(19) [CP **chi** [C-che [TP pro [T [*v*P chi
what that who
[*v**-R(VINCERÁ) [...
win

In (19), there is only one copy of *who* in the Spec of *v*; there is no Determinacy violation. As pointed out by Ishii (2004), there is no *that*-trace effect in Japanese as shown (20), where the subject null operator OP is moved out of the *that*-clause (Ishii (2004: 212)):

(20) [**OP** [John-ga [***t*** Mary-ni hanasikaketa
John-Nom Mary-Dat talked to
to] omotteiru] yorimo] harukani ookuno
C think than far more
hito-ga Susy-ni hanasi tagatte ita
people-Nom Susy-Dat wanted to talk
'Far more people wanted to talk with Susy than John thinks that talked to Mary.'

Given that subjects in Japanese stay in the Spec of *v*, the derivation of (20) is represented in (21):

(21) [CP **OP** [TP [*v*P OP [RP Mary-ni
Mary-Dat
R(HANASIKAKE)] *v*-R(HANASIKAKE)]
talk to talk to
T-*ta*] C-*to*]
Past that

In (21), there is only one copy of OP within the Spec of *v*; there is no Determinacy violation. Hence, the absence of the *that*-trace effect in Italian and Japanese follows form the principle of Determinacy (2) coupled with the PIC.

3. Conceptual Support for Goto and Ishii's (2018, 2019, 2020) Approach

Goto and Ishii's input-based principle of Determinacy coupled with the PIC has conceptual advantages over the approach advocated by Chomsky (2019, 2020) and Chomsky, Gallego, and Ott (2019). Their notion of Determinacy requires subsequent rules to apply in a deterministic way, which ensures that WS should be kept minimal throughout a derivation. In other words, they claim that Determinacy applies at the *output* of MERGE. Under their notion of Determinacy, if MERGE creates WS that could potentially lead to an ambiguous rule application at a *subsequent* stage of derivation, a Determinacy violation occurs. Suppose MERGE takes WS1 = [{a, {b, c}}, d] as its input and maps it to WS2 = [{**c**, {a, {b, c}}}, d], which is the case of IM of *c*. According to their system, Determinacy applies at the *output* of MERGE, i.e. at WS2. In WS2, there are two copies of *c*. This induces an ambiguous rule application for subsequent derivation, since if we apply IM to *c* in subsequent derivation, for example, there is no unique way to apply IM to *c* due to its two copies. Hence, their notion of Determinacy would always rule out an application of IM, which is clearly an undesirable result.

Chomsky (2019, 2020) presents a way out of this problem; such an ambiguous rule application problem can be resolved by minimal search, part of Resource Restriction (RR). Chomsky argues that recursion for language is different from general recursion in that the former is subject to RR, which limits resources, i.e. elements accessible to operations, to be restricted to a minimum. He claims that RR includes both minimal search and the PIC. In WS2 = [{**c**, {a, {b, c}}}, d], although there are

two copies of *c*, minimal search selects the higher copy of *c*. While the higher copy of *c* is accessible, the lower copy of *c* is not; there would not be any Determinacy violation.

Under Chomsky's view of RR, however, there is a redundancy between minimal search and the PIC regarding accessibility. If there are two copies of an element in WS, minimal search always makes its higher copy accessible and its lower copy inaccessible. The PIC makes accessible the elements in the edge of a phase head and inaccessible the elements within a Transfer domain, i.e. in the complement of a phase head. Since a copy in the edge of a phase always appears in a higher position than a copy in the Transfer domain, minimal search would make the effects of the PIC vacuous when we decide whether a copy is accessible. As an illustration, let us consider (22):

(22) [X [PH [... X ...]]]

In (22), PH is a phase head, and X undergoes IM from within the complement of the phase head, i.e. the Transfer domain, to the edge of the phase head. The PIC makes the lower copy of X, which is within the Transfer domain, inaccessible. If we also assume minimal search as part of RR, however, this effect of the PIC is vacuous. This is because minimal search selects the higher copy of X, which is in the phase edge, and makes the lower copy of X inaccessible. Since the need to eliminate redundancies has been a working hypothesis in the linguistic inquiry, such a redundancy should be eliminated (Chomsky 1995: 152). Under Goto and Ishii's approach, on the other hand, RR only includes the PIC, an independently motivated condition for Transfer; there does not exist any such redundancy regarding accessibility.

Furthermore, the output-based principle of Determinacy advocated by Chomsky (2019, 2020) and Chomsky, Gallego, and Ott (2019) has a look-ahead property in that we have to look at a *subsequent* stage of a derivation to decide whether Determinacy gets violated or not. Such a look-ahead property, which necessarily increases computational burden, should be eliminated (see, among others, Chomsky 2000; 2004). Under our input-based principle of Determinacy, on the other hand, if there is an ambiguous rule application at the *present* stage of a derivation, a Determinacy violation occurs. Since we can decide whether Determinacy gets violated only based on the information available at the *present* stage of a derivation, our input-based principle of Determinacy does not have a look-ahead property

4. Conclusion

This paper has first overviewed Goto and Ishii's (2018, 2019, 2020) input-based principle of Determinacy and some of its consequences. It was then shown that Goto and Ishii's deterministic theory of movement also receives conceptual support from the fact that it does not have a look-ahead property or a redundancy between minimal search and the PIC regarding accessibility.

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English Manner-of-Motion Verbs in Transitive Construction*

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Keywords : lexical semantics, manner/result roots, complexity of manner, generative lexicon

1. Introduction

English manner-of-motion verbs like *roll* and *run*, as well as change-of-state verbs like *break*, appear in both intransitive and transitive constructions.

(1) a. The ball rolled down the hill.
b. Bill rolled the ball down the hill. (Levin (1993: 265))

(2) a. The mouse ran through the maze.
b. We ran the mouse through the maze. (Levin and Rappaport Hovav (henceforth L&RH) (1995: 111))

(3) a. The cup broke.
b. Janet broke the cup. (Levin (1993: 29))

We classify three types of verbs here: *roll* verbs (e.g. *bounce*, *slide*), *run* verbs (e.g. *jump*, *march*), and *break* verbs.

Comparing these three types of verbs, this study (i) emphasizes the similarity between *roll* verbs and *run* verbs, (ii) proposes that transitive constructions with these three types of verbs describe two types of events, ("physically caused" ones, which three types can describe, and "mentally caused" ones, which only *roll* and *run* verbs can describe), (iii) claims that the crucial difference between *roll* verbs and *run* verbs is the "complexity" of manner of motion, and (iv) formalizes said generalization within the theory of Generative Lexicon (Pustejovsky (1995), Pustejovsky and Batiukova (2019)).

2. Similarities

Previous studies tended to analyze (1) and (3) as instances of the same inchoative/causative alternation, while treating the alternation in (2) differently (Levin (1993: 27-31), among others). Certainly, *roll* verbs are similar to verbs like *break* in allowing various subjects, but different from *run* verbs, which impose animacy constraint on the subject.

(4) a. The man/the stick/the wind rolled the ball.
b. The vandals/the rocks/the storm broke the windows. (L&RH (1995: 103))
c. The general/*the downpour/*the tear gas marched the soldiers to the tent. (L&RH (1995: 112))

Roll verbs, however, behave similarly to *run* verbs in the following two ways.

2.1. Entailment of Changes and Telicity

First, *roll* verbs and *run* verbs entail neither change of state nor change of location, contrary to *break* verbs. This characteristic allows an explanation of the difference in telicity between the two types.[1]

(5) a. Hanako bounced the ball for two minutes, but it never moved even slightly from the spot.
b. Taro ran the radio-controlled car for two minutes, but it never moved even

slightly from the spot.

(6) *Hanako broke the vase, but it was still completely intact.

(7) Taro broke the vase *for/in two minutes with bare hands.

2.2. Two Types of Caused Events[2]

Second, transitive constructions of *roll* verbs and *run* verbs can describe "physically caused" events, defined in (8), and "mentally caused" ones, defined in (9). Admittedly, *run* verbs have a slight difficulty with physically caused events because of the "complexity" of manner, as will be described below. On the other hand, *break* verbs generally describe only physically caused events.

(8) Physically caused events are a type of causal event, in which one entity's "physical" action on the other entity causes a change of state/location of that entity.

(9) Mentally caused events are a type of causal event, in which one animate entity's "mental" inducement toward the other animate entity causes a change of state/location of that entity.

(10) a. The father slid his daughter to the other side of the skating rink.
b. The general rolled the soldiers down the hill during a rigorous training session.

(11) a. The mother jumped her sleeping baby on the chair.
b. The jailer ran a prisoner to the gate.

As for *roll* verbs, a physical causation interpretation is dominant. This is exemplified in (10a), where the father causes his daughter to skate, perhaps by pushing her body or pulling her hands. In some contexts, however, a mental causation interpretation is possible, as in (10b), where the general merely orders the soldiers to roll down the hill. As for *run* verbs, conversely, a mental causation interpretation is dominant, as exemplified in (11b). In some contexts, however, a physical causation interpretation is possible, as in (11a), where the mother causes her sleeping baby to jump on the chair, for example, by lifting his/her body.

3. Complexity of Manner of Motion

Although we have found similarities between *roll* verbs and *run* verbs so far, there is a difference in the manner complexity of the actions they describe. To put it briefly, the physical action of "running" is more complex than that of "rolling," due to which almost all physical and solid objects can "roll" while objects that can "run" are very restricted. Such a complex event is hard for an external causer to bring about physically, which is likely the reason that the interpretation of mental causation is dominant.

3.1. Scale of the Complexity

As an anonymous reviewer points out, not all *run* verbs can appear in transitive constructions, as below (Tenny (1995: 211)).

(12) Laura *ambled/*bounded/*cavorted/*climbed/*crawled/*dashed/?hastened/*inched/?jogged/*meandered/*plodded/*romped/*scrambled/*scurried/*shuffled/*staggered/*tramped/*traveled/*waddled/*zoomed/*boated/*bused/?dogsledded/?skated/?skied/?taxied/*cruised/*boogied/*bopped/?tapdanced her friend to her door.

(13) Laura marched/walked/bicycled/boated/canoed/fe

rried/helicoptered/drove/flew/paddled/rowed/danced/waltzed her friend to her door.

This difficulty *run* verbs in (12) show can also be attributed to the complexity of manner of motion. For instance, *walk* can appear in transitive constructions as in (13) while *plod* cannot, as in (12). This contrast arises from the manners encoded in them. The manner encoded in *plod* (e.g. "walk doggedly and slowly with heavy steps" (*OED*)) is more complex than that in *walk* (e.g. "move at a regular pace by lifting and setting down each foot in turn, never having both feet off the ground at once" (*OED*)). In other words, the manner of *plod* is a subtype of that of *walk*.[3] The same argument applies to other verbs such as *run* and *scurry*.[4] Thus, we assume a scale of (simplicity or) complexity of manner as below.

(14) Scale of Complexity of Manner[5]

√ROLL < √WALK, √RUN < √PLOD, √SCURRY

←simple complex→

The simpler the manner encoded in a verb is, the more easily the verb can appear in transitive constructions; the more complex the encoded manner is, the more difficult the verb is to use transitively. That is, the complexity of manner affects the strictness of selectional restriction on subject in transitive constructions. A highly complex manner of motion (e.g. √PLOD) cannot be induced by an external causer. It can be realized by only the internal causer of the action (e.g. plodder), so verbs like *plod* cannot appear in transitive constructions. A complex manner of motion (e.g. √WALK, √RUN) can be induced by some restricted causers as in (2) and (11) but not by inanimate causers as in (4c). A simple manner of motion (e.g. √ROLL) can be induced by various causers as in (4a).

As (14) shows, there certainly exists a difference between *roll* verbs and *run* verbs in the complexity of manner of motion, which results in the difference of selectional restriction on subject and of dominant interpretation. Nevertheless, in some contexts, *run* verbs can describe physically caused events like (5b) and (10a) although *run* verbs are not homogenous as in (12) and (13). The difference of the complexity, therefore, should not be treated as a categorical one but as a matter of degree. This line of explanation will be compatible with certain lexical semantic theories which decompose verb meaning, as will be seen.

3.2. Manner Roots vs. Result-State Roots

In some current studies of "argument realization" (L&RH (2005)), it is assumed that a verb meaning can be separated into an idiosyncratic part called "root" and a structural part called "event structure."[6, 7] Roots have encyclopedic contents (Harley and Noyer (1999)) and fall into some ontological categories (e.g. manner, instrument, container, internally caused state, externally caused state in Rappaport Hovav and Levin (henceforth, RH&L) (2010), √agentive, √internally caused, √externally caused, √cause unspecified in Alexiadou et al. (2006, 2015)).[8] Event structure is "typically taken to encode the skeletal structure of linguistically significant event types" (Rappaport Hovav (2017: 79)) and is directly related to argument realization. Roots, however, are indirectly related to it by determining which event structure a certain root can be integrated into. Below, RH&L (2010: 24, cf. RH&L (1998)) show the patterns of the integration.

(15) a. manner → [x ACT<*MANNER*>]
(e.g. *jog*, *run*, *creak*, *whistle*, . . .)
b. instrument → [x ACT <*INSTRUMENT*>]
(e.g. *brush*, *hammer*, *saw*, *shovel*, . . .)
c. container → [x CAUSE [y BECOME AT <*CONTAINER*>]
(e.g. *bag*, *box*, *cage*, *crate*, *garage*, *pocket*, . . .)
d. internally caused state → [x <*STATE*>]
(e.g. *bloom*, *blossom*, *decay*, *flower*, *rot*, *rust*, *sprout*, . . .)
e. externally caused, i.e., result state → [[x ACT] CAUSE [y BECOME <*RESULT-STATE*>]]
(e.g. *break*, *dry*, *harden*, *melt*, *open*, . . .)

"Roots are intergrated into event schemas as arguments [(e.g. (15c-e)] or modifiers [(e.g. (15a-b)] of predicates in the event schemas. Roots are italicized and in angle brackets […]" (RH&L (2010: 24)). As such, the integration depends on what ontological category a root belongs to. Once the integration completes, the information of the argument configuration in the event structure will be mapped to syntax. As a result, a sentence will be generated.

Our proposal is that given the similarities between *roll* verbs and *run* verbs, √ROLL and √RUN fall under the category "manner," but even within the same category, their encyclopedic contents, especially, complexity of manner of motion are different. Such a difference affects their integrations, which results in the patterns seen in (4), (12) and (13). As with RH&L (2010), we assume that √BREAK falls under the category "result state." In this respect, *roll* verbs and *break* verbs diverge, while *roll* verbs and *run* verbs form the same category.[9]

3.3. Formalization within Generative Lexicon

Instead of employing event structure (or syntactic structure), we employ the framework of Generative Lexicon (henceforth, GL) (Pustejovsky (1995) Pustejovsky and Batiukova (2019)) for technical reasons (Maeda (2018)).[10]

Below are the stipulative descriptions of verb semantics of the three types (cf. Pustejovsky (1995: 186)).

(16) *Roll* Verbs
$\lambda y \lambda x \lambda e_1 \lambda e_2 \exists P \exists \sqrt{\text{MANNER}}^{\text{-complex}}$ [α: AGENTIVE = $[\sqrt{\text{MANNER}}^{\text{-complex}}(e_1, \mathbf{x}, y)] \wedge$ FORMAL = $[P(e_2, y)] \wedge e_1 <_{\propto} e_2$]

(17) *Run* Verbs
$\lambda y \lambda x \lambda e_1 \lambda e_2 \exists P \exists \sqrt{\text{MANNER}}^{\text{+complex}}$ [α: AGENTIVE = $[\sqrt{\text{MANNER}}^{\text{+complex}}(e_1, \mathbf{x}, y)] \wedge$ FORMAL = $[P(e_2, y)] \wedge e_1 <_{\propto} e_2$]

(18) *Break* Verbs
$\lambda y \lambda x \lambda e_1 \lambda e_2 \exists \sqrt{\text{RESULT}} \exists R$ [α: AGENTIVE = $[R(e_1, x, y)] \wedge$ FORMAL = $[\sqrt{\text{RESULT}}(e_2, y)] \wedge e_1 <_{\propto} e_2$]

By and large, AGENTIVE and FORMAL roles correspond with [x ACT] and [y BECOME <*RESULT-STATE*>] respectively.[11] √MANNER is a predicate in the AGENTIVE role, while √RESULT is in the FORMAL role. The semantics of *roll* verbs and *run* verbs are identical except for their expedient index (i.e. -complex, +complex) of √MANNER. It is not exactly a binary feature but rather a gradient property based on the scale of manner complexity, i.e., (14). Also, in (16) and (17), both $\sqrt{\text{MANNER}}^{\text{-complex}}$ and $\sqrt{\text{MANNER}}^{\text{+complex}}$ can take an argument "x" as well as y, while in (19), $\sqrt{\text{MANNER}}^{\text{++complex}}$ (e.g. √PLOD, √SCURRY) cannot, because of its high complexity.

(19) $\lambda y \lambda x \lambda e_1 \lambda e_2 \exists P \exists \sqrt{\text{MANNER}}^{\text{++complex}}$ [α: AGENTIVE = $[\sqrt{\text{MANNER}}^{\text{++complex}}(e_1, y)] \wedge$

FORMAL = $[P(e_2, y)] \wedge e_1 <_\propto e_2]$

As a consequence, verbs which possess $\sqrt{\text{MANNER}}^{\text{++complex}}$ (e.g. √PLOD, √SCURRY) cannot appear in transitive constructions. Thus, the manner complexity determines whether an external causer (i.e. x) can be introduced into e_1 or not. This is defined as (20).

(20) Introduction of External Causer

For any complexity of a manner which is either -complex or +complex,

$\sqrt{\text{MANNER}}^{\text{-/+complex}}(e_1, y) \rightarrow \sqrt{\text{MANNER}}^{\text{-/+complex}}(e_1, \mathbf{x}, y)$

(20) predicts that in transitive constructions of *roll*/*run* verbs an internal causer referred to by the object noun always embodies a manner of motion specified by √MANNER. In fact, such a prediction seems to be borne out. Every internal causer in the examples given so far embodies the manner of motion specified by the root, whether its caused event is physically caused one or mentally caused one. As for external causers (i.e. subjects), they are not an inherent argument of √MANNER but one introduced by (20), so it is not obligatory that an external causer embody a manner of motion specified by the root (e.g. "the father" in (10a) possibly does the action of skating but "the mother" in (11a) possibly does not the action of jumping).

4. Summary

The complexity of manner of motion is different between *roll* verbs and *run* verbs, which I claim results in the difference of their selectional restriction on subject and of their dominant interpretations. Nevertheless, we conclude that as a whole, *roll* verbs and *run* verbs behave in the same way in transitive constructions. The similarity between *roll* verbs and *break* verbs is a superficial one. In the case of *roll* verbs, various causers are allowed because their √MANNER is not complex. In the case of *break* verbs, those are allowed because no √MANNER is specified in the first place.

There are some issues to be contemplated in future research. First, the semantic descriptions in (16)-(18) do not reflect the difference in entailment of changes between *roll*/*run* verbs and *break* verbs.[12] Also, other verbs in Tenny (1995)'s list such as *vehicle* verbs (e.g. *bus*, *canoe*, *helicopter*, *taxi* etc.) are still unexplained. Perhaps, *dance* verbs can be accounted for by the manner complexity (though the difference between *waltz* and *boogie* may not be). Lastly, in this paper the concept of complexity is defined in the way of "is_a relation" (e.g. *plod* is a subtype of *walk* but not vice versa). It should be defined more precisely.

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NOTES

[1] The test for the entailment of change of location in (5) is based on the advice from Joseph Tabolt.

[2] In this paper, we will not discuss the relation between these caused events and direct/indirect causation. Nevertheless, I stipulate that both types of events can be regarded as direct causation if 'enabling condition' (Wolff (2003)) or 'feasibility' (Maeda (2020)) is taken into consideration.

[3] Other verbs in (12) which are subtypes of *walk* may be *amble*, *bounce*, *cruise*, *meander*, *shuffle*, *stagger*, *tramp*, and *waddle*.

[4] Other verbs in (12) which are subtypes of *run* may be *dash*, *hasten*.

[5] The reason why we use "√" will be explained

in the following section.

[6] Instead of event structure, structural meanings are sometime called "lexical conceptual structure (LCS)" or "event schema."

[7] In addition to L&RH's projectionist approach, the idea of the separation of verb meaning is also found in construction grammar (e.g. Goldberg (1995)) and syntactic approaches, i.e., constructionist (e.g. Marantz (2013)).

[8] Some issues concerning √internally caused are discussed in Alexiadou (2014).

[9] This categorization is also compatible with the "manner/result complementarity (MRC)" hypothesis (e.g. Beaver and Koontz-Garboden (2012, 2020), Levin (1999), L&RH (1991a, 1991b, 1995, 2013, 2014), Rappaport Hovav (2008, 2017), Rappaport Hovav and Levin (1998, 2010) etc.).

[10] Maeda (2018) criticizes Kageyama (2000)'s analysis of English manner-of-motion verbs in transitive constructions.

[11] GL assumes "qualia structure" for lexical meaning of noun and verb. The structure consists of four qualia: FORMAL, AGENTIVE, TELIC, and CONSTITUTIVE.

[12] It can be assumed that a result state (i.e. change of state or change of location) is entailed in *break* verbs but only implicated in *roll*/*run* verbs (cf. Ausensi (2019), Martin (2018)).

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Nominative Objects and Scope in Japanese[*]

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Keywords：Japanese, Kumamoto Japanese, Focus, Case, Scope

1. Introduction

The aim of this paper is twofold: (i) we will clarify the derivation of Nominative objects in Japanese, and (ii) attempt to solve the long-standing problem regarding the scope phenomenon.

Kuno (1973) points out that in Japanese, the object of transitive verbs can be marked with Nominative Case *-ga* instead of Accusative Case *-o* when the stative suffix is attached to the transitive verb as in (1).

(1) a. John-ga migite-**o** age-rare
John-Nom right.hand-**Acc** raise-can
-ru.
-Pres
'John can raise his right hand.'

b. John-ga migite-**ga** age-rare
John-Nom right.hand-**Nom** raise-can
-ru.
-Pres

In (1b), the stative suffix *-rare* 'can' is attached to the verb *age* 'raise.' Hence, the object can be marked with Nominative Case. In the next section, we will review the previous analysis.

2. Previous Analysis

Interestingly, Nominative objects show a different behavior from Accusative objects with respect to scope. Tada (1992) and Koizumi (1994) attribute it to differences in Case marking.

(2) a. John-ga migime-dake-**o**
John-Nom right.eye-only-**Acc**
tumur-e-ru. (Tada (1992: 94))
close-can-Pres
'John can close only his right eye.'
(i) can > only (ii) ?*only> can

b. John-ga migime-dake-**ga**
John-Nom right.eye-only-**Nom**
tumur-e-ru. (*ibid.*)
close-can-Pres
(i) *can > only (ii) only > can

(3) a. John-ga migime-dake-**o**
John-Nom right.eye-only-**Acc**
tumur-e-na-i. (Koizumi (1994: 221))
close-can-Neg-Pres
'John cannot close only his right eye.'
(i) Neg > can > only

b. John-ga migime-dake-**ga**
John-Nom right.eye-only-**Nom**
tumur-e-na-i. (Koizumi (1994: 222))
close-can-Neg-Pres
(i) only > Neg > can

Following Takezawa's (1987) claim that Nominative Case is associated with T, Koizumi (1994) proposes that the Nominative object moves to Spec TP and is licensed by T via spec-head agreement. Spec TP is higher than NegP and VP containing the stative suffix, and thus Nominative objects can take scope over those two constituents (cf. Tada (1992)). This derivation is illustrated succinctly in (4) (irrelevant points are omitted here):

(4) [$_{CP}$ [$_{TP}$ Subj$_i$ Obj$_j$-**Nom** [$_{NegP}$ [$_{VP}$ t_i t_j V] Neg] T] C]

3. Problems with Koizumi (1994)

The data in (5) suggest that the Case driven movement analysis of Nominative objects is insufficient.

(5) a. Zikan-ga na-katta-ga, John-wa
time-Nom not-Past-but, John-Top
isoide oba-no-ie-ni kao-**o**
hurriedly aunt-Gen-house-to face-**Acc**
-das-e-ta.
-visit-can-Past
'While he does not have much time, John can visit aunt's house in a hurry.'

b. Zikan-ga na-katta-ga, John-wa
time-Nom not-Past-but, John-Top
isoide oba-no-ie-ni kao-**ga**
hurriedly aunt-Gen-house-to face-**Nom**
-das-e-ta.

In (5), the adverb *isoide* 'hurriedly' modifies the verb, so that it is adjoined to vP. *Oba-no-ie-ni* 'to aunt's house' is an argument related to location. Following Murasugi (1991) and Yatsushiro (1999), we consider that such an argument is situated in VP. Given these points, it can be safely argued that the object *kao* 'face' in (5b) can receive Nominative Case without movement to Spec TP, contradicting Koizumi's (1994) analysis. However, if Nominative objects can stay in VP, a problem arises: how can we establish the scope discrepancy in (2) and (3)?

4. Proposal

4.1. Case Assignment in Japanese

Chomsky (2000, 2001, 2008) proposes that in English, Case assignment takes place as a reflex of phi-feature agreement. However, many researchers argue that Japanese lacks phi-features (e.g. Kuroda (1988), Saito (2016), among others). Thus, we must assume that Case assignment is independent of phi-feature agreement.

Miyagawa (2011) proposes that phase heads in Japanese have Case-feature, though they lack phi-features. It follows that C and v bear valued Nominative and Accusative Case-features, respectively. T inherits the former and V the latter. We adopt Miyagawa's (2011) claim. Furthermore, we assume with Bošković (2007) and Saito (2016) that Case valuation takes place in a spec-head relation as in (6) (the head directionality is irrelevant here):

(6) a. [$_{CP}$ C [$_{TP}$ XP$_i$ [u-Case] [$_{T'}$ T [Nom] [$_{vP}$ t_i …]]]] → [u-Case] receives [Nom]

b. [$_{vP}$ v [$_{VP}$ XP$_i$ [u-Case] [$_{V'}$ V [Acc] t_i]]] → [u-Case] receives [Acc]

4.2. The Structure of vP

Miyagawa (1989) argues that the stative suffix *-rare* 'can' can absorb Accusative Case from the transitive verb (cf. Takahashi (2010) and Ura (1999)). We try to clarify this mechanism. Based on Chomsky's (2004) proposal for pair-merge, we claim that v can be pair-merged with the stative suffix *-rare* 'can,' which is illustrated in (7). In this case, the category of the derived head becomes V since a pair-merged element is on a separate plane, and thus is invisible in narrow syntax.

(7) V ((-rar)e)
v [~~Acc~~] V ((-rar)e)

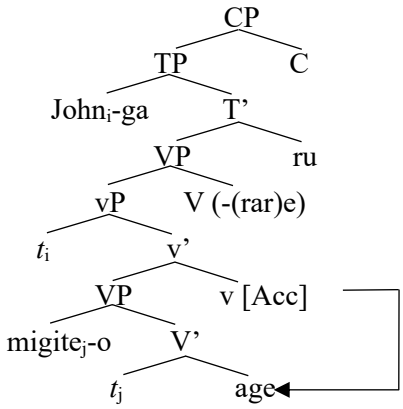
It follows from (7) that Accusative Case-feature on v is invisible. We assume here that this is a Case absorption mechanism.

However, the object must obtain Case to satisfy the Case Filter (Chomsky (1981)). We thus adopt Aoyagi's (2006) proposal that Nominative Case is assigned by default.[1]

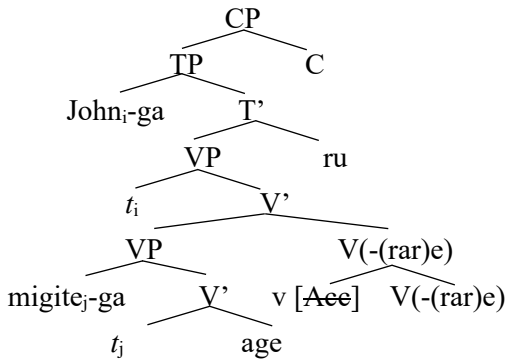
(8) In Japanese, DP is marked as Nominative Case by default only when it cannot receive any structural Case.

Considering all the discussions above, the structures of (1a, b) are illustrated as (9a) and (9b), respectively.

(9) a. John-ga migite-**o** age-rare-ru.



b. John-ga migite-**ga** age-rare-ru.



In (9a), v is not attached to the stative suffix. In this case, v successfully transmits the Case-feature to V and Case valuation takes place in VP. In (9b), on the other hand, v is pair-merged with the stative suffix. Therefore, the Case-feature on v cannot be inherited by V. The default Nominative Case assignment then salvages the object. The derivation of (9b) suggests that Nominative objects can remain within VP. This discussion leads us to the conclusion that Nominative objects need not move out of VP contra Tada (1992) and Koizumi (1994).

5. Scope

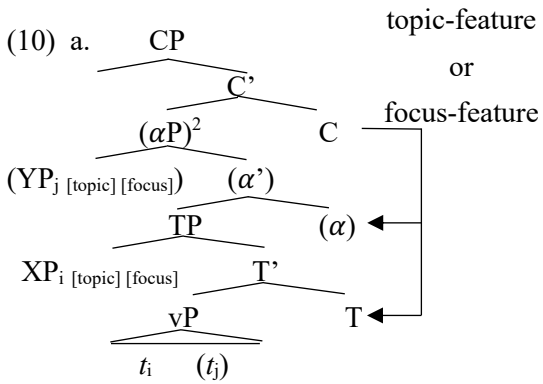
Now, we face the difficulty in establishing the scope discrepancy in (2) and (3). In our proposal, Nominative objects can stay in VP. Therefore, we wrongly predict that Nominative objects is in scope of the stative suffix and negation contrary to the facts in (2) and (3).

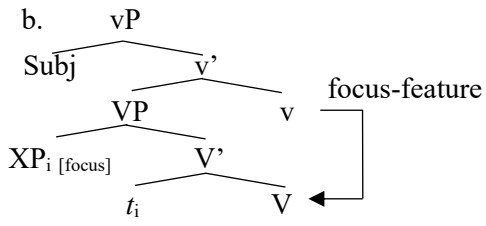
5.1. Miyagawa (2010, 2013)

Note that in (2) and (3), an inherently focused constituent *dake* 'only' is attached to objects. This means that objects receive a focus interpretation in these cases.

Miyagawa (2010) proposes that the phase head C in Japanese bears topic/focus-features instead of phi-features. He claims that it is topic/focus-features that are inherited by T in Japanese. Furthermore, Miyagawa (2013) extends Miyagawa's (2010) mechanism to vP and claims that the phase head v bears the focus-feature. The following diagrams show Miyagawa's (2010, 2013) proposal.

(10) a.





We adopt this mechanism to explain the facts in (2) and (3).

5.2. Analysis

First, we will tackle the scope difference in (2). In (2a), the focused Accusative object takes scope under the potential suffix *-rare* 'can.' We propose that the phase head v in (2a) can pass not only the Case-feature but also the focus-feature to V in this case. The object can thus satisfy focus as well as Case at Spec VP. This derivation is as follows:

(11) [$_{CP}$ [$_{TP}$ John$_i$-ga [$_{VP}$ [$_{vP}$ t_i [$_{VP}$ migime-dake$_j$-**o** [$_{V'}$ t_j age]] v] rare] ru] C]

(11) shows that the focused Accusative object is located at Spec VP where it is lower than the potential suffix. The derivation of (11) can thus capture the fact that the relevant object is in scope of the potential suffix in (2a).

As for (2b), the focused Nominative object takes scope over the potential suffix. Recall that in (2b), the phase head v is pair-merged with the potential suffix. Hence, neither the Case-feature nor the focus-feature on v can be transmitted to V. This means that focus cannot be satisfied in VP. Note that T can inherit the focus-feature from C as proposed by Miyagawa (2010). Hence, we propose that if the Nominative object is focused, it must move to Spec TP to meet focus. Spec TP is higher than the potential suffix, and thus the focused Nominative object takes scope over it in (2b). Furthermore, we assume in this case that T is responsible for non-default Nominative Case assignment because T retains its ability for Case assignment. The derivation is then illustrated in (12).

(12) [$_{CP}$ [$_{TP}$ John$_i$-ga migime-dake$_j$-**ga** [$_{VP}$ t_i [$_{VP}$ t_j [$_{V'}$ t_j age]] [rare-v]] ru] C]

In (12), the focused Nominative object moves to Spec TP where it satisfies focus via agreement with T involving the focus-feature inherited from C. This analysis captures the scope discrepancy in (2).

The above analysis also explains the difference in (3). The derivation of (3a) and (3b) are illustrated in (13a) and (13b), respectively. Here, the same explanation of (2) holds true of (3). What we assume here is that NegP is located between TP and vP (cf. Pollock (1989)).

(13) a. [$_{CP}$ [$_{TP}$ John$_i$-ga [$_{NegP}$ [$_{VP}$ [$_{vP}$ t_i [$_{VP}$ migime-dake$_j$-**o** [$_{V'}$ t_j age]] v] rare] na] i] C]

b. [$_{CP}$ [$_{TP}$ John$_i$-ga migime-dake$_j$-**ga** [$_{NegP}$ [$_{VP}$ t_i [$_{VP}$ t_j [$_{V'}$ t_j age]] [rare-v]] na] i] C].

5.3. Kumamoto Japanese

This proposal is supported by empirical data from Kumamoto Japanese (=KJ, which is spoken in southwestern Kyushu in Japan). Kato (2005, 2007) show that Nominative Case is expressed not only by *-ga* but also *-no* in KJ, which is illustrated in (14).

(14) a. John-wa nihongo-**ga** dekur-u. (KJ)
John-Top Japanese-**Nom** can-Pres
'John is capable of Japanese.'

b. John-wa nihongo-**no** dekur-u. (KJ)
John-Top Japanese-**Nom** can-Pres

According to Kato (2007), a subject with *ga*-Nominative Case is outside vP, while a subject with *no*-Nominative Case is within vP. Building on Kato (2007), we further assume here that the *ga*-marked object in (14a) is outside vP, whereas the *no*-marked object is within vP. Then, why are there two different realizations of Nominative Case in KJ?

Let us consider the KJ data in (15).

(15) Kozutumi-dake/sae-**ga**/***no** todoi
parcel-only/even-**Nom** arrive
-ta (bai). (KJ) (Nishioka (2019: 32))
-Past (final particle)
'Only/Even a parcel has arrived.

(15) shows that elements with focus particles such as *-dake* 'only' or *-sae* 'even' cannot be accompanied by *no*-Nominative Case, while such focus particles are compatible with *ga*-Nominative Case. Nishioka (2019) deduces this fact from the assumption that *no*-Nominative Case has an anti-focus property. Based on this discussion, Nishioka (2019) also argues that *ga*-marked subjects in Spec TP receives a focus interpretation. This argument derives from the discourse-configurational property of Japanese.[3] Nishioka (2019) discusses only subjects, but we will show that this line of research can be extended to objects. As we have already seen, Nominative objects in KJ are expressed in two ways: one is *ga*-Nominative Case, and the other *no*-Nominative Case. Interestingly, *ga*-marked Nominative objects can be focused as in (16a), but *no*-marked Nominative objects cannot as in (16b).

(16) a. John-wa nihongo-dake-**ga**
John-Top Japanese-only-**Nom**
dekur-u. (KJ)
can-Pres
'John is capable only Japanese.'
b. * John-wa nihongo-dake-**no**
John-Top Japanese-only-**Nom**
dekur-u. (KJ)
can-Pres

The KJ data corroborates our argument. In 4.1 and 4.2, we have observed that in Standard Japanese, if Nominative objects are outside VP, they receive structural Nominative Case and a focus interpretation, whereas if they are within VP, they receive default Nominative Case and show the anti-focus effect. The KJ data in (14) and (16) also show the same phenomenon. In short, we can draw the diagram below. In (17), SJ stands for Standard Japanese.

(17)

	Outside vP (subject / object)	Inside vP (subject / object)
SJ	*ga*-Nom (Focused)	*ga*-Nom (default) (Non-Focused)
KJ	*ga*-Nom (Focused)	*no*-Nom (default) (Non-Focused)

What is important here is that when Nominative objects are realized, the phase head v is pair-merged with the stative suffix, which prohibits the Accusative Case-feature and focus-feature from being transmitted to V from v in Standard Japanese and KJ. This mechanism crucially correlates with the dichotomy of Nominative Case realization in KJ, which is not superficially obvious in Standard Japanese, but this distinction underlies in both Standard Japanese and KJ.

6. Conclusion

In this paper, we examined the long-standing problem of Nominative objects in Japanese. We shed new light on it adopting Miyagawa (2010, 2013). Moreover, Kumamoto Japanese corroborates our proposal with respect to the correlation between Nominative Case marking and the focus interpretation. This new analysis can solve lingering problems regarding Nominative objects.

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NOTES

[1] Note that Aoyagi (2006) argues that Nominative Case is only assigned by default in his approach. However, we assume here that Nominative Case can be structurally assigned via spec-head agreement with T. Default Nominative Case assignment then takes place if and only if no structural Case is assigned as in (8) (for a detailed discussion of default Case, see Schütze (2001)).

[2] According to Miyagawa (2010), αP is optionally projected and the head α receives topic/focus-features from C when necessary. For a detailed discussion, see Miyagawa (2010).

[3] Nishioka (2019) argues that in the root clause in Japanese, topic or focus must be activated due to a language particular property: discourse-configurationality (Kiss (1995)). His original claim is as follows:

(i) Topic/focus must always be activated in matrix clauses, while only focus can be done so in subordinate clauses in Japanese.

(Nishioka (2019: 30))

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Extraposition as Late-Merger or Agreement

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1. Introduction

In this paper, we are particularly concerned with the adjunct extraposition from the subject in English. It has been argued that the availability of that extraposition is restricted in definiteness and types of predicate; it has also been observed that such restrictions can be overridden by contrastive foci. In this paper, we propose two distinct derivations for such restricted cases as well as for cases with foci.

The organization of this paper is as follows: Section 2 observes general linguistic facts on extraposition from subject NPs. Section 3 introduces Fox and Nissenbaum's (F&N) (1999) QR-and-late-merger analysis for the adjunct–complement asymmetry of object extraposition. Based on this analysis, we propose two derivations for the case of the subject in Section 4. Section 5 offers a principled account for unaccusative–unergative asymmetry. Section 6 summarizes the paper with a conclusion.

2. General Observations

2.1. Asymmetries in Subject Extraposition

Previous studies have observed that asymmetries in subject extraposition are in some respects attested. First, the extraposition from the definite host NP is not allowed, as is seen in (1) (cf. Huck and Na (1990:52)).

(1) a. A guy just came in that I met at Treno's yesterday. [indefinite]
b.?? The guy just came in that I met at Treno's yesterday. [definite]

Second, Johnson (1985:109, 111) observes that the extraposition from the subject NP is possible only in the case of unaccusative predicates as in (2a); unergative predicates do not allow for subject extraposition, as in (2b):

(2) a. Men appeared from Tanzania. [unacc.]
b.* A man whispered from Niue. [unerg.]

In summary, asymmetries are observed in the following respects: (i) indefinite vs. definite, and (ii) unaccusatives vs. unergatives.

2.2. Rescue by Contrastive Focus

We observed above that the formedness of the extraposition is associated with a property imposed either on the extraposed element, the host NP, or the predicate. Notably, the relevant context, more precisely a contrastive focus, rescues such degraded examples (small capitals indicate a focus). (cf. Huck and Na (1990:61))

(3) The guy just came in that I met at TRENO'S yesterday. (cf. (1b))
(4) a.* The book came out by Obama.
b. The book came out by OBAMA (, not by TRUMP).

In (3) and (4b), the extraposed elements contain the contrastive focus elements, which are contrasted with a material in each context.

We also observe that the degraded extraposition from unergative subjects improves in its acceptability (cf. Johnson (1985:109) for (5)):

(5) a.* A man jumped with a green parachute.
b. First, a man with a GREEN parachute jumped, and then a man jumped with a BROWN parachute.

(6) a.* A student ran in the schoolyard with blue hair.
b. A student ran in the schoolyard with BLUE hair (, not with BROWN hair).

Hence, in addition to the constraints provided in 2.1, we have exemplified that degraded cases that are due to the violation of such constraints come to be acceptable when an extraposed element contains a contrastive focus element. Syntactically speaking, this focus-rescue strategy indicates that the extraposition from the subject may undergo two distinct processes: one obeys the constraints; the other is associated with foci. The next section introduces F&N (1999) approach to the adjunct–complement asymmetry attested in the object extraposition.

3. Adjunct–Complement Asymmetry and LM

Lebeaux (1988) first argued that the generative process of a complement is distinct from that of an adjunct. In particular, the former is derived cyclically and the latter counter-cyclically. This is attested by the presence/absence of reconstruction effects in *wh*-movement (cf. Lebeaux (1988:102) for (7)):

(7) a. Which pictures that $John_i$ took does he_i like?
b.?/*Which pictures of $John_i$ does he_i like?

Notably, F&N (1999:8–9) observe that the adjunct–complement asymmetry is also observed in rightward movement.

(8) a. I gave him_i a picture yesterday from $John_i$'s collection.
b.* I gave him_i a picture yesterday of $John_i$'s mother.

Extraposition of the adjunct in (8a) does not exhibit the condition C violation: the bound reading of *him* as *John* is allowed. By contrast, extraposition of the complement in (8b) does exhibit this violation. To capture this fact, F&N (1999) propose that extraposition of an adjunct is not derived by its movement operation. More precisely, it is derived via Quantifier Raising (QR) of the host NP and late-merger of the adjunct that modifies it, which is illustrated in (9) (shading indicates QR). In this connection, late-merger is originally proposed by Lebeaux for the asymmetry in the leftward movement, as in (7); F&N invokes it for the case involved.

(9) a. $[_{TP}$ We_i $[T$ $[_{VP}$ t_i $[_{V'}$ saw a painting yesterday] **a painting**]]. [QR]
b. $[_{TP}$ We_i $[T$ $[_{VP}$ t_i $[_{V'}$ saw a painting yesterday] a painting **by John**]]. [LM]

Traditionally, QR has been regarded as a covert operation (May (1977)), and thus is implemented in LF rather than syntax (i.e., T-model of the grammatical architecture). F&N (1999), on the other hand, assume that every permutational operation, either overt or covert, is implemented in syntax, and the c/overt distinction is originated in the chain pronunciation (single output model (Bobaljik (2002))));

namely, the pronunciation of the head of a chain results in "overt" while that of the tail leads to "covert." This model potentially allows covert movement to feed the subsequent overt movement—a crucial assumption for F&N's analysis (originally coined as "overt" QR).

4. Proposal and Analysis

This section argues how F&N's (1999) proposal on the extraposition from the object can be extended to the case of the subject which does not require a contrastive focus. Our proposal is as follows: the subject extraposition without a focus undergoes QR of a host NP to the edge of *v*P and the subsequent late-merger of its extraposed element; meanwhile, those that require a focus involve parallel movement of a host NP along with an adjunct to be extraposed both to the Spec, TP and to the TP-internal Focus projection (e.g., Jayaseelan (2002), Overfelt (2015)), and the scattered deletion for pronunciational reasons (Nunes (2004)).

4.1. Subject Extraposition *Without* a Focus

4.1.1. Unaccusative and Indefinite Subjects

Let us consider how the adjunct extraposition from the unaccusative subject is derived. According to the Unaccusative Hypothesis (Perlmutter (1978)), subjects of unaccusative verbs are base-generated as the complement of a verb — a position also designated for an object. Observe the following illustration ((10a) is from Guéron (1980:637)):

(10) a. A man appeared with green eyes.
b. [$_{TP}$ A man$_i$ [T [$_{vP}$ [$_{v'}$ appeared <a man$_i$>] a man$_i$ **with green eyes**]]].

The derivation of the adjunct extraposition from the unaccusative proceeds as follows: (i) the complement of the verb *appear* adjoins to the *v*P (covert movement (QR)); (ii) the adjunct *with green eyes* late-merges to the QR-ed element; (iii) the base-generated unaccusative subject undergoes A-movement to Spec, TP.

This derivation can structurally account for the observation by Huck and Na (1990); namely, extraposition from the definite subject is ruled out by virtue of the condition of Scope Economy, advocated by Fox (1999). Scope Economy states that "scope-shifting operations cannot be semantically vacuous [; namely, QR] does not apply when it has no effect on semantics" (Fox (1999:3)). Because definite NPs are not quantificational, and thus do not normally affect the scope relation, this leads to the ban on QR to the definite NP. The QR-and-late-merger analysis, thus, naturally captures the fact that the extraposition from the definite NP is normally prohibited. By contrast, we will observe later (Section 4.2.1) that this case of extraposition may undergo another derivation associated with a focus because it does not involve QR.

4.1.3. Evidence for QR-and-LM Analysis

Let us observe some pieces of evidence, presented by F&N, for QR-and-late-merger analysis of adjunct extraposition from the object.

First, the adjunct extraposition of the object can obviate the condition C (cf. F&N (1999:8):

(11) a.??/*I gave him$_i$ a picture [from John$_i$'s collection] yesterday.
b. I gave him$_i$ a picture yesterday [from John$_i$'s collection].

The canonical sentence in (11a) resists the reading in which the R-expression *John* is bound by the pronoun *him*. On the other hand, the extraposed sentence in (11b) is licit even though

the R-expression follows the pronoun linearly. If the condition functions in terms of the hierarchical, c-command relationship, this illuminates the fact that the extraposed element in (11b) does not exist in the c-command domain of the pronoun even as a silent copy. Therefore, F&N (1999) regard the rescue of the violation of condition C in (11b) as an indication that late-merger takes place in deriving the extraposition of an adjunct instead of movement.

In our proposal, if late-merger takes place in the extraposed adjunct from the unaccusative subject, the same result should be observed here. As we predict, the condition C obviation is also attested (cf. Reeve (2011:155) for (12)):

(12) a.?? It seemed to her$_i$ that a man had arrived that Mary$_i$ know from school.
b. A man seemed to her$_i$ to have arrived that Mary$_i$ knew from school.

The R-expression *Mary* in the extraposed relative clause is bound in (12a). Although it is possible to assume that QR and late-merger take place in (12a), the condition C violation must occur even with this assumption, because in this case, the attachment site of the late-merger is in the embedded clause, which is c-commanded by the pronoun. On the other hand, if the host NP *a man* undergoes A movement to Spec, TP of the matrix clause, the condition C effect is obviated in (12b). This is because the late-merger takes place in the matrix TP-domain, which is outside of the c-command domain of *her*. These data lend credence to our proposal that the unaccusative case involves QR and late-merger.

Next, F&N (1999:10) observe that parasitic gaps are banned in the adjunct extraposition.

(13) a. I presented an argument t_i before having evidence PG$_i$ [that what you told me is right]$_i$. [Complement]
b.* I presented an argument t_i before having evidence PG$_i$ [that you told me about]$_i$. [Adjunct]

It is well known that the parasitic gap takes place only when its associate undergoes A-bar movement. The parasitic gap is appropriately licensed in (13a), in which the complement of the host nominal is extraposed. In contrast, this is not the case when the extraposed element is an adjunct. According to F&N, this asymmetry is taken to be evidence that the extraposed complement undergoes A-bar movement and the extraposed adjunct does not; or, more particularly, it involves late-merger.

In the same vein, we show that the same holds in the case of a subject:

(14) a.?? A book$_i$ came out t_i yesterday without revising PG$_i$ [by Obama]$_i$.
b. A book$_i$ came out t_i yesterday without revising it$_i$ [by Obama]$_i$.

This further indicates that the unaccusative type is derived in the same way as the type of objects.

4.2. Subject Extraposition *with* a Focus

4.2.1. Definite NPs

We have suggested that the QR-and-late merger analysis is only relevant to the case of indefinite NPs due to Scope Economy. The case of the definite NP in (3) and (4b), on the other hand, should undergo another type of derivation. We propose that this derivation involves parallel movement both to Spec, TP and to TP-internal FocP, as assumed by Jayaseelan (2002), Overfelt (2015), and among others. The derivation for (4b) is illustrated as follows:

(15) a. The book came out by OBAMA.(= (4b))
b. [$_{TP}$ The book ~~by Obama~~ [$_{T'}$ PAST [$_{FocP}$ [$_{vP}$ [$_{v'}$ came out <the book by Obama>]] ~~the book~~ by Obama$_{[FOC]}$]]].

The point is that, unlike the derivation for the indefinite NP, the element to be extraposed (i.e., *by Obama*) is generated along with the subject. The subject DP as a whole moves to Spec, TP and, at the same time, to the TP-internal FocP to check a focus feature. Then, scattered deletion takes place: the subject is pronounced at Spec, TP and the element to be extraposed is at the FocP. Hence comes extraposition of the adjunct.

4.2.2. Unergative Subjects

We have also observed that the extraposition from unergative subjects must involve a contrastive focus (cf. (5b) and (6b)). The relevant derivation is similar to the definite case, the only difference being that the unergative subject underlyingly occupies Spec, *v*P. The derivation of (6b) is illustrated below:

(16) [$_{TP}$ A student ~~with blue hair~~ [$_{T'}$ PAST [$_{FocP}$ [$_{vP}$ [$_{vP}$ <a student with blue hair$_{[FOC]}$> [$_{v'}$ *v* [$_{VP}$ ran]]] in the schoolyard] ~~a student~~ with blue hair$_{[FOC]}$]]] (cf. (6b))

In Section 5, it will be addressed why unergative subjects cannot undergo the derivational process that unaccusatives can.

4.2.3. Evidence for Scattered Deletion

Two pieces of evidence come from scopal facts and parasitic gap licensing. First, it is observed that the scopal ambiguity is always attested between a host NP and its extraposed element (i.e., Williams' (1974) generalization). Hence, sentence (17a), which is acceptable without a focus, is ambiguous in scope. Meanwhile, an unergative extraposition (cf. (17b)) necessarily shows the higher scope of the extraposed element. This gap suggests that the derivation for an unergative extraposition is distinct from those with an unaccusative.

(17) a. A man appeared with every talent.
(unaccusative, $\exists > \forall$, $\forall > \exists$)
b. A man jumped with EVERY TALENT.
(unergative, $\exists > \forall$, $*\forall > \exists$)
(cf.*A man jumped with every talent.)

The other, the more striking evidence is attested in parasitic gaps. On the basis of the ban on parasitic gaps in (18), we have argued that the extraposition of the indefinite subject involves QR of the host and late-merger of the extraposed adjunct. Those associated with a focus, we propose, involve A-bar movement of a subject along with the associated adjunct, which leads us to predict that this extraposition licenses parasitic gaps. This prediction is borne out:

(18) a. The book$_i$ came out t_i yesterday without revising PG$_i$ [by OBAMA]$_i$.
b.?? The book$_i$ came out t_i yesterday without revising it$_i$ [by OBAMA]$_i$.

Notably, the PF operation, scattered deletion, is also supported: because the verb *revising* requires a nominal complement, the corresponding parasitic gap should be nominal, too. Given that a parasitic gap pertains to a phrase A-bar moved, it is thus implied that what is A-bar moved to FocP is the nominal phrase *the book by Obama* rather than observable part of it (i.e., *by Obama*). At PF, scattered deletion takes place perhaps because of the pronunciation; since

Spec, TP must be phonologically filled with the subject in English, the pronunciation of Spec, FocP necessarily targets the rest of the subject.

In summary, we propose that the subject extraposition involves two derivational sources: one in line with F&N's (1999) QR-and-late-merger analysis; the other with focus movement of the subject as a whole and scattered deletion.

5. A Note: Unaccusative–Unergative Asymmetry and QR as Covert Scrambling

Finally, we address the question of why an unergative subject may not involve QR. In the case of definite NP, we claim that the prohibition is naturally accounted for in terms of Scope Economy (Fox (1999)). However, if the extraposition without a focus involves QR, it remains unclear why the unergative subject does not undergo QR (cf. (5) and (6)). Given the fact that the extraposition from the unaccusative subject is allowed without a focus, as in (2a), it is indicated that the unaccusative–unergative asymmetry is tied to the underlying position of the subject (Johnson (1985)). In particular, the unaccusative subject occupies the complement of V while the unergative subject is base-generated in Spec, *v*P. One may consider that the asymmetry is ascribed to the timing of spell-out stemming from the strong/weak distinction of phasehood. However, an explanation would be ad hoc unless it includes why such a distinction is relevant. In line with this reasoning, we would like to address the question from another respect. In fact, this issue would bring to light the symmetry between QR and scrambling.

A discussion has been raised about what derives the optionality of movement (e.g., Johnson (2000)). Regarding QR, Johnson (2000) proposes that the operation is similar to what is called scrambling found in languages such as Dutch and German. Based on his insight, Miyagawa (2011) claims that the optionality of QR and scrambling is constrained by an Edge Feature (EF) on a phase head (*v* and C) as well as Scope Economy. Regarding scrambling in Korean and Japanese, Ko (2013) proposes that the lack of subject scrambling (e.g., Saito (1985)) (and other quantifier-floating facts that are not captured by Saito as well) is explained in terms of the EF-based approach to scrambling. More precisely, because the unergative subject is outside of the c-command domain of a *v* head, an EF on *v* cannot allow the subject to scramble to the edge of *v*P. Although space limits prevent us from discussing Ko's arguments, we hypothesize that QR is a covert counterpart of scrambling, and moreover, we speculate that Ko's principled account of the unavailability of subject scrambling is accommodated to the predicate asymmetry of the extraposition.

If QR is triggered by Agree with an EF of a *v* and attaches to the (outer) Spec, *v*P, on a par with scrambling (Ko (2013)), it is entailed that while the unaccusative subject or the object may involve QR while the unergative subject may not since the latter is the outside of *v*'s c-command domain. The schemata are illustrated as follows:

(19) a. $[_{TP}$ A man$_i$ $[_{T'}$ $T_{[EPP]}$ $[_{vP}$ a man $[v_{[EF]}$ $[_{VP}$ arrived <a man>]]]]] [unacc.]

b.* $[_{TP}$ A man$_i$ $[_{T'}$ $T_{[EPP]}$ $[_{vP}$ a man $[_{vP}$ <a man> $[v_{[EF]}$ $[_{VP}$ jumped]]]]]] [unerg.]

Unlike the unaccusatives as in (19a), the unergative subject *a man* is base-generated in the (inner) Spec, *v*P, the position that the *v* head cannot c-command, as in (19b). Thus, QR of the unergative subject is ruled out in principle as far as the EF-based approach to QR is concerned. Although we need to develop a parallelism

between scrambling and QR in more detail, the possibility is worth exploring in future research.

6. Conclusion

We have observed that the adjunct extraposition from the subject is constrained in some respects and that the degraded cases improve if contrastive foci are assigned to the extraposed element. We have proposed two types of derivational process for the subject extraposition: (i) QR-and-late-merger process, originally advocated by F&N (1999), and (ii) scattered deletion (e.g., Nunes (2004)). These two sources are evidenced by binding and parasitic gap facts. Finally, we have discussed unaccusative–unergative asymmetry originally noticed by Johnson (1985), which could, we suggest, shed light on the issue regarding the symmetry of two optional movements: scrambling and QR.

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Deducing Transfer Domain from Labeling*

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Keywords：Transfer, Labeling, Minimal Search, transparency of non-finite clauses, the bound pronoun effects

1. Introduction

One of the most fundamental questions in generative syntax concerns the nature of the mechanism that gets the hierarchical structures accessed to the two language-external components, the systems of meaning and sounds. In minimalism, this question is addressed by the phase theory (Chomsky (2000) et seq.). According to this, syntactic structures are accessed by external systems in a cyclic manner: once a unit called phase (CP or v*P) is constructed, a phase-head-complement (PHC, TP or VP) is transferred to the Conceptual-Intentional (CI) interface and the Articulatory-Perceptual (AP) interface (or, in the latest term, externalization). Once transferred, the domain is rendered inaccessible to any further syntactic operations (the Phase Impenetrability Condition (PIC)).

However, the question remains unanswered why the PHC, not the phase itself, undergoes Transfer. Furthermore, it was left unanswered why PHCs are accessed by external systems in a cyclic way. This article attempts to solve these long-standing puzzles about the domain and timing of Transfer.

2. Preliminary Assumptions

Before proposing an alternative analysis, let me introduce some preliminary assumptions. First, I assume with Chomsky (2013, 2015) that a label of a syntactic object (SO) is determined by a fixed algorithm, Labeling Algorithm (LA). LA is an instantiation of Minimal Search (MS) to detect relevant heads, which works in the following ways: Given SO = {H, XP}, where H is a head and XP is a phrase, MS selects H as its label. When an SO is {XP, YP}, LA cannot uniquely locate a head that provides a label, but there are two ways to determine a label of the XP-YP structure. One case is when XP is moved out of the XP-YP structure. In this case, the lower copy of XP becomes “invisible” to LA, providing the label YP. Another case is when X and Y, heads of XP and YP, are “identical” in the sense that they involve identical agreement features F. Then, LA finds heads X and Y, providing <F, F>, a pair of features shared between X and Y, as its label. Otherwise, an SO cannot bear a label, thereby violating Full Interpretation at the interfaces.

If we take the Inclusiveness Condition (Chomsky (1995) et seq.) strictly, labeling must be simultaneous with Transfer. If Labeling took place before Transfer, Inclusiveness Condition would be violated since it introduces projection, an object extraneous to syntax. On the other hand, if Labeling took place after Transfer, Labeling could not feed interpretation at CI interface and externalization. Therefore, Labeling must be carried out as a part of Transfer.

Second, I assume with Kitahara (2017) and Epstein, Kitahara, and Seely (EKS) (2018), that Agree (Chomsky (2000) et seq.) is eliminable from narrow-syntax. They claim that Agree is

a composite operation consisting of (i) probe-goal search and (ii) feature-valuation, reducing that the former to (MS) for Labeling (simultaneous search for relevant heads into an XP-YP structure carried out in a "top-down" fashion), and the latter to feature-assignment at the morpho-phonological component. Suppose, for example, we have an SO = {{$n_{[v\varphi]}$, RP}, {$T_{[u\varphi]}$, v*P}}, which is created by free Internal Merge of an nP into Spec-T. Then, the "top-down" MS for Labeling simultaneously finds n and T involving valued and unvalued Phi. At the morpho-phonological component, feature assignment takes place between these two heads as a reflex of Labeling: uPhi on T gets valued, based on the relation between n and T established via MS.

Third, I assume that syntactic features are divided into two types; +CI features that play some role at the CI interface, and -CI features that play no role there (cf. EKS (2010)). Given this definition, uPhi and uCase (unvalued Case features) are classified as -CI, since they play no role in semantic interpretation. In contrast, unvalued wh-features on wh-phrases are +CI, since they determine the interpretation of wh-phrases as relative, interrogative, or exclamative (Chomsky (2015: 13, fn. 16)).

3. Deducing the Domain of Transfer

With these assumptions in place, this article proposes to characterize the Transfer Domain (TD) as in (1).

(1) TD is the minimal SO containing eliminable -CI features.

Let us define eliminability of -CI features as follows: -CI features F_{-CI} are eliminable iff MS for LA may locate the head involving unvalued F_{-CI} and the one involving valued F_{+CI} to provide the label <F, F>. In other words, (1) states that once an unvalued -CI feature enters into the configuration where the "top-down" MS may pair it with its counterpart, Transfer applies to the SO properly containing these features, eliminating F_{-CI} at the CI interface and assigning values to F_{-CI} at externalization. Consider (2).

(2) a. {$T_{[uPhi]}$, v*P}
b. {{$n_{[vPhi]}$, RP}, {$T_{[uPhi]}$, v*P}}
c. {C, {{$n_{[vPhi]}$, RP}, {$T_{[uPhi]}$, v*P}}}

The SO in (2a) is not qualified for Transfer under (1) since uPhi on T is not eliminable: Within this domain, MS does not find out the head involving the +CI features to be paired with uPhi on T. The SO in (2b) is qualified for Transfer, since the "top-down" MS may simultaneously locate X with valued +CI features, on the one hand, and Y with -CI features, on the other, within this domain. (2c) is not qualified for Transfer, although uPhi on T is eliminable in this domain. This is because (2c) is not a minimal SO: (2c) is larger than (2b). Thus, (2b) is uniquely identified as TD.

A question immediately arises why the transferred SO must be minimal. I suggest that a principle of minimal computation in (3), a third factor condition in the sense that Chomsky (2005), dictates that the path of MS to locate eliminable -CI features must be minimized as far as possible.

(3) Minimize the path of MS within TD.

Let us define the path of MS as the sets dominating a relevant head. For example, in (2b), the number of sets dominating T is two: {T, vP} and {{n, RP}, {T, v*P}}, whereas in (2c),

the number of sets dominating T is three, {T, vP}, {{n, RP}, {T, v*P}}, and {C, {{n, RP}, {T, vP}}}. Suppose also that the "top-down" MS is carried out in a step-by-step fashion: namely, it firstly locates the largest SO (= TD), and subsequently looks for a member of the set, a member of a member of the set, and so on (this procedure terminates when it locates a head involving F_{-CI}). Then, the principle in (3) selects (2b) over (2c), since the path (= the number of steps of the "top-down" MS) is minimized in (2b).

Let us consider how the system works. Consider the derivation of v*P = [$_{\gamma}$ v* [$_{\beta}$ IA [$_{\alpha}$ R t_{IA}]]] (= *(John) met Mary*) in (4).

(4) a. {R, $IA_{[vPhi]}$} (= α)
b. {$IA_{[vPhi]}$, {R, t_{IA}}} (= β)
c. {$v^*_{[uPhi]}$, {$IA_{[vPhi]}$, {R, t_{IA}}}} (= γ)
d. {v*, {$IA_{[vPhi]}$, {$R_{[uPhi]}$, t_{IA}}}}
e. {v*, {$IA_{[vPhi]}$, {$R_{[uPhi]}$, t_{IA}}}}

Firstly, External Merge (EM) of the verbal root is firstly applied to the internal argument (IA) with valued phi-features (vPhi), forming the set α. At this point, nothing is transferred since the SO contains no eliminable F_{-CI}. Secondly, IA undergoes Internal Merge (IM) to Spec-R, forming the set β. Again, nothing qualifies for Transfer. Thirdly, v* involving uPhi externally merges, forming γ. Here, the uPhi on v* is not eliminable, and nothing undergoes Transfer. Fourthly, uPhi on v* gets inherited by R. Then, the minimal SO containing F_{-CI} is R, but uPhi is not eliminable within this domain. The next larger SO is α, but uPhi is not eliminable within α, either. The next larger SO is then β. Here, β qualifies for TD, since within β, MS may simultaneously locate R with uPhi, on the one hand, and the head of IA, n with vPhi, on the other, to provide the label <Phi, Phi>. Crucially, γ does not qualify for Transfer since it is not the smallest SO containing eliminable F_{-CI}: Locating R requires more steps of MS within γ then within β. Thus, we successfully characterize TD in the v*P area with the principle in (1).

Let us next consider how the derivation proceeds in the CP area. The derivation of an embedded CP = [$_{\gamma}$ C [$_{\beta}$ EA [$_{\alpha}$ T [t_{EA} [v …]]]]] (= *(I think) that John met Mary*), is shown in (5).

(5) a. {T, v*P} (= α)
b. {$EA_{[vPhi]}$, {T, v*P}} (= β)
c. {$C_{[uPhi]}$, {$EA_{[vPhi]}$, {T, v*P}}} (= γ)
d. {C, {$EA_{[vPhi]}$, {$T_{[uPhi]}$, v*P}}}
e. {C, {$EA_{[vPhi]}$, {$T_{[uPhi]}$, v*P}}}

Firstly, EM of T forms the set α. Secondly, the EA in Spec-v* undergoes IM to Spec-T, forming β. At this point, nothing is transferred since the SO contains no -CI features. Thirdly, C with uPhi externally merges, forming γ. Here, the minimal SO containing -CI features is C, but it is not eliminable. Then, nothing undergoes Transfer at this point. Fourthly, the uPhi on C gets inherited by T. The minimal SO containing -CI features is T, but uPhi is not eliminable within this domain. The next larger SO is α, but uPhi is not eliminable within α, either. The next larger SO is then β. β qualifies for TD, since within β, MS for Labeling may simultaneously locate T with uPhi, on the one hand, and the head of EA, n with vPhi, on the other, to provide the label <Phi, Phi>. Thus, we successfully characterize TD in the embedded CP area as well as the v*P area.

One may wonder how to Transfer the root CP = [$_{\gamma}$ C [$_{\beta}$ $EA_{[vPhi]}$ [$_{\alpha}$ $T_{[uPhi]}$ [t_{EA} [v* …]]]]]. Notice that if we transferred β, C would be left

in the narrow syntax, thereby yielding no interpretation at CI and externalization. For this reason, transferring β is excluded from the options to converge the derivation. Then, the next larger domain γ is nominated as the domain within which the path of MS is minimized. Thus, transferring γ converges the derivation, as well as minimizing the path of MS as far as possible.

4. Deducing the Timing of Transfer

Let us turn to the question of what determines the timing of Transfer. So far, we have simply stipulated that Transfer takes place just after a phase head (C or v*) is introduced and uPhi is inherited. However, this incorrectly excludes derivation from (4a) to (4b): β is transferred just after v* is introduced, prohibiting the wh-phrase from moving on.

(6) a. [$_{\gamma}$ v* [$_{\beta}$ WH [$_{\alpha}$ R$_{[u\varphi]}$ …]]]
b. [$_{\delta}$ WH [$_{\gamma}$ v* [$_{\beta}$ t_{WH} [$_{\alpha}$ R$_{[u\varphi]}$ …]]]]

So, suppose that Transfer may take place at any point of derivation. Then, β may be transferred after wh-movement. However, this assumption cannot account for successive-cyclicity of movement. In (7), for example, the wh-phrase in Spec-R can be extracted to Spec-C without leaving a copy at the edge of v*P, because β is transferred after wh-movement.

(7) a. [C [$_{\zeta}$ EA [$_{\varepsilon}$ T$_{[u\varphi]}$ [$_{\delta}$ t_{EA} [$_{\gamma}$ v* [$_{\beta}$ WH [$_{\alpha}$ R$_{[u\varphi]}$ …]]]]]]]
b. [WH [C [$_{\zeta}$ EA [$_{\varepsilon}$ T$_{[u\varphi]}$ [$_{\delta}$ t_{EA} [$_{\gamma}$ v* [$_{\beta}$ t_{WH} [$_{\alpha}$ R$_{[u\varphi]}$ …]]]]]]]]
c. [WH [C [$_{\zeta}$ EA [$_{\varepsilon}$ T$_{[u\varphi]}$ [$_{\delta}$ t_{EA} [$_{\gamma}$ v* [$_{\beta}$ t_{WH} [$_{\alpha}$ R$_{[u\varphi]}$ …]]]]]]]]
(= (I wonder) who John admires)

This article suggests that although Transfer is applicable at any point of derivation, successive-cyclicity is ensured by Determinacy put forth by Chomsky (2019).

(8) *Determinacy*
If the structural conditions for a rule are met, the structural change has to take place in a fixed and determinate manner.

Determinacy dictates that derivation must proceed in a deterministic way. In other words, a structure cannot include more than one element to which a syntactic rule may be applied. Although Determinacy is proposed as a condition on Merge, suppose that Transfer is also subject to Determinacy. Then, we correctly rule out the derivation in (7): In (7a), there are two -CI-features, uPhi on T and uPhi on R. Given (1), the minimal domain containing them, namely β and ζ, must undergo Transfer. However, this leads to Determinacy violation, because it includes two candidates of Transfer, β and ζ. Accordingly, Transfer of β must be applied before the next higher locus of uPhi, namely C, is introduced.

The Phase Impenetrability Condition (PIC) in the sense of Chomsky (2001) follows from Determinacy. Given the structure [$_{ZP}$ Z … [$_{HP}$ [H YP]], where Z and H are phase heads, (9) holds.

(9) *Phase Impenetrability Condition*
The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

As discussed before, once a higher locus of uPhi is introduced, the lower domain containing uPhi cannot undergo Transfer owing to Determinacy.

So, the derivation must proceed as in (10).

(10) a. [$_{\gamma}$ v* [$_{\beta}$ WH [$_{\alpha}$ R$_{[u\varphi]}$ …]]]
b. [$_{\delta}$ WH [$_{\gamma}$ v* [$_{\beta}$ t_{WH} [$_{\alpha}$ R$_{[u\varphi]}$ …]]]]
c. [$_{\zeta}$ EA [$_{\varepsilon}$ T [$_{\delta 2}$ t_{EA} [$_{\delta 1}$ WH [$_{\gamma}$ v* [$_{\beta}$ t_{WH} [$_{\alpha}$ R$_{[u\varphi]}$ …]]]]]]]
d. [C [$_{\zeta}$ EA [$_{\varepsilon}$ T$_{[u\varphi]}$ [$_{\delta 2}$ t_{EA} [$_{\delta 1}$ WH [$_{\gamma}$ v* …]]]]]]
e. [WH [C [$_{\zeta}$ EA [$_{\varepsilon}$ T$_{[u\varphi]}$ [$_{\delta 2}$ t_{EA} [$_{\delta 1}$ t_{WH} [$_{\gamma}$ v* …]]]]]]]

The wh-phrase in (10a) is extracted to the edge of v*, as in (10b). To avoid Determinacy violation, Transfer is applied at any point of derivation before introduction of C, as illustrated in (10c). In (10d), C is introduced and uPhi is inherited by T. In (10e), the wh-phrase is extracted from Spec-v* to Spec-C (ζ is subject to Transfer at any point of derivation after (10d), unless the next higher locus of uPhi is introduced). Thus, the PIC in (9) follows from Determinacy: Transfer is, in principle, applied at any point of derivation, but Determinacy sets the upper bound of application of Transfer.

5. Some Consequences

The proposed system predicts that β in (4) and (5) is not counted as TD when T or R does not involve eliminable uPhi. This section verifies this prediction, by providing a unified account for transparency of non-finite clauses (section 5.1) and the bound pronoun effects (section 5.2).

5.1 Transparency of Non-finite Clauses

Let us firstly consider the finite-nonfinite asymmetry with respect to transparency, illustrated in (11).

(11) a. ?*To whom$_j$ did you wonder what$_i$ they gave t_i t_j?
b. To whom$_j$ did you wonder what$_i$ to give t_i t_j? (Cinque (1990: 52))

(11) shows that the wh-island violation is relaxed when the embedded clause is non-finite.

(12) a. To whom$_j$ did you wonder [$_{\gamma}$ what$_i$ C [$_{\beta}$ they T gave t_i t_j]]?
b. To whom$_j$ did you wonder [$_{\gamma}$ what$_i$ C [$_{\beta}$ T give t_i t_j]]?

In (12a), β is counted as TD owing to the eliminable uPhi on the finite T. Then, *to whom* must be extracted to the embedded Spec-C thanks to the PIC, but it is occupied by *what*, thereby causing the wh-island violation. In (12b), by contrast, β is not counted as TD, since the non-finite T lacks uPhi. Then, *to whom* does not have to be extracted to the embedded Spec-C, and hence wh-island violation is circumvented.

5.2 The Bound Pronoun Effects

Second, the proposed system accounts for the bound pronoun effects (BPE). Grano and Lasnik (2019) (G&L) observe that some clause-bounded constructions become transparent when a clausal subject is replaced with a bound pronoun. (13) illustrates the BPE in the gapping construction.

(13) a. Mary likes apples and Ann <~~likes~~> oranges.
b. *Mary claims that Jill likes oranges and [Ann ~~<claims [that Jill likes>~~ oranges]].
c. ?Mary$_i$ claims that she$_i$ likes oranges and [Ann$_j$ ~~<claims [that she$_j$ likes>~~ oranges]].

(Grano and Lasnik (2019: 466-467))

(13a) is a canonical case of gapping. (13b) shows clause-boundedness of gapping constructions. Crucially, as shown in (13c), clause-boundedness of gapping is relaxed when the pronoun *she* bound by *Ann* occupies the subject position of the embedded clause. Grano and Lasnik (2019) also observe the BPEs in *too/enough* movement, comparative deletion, antecedent contained deletion, quantifier scope interaction, and multiple questions.

Grano and Lasnik try to account for the BPE, assuming that (i) the CP phase is responsible for clause-boundedness, (ii) a bound pronoun may enter into the derivation without phi-feature values, (iii) unvalued features on the head of the phase-head-complement (i.e., uPhi on T) keep the CP phase open. Given these, the embedded CP in (13b) (= γ in (14)) is counted as a phase, since the uPhi on T undergoes deletion as a reflex of valuation from the vF on *Jill*. Therefore, the phasal CP blocks long-distance gapping.

(14)Mary claims that Jill likes oranges and Ann <~~claims [$_{\gamma}$ that [$_{\beta}$ Jill$_{[vPhi]}$ T$_{[uPhi]}$ likes~~> oranges]]

By contrast, the embedded CP in (13c) (= γ in (15)) is not counted as a phase, since the uF on T cannot be deleted owing to lack of vF on the bound pronoun *she*. Accordingly, uPhi on T keeps the CP open, thereby permitting long-distance gapping.

(15)Mary claims that Jill likes oranges and Ann$_i$ <~~claims [$_{\gamma}$ that [$_{\beta}$ she$_i$ T$_{[uPhi]}$ likes~~> oranges]]

Although the analysis by Grano and Lasnik is attractive, it is not without a problem. To be specific, they leave unexplained why unvalued features on the head of the phase-head-complement keeps the phase open. This stipulation is eliminated by the system proposed in this paper: β in (15) is not counted as TD when the uPhi on T cannot participate in feature-sharing owing to lack of vPhi on the pronominal subject. Thus, the proposed system provides a more principled explanation to the BPE.

6. Conclusion

The current phase theory (Chomsky (2000) et seq.) left the question unanswered what determines the domain and timing of Transfer. Section 2 proposed that the TD is deducible from MS: TD is a domain within which MS may locate a pair of heads involving ±CI features, with the path of search minimized. Section 3 argued that the PIC in the sense of Chomsky (2001) follows from Determinacy put forth by Chomsky (2019). Section 5 proposed a unified account for transparency of non-finite clauses and bound-pronoun effects. If this approach is on the right track, the stipulations about the domain and timing of Transfer is eliminated, and TD and PIC naturally follow from principles of minimal computation and deterministic derivation, third factor conditions on language design.

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A Comparative Study Between Japanese and American Mother-Child Interactions During Joint Picture Book Reading

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Keywords: Interactional Linguistics, language socialization, empathetic speech, picture book reading, mother-child discourse

1. Introduction

Language socialization is said to begin from the moment a child has social contact (Schieffelin and Ochs, 1986). Throughout childhood, children learn the culturally appropriate form of communication from their caretakers. Extensive research has revealed that Japanese mothers are affection oriented and value interpersonal relationships, while American mothers are information oriented and respect independence (Crane and Fernald, 2016; Hess et al., 1980; Ishizaki, 1996; Markus and Kitayama, 1991). Clancy (1987) maintains that Japanese mothers of 2-year-olds conduct empathy training by using declaratives instead of imperatives to discipline their children (i.e., "I feel bad for the toy" instead of "Play with the toy gently"). However, almost no previous studies explain the developmental process via which children are socialized.

Therefore, this paper aims to understand how American and Japanese children acquire their respective styles of empathetic speech in the context of joint picture book reading. This paper argues that while Japanese and American children both acquire empathetic speech through a similar process during their first five years of life, Japanese caregivers tend to immerse their children in empathetic speech from infancy and gradually decrease the amount of scaffolding provided, whereas American caregivers strategically use less empathetic speech in the infant stage and increase the proportion of such as the children cognitively develop.

2. Method

2.1 Data Collection Method

A total of 106 Japanese and 179 American mother-child dyads were observed reading *The Very Hungry Caterpillar* (*Harapeko Aomushi*) to their children. Participants were recruited from the researcher's friends and family, online public recruiting websites, and public posts on social networking services from July 2019 to December 2020. The participants were asked to video-record themselves reading the book to their children in their native language and answer a questionnaire about their demographic backgrounds. This book was chosen because it is a best-selling book that is widely accepted in both America and Japan, the narrative does not have a didactic tone, and the arrangement of pictures and text layout is mostly the same between the Japanese and English versions, making it easier to compare. The purpose of this study was not disclosed to the participants before the video recording so as not to influence the parent-child conversation during the sessions.

2.2 Coding of Data

All utterances captured on the video recordings were transcribed. Any utterances that could not be deciphered within three passes and

children's non-verbal vocalizations were coded as unintelligible. Utterances were segmented into individual units based on Kroll's Idea Unit (1977). While the Phrases and Clauses Unit proposed by Brown et al. (1984) has been more widely employed in studies of spoken language among adults, the Idea Unit is more applicable to linguistically immature children because they rarely speak in complete phrases. Kroll defines the Idea Unit as "a chunk of information which is viewed by the speaker/writer cohesively as it is given a surface form" (Kroll, 1977, 89). In principle, in this method, every new idea is considered a new utterance. To determine what a new idea is, Kroll employs as set of syntactic structures as an operational definition: (1) Full relative clauses when the relative pronoun was present, (2) phrases set off from the sentence with commas, (3) verbal elements as objects, (4) reduced clauses in which a subordinator is followed by a non-finite verb, and (5) post-nominal -ing phrases used as modifiers, as well as absolutes, appositives, and verbals. For example, "Sue roared all the harder./ She claimed I looked funny,/ clinging there,/ screaming./" Kroll (1977, 91) considers this text to represent four idea units.

Upon defining empathetic speech as the verbalization of an affective response that stems from the understanding and sharing of other people's feelings, uttterances concerning empathetic speech included the following three codes:

(1) *Reference to internal states*: utterances referring to the characters' emotions or perceptions, such as *Kanashisō dane* 'He looks so sad,' or *Itaiyo!* 'Ouch!'
(2) *Empathizing with others*: Any utterances expressing sympathy or empathy toward the characters, such as *Kawaisōni* 'Poor thing.' *Kanashisō dane* 'He looks so sad,' was dually coded as referring to internal states and also as empathizing with others.
(3) *Assimilations*: utterances in which the speaker is speaking from the characters' point of view, such as *paku paku paku* 'nom nom nom,' or "Ugh" when the caterpillar has a stomach ache.

3. Results

3.1 Preliminary Analysis

The researcher first conducted a preliminary analysis using a multiple regression to rule out the possibility that any results obtained from this study stem from the participants' demographic backgrounds, instead of purely linguistic and age-based features. Because there was a sizable difference in the length of the book reading sessions and the amount of conversation between the reader and child, all analyses were conducted concerning the proportion of utterances in which a speaker used a specific utterance type. This was calculated by dividing a speaker's total number of utterances for a specific code by the total number of that speaker's utterances.

The results indicated that the overall correlation between participants' demographic backgrounds and utterances was insignificant based on a probability of under 0.05. The only two demographic factors with a slight influence were that American children with mothers who had higher levels of education tended to use empathetic speech less often (β (coefficient)= -.254, p = .012) and that Japanese children who were more frequently read to tended to use empathetic speech more often (β (coefficient) = -.243, p = .037). Neither the American nor the Japanese mothers' utterances were correlated

with their demographic factors.

3.2 Maternal Empathetic Speech

The maternal and children's proportions of empathetic speech in terms of the child's age were graphically analyzed with scatter plots. In all of the figures, the horizontal axis is the child's age by year, and the vertical axis is the proportion of empathetic speech. Each plot represents one mother-child dyad.

As shown in Figure 1, the Japanese mothers started using empathetic speech with their children when their children were 2 months old, and the proportion of empathetic speech peaked at a maximum of 100% when the children were approximately 8 months old. This gradually decreased as the children matured, with the exception of a few outliers, until the proportion fell below 20% when the children were 4–5 years old.

Contrastively, the American mothers' empathetic speech followed a pattern that was opposite that of the Japanese mothers. As shown in Figure 2, except for a few outliers, American mothers only used empathetic speech for less than 20% of their utterances until the children were over the age of three. When the children were 3–4 years old, a maximum of 40% of the maternal utterances consisted of empathetic speech.

Figure 1

Japanese Mothers' Proportion of Empathetic Speech by Child Age

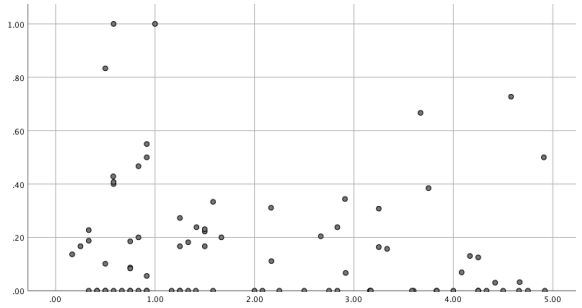
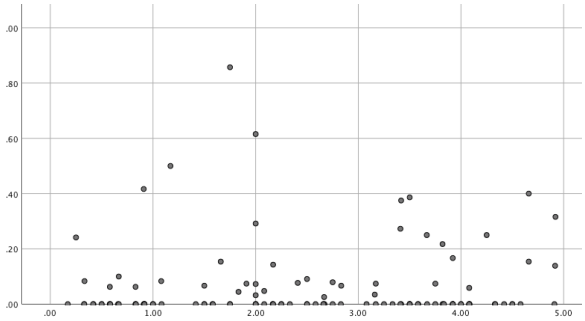


Figure 2

American Mother's Proportion of Empathetic Speech by Child Age



3.3 Children's Empathetic Speech

Both Japanese and American children started using empathetic speech when they were approximately 18 months old. While there were not enough utterances to conduct a statistically significant comparison, the Japanese children's use of empathetic speech increased when they were 2–3 years old, until the maximum proportion reached 40%. On the other hand, the American children began using a relatively high proportion of empathetic speech when they were 2 years old, which gradually decreased as they matured. By the age of five, the American children's utterances consisted of almost zero empathetic utterances.

Figure 3

Japanese Children's Proportion of Empathetic Speech by Age

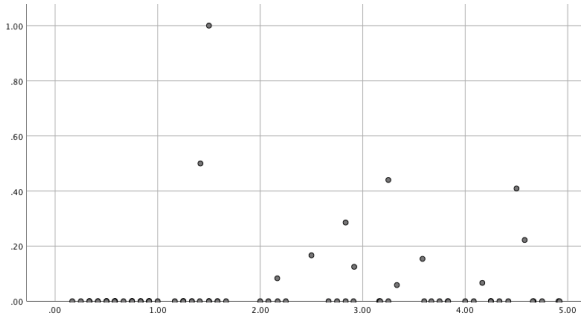
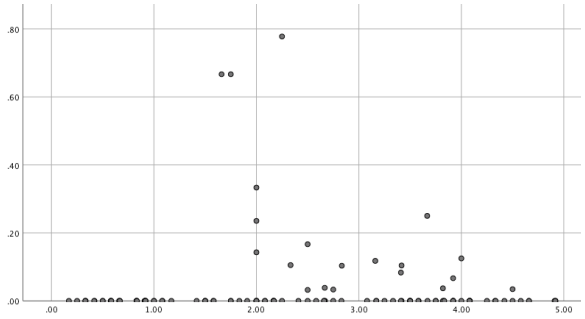


Figure 4

American Children's Proportion of Empathetic Speech by Age



4. Discussion

This paper sought to address how American and Japanese children acquire their respective styles of empathetic speech in the context of joint picture book reading. The preliminary analysis of the influence of demographic factors on the mothers' and children's utterances revealed that the overall correlations between participants' sex, age, education, frequency of book reading, and the number of times they had read the book prior to this study were insignificant. While some previous research has shown that a child's gender and parental reading frequency influence how parents read to their children (Teale, 1986; Fletcher and Reese, 2005), the findings of this study did not prove a reliable correlation between demographic background and empathetic speech during book reading. The lack of a correlation between gender and empathetic speech may suggest a change in parents' perception of gender roles, in which girls are no longer expected or perceived to be more caring and empathetic than boys.

Upon confirming through the preliminary analysis that any statistical trends in the data were based on language and the child's age, the mothers' and children's empathetic speech were analyzed for the Japanese and American samples separately.

The findings on the difference between Japanese and American parental use of empathetic speech evoke an important discussion. While previous research points out that the Japanese are generally more empathetic than Americans (Karasawa et al., 2006), the findings from this study suggest that this may not be a consistent cultural characteristic but rather an age-sensitive pass-point. The results showing that Japanese mothers used a high proportion of empathetic speech at the infantile stage and gradually decreased this proportion as the children developed may indicate that many Japanese parents initially immerse their children in a rich amount of empathetic speech but gradually decrease the amount of scaffolding to encourage their children to use such speech independently. On the other hand, American parents may use less empathetic speech in the infantile stage, but they later increase the amount of scaffolding in alignment with their children's linguistic and cognitive competence. Thus, the high value that many Japanese place on empathetic speech may not be a permanent or constant cultural characteristic.

This is further supported by the finding that both American and Japanese children used empathetic speech in approximately the same proportions, but at different ages. While the American children used the highest proportion of empathetic speech immediately after they became verbal, at approximately 18 months old,

the Japanese children began using a low proportion of such speech, which gradually increased as they matured. Based on the understanding that children's speech is primarily acquired through conversation with their caregivers, it is anticipated that the parent's values, as indicated by utterance types, are projected onto their children's speech, resulting in children born to empathetic parents using relatively more empathetic speech (Watanabe and Takiguchi, 1986). However, this was not the case for 2-year-old children in this study, as can be seen in the results.

On the other hand, the findings that the 4-year-old Japanese children used substantially more empathetic speech than the Americans could also be interpreted as indicating that Americans are more empathetic in the initial stage but that the Japanese learn to value empathetic speech more than Americans in the long run. This could mean that the American children acquire empathetic speech at a younger age than Japanese children but gradually shift to placing value on other conversation skills, such as stating their opinions and describing illustrations. Meanwhile, Japanese children may acquire empathetic speech at a slower pace than the American children, but they continue increasing the proportion of such as they mature.

While this interpretation would partially support the view that the majority of Japanese are more empathetic than Americans, the assumption that the Japanese are consistently more empathetic cannot account for the findings that the Japanese intentionally decreased their use of empathetic speech when caring for their 0–4-year-old children and that the maximum proportion of empathetic speech was approximately the same, at 40%, for both Japanese and American parents. This leads to the conclusion that the assumption proposed by the previous literature that the Japanese are more empathetic may be myopic or, at the least, an overgeneralization. Americans may equally value empathetic speech and simply socialize their children using a different approach.

However, caution is required in generalizing the findings of this study. Firstly, the sample size proved insufficient considering the wide age span of 0–4 years. Ideally, each age group should have at least thirty samples to allow a cross-sectional analysis.

Secondly, the conclusions of this study only apply to a very specific context because they study was based on the joint reading of a single book. Further analysis based on different books and situations, such as free-play or classroom settings, would be beneficial in testing the generalizability of the findings of this study.

Thirdly, a more precise analysis of each individual code is necessary to draw precise conclusions about the process by which children acquire empathetic speech. Consolidating the codes is beneficial in terms of shedding light on the bigger picture, but it also obscures significant details.

Finally, although the general concept of language socialization is that mothers and their children are in a mutual relationship in which the children's utterances influence and sculpt the mothers' utterances and vice versa, this paper did not address the way in which children's speech may have influenced maternal utterances. Integrating this factor instead of solely focusing on independent maternal and children's utterances will allow a more dynamic and multi-faceted approach to language acquisition through mother-child communication.

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What Defines Phases?*

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Keywords : phase theory, phi feature, infinitives, adjunct island effects, pair-Merge

1. Introduction

Let us start with a brief introduction of phases. The concept of phases is first introduced by Chomsky (2000) and further developed in Chomsky (2001, 2004, 2008, 2013, 2015). It is argued that phases are computational units of syntactic derivations, and transitive *v**P and CP form a phase. Under the phase theory, sentences are constructed separately phase by phase. Once syntactic operations in a phase have been completed, the phase head transfers its complement to the Conceptual-intentional (CI) interface and the Sensorimotor (SM) interface. Therefore, no elements within the complement of phases can be accessed. This constraint is named the Phase Impenetrability Condition (PIC).

(1) Phase Impenetrability Condition
In phase α with Head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.
(Chomsky (2000: 108))

Due to this concept, the computational burden is dramatically reduced since the domain of the earlier phases is rendered inaccessible to later syntactic operations.[1] Hence, phases play a crucial role in the development of generative grammar.

The aim of this paper is to refine the concept of phases. More specifically, we reexamine how phases are defined. We claim that what is needed for phases is an unvalued phi feature while arguing against the necessity of a Tense feature for phases, which is put forth by the analysis by Kanno (2008).

The rest of the paper is organized as follows. In section 2, we will see the phasehood of infinitives. Section 3 discusses Kanno (2008). In section 4, we will introduce empirical and theoretical problems which Kanno (2008) faces. Then, in order to resolve issues remaining in the previous literature, section 5 will propose an alternative analysis, and by extension, we will provide a phase-based explanation for adjunct island effects and revise pair-Merge. Section 6 concludes this paper.

2. Phasehood of Infinitives

It has been argued by a number of researchers that infinitival constructions in English do not constitute a phase (Grano and Lasnik (2018), Kanno (2008), Miyagawa (2011), Wurmbrand (2013)). In the previous literature, *wh*-island and Quantifier Raising (QR) are used as diagnoses of the phasehood of CP complements. In the following subsections, we reexamine whether infinitival complements constitute a phase or not.

2.1 *Wh*-Island Effects

It is well known that *wh*-island effects can vanish if the embedded complement is nonfinite, as shown in (2).

(2) a. What$_i$ do you wonder [how$_j$ PRO to

repair t_i t_j]? (Manzini (1992: 51))

b. * What$_i$ do you wonder [how$_j$ Mary repaired t_i t_j]? (*ibid*.)

Kanno (2008) and Grano and Lasnik (2018) argue that extraction from the control *wh*-island is possible because C of the control complements does not constitute a phase and is not subject to the PIC.

2.2 Quantifier Raising

We can also check the phasehood of relevant constructions with QR. It has been well known since May (1977) that QR is 'clause-bounded' as shown in (3).

(3) Someone thinks that John loves everyone. (∃>∀, *∀>∃) (Takahashi (2010: 331))

Cecchetto (2004), Miyagawa (2011), Takahashi (2010) and Wurmbrand (2013) provide a phase-based account for QR and they maintain that QR is a syntactic movement which also obeys the PIC. In (4), for instance, C of the control complement in (4a), the Exceptional Case-Marking (ECM) complement in (4b), and the raising complement in (4c) does not constitute a phase. This is clearly shown by the fact that QR is possible from infinitival complements:

(4) a. At least one professor claims/tends to read every journal. (∃>∀, ∀>∃) (Grano and Lasnik (2018: 467))

b. Someone expects Sue to marry every boy. (∃>∀, ∀>∃) (Wurmbrand (2013: 278))

c. Someone seems to attend every class. (∃>∀, ∀>∃) (Cecchetto (2004: 369))

3. Kanno (2008)

In this section, we will discuss Kanno (2008), which attempts to provide the explanation for the (non-)phasehood of infinitives. He provides an intriguing proposal that the presence of an "Agree feature" and a Tense feature on CP makes CP a phase, while the absence of one or both features makes it a non-phase. Under his proposal, finite complements have both features, thereby constituting a phase, while control, ECM, and raising complements lack one or both features, hence leading to no phases. This proposal is a promising candidate for defining a phase, as it can explain the behavior of all the infinitival complements, as exemplified in (2) and (4).

4. Empirical and Theoretical Problems

Here we argue that Kanno (2008) faces empirical and theoretical problems. One empirical problem is the control construction in European Portuguese, as shown in (5).

(5) a. O que (.que) perguntaste
what wondered-you
como/quando arranjar?
how/when to-fix
'What did you wonder how/when to fix?' (Eduardo Raposo (p.c.))

b. * O que (.que) perguntaste
what wondered-you
como/quando arranjares?
how/when to-fix.2sg
'What did you wonder how/when to fix?' (Eduardo Raposo (p.c.))

(5a) contains a non-inflected control complement, while (5b) includes an inflected control complement (*arranjares* 'fix' is the 2sg form of the inflected infinitive). A *wh*-phrase can

be extracted from the *wh*-control complement in (5a), in contrast with (5b). What is crucial here is that the only difference between (5a) and (5b) is the existence of an "Agree feature" (phi feature) in the control complement. The difference in grammaticality cannot be explained by Kanno (2008) since it assumes that the presence of both "Agree feature" and Tense feature is necessary for phasehood and that C of control complements does not have a Tense feature.

The second empirical problem is that his approach cannot be applied to *for*-DP-infinitives in (6).[2]

(6) a. A different student wanted to read every book. (∀>∃)
(Johnson (2000: 199))
b. A different student wanted for you to read every book. (*∀>∃) (*ibid*.)

If *to* infinitives have *for*-DP, inverse scope (∀>∃) is impossible, as in (6b). From this observation, Wurmbrand (2013) argues that *for*-DP-infinitives constitute a phase.[3] Hence, it is difficult to assume that a Tense feature is related to the determining factor of phases. Moreover, it is unlikely that C of control complements does not have a Tense feature. As Kanno himself notes, Landau (2000) argues that some types of control constructions do have the property of Tense. Kanno avoids this issue by arguing that control complements of this type do not show full temporal properties that finite clauses exhibit. But his argument is not persuasive, and (5) and (6) suggest that a Tense feature is not related to any property for phases.

Kanno (2008) also has a theoretical problem concerning *v**P phases. Since it assumes that *v**P is also a phase, a problem arises as to what in the first place defines a phase if *v**P is taken into consideration as well.[4] In general, *v**P does not have a Tense feature, so that it is unclear how *v**P can constitute a phase without a Tense feature. It would be desirable to unify the way of defining phases. Interestingly, Richard (2012) and Otsuka (2014) provide a phase-based analysis for the connection between phi feature agreement (inflection) and movement. In Swedish, Norwegian, and French (Richards (2012: 205)), for example, when A-movement is observed, inflection is also found on passive particles, whereas when A-movement is not seen, it is not found. For these facts, Richards (2012) proposes that when a partially defective *v* head contains uninterpretable features, it triggers the transfer (see also Richard (2012) and Otsuka (2014) for detailed analyses and remaining problems). What is important here is that an unvalued phi feature triggers transfer at the *v*(*)P level. Apparently, a Tense feature is not related to constituting a phase.

5. Proposal

Recall that the inflected infinitive in (5b) constitutes a phase. This is a clear indication that an unvalued phi feature ("Agree feature") is the determining factor of phases, irrespective of a Tense feature. Concerning phases, Chomsky (2015) makes the following statement:

(7) [L]anguages have unvalued features, assigned values in certain structural positions. These features mark phases, a particular execution of strict cyclicity, well-motivated on grounds of computational efficiency[.]
(Chomsky (2015: 5))

Extending this suggestion, we argue that an

unvalued phi feature constitutes a phase and show that this can successfully capture this empirical fact in (5b) and (6b): a Tense feature is no longer necessary for the determining phases.[5]

5.1 Analysis

5.1.1 Control in European Portuguese

Our analysis straightforwardly provides an explanation for the asymmetry of (5a, b). Under our proposal, C of the inflected control complements in (5b) does constitute a phase because it bears an unvalued phi feature. In contrast, C of the non-inflected control complement in (5a) does not bear an unvalued phi feature and no phases are constituted; thus, extraction from it is allowed in (5a) unlike (5b).

5.1.2 *For*-DP-infinitives in English

With regard to the *for*-DP-infinitive as in (6b), we argue that C of control complement has an unvalued phi feature, which is made evident by the existence of DP in Spec TP.[6] This is why the *for*-DP-infinitive constitutes a phase, so that extraction from it is made impossible, as shown in (6b).

5.1.3 ECM and Raising

We claim that C of ECM and raising complements does not have an unvalued phi (Agree) feature, contrary to Kanno's (2008) argument. For the existence of an unvalued phi feature, Kanno provides the following evidence:

(8) John$_i$ seems to Mary [*t* to appear to himself$_i$ *t* be happy].
(Castillo, Drury, and Grohmann (1999: 29))

(9) Mary believes the students all to know French. (Boskovic (2001: 68))

These data seem to suggest that an unvalued phi feature attracts DP to the TP Spec position in the complement clause. However, as Epstein, Kitahara Seely (2014: 471 fn. 24) argue, Free Merge allows both one-fell-swoop A-movement and successive-cyclic A-movement. Thus, the argument that an unvalued phi feature attracts DP is no longer available for explaining the grammaticality of (8) and (9) under Free Merge. Hence, there is no reason for us to assume the existence of an unvalued phi feature in CP of ECM and raising complements.

5.1.4 Adjunct Island Effects

Finally, we extend our phase-based analysis to the adjunct island to account for the extraction condition analogous to infinitive clauses. It has been observed traditionally that extraction from adjunct clauses is impossible, which is called adjunct island (Ross (1967)). Under Chomsky (2004, 2008), the adjunct island effect is explained by pair-Merge, which yields ordered pairs, corresponding to Adjunction in Government and Binding theory. Chomsky uses a "separate plane" for the pair-Merged adjunct, so that adjunct is invisible in syntax and extraction from the adjunct is thus impossible. However, Truswell (2011) observes that there are cases where extraction from adjunct clauses is not always impossible, as we can see the difference in acceptability between (10) and (11). As Oseki (2015) points out, if the adjunct island is truly invisible in syntax, we cannot explain why extraction from (11) is possible.

(10) a. * Who$_i$ did John go home [before he talked to t_i]?
b. * Who$_i$ did John go home [after he talked to t_i]?
c. * Who$_i$ did John fall asleep [while he was talking to t_i]?

(Truswell (2011: 176))

(11) a. What$_i$ did you come round [to work on t_i]?
b. Who$_i$ did John get upset [after talking to t_i]?
c. What$_i$ did John come back [thinking about t_i]?

(Truswell (2011: 129))

Since pair-Merge was originally invented for an empirical reason (Chomsky (2004: 117)), the grammaticality of (11) is highly problematic. The fact that extraction from a nonfinite adjunct is possible indicates that the adjunct is visible in syntax, unlike Chomsky's (2004) assumption. This leads us to propose the following:

(12) A pair-Merged syntactic object does not contribute to labeling but is visible in syntax.

By (12), extraction from an adjunct clause is a theoretically viable option, contrary to the previous literature. Then, why is extraction from finite adjunct clauses impossible? This paper demonstrates that its invisibility can be attributed to the PIC under the phase theory.[7] First, following Haegeman (2012), we assume that the edge of an adjunct cannot be used as an escape hatch because of the existence of the temporal operator in its Spec CP. In (10), C in the adjunct clause has an unvalued phi feature, constituting a phase, so that the *wh*-phrase cannot be extracted due to the PIC. On the other hand, in (11), C in the adjunct clause does not have any unvalued phi features; thus, no phases are constituted, and *wh*-extraction is therefore possible.[8]

6. Conclusion

To conclude, we have explored how phases are defined. We have also seen the intriguing proposal for defining phases which Kanno (2008) makes and pointed out its empirical and theoretical problems. Then, by extending Chomsky's (2015) suggestion, we have proposed that an unvalued phi feature constitutes a phase and provided a principled explanation for remaining issues in the previous literature, while eliminating redundancy. Furthermore, we have showed that our proposal can be extended to the adjunct island effects and put forth a revised restriction on pair-Merge.

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NOTES

[1] However, Chomsky, Gallego and Ott (2019) point out that this view is not literally correct since Merge can be applied to the whole phase (Obata (2010)). Since this discussion goes beyond the domain of this paper, we leave it for future research and just assume the general view of the PIC.

[2] Kanno (2008) focuses on a subclass of control constructions, which are exhaustive control and *wh*-infinitival constructions under Landau's (2000) classifications and not on *for*-DP-infinitives, as he notes.

[3] Wurmbrand (2013) proposes that the difference in value selection is a crucial factor that determines whether the top projection of a clausal complement is a phase or not. Since *for*-DP-infinitives lack value selection, they are phases. We will seek another possibility of why

they constitute a phase without appealing to value selection.

[4] Kanno (2008: 24 fn. 2) states that he focuses on only CP and his proposal makes a different claim from Chomsky's (2008). Instead, we will attempt to capture the phasehood of CP and *v**P without appealing to the idea of a Tense feature.

[5] This proposal can be supported by anaphor binding, as analyzed by Saito (2017a, b). On the basis of Quicoli's (2008) phase-based analysis of its locality, Saito (2017a, b) proposes that transfer domain is changed if T lacks phi feature agreement, which precisely captures the peculiar anaphor biding phenomena. Even if transfer domain is changed, Saito (2017a, b) assumes that CP is always a phase.

[6] Martin (1996) argues that *for* has a phi feature in order to explain the incompatibility of *for*-infinitives with PRO.

[7] Phase-based approaches to adjuncts are also proposed in previous studies. See Narita (2011) among others.

[8] Truswell (2011) claims that extraction from adjuncts is also affected by semantic and pragmatic factors. What is crucial here is that it is syntactically possible if C of adjunct clauses does not constitute a phase.

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Passive Participles Movement in the History of English*

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Keywords: passive participle movement, floating quantifier, multiple agree

1. Introduction

In Present-day English (PE), a passive participle must not occur in the position preceding a floating quantifier (FQ) or a *v*P/VP-adverb, as shown in (1).

(1) a. * The votes have been **counted** *all*.
(Bobaljik (1995: 206))
b. ??/* Ever since then, our invitations have no longer been **accepted** *always* by your parents.
(Caponigro and Schütze (2003: 296))

In Early English, however, the participle-FQ (Part-FQ) word order or the participle-adverb (Part-Adv) word order was permissible, as the examples from the *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE) illustrate in (2).

(2) a. ac *hys wundra* næron **awritene** *ealle*
but his wonders weren't written all
'but his wonders were not all written'
(coaelhom, ÆHom_6:318.1025: LOE)
b. and cwædon þæt se tima forþ agan wære and þæt folc wære **gewergod** *þearle*
and said that the time away passed were and that people were wearied exceedingly
'and said that the time had been passing away, and that the people were exceedingly wearied.
(coaelive, ÆLS_[Martin]:1416.6907)

This study investigates the historical development of the word-order pattern in (2) by employing the historical corpora and explaining the reason it was lost in the history of English within the framework of minimalist program (Chomsky (2000, 2001)).

This paper is organized as follows. Section 2 examines the historical distribution of the passive participle with respect to FQs and adverbs. The investigation reveals that the Part-FQ/Adv word order was lost during Section 3 proposes an analysis of the syntactic derivation of Part-FQ/Adv word orders. I claim that a passive participle might undergo head movement to a higher projection out of *v*P in Early English, by postulating a functional projection. Section 4 discusses why the participle movement was available until the 15th century but became unavailable from then on. Section 5 is the conclusion.

2. Historical Data

I examine the distribution of the passive participle with respect to FQs and adverbs in the history of English by employing the YCOE, *The Penn-Helsinki Parsed Corpus of Middle English, Second Edition*, and *The Penn-Helsinki Parsed Corpus of Early Modern English*. As the interpretation of a participle in BE passive is

sometimes ambiguous between its verbal and adjectival forms, it is difficult to distinguish this category based on their forms. Following Wasow (1977), who demonstrated that verbal passive participles are neither formed from unaccusative verbs nor prefixed with *un*-, this study focuses on participles of transitive verbs without the *un*- prefix. As for adverbs, this study focuses on *v*P/VP adverbs occuring in the middle field, which express manner, time, frequency, place, means, etc. The results of this investigation are summed up in Tables 1 and 2. Some examples are given below each table.[1]

Table 1. Relative Orders of FQs and Passive Participles

	EOE	LOE	EME	LME
FQ-Part	4	51	18	35
Part-FQ	0	17	8	7
Part-FQ (%)	0	25	30.8	16.7

	E1	E2	E3
FQ-Part	17	38	25
Part-FQ	0	0	0
Part-FQ (%)	0	0	0

(3) a. *Hi* wurdon ða **gebysgode** on
They were then engaged in
heora gebedum *ealle*,
their prayer all
'Then they were all engaged in their prayer'
(coaelive, ÆLS_[Sebastian]:350.1421: LOE)

b. þt forte alesen moncun þt schulde beon **forloren** *al*
'until release mankind who should all be destroyed' (CMJULIA,100.79: EME)

c. And so were they **buryed** *bothe*,
'And so they were both buried'
(CMMALORY,69.2362: LME)

Table 2. Relative Orders of *v*P/VP Adverbs and Passive Participles

	EOE	LOE	EME	LME
Adv-Part	215	375	99	355
Part-Adv	8	128	19	3
Part-Adv (%)	3.6	25.4	16.1	0.8

	E1	E2	E3
Adv-Part	17	38	25
Part-Adv	0	0	0
Part-Adv (%)	0	0	0

(4) a. We habbaþ nu **gesæd** *sceortlice*
We have now related briefly
on ðysum gewryte hu se halga
in this writing how the holy
Marcus wæs gemartyrod.
Mark Avas martyred.
'We have now related briefly in this writing how the holy Mark Avas martyred.'
(coaelive, ÆLS_[Mark]:104.3277: LOE)

b. þt Iesucrist for beode ear ha beo **iset** *wel*.
'that Jesus Christ forbids before he is set well'
(CMANCRIW-1,II.188.2676: EME)

c. for þi wil sain benet þat it be saide hezlike
'St. Benet wish that it is highly said for them' (CMBENRUL,19.641: LME)

Tables 1 and 2 provide clear evidence that the distribution of Part-FQ/Adv word order occurred with a certain frequency until the end of Old English (OE), even though this distribution is lower than that of the

FQ/Adv-Part order. In Early Middle English (EME), however, the Part-FQ/Adv word order was attested to decline from the end of 14th century and was ultimately lost during the 15th century.

3. Analysis

This section provides an analysis of the syntactic derivation of Part-FQ/Adv word orders. Following Sportiche (1988), I assume that an FQ is stranded in the position where the associated DP is base-generated. Moreover, according to Cinque's (1999: 116ff) cartographic analysis on the position of adverbs, the ungrammaticality of (1) follows immediately from the failure of the licensing of an FQ or a *v*P/VP adverb in a clause final position, as represented in (5).

(5) * [$_{TP}$ DP$_i$ [$_{T'}$ have [$_{PerfP}$ been [$_{vP}$ t_i [$_{v'}$ Part [$_{VoiceP}$ -*en* [$_{VP}$ [FQ/Adv] [$_{VP}$ t_V t_i]]]]]]]]

With the assumption that the position of an FQ/adverb is universally fixed, the occurrence of a Part-FQ/Adv word order should be considered as the result of the movement of the participle. A natural question to ask is why it moves, that is, what is the motivation for participle movement?

Given that Early English had a richer system of inflectional morphology than PE (e.g., Roberts (1993), van Gelderen (1993), Biberauer and Roberts (2010)), the movement can be considered as a result of the richness of verbal agreement morphology. On the one hand, languages with rich inflection can have participles moving to a higher position, such as Italian and Spanish, as exemplified in (6) and (7). On the other hand, participles remain in the base-generated position in languages with weak inflection (for instance, PE).

(6) a. I libri sono *tutti* **letti**. (Italian)
the books are all read
b. I libri sono **letti** *tutti*.
the books are read all
'The books are all read.'
(Cirillo (2009: 32))

(7) a. Los libros son *todos* **leídos**. (Spanish)
the books are all read
b. ? Los libros son **leídos** *todos*.
the books are read all
'The books are all read.'
(Cirillo (2009: 38))

In the Italian sentences in (6), the FQ *tutti* 'all' can occur in the position either preceding or following the participle *letti* 'read'. In the Spanish sentence given in (7), the FQ-Part word order is also highly acceptable.

Furthermore, Caponigro and Schütze (2003: 296) provide a comparison between the placement of English and Italian passive participles, as in (8) and (9).

(8) a. Ever since then, our invitations have no longer *always* been **accepted** by your parents.
b.??/* Da quella volta in poi, i nostri
from that time in then the our
invite non sono più
invitations not are any-longer
sempre stati **accettati** dai
always been accepted by-the
tuoi genitori.
your parents

(9) a.??/* Ever since then, our invitations have no longer been accepted always by your parents.
b. Da quella volta in poi, i nostri inviti non

sono più stati **accettati** *sempre* dai tuoi genitori.

(Caponigro and Schütze (2003: 296))

Given the standard assumption that adverb positions are universal (Cinque 1999), it is shown that Italian passive participles are raised higher than PE passive participles. In contrast to (8a) and (9a), (8b) and (9b) show that the adverb always can only precede the passive participle in PE, whereas the Italian adverb is much more natural following the passive participle. Under the assumption that FQs or *v*P/VP adverbs are adjoined to [Spec, *v*P/VP], I postulate that the landing site of participle movement is F, which is the head of a higher functional projection above *v*P, bearing [EPP], which can trigger the movement of the participle. As the annotation of the Italian and OE examples represented in (10a, b), a passive participle in these languages bears an agreement inflectional morpheme along with its internal argument DP. As there are more than two elements in this Agree relation, I adopt Hiraiwa's (2001) Multiple Agree approach and assume that F acts as a probe and enters into a Multiple Agree relation with the subject DP bearing [*i*φ] and [*u*Case] as well as the passive participle bearing [*u*φ] and [*u*Case]. As a result of agreement, the passive participle undergoes successive cyclic head movement to F, as schematized in (11).

(10) a. Le ragazze sono
the.FEM.PL girls.FEM.PL are.PL
state **arrestate**.
been.FEM.PL arrested.FEM.PL
'The girls have been arrested.'
(D'Alessandro and Roberts (2008: 478))

b. Gehwa wundrað hu se
Everybody wonders how the
hælend become into his
Saviour came to his
apostolum & wæron þeahhwæðere
apostles and were though
þa dura **belocene**.
the gates closed.NOM.FEM.PL
'Everybody wonders how the Saviour came to his apostles, even though the doors were closed'
(ÆCHom I, 16: 308.27 / Los (2015: 83))

(11) …[$_{FP}$ Part$_i$ [$_{vP}$ FQ/Adv [$_{vP}$ DP$_j$ t_i [$_{VoiceP}$ *-en* [$_{VP}$ t_i t_j]]]

Adapting (11), I will discuss why the Part-FQ/Adv word order was available until the 15th century but became unavailable from then on in the following section.

4. Participle Movement in Early English

The derivation of (2a) (repeated in (12a)) is represented in (12b).

(12) a. ac *hys wundra* næron **awritene** *ealle*
but his wonders weren't written all
'but his wonders were not all written'
(coaelhom, ÆHom_6:318.1025: LOE)

b. [$_{TP}$ hys wundra$_i$ [$_{T'}$ næron [$_{FP}$ awritene [$_{vP}$ [$_{QP}$ ealle] [$_{vP}$ t$_i$ [$_{v'}$ t$_V$ [$_{VoiceP}$ *-en* [$_{VP}$ t$_V$ t$_i$]]]]]]]

In (12a), the passive participle in the *v* head successfully enters into a Multiple Agree relation with the probe T and subject DP in Spec-*v*P. As a result, the participle moves to Voice head past the FQ, deriving the Part-FQ order. Similarly, the derivation of (2b) (repeated in (13a)) is represented in (13b).

(13) a. and cwædon þæt se tima forþ
and said that the time away
agan wære and þæt folc
passed were and that people
wære **gewergod** *þearle*
were wearied exceedingly
'and said that the time had been passing away, and that the people were exceedingly wearied.
(coaelive, ÆLS_[Martin]:1416.6907)

b. [$_{CP}$ þæt [$_{TP}$ folc $_{i}$ [$_{T'}$ wære [$_{FP}$ gewergod [$_{vP}$ [$_{QP}$ þearle] [$_{vP}$ t$_{i}$ [$_{v'}$ t$_{V}$ [$_{VoiceP}$ *-en* [$_{VP}$ t$_{V}$ t$_{i}$]]]]]]]

According to Wojtyś (2016:197), the loss of inflectional endings of passive participles reached its peak in the 14th century. The demise of the Part-FQ/Adv order is thus a consequence of the loss of movement and agreement of passive participles.

5. Conclusion

This study confirms that a passive participle could occur in the position preceding an FQ or a *v*P/VP adverb until the 14th century. It was argued that a passive participle may enter into a Multiple Agree relation with a functional head F and the subject DP. The landing site was argued to be the head of FP. When the English passive participles lost their inflection morphemes, the movement ceased to be available.

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NOTES

[1] Here are the standardly assumed historical periods of English: Early Old English (500−950), Late Old English (950−1150), Early Middle English (1150−1350), Late Middle English (1350−1500), Early Modern English (1500−1710), E1 (1500−1569), E2 (1570−1639), E3 (1640−1710).

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How to License NPIs and PPIs in the *Than*-Clause Across *More Than*- and *Less Than*-Comparatives

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Keywords: NPIs, PPIs, Comparatives

1. Introduction

It is well-known that the *than*-clause of *more than*-comparative constructions CCs can license negative polarity items NPIs and much recent semantic work has pointed to positive polarity items PPIs also being licensed in this position. While not much attention has been paid to *less than*-CCs, it has been pointed out that the *than*-clause of *less than*-CCs is upward- entailing, with NPIs also occurring in this position. The aim of this paper is to explore licensing(-like) properties of the *than*-clause across *more than*- & *less than*-CCs. We specifically focus on possible appearances of positive & negative polarity items (PPIs, NPIs) with varying acceptability in CC *than*-clauses. The analysis here is couched in Heim's (2006a) *CCs as generalized quantifiers over degrees* approach to clausal comparatives, with the internal argument specifying a finite set & the external argument not specifying such a set (based on Hornstein & Pietroski 2009).

2. Typical Examples to Account For

We will see the following four cases with their varying possibilities: i) an NPI in the *than*-clause of a *more than*-CC ((1a, b)); ii) a PPI in the *than*-clause of a *more than*-CC ((1c)); iii) an NPI in the *than*-clause of a *less than*-CC ((1d, e)); & iv) a PPI in the *than*-clause of a *less than*-CC ((1f)):

(1) a. Sarah was taller than *anybody* had expected.
b. Belinda is much richer than I will *ever* be. (NPI-licensing; Rullmann 1995: 64)
c. John is taller than *some professional basketball players are*. → John is taller than *some professional athletes are*. (*some* as a PPI/'upward entailing'; Giannakidou & Yoon (2017: 3)
d. Sarah was less tall than *anybody* had expected.
e. Belinda is less rich than I will *ever* be. (NPI-licensing; Rullmann 1995: 80)
f. Fewer students danced than *teachers sang a ballad.* → Fewer students danced than *teachers sang.* ('upward-entailing'; Rullmann 1995: 79, note 4)

3. Assumptions and Analysis

The **standard of comparison** contributed by the *than*-clause provides ***a finite set/interval of degrees***, informationally being a discourse-given topic of some sort ((2ai), ii)). I take "*-er/less (= -er+little)"* as the heads of the CCs taking two arguments (2bi), ii)); based on Heim 2006a,b; also Morzycki 2016):

(2) a. i) Mary is taller than John is. (with Mary being 180cm & John 170cm)
ii) John is less tall than Mary is.

b. i) [[*-er* [$_{\text{INTERNAL}}$ than John is]] [$_{\text{EXTERNAL}}$ Mary is tall-($_{\text{er}}$ e) [e]]]
Mary's height: (0 ~ 180cm), John's height: (0 ~ 170cm)

ii) [[*less=-er+little* [$_{\text{INTERNAL}}$ than Mary is]] [$_{\text{EXTERNAL}}$ John is ($_{\text{less=er+little}}$ e) tall [e]]]
Mary's height: (180cm ~ ∞), John's height: (170cm ~ ∞)

The focus of the CC in (2ai)) is the existence of some degrees of Mary's height surpassing the set of all such degrees of John's height. The focus of the CC in (2aii)) is the existence of some degrees of John's height falling below the set of all such degrees of Mary's height.

4. Licensing Requirements for NPIs and PPIs: Some Basic Considerations

The following may give us some material to start with:

(3) a. NPI-licensing requires the presence of some ***finite set/interval of degrees***.
b. PPI-licensing requires the presence of some ***set/interval of degrees***.

As for (3b), I keep for part of its exposition to Chierchia (2013: 37, note 16: "… plain indefinites like *some/a* can also activate subdomain alternatives. If this is so, then polarity items and plain indefinites are identical in both meaning and alternatives. *The only difference between the two is whether the alternatives have to be obligatorily used (i.e., factored into the meaning) or not*" (emphasis — *NS*); see also Chierchia 2013: chapter 2). We will see some baseline logic below for (3a) purposes along the lines of Chierchia (2013: 30-31, 34; with *D* for *individuals, ALT* for *a set of alternatives,* (4c) as *any*'s normal semantic value, and (4d) as *any*'s focus value constituted by sets of values of the same type as *any*):

(4) a. ⟦There aren't any$_{F,D}$ cookies left⟧= $\neg \exists x \in D$ [cookies (x) $\wedge$ left(x)]
b. ALT = {$\neg \exists x \in D'$ [cookies (x) $\wedge$ left(x)]: $D' \subseteq D$}
c. ⟦any$_{F,D}$⟧= $\lambda P \lambda Q \exists x \in D$ [P(x) $\wedge$ Q(x)]
d. ⟦any$_{F,D}$⟧^{F} = {$\lambda P \lambda Q \exists x \in D'$ [P(x) $\wedge$ Q(x)]: $D' \subseteq D$}

Any carries an inherent (phonologically unrealized) focal feature F, which signals that *any* associates with a set of alternatives constrained as in (4) above. The focal feature on *any* is the lexical property distinguishing it from plain existentials which is used to code the fact that the alternatives with which a statement involving *any* can be contrasted involve existentials with smaller domains. The system in (4) points to the requirement that the original individuals associated with *any* be larger than any of its alternatives. Since the original individuals associated with *any* cannot be infinite, the resulting set of individuals turns out to be finite (see (3a)).

Chierchia (2013: 32, 36-39) further derives the observation that, **when contrastively stressed, *any* acts as a "domain widener.**" If *any* (eventually, its semantics must always involve O) comes with obligatorily active alternatives, they must always be factored into meaning through alternative sensitive operators,

such as *only/O,* which "use up" active alternatives associated with the contrastive focus. Look at (5) below, where the logical form of (5a) is (5b), in which O targets the alternatives associated with *any.* In (5b), the first argument of O is the subscripted variable C ranging over alternatives (i.e., a set of propositions) and its second argument is the prejacent sentence in square brackets; with 'O' in (5b) as the null counterpart of *only,* which is a standard device for exhaustifying:

(5) a. There aren't $any_{F,D}$ cookies left.
b. O_C [There aren't $any_{F,D}$ cookies left]

(6) a. $\neg \exists x \in D$ [cookies (x) $\wedge$ left(x)]
b. $\{\neg \exists x \in D'$ [cookies (x) $\wedge$ left(x)]: $D' \subseteq D\}$

The assertion is expressed truth-conditionally in (6a), while the alternatives are as in (6b) in virtue of the lexical constraint on *any* (see (4) above). All the members of the alternative set in (6b) are entailed by the assertion (6a). Then the result of exhaustifying (6b) is simply equivalent to the plain assertion:

(7) O_C [There aren't $any_{F,D}$ cookies left] =
[There aren't $any_{F,D}$ cookies left]
$= \neg \exists x \in D$ [cookies (x) $\wedge$ left(x)]

Then (5a) turns out to be a plain negative existential statement, returning the meaning of the assertion unaltered. And this result will ensue whenever a word like *any* occurs in the local environment of a downward entailing (DE) operator. (Note that the case of *any* not within the scope of a DE operator, 'There are any_D cookies left,' would lead to a *contradiction,* communicatively useless; see Chierchia 2013: 39-40.) ***It also turns out that we are left with the original domain D for individuals, which must somehow be 'finite.'*** Note that there are popularized points of view to the effect that *it is impossible to prove that something is absent/nonexistent.* ***Indeed, it would be impossible to prove that something is absent in the absence of the finite domain of its existence. But given a finite domain for its existence, it may not be so difficult to find out whether something is absent or present.***

Recall the *Problem of induction/"Black swan problem."* "Induction is the glory of science and the scandal of philosophy," according to C.D. Broad. In spite of the great number of observations you have made that "swans are white," you cannot be sure by inductive reasoning that the next time you see a swan, it will be white, excluding the possibility of it being black (based on the information taken from *Wikipedia: Problem of induction*). It seems that the net result of the Problem of induction should be the impossibility of proving something's nonexistence, which would somehow come to be possible when you are given a finite domain (i.e., not infinite) for the purposes of its existence.

Generally, you assert that *something is nonexistent* in the context of a case of NPI-licensing. Uttering "There aren't any books on the desk," you want to convey the nonexistence of books on the desk. Popularized views (i.e., via inductive reasoning) have it that you cannot prove the nonexistence of something without a finite domain for the purposes of its existence. Then you obtain an argument of a 'third-factor' sort for the necessity of a finite domain for NPI-licensing.

Moreover, if people's mistaken belief (i.e., 'mistaken' in the sense of the 'scandal of philosophy') is coped well with as a 'third-factor' resource incorporated into and contributing to the making of language (like NPI-licensing cases), this may create quite an interesting aspect of human language, which may continue to remain at the level of children who seem to developmentally believe whales to be a species of fish.

5. Some Consequences

Returning to (3a, b), part of the considerations entering into the logic leading to (3a, b) may be found in (8) below:

(8) a. For NPI licensing, you need a set with a maximal degree other than ∞.
b. For PPI licensing, you only need a set with ∞.
c. A *than*-clause, which is the first argument of the comparative construction as a generalized quantifier, naturally gives an environment for NPI-licensing.
d. What happens when the *than*-clause licenses a PPI? See the following:
i) John is taller than *some professional basketball players are*. (= (9) below)
ii) John is taller than *max* (λ*d.* ∃x[tall (x, *d*) ∧ [things-less-tall-than-John ∩ professional-basketball-players] (x)])

The set of professional-basketball-players can be in any height, satisfying the PPI licensing requirement in (3b). The presence of the (maximal) height-degree less than John's height contributes to satisfying (3a) for the purposes of NPI-licensing.

I take the licensing requirements (3a, b) to be the baselines to account for the unmarked status of NPI-licensing in the *than*-clause of *more than*-CCs ((1a, b)) and PPI-licensing in the *than*-clause of *less than*-CCs ((1f)). Let us see the marked cases of PPI-licensing in the *than*-clause of *more than*-CCs ((1c)) & NPI-licensing in the *than*-clause of *less than*-CCs ((1d, e)):

(9) a. John is taller than *some professional basketball players are*. → John is taller than *some professional athletes are*. (= (1c))
b. John is taller than *max* (λ*d.* ∃x[tall (x, *d*) ∧ [things-less-tall-than-John ∩ professional-basketball-players] (x)])

The requirement in (9b) is that there be a non-null intersection of a (finite) set of height-degrees less than John's height and set of professional basketball players (in any height). I assume that upward-entailing computation is implemented independently of comparative interpretation. Look at (10) before getting on to (1d):

(10) Lucinda is driving less fast [than [is allowed on this highway].
(Heim 2006b, 35 (1))

Suppose that the posted speed limit is 65mph (65mph ~ ∞) and the posted minimum speed 40mph (40mph ~ ∞). Given the ***finite*** speed interval of 40 ~ 65 mph obtained from the above two points of speed, we get the two readings: (i) "less-than-max" => < 65mph; & (ii) "less-than-min" => < 40mph (Heim 2006b).

(11) a. Sarah was less tall than *anybody* had expected. (= (1d); with Sarah being 150cm)

b. Sarah's height: (150cm ~ ∞)

c. Sarah was less tall than *max/min* ((*anybody-had-expected*) $_{(M)}$ ∧ λ*d*. ∃x[tall (x, *d*) ∧ Sarah (x)])

For the purposes of the requirement (3a), we need a *finite set/interval of degrees* of Sarah's height for the *than*-clause. Suppose then that Sarah's heights a la *anybody-had-expected* are: *min:* 160cm ~ ∞ & *max:* 170cm ~ ∞, leading to a finite set/interval of height degrees: 160cm ~ 170cm. Then in this case as well, we get two interpretations: i) Sarah's actual height < *min:* 160cm, & ii) Sarah's actual height < *max:* 170cm.

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A Unified Account of Mad Magazine Sentences and Non-canonical Types of *How Come* Construction in English

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Keywords：*How Come* constructions, Mad Magazine Sentences, default case, EPP effect

1. Introduction

Akmajian (1984) discussed a special class of exclamative sentences which is dubbed Mad Magazine Sentences (henceforth, MMs), which is illustrated in (1).

(1) What! *Her* call me up?! Never.
(Akmajian (1984: 3))

MMs share a common property with a special type of *How Come* Construction (henceforth, HCC) in (2): their subjects appear in the accusative form.

(2) "How come *him* to mention me at all?"
(COHA,1932,FIC,Store)

(2) is not a typical type of HCC in that the subject appears in the accusative form as *him* followed by the *to*-infinitive *to mention*. We call this type non-canonical type of HCC. What we call a canonical type of HCC is the one with nominative subjects, as illustrated in (3), where the subject *John* is marked nominative followed by the inflected verb *left*.

(3) How come John left?
(Collins (1991: 32))

(4) is another variant of the canonical type of HCC with nominative subjects followed by *to*-infinitives instead of finite verbs.

(4) how came *he* to have such daughters?
(COHA,1846,FIC,ElinorWyllysVolume1)

Kondo and Tamada (2020) suggest that *come* in (3) is base generated under C as a result of reanalysis of V-element into C-element in line with Late Merge Principle (Gelderen (2004, 2011)), or base generated in the specifier of CP forming a constituent with *how*, whereas *came* in (4) is base generated under V and raised to the CP domain through T. Their derivations are shown in (5) and (6) respectively (cf. Kondo and Tamada (2020: 75) for the original derivations).

(5) a. $[_{CP}$ how $[_{C}$ come$]$ $[_{TP}$ John T $[_{vP}$ t_{John} $[_{VP}$ left$]]]]$
b. $[_{CP}$ [how come] $[_{C}$ Ø$]$ $[_{TP}$ John T $[_{vP}$ t_{John} $[_{VP}$ left$]]]]$

(6) $[_{CP}$ how $[_{V+v+T+C}$ came$]$ $[_{TP}$ he t_{V+v+T} $[_{vP}$ t_{V+v} $[_{VP}$ t_{V} t_{he} [to have such daughters]]] $t_{how}]]$

The similarity between (2) and (4) in word order would lead us to assume that *come* is a lexical verb in (2), though these examples are different in that only in (4) is *come* inflected.

The purpose of this paper is to account for the similarity between (1) and (2) and the difference between (2) and (4) within the minimalist theory. Adopting the framework of Chomsky (2008), this paper will propose that in

MMs and the non-canonical type of HCC, the head of CP is merged without φ-features and tense feature. It will be argued that the lack of the relevant features in C leads to the assignment of an accusative case to the subject in the two constructions.

2. Properties of Mad Magazine Sentences

Before proceeding to a detailed analysis, let us look briefly at some of the syntactic properties of MMs (see Akmajian (1984) and Schütze (1997) for further properties of MMs not listed here).

First, the subjects appear in the accusative form in MMs, as we have seen in (1). This is also seen from the following pair of examples, which shows that it is impossible for the subjects to appear in the nominative form.

(7) a. What! Her call me up?! Never.
b. What! *She call me up?! Never.
(Schütze (1997: 189))

Second, the verbs in MMs are not inflected for tense, person and number. The inflected verbs *broke* and *worries* are used in (8a) and (8b) respectively, which leads to ungrammaticality.

(8) a. * What?? Him broke a promise??? Never!
b. What?? Him worry/*worries? Never! (Schütze (1997: 189))

Third, MMs do not allow the presence of modals, which occupy the domain of TP.

(9) What?? Him (*will/should/could/would/ can/must/might) leave the firm??? Never!
(Schütze (1997: 189))

The first property is the same as that of the non-canonical type of HCC, as we have seen in (2). The second and third property can also be seen in the non-canonical type of HCC as in (2), as well as in the canonical type of HCC as in (3).

In addition to these syntactic properties, there is an important phonological constraint in MMs: the subject forms an obligatory intonation center, and thus it is always stressed, as shown in (10).

(10) a. Him get a job?!
b. * 'im get a job?!
(Akmajian (1984: 8))

The ungrammaticality of the example in (10b) would suggest that the subjects in MMs cannot be phonologically reduced due to its status as a focus. We will argue below that this property can be regarded as the same as that of *wh*-movement of *how* in HCC.

3. Theoretical Background

In this paper, we adopt the framework presented by Chomsky (2008). He assumes that T inherits φ-features and tense feature from C. This enables T to serve as a probe and establish an Agree relation with the goal DP, valuing and deleting its Case feature. As a result, it is attracted to the specifier of TP. Under the assumption, the nominative case is assigned to the subject through an Agree relation in φ-features, but if T does not inherit them from C, the relation cannot be established.

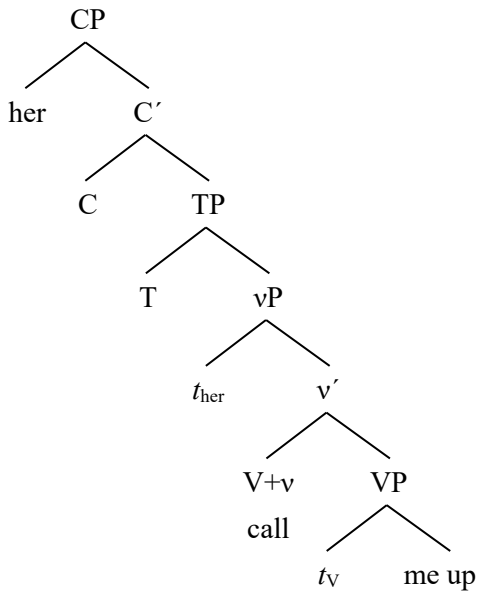
4. Analysis

Extending Chomsky's (2008) assumption, we propose that, in MMs, C is introduced into the derivation without φ-features and tense feature. This means that T cannot inherit any

features from C and function as a probe. As a result, the subject cannot be assigned any kind of Case, and thus realizes as an accusative form as a default case, which is licensed independently of T (cf. Schütze (1997) and Osawa (2011)). Along this line, the sentence in (11a) is derived as in (11b).

(11) a. What! *Her* call me up?! Never. (= (1))

b.



In (11), since T cannot inherit φ-features and tense feature from C, the relevant affixes cannot be created to attach to a lexical verb, and an Agree relation cannot be established between the subject and T. Thus, the subject is assigned an accusative case as a default case, but not a nominative case. As we have seen above, the subject in MMs must be stressed. This leads us to assume that *her* undergoes focalization, moving from its original position to the left periphery of CP.

The present analysis is immediately extended to the non-canonical type of HCC in (2). Thus, the sentence in (2) is derived as schematized in (12).

(12) [$_{CP}$ how C [$_{TP}$ T [$_{νP}$ [$_{V+ν}$ come] [$_{VP}$ t_V him [to mention me at all]]] t_{how}]] (= (2))

In (12), the subject *him* is base generated in the internal argument position of the unaccusative verb *come*. Since C lacks φ-features, T cannot inherit them, which forces the subject to realize as an accusative form and stay in its original position. Given that *wh*-movement is an instance of focalization, it is *how* that undergo focalization to move to Spec-CP in such sentences, but not the subject *him*. The derivation in (12) is different from that in (6), in which *come* moves to the head of CP through the head of TP, creating the sequence of *how come*.

It has been argued so far that the subjects in MMs and the non-canonical type of HCC have different properties from those in other finite constructions. Under the present analysis, in MMs, the movement of the subject to the sentence-initial position is an instance of focalization. On the other hand, in the non-canonical type of HCC, *how* undergoes focalization. It is concluded from the discussion in this section that the EPP effect is absent in the two constructions because of the lack of the relevant features to be inherited from C to T.

5. Further Consequence

The present analysis can account for the presence of the sentence such as (13), which is a variant of the non-canonical type of HCC.

(13) How come that he knows so much about the yacht?
(COHA,1950,FIC,LoveHonor)

(13) can be regarded as a variant of (14) that

lacks the pronominal subject *it*.

(14) How comes it that those ruins have not, in part, accumulated?
(COHA,1836,NF,StPierresStudies /
Kondo and Tamada (2020: 73))

Kondo and Tamada (2020) argue that the sentences in (4) and (14) are classified into the same category, because in these sentences, *come* is analyzed as a lexical verb in that it inflects for tense, person and number and agrees with the subject. This leads us to assume that the sentence in (14) has the same structure as (4), as schematized in (15).

(15) $[_{CP}$ how $[_{V+v+T+C}$ comes$]$ $[_{TP}$ it t_{V+v+T} $[_{vP}$ t_{V+v} $[_{VP}$ t_V $[_{CP}$ that …$]]]$ $t_{how}]]$

Integrating this assumption with the present analysis, (13) would be derived as in (16).

(16) $[_{CP}$ how C $[_{TP}$ T $[_{vP}[_{V+v}$ come$]$ $[_{VP}$ t_V $[_{CP}$ that …$]]]$ $t_{how}]]$ (= (13))

Assuming with Chomsky (2000) that the expletive subject *it* is inserted to satisfy the EPP, serving as a probe which locates T as a goal, then the absence of *it* in (13) immediately follows from the present analysis. In (16), C is introduced without φ-features and tense feature and thus T cannot inherit any features from it, so that the EPP effect does not arise (see Radford (2018: 270ff) for another analysis of the variant of HCC where a *that*-clause directly follows *come*).

6. Conclusion

This paper has accounted for the common property between MMs and the non-canonical types of HCC that the subject appears in the accusative form. Since C lacks φ-features and tense feature in both constructions, T cannot inherit them, which forces the subject to be licensed by default case. As a consequence of this analysis, we have accounted for the presence of the variant of HCC such as (13) where the expletive *it* is absent and a *that*-clause directly follows *come*. Since T cannot inherit any feature form C, it cannot function as a probe, so that there is no need to insert the expletive *it* to the specifier of TP to satisfy the EPP.

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On the Functional Differences in Optional Subject Auxiliary Inversions*

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Keywords: Subject Auxiliary Inversion, Clause Combination, Comparative Clauses, *As*-Clauses in Manner Use

1. Introduction

Optional subject-auxiliary inversion (SAI) can appear in comparative clauses (hereafter SCC) and *as*-clauses in manner use (hereafter SAM), as in the examples in (1) (underlining mine):

(1) a. I spend more than do my friends.
(Quirk et al. (1985: 1382))
b. …, I did not see her as often as did Francis, to whom she frequently came for advice … (Yagi (1987: 88))
c. Ed build a canoe, as did his wife.
(Potts (2002: 639))

Many scholars have argued that SAI in (1) is triggered by (the principles of) end-weight and end-focus (Quirk et al. (1985); Yagi (1987); Yoshida (1998); Biber et al. (1999); Huddleston and Pullum (2002); Culicover (2013)).

Such expositions, however, are unsatisfactory because they have not treated SAI with personal pronoun subjects in much detail. SAI as in (1) differs in acceptability when personal pronoun subjects are postposed, as in (2) below (a capitalized word indicates an accented element):

(2) a. ??Anna is taller than was SHE.
(Quirk et al. (1985: 1382))
b. (?)She was as delighted with the suggestion as was he. (Yagi (1987: 88))
c. They go to concerts frequently, as do I.
(adapted from Culicover (2013: 106))

This contrast between (2a, b) and (2c) raises the question of why only SAM is always acceptable, while the acceptability of SCC is not stable.

In addition to the difference in acceptability, as we will see in Section 2, SCC plays a different role in context than does SAM in terms of topic persistence.

The present study attempts to clarify the factor making the difference between SCC and SAM, focusing on their syntactic clausal integrity.[1] Consequently, I argue that *as*-clauses in manner use are originally less integrated with the main clause than are comparative clauses, which affects their functional orientation differently when SAI is applied to them.

This paper will proceed as follows: in Section 2, we will look at how different SAI in comparative clauses is from that in *as*-clauses in manner use, in light of research results from Tokunaga's corpus survey (in press). Section 3 is devoted to Green's (2017) analysis of two types of clausal integrity: clause combination and event integration. In Section 4, we analyze the clausal integrity of comparative clauses and *as*-clauses in manner use. Section 5 concludes the study.

2. Functional Asymmetry between SAI in Comparative Clauses and that in *As*-clauses of Manner[2]

The key problem with the existing accounts is that they have tended to focus on a single-sentence-based analysis, albeit significant, rather than considering how the SAI constructions in (1) and (2) behave in context. For this reason, Tokunaga (in press) conducted a corpus survey using the Corpus of Contemporary American English (COCA) on the web and its full-text data available on a Linux server at Ritsumeikan University.[3] The corpus research reveals that there is a distributional difference between SCC and SAM. The former tends to occur less frequently than the latter when these clauses have personal pronoun subjects.

Table 1: The Distribution of SCC and SAM with Personal Pronoun Subjects

Sub-corpora	SCC	SAM
Academic	0	4
Fiction	2	18
Magazine	0	11
News	0	7
Spoken	0	15
Total	0	55

In addition, SCC plays a different role in context than does SAM. SCC is not used to introduce postposed subjects into the subsequent discourse, unlike SAM. Compare SCC in (3a, b) with SAM in (4) ("S" stands for "sentence"):

(3) a. [S1] ✗ (no TP)
"Our own soldiers suffer in Northern prison camps," Lee said, "though the North has more to spare for captives <u>than do we</u>. [S1] The North has more to spare for everyone. (COCA: fiction)

b. [S1] ✗ → [S2] N (but not continuous topic) → [S3] ✗
I longed to depart this noisome hole as avidly <u>as did they</u> [= the wreckers]. [S1] We were at this tedious work for the rest of the watch. [S2] The Wreckers tried to lighten their burden with common shipmate raillery, [S3] as when Goldenrod said to Crossgrain, "Had'st not thou once a wife who smelled as of this place?" (COCA: fiction)

(4) [S1] N → [S2] N (omitted but identical)
Wolstenholme said her children were shaking and terrified, <u>as was she.</u> [S1] **She** ran upstairs and [S2] frantically started packing when her fiance [sic] reminded her of their plan, to leave in their own vehicles, with the children and their dog, when the water went down. (COCA: news)

As the two examples of SCC in (3) illustrate, the consecutive topical referents (e.g. subject and direct object) that refers to the postposed subjects in comparative clauses cannot be found in the subsequent sentences. In contrast, as for SAM, 18 out of 55 cases (32.5%) exhibit the function of introducing their postposed subjects into the subsequent discourse. This result suggests that SCC is less motivated than SAM from the viewpoint of discourse. As the examples in (3) show, the function of SCC does not change in that SCC simply conveys the standard of comparison, regardless of SAI. On the other hand, SAM like (4) can serve to introduce its subject into the subsequent context via SAI. However, this raises the question of what causes the functional difference. One of the possible factors is clausal integrity because comparative clauses depend on a main clause, but *as*-clauses in manner use can be separated from their main clause. McCawley (1988: 696) points out that comparative clauses need

"compared constituents," as in (5a) and (5b):

(5) John is more worried about the future than Mary (is), but not
   a. more worried about the environment than Bill (is).
   b. *than Bill (is).

(6) John is as anxious to finish the job as George is, but not
   a. as determined to do it right as Mary is.
   b. *as Mary is.
   (adapted from McCawley (1988: 696))

By contrast, SAM can be employed as an insubordinate clause. In (7), the *as*-clause is situated after a paragraph gap ("//" indicates a paragraph gap).

(7) He knew something they did not, and they did not know the difference: this was one thing that marked him as an artist while they painted portraits. // As did I. My part in the story is yet to come. (COCA: fiction)

Given the examples in (5), (6), and (7), it can be hypothesized that the difference in integrity can possibly affect these functional orientations when SAI is applied to them. More concretely, comparative clauses are oriented to intra-sentential functions because of tight clausal integrity, while *as*-clauses in manner use are oriented to extra-sentential functions because of loose clausal integrity. To clarify this property, it is necessary to consider their degree of clausal integrity. In the following section, we will examine this difference in integrity.

3. Two Types of Clausal Integrity

Before shifting to the analysis of the clausal integrity of comparative clauses and *as*-clauses in manner use, how main clauses and subordinate clauses are integrated must be considered. In this section, we look at Green's (2017) two types of clausal integrity: (i) clause combination and (ii) event integration.

3.1. Clause Combination

Green (2017) investigates the English clause system diachronically and synchronically, suggesting that there is a difference of integrity in English combined clauses. Green (2017) classified them into nine categories, as in (8).

(8) a. Coordinate (symmetric)
   He hated Leeds *and everyone hates Leeds*
   b. Coordinate (asymmetric)
   I must tread gingerly this week *or things will backfire*
   c. Adverbial
   I'll show you, *when you some* [sic] *out*
   d. Comparative
   It is probably more *than the car is worth*
   e. Relative
   I've got another girl *that does all my buying*
   f. Content
   I think *that is right*
   g. Past Participle
   You don't want the ground s*plattered with horrible things*
   h. Present Participle
   there was a problem *buying the house*
   i. Infinitival
   I've got enough for tomorrow *to get me there* (adapted from Green (2017: 36))

Based on the category in (8), Green (2017: 36) proposes a hierarchy for combined clauses ("Inf.," "Part.," "Adv.," "AC," and "SC" stand

for "Infinitival Clause," "Participle," "Adverbial," "Asymmetric Coordination," and "Symmetric Coordination"). In (9), clause integrity ranges from the tightest to the loosest.

(9) The Hierarchy of Combined Clauses in English:
Inf. > Present Part. > Past Part. > Content Clause > Relative Clause > Comparative Clause > Adv. Clause > AC > SC
(adapted from Green (2017: 36))

Green (2017) comments that comparative clauses are tighter than adverbial clauses because comparative clauses are "not often easy to remove, nor a background proposition" (e.g., She ran faster *than all her colleagues did.*), and sluicing and verb substitution are applicable when "the main clause verb is carried over to the subordinate clause" (p. 38). On the other hand, adverbial clauses show less integration than comparative clauses in (9) in that they are optional, and there is a gap between main clauses and subordinate clauses "by a comma in writing or intonational reset in speech" (p. 38).[4]

To demonstrate that there are different levels of integration in the English clause system, Green (2017) conducts corpus research and attempts to prove the following hypothesis:

(10) "The more integrated a clause, the more one might expect it to have a more integrated function and share the tense, aspect and participants of the clause with which it combines" (Green (2017: 40))

In order to clarify the degree of integration between main clauses and subordinate clauses, Green (2017: 43-44) examines the nine types of clauses in (9) from two perspectives: (i) tense-aspect continuity and (ii) subject continuity. Based on these results, Green (2017: 43) concludes that "[n]one of the distributions strikingly favored discontinuity or continuity between the tense-aspect of verbal elements in a form" and the tense-aspect (dis)continuity does not support the hypothesis in (10).

On the other hand, Green (2017) maintains that the subject (dis)continuity verifies this hypothesis. The tighter the integration of clauses is (e.g., "To-infinitival," "Present participle," and "Past participle"), the more frequently they represent a stronger tendency to have the same subject, which suggests that the clauses with tight integration tend to share the same subjects with the main clauses (e.g., Non-Finite and Semi-Finite clauses such as Infinitival Clauses and Present/Past Participle).

In contrast, loosely integrated clauses are often used with different subjects between the main clauses and subordinate clauses (e.g., Finite clauses such as "Content clause," "Relative clause," "Comparative clause," and "Adverbial clause").[5] This tendency corresponds to (9) above.

In Section 4, we will examine the tense-aspect continuity and subject continuity of comparative clauses and *as*-clauses in manner use in order to analyze the integration of both clauses.

4. Integrity of Comparative Clauses and *As*-Clauses in Manner Use

In this section, we will consider the difference of clausal integrity between comparative clauses and *as*-clauses in manner use, based on Green's (2017) study. For this purpose, corpus data including both clauses are obtained from COCA, and analyzed with the two criteria utilized in Green's (2017) work: (i)

tense-aspect continuity and (ii) subject continuity. As for the data we will examine here, comparative clauses without SAI amount to 50 clauses in number (*than*-clauses and equatives each account for 25 clauses), and the data of non-SAI in *as*-clauses in manner use also account for 50 clauses in number. Note that the goal of this research is to examine the clausal integrity of both types of clauses. This approach is not concerned with SAI. Therefore, the data of the two clauses containing SAI are not considered in this section.[6]

4.1. Tense-Aspect Continuity

First, we look at tense-aspect continuity. If a main verb in a main clause represents the same tense/aspect as a subordinate clause, the clausal integrity can be considered high. Conversely, when the two clauses show different tenses/aspects, the clausal integrity can be evaluated as loose. The tense-aspect continuity of the two clause types is given in Table 2.

Table 2: Clause Type and Tense-Aspect Continuity

Clause Type	T/A discontinuity	T/A continuity	N
Comparative[7]	6 (12%)	44 (88%)	50
As (manner)	11 (22%)	39 (78%)	50
Total	17 (17%)	83 (83%)	100

In this case, comparative clauses exhibit higher tense/aspect continuity than do *as*-clauses of manner. We also see a different distribution in the tense/aspect discontinuity between the two clauses. *As*-clauses of manner tend to represent discontinuity of tense/aspect more frequently than do comparative clauses. Although these differences can be seen in Table 2, there is no significant difference between the two clauses ($p = .28 > .05$). It follows that neither tense nor aspect continuity would work as a criterion for clarifying clausal integration of the two clauses, as Green (2017) points out.[8]

4.2. Subject Continuity

Having examined tense/aspect continuity, we now turn to the topic of subject continuity. Table 3 represents the distribution of subject continuity for comparative clauses and *as*-clauses in manner use.

Table 3: Clause Type and Subject Continuity (Non_SAI)

Clause Type	Same Subject	Different Subject	N
Comparative[9]	24 (44%)	26 (56%)	50
As (manner)	13 (26%)	37 (74%)	50
Total	37 (37%)	63 (63%)	100

In comparative clauses, the ratio of comparative clauses (44%) with the same subjects is nearly the same as the ratio of those with the different subjects (56%). This implies that the integrity of comparative clauses can be regarded as a matter of chance level. In other words, the degree of their clausal integration seems to be variable. On the contrary, the distribution of *as*-clauses is uneven. The ratio of *as*-clauses with different subjects (74%) is higher than the ratio of those with the same subjects (26%). This distribution also reaches statistical significance ($p = .03 < .05$). We can deduce from the result that *as*-clauses of manner can be regarded as clauses with lower the degree of integrity in comparison to comparative clauses. As (9) shows, the lower clausal integrity becomes, the more subordinate clauses become independent from main clauses.

Thus, it can be posited that *as*-clauses can be considered more independent from the main clause than comparative clauses, and that the former type of clauses in expected to assume an additional function outside of the sentence in which it is embedded: the *as*-clauses can exhibit an extra-sentential function of introducing their inverted subjects as new topics in the subsequent discourse when SAI is applied to them. On the contrary, comparative clauses cannot exhibit such a discourse function because they are closely connected with their main clause. Therefore, their function is simply to present the standard of comparison, regardless of SAI.

5. Conclusion

This paper has been concerned with the difference in clausal integrity between comparative clauses and *as*-clauses in manner use. Based on Green's (2017) framework, we have examined the integrity of these clauses from the following two perspectives: (i) tense-aspect continuity and (ii) subject-continuity. As for the former case, there is no significant difference between the two clauses, whereas a significant difference can be found in the latter case. This finding suggests that subject-continuity may affect the functional orientation of SCC and SAM. *As*-clauses are originally less integrated with the main clause than are comparative clauses. Therefore, when they are used as a marked construction, their unique extra-sentential discourse function can be observed. Comparative clauses, on the other hand, are closely integrated with their main clause. The function is limited to the presentation of the standard of comparison even when SAI is applied to the clause.

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NOTES

[1] Tokunaga (in press) addresses this problem from a cognitive semantic perspective.

[2] This section is based on Tokunaga (in press).

[3] Therefore, this study deals mainly with Modern American English (the corpus survey was conducted on September 13, 2020). Currently, I am a Post-Master's Researcher at the Ritsumeikan University Graduate School of Language Education and Information Science. I obtained an appropriate qualification for access to a corpus server containing the text data.

[4] In his research, syntactic function is categorized into four levels: complement, modifier, adjunct, and independent. According to Green (2017: 35), the complement level is the tightest among them, followed by the modifier level. The adjunct level is third in the hierarchy, while independent has the loosest integration. According to his classification, comparative clauses fall under (i) complement and (ii) adjunct, as illustrated below.

(i) Adjunct
Many more birds had been sold in retail outlets *than had been bred in captivity.*

(ii) Complement
[T]he faces aren't *as pretty as they once were.* (Green (2017: 42))

However, he does not explain why the *than*-clause in (i) has higher integrity than the equative in (ii). This analysis seems problematic because comparative clauses need "compared constituents" (McCawley (1988: 696)), as

mentioned in (5) and (6). For this reason, in this study, *than*-clauses and equatives are regarded as complements in accordance with McCawley's (1988) analysis.

[5] As for Asymmetric Coordination and Symmetric Coordination, the cases of the same subjects in the former coordination are observed more frequently than in the latter. This trend suggests that the integrity of the former is tighter than that of the latter. Therefore, Asymmetric Coordination is placed before Symmetric Coordination in (9).

[6] There is another reason why SCC and SAM are not dealt with in this section. The data of the former are rarely found in COCA (only three cases), unlike SAM (50 cases). Hence, this research focuses on non-SAI data.

[7] Comparative clauses consist of the data of *than*-clauses (25 cases) and equatives (25 cases). In Table 2, three cases of tense or aspect discontinuity can be obtained from each of the former and the latter data, which means that the rest of the data (22 cases in each clause type) show the same tense or aspect as their main clauses.

[8] Although Green (2017) does not adopt this criterion, it is employed in this study in order to confirm whether tense-aspect continuity is relevant to the difference between comparative clauses and *as*-clauses of manner.

[9] The data of *than*-clauses consist of six cases with the same subjects and 19 cases with different subjects. The data of equatives include 18 cases with the same subjects and seven cases with different subjects.

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On the Distribution of the Genitive Case Marker in the Manchu Language*

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Keywords: genitive subject, Mongolian, Manchu, N′-deletion, the Yanbian variety of Korean

1. Introduction

This paper investigates the distribution of the genitive case marker in Manchu, a Tungusic language spoken in Manchuria, and elucidates the mechanism behind it. We owe all examples used in this paper to Shuo Wang, an instructor of Manchu at Hebei Normal University for Nationalities. There are no existent monolingual speakers of the language, but some 100 people are bilingual of Manchu and Chinese, and there are some 1,000 people who are not bilingual of these, but can read, write, speak and translate Manchu, one of whom is Shuo Wang.

Our findings are as follows. First, the genitive subject is allowed in Manchu. Second, in sentences with no overt relative head, headed by *de isitala* 'until,' for example, the genitive subject is allowed. Third, the Transitivity Restriction does not hold. Fourth, the genitive subject is disallowed in embedded clauses. Fifth and finally, N′-deletion is impossible.

It will be argued that these findings suggest (i) that the distribution of the genitive case marker in Manchu is more or less identical to that of the Yanbian variety of Korean, (ii) that (i) implies that there is no correlation between the N′-deletability and the availability of genitive subject in human language, and (iii) that the conditions on genitive subject licensing in Mongolian proposed by Maki et al (2016) apply not only to Mongolian, Japanese and the Yanbian variety of Korean, but also to Manchu.

2. Background

Research has been done on the availability of genitive subject in various languages, and also on the availability of N′-deletion in various languages. Harada (1971) originally points out that Japanese allows genitive subject, as shown in (1).

(1) [Doyoobi-ni tamago-ga/-no yasui]
Saturday-on egg-Nom/-Gen cheap
mise-wa kono mise desu.
store-Top this store be
'The store where eggs are cheap on Saturdays is this store.' (Japanese)

Since his seminal work, the phenomenon has been investigated by many linguists, such as Miyagawa (1993, 2011, 2012, 2013), Watanabe (1996), Hiraiwa (2001), Ochi (2001, 2009), Harada (2002) and Kobayashi (2013), among others.

Saito and Murasugi (1990) originally point out that N′-deletion is possible in Japanese. The example in (2) is from Saito et al (2008).

(2) [Taroo-no taido]-wa yoi ga,
Taro-Gen attitude-Top good though
[Hanako-no ~~taido~~]-wa yokunai.
Hanako-Gen attitude-Top not.good
'Though Taro's attitude is good, Hanako's isn't.' (Saito et al (2008)) (Japanese)

Maki (2019) finds certain relations between the N′-deletability and the availability of genitive subject in languages with prenominal sentential modifiers so far examined to some depth, which is shown in (3).

(3) The N′-Deletability and the Availability of Genitive Subject in Languages with Prenominal Sentential Modifiers

	✓ Genitive Subject	* Genitive Subject
✓ N′-Deletion	Japanese, Mongolian, Urdu, Bengali	
* N′-Deletion		Korean, Tibetan

(3) seems to show two relations in (4a, b).

(4) a. A language allows N′-deletion. = It allows genitive subject.
b. A language disallows N′-deletion. = It disallows genitive subject.

Japanese and Mongolian, among others, allow both N′-deletion and genitive subject. However, Korean and Tibetan does not allow either N′-deletion or genitive subject. In the following, we will present data from Tibetan as a language that does not allow either of them.

Let us consider the Tibetan examples in (5) and (6), which are due to Daojicao (p.c.).

(5) a. Su-yi rnam agyur bzang ngam?
who-Gen attitude good Q
'Whose attitude is good?'
b. Bkrashis-kyi [$_{N'}$ rnam agyur] red.
Bkrashis-Gen attitude be
'Bkrashis's attitude is.'
c. * Bkrashis-kyi [$_{N'}$ *e*] red.
Bkrashis-Gen be
'Bkrashis's is.' (Tibetan)

(6) Dering Bkrashis-ø/*-**kyi** thon pa-'i
today Bkrashis-Abs/-Gen arrive-Gen
dustshod-ni phyidro-'i dustshod 8 red.
time-Top a.m.-Gen time 8 be
'The time when Bkrashis arrived today is 8 a.m.' (Tibetan)

In contrast to Tibetan, Japanese allows both genitive subject and N′-deletion, as shown in (1) and (2).

3. Data

Let us now examine sentences with the genitive subject in Manchu. Just like Japanese and Mongolian, Manchu also allows the nominative/genitive alternation. First, in relative clauses, the subject can be marked genitive, as shown in (7).

(7) [Sikse Jangsan'-ø/-i *t* udaha]
yesterday Zhangsan-Nom/-Gen bought
bithe-oci ere bithe inu.
book-Top thisbook be
'The book Zhangsan bought yesterday is this book.'

While (7) contains a gap in the relative clause, (8) does not.

(8) [Sikse Jangsan'-ø/-i injebuhe]
yesterday Zhangsan-Nom/-Gen laughed
baita baita inu.
fact problem be
'The fact that Zhangsan laughed yesterday is a problem.'

Second, in sentences with no overt relative head, headed by *de isitala* 'until,' for example, the genitive subject is allowed.

(9) Aga-ø/-i waqihiyame nakaha
rain-Nom/-Gen completely stop
de isitala, Jangsan'-ø albanbou-de
until Zhangsan-Nom office-at
bihei bi.
all.the.way was
'Zhangsan was at his office all the way until it stopped raining.'

Third, the Transitivity Restriction does not hold in Manchu. Japanese has a phenomenon that the genitive subject cannot co-occur with an accusative '-o' marked object. The restriction prohibiting it is called the 'Transitivity Restriction (hereafter, TR).' (The TR is discussed by Harada (1971), Miyagawa (1993), Watanabe (1996), Hiraiwa (2001) and Ochi (2009), among others). The TR in Japanese is shown below.

(10) [John-ga/*-no hon-o kashita] hito
John-Nom book-Acc lent person
'the person to whom John lent a/the book'
(Watanabe 1996: 389, ex. 37a)

On the other hand, the TR does not hold in Manchu, as shown below.

(11) [Sikse Jangsan'-ø/-i tere
yesterday Zhangsan-Nom/-Gen that
bithe-be juwenbuhe ningge, Liisy' inu.
book-Acc lend give person Lisi be
'The person who Zhangsan lent the book to is Lisi.'

Fourth, the genitive subject is not allowed in embedded clauses in Manchu, as shown in (12), in contrast to Mongolian, as shown in (13).

(12) [[Sikse Jangsan'-ø/*-i t_1 udaha
yesterday Zhangsan-Nom/-Gen bought
seme] Liisy'-ø gvnimbi] bithe-oci, tere
that Lisi-Nom think book-Top that
bithe.
book
'The book which Lisi thinks [that Zhangsan bought *t* yesterday] is that book.'

(13) Baɣatur-ø [öčügedür Ulaɣan-ø/-u t_1
Bagatur-Nom yesterday Ulagan-Gen
qudaldun-abu-ɣsan/*-ab-čai gejü]
buy-take-Past.Adn/-take-Past.Con that
bodu-ɣsan nom_1-bol ene nom.
think-Past.Adn book-Top this book
'The book which Bagatur thought [that Ulagan bought *t* yesterday] is this book.'

Fifth and finally, N′-deletion is not possible in Manchu, as shown below.

(14) We-i tuwaraba-ø sain akv?
who-Gen attitude-Nom good not
'Whose attitude is not good?'

(15) Jangsan'-i [$_{N'}$ tuwaraba/**e*].
Zhangsan-Gen attitude
'Zhangsan's (attitude).'

4. Discussion

Let us now consider what the observed facts might suggest for the theory of (Manchu) syntax. First, the findings suggest that Manchu and Japanese differ in the Transitivity Restriction. Consider again the contrast between (11) and (10). In order to see if the TR is a general phenomenon in Altaic languages, let us examine other Altaic languages. First, Maki et al (2015) show that in Mongolian, the TR is not observed. Second, Xie and Maki (2019) show that Kazakh does not show the TR effect. Third, Kornfilt (2003) shows that in Turkish, the TR is not

observed, either. Fourth, Qiu and Maki (2020) show that Azerbaijani does not show the TR effect. Fifth and finally, Jin (2014) shows that the Yanbian Variety of Korean (YK, hereafter) shows the TR effect, as shown below.

(16) [John-i$^{(H)}$/-i$^{(L)}$ chayk-u
John-Nom/*-Gen book-Acc
pillyec-u-n] salam
lend-Past-Adn person
'the person to whom John lent a/the book'

Note that in colloquial YK, although no overt case marking is found for nominative or genitive, pitch accents are used to distinguish between the two grammatical cases: $^{(L)}$ is associated with genitive case, while $^{(H)}$ with nominative case.

These examples from various Altaic languages show that in terms of the Transitivity Restriction, only Japanese and YK pattern together, and Manchu patterns together with the other Altaic languages such as Mongolian, Kazakh, Turkish and Azerbaijani. This indicates that the Transitivity Restriction is restricted to a few Altaic languages, and Japanese and YK are such exceptional languages, while Manchu is not. We will leave open this perplex issue within Altaic languages.

Second, both Japanese and Manchu allow the genitive subject in the 'until'-clause, while YK does not. Compare the Manchu example in (9) with its Japanese and YK counterparts in (17) and (18).

(17) John-wa [ame-ga/-no yam-u made]
John-Top rain-Nom/-Gen stop-Pres until
ofisu-ni i-ta.
office-at be-Past
'John was at his office until it stopped raining.'

(18)*John-un wancenhi pi$^{(H)}$/pi$^{(L)}$
John-Top completely rain.Nom/rain.Gen
kkun-u-l kkaci samusil-ey issessta.
stop-Past-Adn until office-at was
'John was at his office until it stopped raining completely.'

Third, Manchu, Japanese and YK do not allow the genitive subject in complement clauses. Compare the Manchu example in (12) with its Japanese and YK counterparts in (19) and (20).

(19) Taroo-ga [kinoo Hanako-ga/*-no t_1
Taro-Nom yesterday Hanako-Nom/-Gen
katta to] omotta hon$_1$-wa kono
bought Comp thought book-Top this
hon da.
book be
'The book which Taro thought [that Hanako bought *t* yesterday] is this book.'

(20) John-i ezey
John-Nom yesterday
Meyari$^{(HLL)}$/*Meyari$^{(LLL)}$ t_1 satta ko
Mary-Nom/-Gen bought Comp
saygkakhan chayk$_1$-un i chayk ita.
thought book-Top this book be
'The book which John thought [that Mary bought *t* yesterday] is this book.'

These examples indicate that Manchu patterns together with Japanese and YK, not Mongolian.

Fourth, the findings suggest that in terms of N´-deletion, Manchu pattens together with YK, not Japanese. Compare the Manchu examples in (14) and (15) with the YK and Japanese counterparts in (21a, b) and (22a, b).

(21) a. Nu-ki thayto choci ansumni ka?
who-Gen attitude good not.be Q
'Whose attitude is not good?'

b. John-i [$_{N'}$ thayto/*e] imnita.
John-Gen attitude be
'John's (attitude) is.' (YK)

(22) a. Dare-no taido-ga yoku nai
who-Gen attitude-Nom good not
desu ka?
be Q
'Whose attitude is not good?'

b. John-no [$_{N'}$ taido/e] desu.
John-Gen attitude be
'John's (attitude) is.' (Japanese)

(23) summarizes the distribution of the genitive case marker in Japanese, Manchu and YK.

(23) On the Distribution of the Genitive Case Marker in Japanese, Manchu and YK

	Japanese	Manchu	YK
Genitive Subject	√	√	√
'Until'-Clause	√	√	*
Transitivity Restriction	√	*	√
Complement Clauses	*	*	*
N′-Deletion	√	*	*

(23) shows that Manchu seems to be placed between Japanese and YK, as it partially patterns together with Japanese, and at the same time, partially patters together with YK.

However, from the viewpoint of the relations between the N′-deletability and the availability of genitive subject in languages with prenominal sentential modifiers so far examined to some depth, Manchu patterns together with YK, as shown in (24).

(24) The N′-Deletability and the Availability of Genitive Subject in Languages with Prenominal Sentential Modifiers

	✓ Genitive Subject	* Genitive Subject
✓ N′-Deletion	Japanese, Mongolian, Urdu, Bengali	
* N′-Deletion	YK, Manchu	Korean, Tibetan

(24) shows two important things. First, Manchu patterns together with YK with the two properties, namely, the N′-deletability and the availability of genitive subject. Second, and more importantly, the facts about Manchu and YK clearly indicate that there is no correlation between the two properties.

Now, (24) clearly shows the non-correlation between the N′-deletability and the availability of genitive subject, which further raises the question as to whether the upper right corner is an accidental gap, or some languages come to the gap. Hu and Maki (2019) and Wang and Maki (2019) found that Naxi and Tujia, which are considered officially identified minority languages of China, do not allow genitive subject, but do allow N′-deletion. Therefore, these two languages fill the gap at the upper right corner, as shown in (25).

(25) The N′-Deletability and the Availability of Genitive Subject in Languages with Prenominal Sentential Modifiers

	✓ Genitive Subject	* Genitive Subject
✓ N′-Deletion	Japanese, Mongolian, Urdu, Bengali	Naxi, Tujia
* N′-Deletion	YK, Manchu	Korean, Tibetan

(25) thus clearly indicates that there is no correlation between the two syntactic properties, namely, the N′-deletability and the availability of genitive subject.

Fifth and finally, the conditions on genitive subject licensing in Mongolian proposed by Maki et al (2016) apply not only to Mongolian, but also to Japanese, YK and Manchu. The conditions on genitive subject licensing in Mongolian are shown below.

(26) Conditions on Genitive Subject Licensing in Mongolian
   a. A genitive subject must be c-commanded by a nominal element in a local domain.
   b. A genitive subject must be in a local relationship with the adnominal form of a predicate.

These two conditions correctly predict the (un)grammaticality of the examples with the genitive subject, if we assume (27).

(27) a. There is an abstract distinction between the conclusive form and the adnominal form in Manchu, just like Japanese.
   b. *De isitala* 'until' has nominality, and the predicate that precedes it has its adnominal form in Manchu, just like Japanese.
   c. The predicate that precedes the complementizer *seme* 'that' does not have its adnominal form in Manchu, just like Japanese.

Therefore, the conditions on genitive subject licensing in Mongolian proposed by Maki et al (2016) apply not only to Mongolian, Japanese and YK, but also to Manchu.

5. Conclusion

This paper investigated syntactic properties of the Manchu language, and showed (i) that the genitive subject is allowed, (ii) that in sentences with no overt relative head, headed by *de isitala* 'until,' for example, the genitive subject is allowed, (iii) that the Transitivity Restriction does not hold, (iv) that the genitive subject is disallowed in embedded clauses, and (v) that N′-deletion is impossible. We also argued that these findings suggest (i) that the distribution of the genitive case marker in Manchu is more or less identical to that of the Yanbian variety of Korean, (ii) that (i) implies that there is no correlation between the N′-deletability and the availability of genitive subject in human language, and (iii) that the conditions on genitive subject licensing in Mongolian proposed by Maki et al (2016) apply not only to Mongolian, Japanese and the Yanbian variety of Korean, but also to Manchu.

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<Workshop Report>

Some Concepts and Consequences of MERGE*

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Keywords : MERGE, multi-dominance, minimal search, Case/agreement

1. Introduction

Since Aristotle, language has been seen as "sound with meaning." An important finding of modern linguistics is that sound and meaning are mediated by hierarchical structures. To explain permissible hierarchical structures of language, generative grammarians proposed phrase structure rules and transformations. However, in mid-1990s, such structure-building and movement operations were unified under the single operation Merge.

The first formulation of Merge is found in Chomsky (1995). In that formulation, Merge combines two syntactic objects together with labeling as a suboperation, incorporated as part of the Merge operation.

In his subsequent work, however, Chomsky (2004) modifies the Merge operation, dispensing with the labeling algorithm stipulated as part of the definition of Merge. Instead, labeling is taken to be part of the third-factor principle of minimal search (Chomsky 2013). Thus, Merge, no longer being responsible for labeling, simply takes two syntactic objects α and β and forms a two-membered set, as shown in (1).

(1) Merge (α, β) = {α, β}

(1) shows that Merge is a symmetrical operation in that it encodes neither α nor β as a label for the resulting set, meaning that Merge is "projection-free" (see, among others, Collins 2002 and Chomsky 2007).

2. MERGE

The formulation of Merge in (1) is simple and clear, but from a minimalist perspective, it is unclear how exactly Merge operates to generate derivations. It must be the case that such generative procedures presuppose the existence of a workspace (WS), where syntactic objects constructed by Merge are made available for subsequent operations, but the notion of WS itself has remained vague. To fix this problem, Chomsky (2017) makes WS explicit and reformulates Merge as an operation on WS, called MERGE.

Under MERGE, the derivation proceeds as follows:

(2) a. WS = [α, β, γ]
b. MERGE (α, β, WS)
c. WS' = [{α, β}, γ]

(2a) shows a derivational stage where WS contains three syntactic objects. (2b) means that MERGE operates on WS, selecting α and β. As a result, WS is updated to WS', as in (2c). Notice that WS' contains the newly created set {α, β} and the unselected object γ, but not the selected objects α and β.

Chomsky (2019a, b) argues that the MERGE-based analysis, if on the right track, calls for a new approach to so-called

"multi-dominance" phenomena.

3. Consequences of MERGE

Theoretically speaking, MERGE (2) is arguably preferable over Merge (1) because the former clarifies that so-called "movement" is an illusion; there is no "raising" or "lowering." What MERGE (2) does is select α, β from WS and form {α, β}, which enters WS', and the rest follows from third-factor considerations. Nevertheless, MERGE (2) confronts a number of empirical questions related to the problem of descriptive adequacy. Thus, a tension arises between theoretical explanation and empirical description.

4. The Organization of the Workshop

This workshop was designed to demonstrate the following points:

(i) we first review the core concepts of MERGE, and then identify empirical issues, paying special attention to MERGE (on the one hand) and minimal search, labeling, and the theory of Case and agreement (on the other). By addressing these issues, we identify and investigate further consequences of MERGE.

(ii) in order to resolve the tension between theoretical explanation and empirical description, we clarify how a MERGE-based approach relates to notions such as minimal search, labeling and agreement (which involves φ-features and Case). These notions are of critical importance for the current minimalist investigation.

5. Conclusion

We strongly believe that pursuing these issues leads us to a deeper understanding of the language faculty and a deeper inquiry into a profound nature of the human mind.

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日本英語学会事務局

JELS 日本語執筆の場合の注および参考文献の書式について（補足資料）

JELS を日本語で執筆する場合の注と和文参考文献の例を以下に示します。外国語で書かれた参考文献については、*JELS* を英語で執筆する場合と同様，学会ウェブサイト (http://elsj.jp/english_linguistics-eng/information-for-contributors/) に掲載されている *English Linguistics* の参考文献の書式を参照して下さい。

注

1. 河上誓作（私信：XX 年YY 月ZZ 日）によると、以下の例は…….

2. Oba (1997)にも指摘されているとおり、……

3. 杉本 (1998:34)では、以下のような類例が紹介されている。

(i) I long for ……

(ii) I manage to ……

4. Takami (1996:51)には、以下のような……

参考文献

小泉保 (1997)『ジョークとレトリックの語用論』大修館書店, 東京.

松本曜・田中茂範 (1997)『空間と移動の表現』研究社出版, 東京.

盛岡ハインツ・梶田優 (編) (1994)『海外言語学情報』（第7 号）大修館書店, 東京.

和書の場合

福岡言語学研究会 (編) (1993)『言語学からの眺望』（福岡言語学研究会20 周年記念論文集）九州大学出版会, 福岡.

論文集の場合

吉村あき子(1996)『否定極性現象』博士論文, 大阪大学.

博士論文の場合

福井直樹 (1998)「極小モデルの展開」, 田窪行則他 (編) 『生成文法』（岩波講座言語の科学第六巻）, 161-210, 岩波書店, 東京.

論文集収録論文の場合

大阪太郎 (未公刊)「Donkey 文の解釈について」, 未公刊論文, 日本英語大学.

未公刊論文の場合

藤田耕司 (1997)「最適派生理論の最適化に向けて」,『英語青年』5 月号, 74-76, 研究社出版, 東京.

大津智彦 (1993)「現代イギリス英語における目的語節を導くthat の有無について」,『論集』第 9 号, 41-50, 大阪外国語大学.

雑誌論文の場合

東京花子 (印刷中)「英語統語論について」,『日本英語学研究』, 日本英語出版.

雑誌掲載が決定しているが未公刊の論文の場合

塚本聡 (2013)「大名力『言語研究のための正規表現によるコーパス検索』」書評,『英文学研究』第90 巻, 155-160, 日本英文学会.

書評の場合１

廣瀬幸生 (1996)「Adele E. Goldberg: Constructions: A Construction Grammar Approach to Argument Structure」書評『英文学研究』73 巻1号, 170-174, 日本英文学会.

書評の場合２（洋書の書評を和文で執筆）

桐生和幸 (1997)「結果述語構文の言語類型論的研究」関西言語学会第 22 回大会口頭発表.

口頭発表の場合

川瀬義清 (1998)「認知的観点から見た進行形の意味」*KLS* (*Kansai Linguistic Society*) 18, 155-165.

学会等のプロシーディングスの場合

Freud, Sigmund (1905) *Jokes and Their Relation to the Unconscious*, Moffat Ward, New York.（フロイト, ジグムンド. 生松敬三訳『機知—その無意識との関係』人文書院, 東京, 1970）

翻訳の場合

Radcliff, Allan (1940) “On Joking Relationships,” *Africa* 13, 195-210.（ラドクリフ, アラン. 青柳まちこ訳『未開社会における構造と機能』「（第4 章）冗談関係について」新泉社, 東京, 1975）

論文の翻訳が本の一部として公刊されている場合

Guidelines for Submission of Manuscripts to *JELS*

<If you write in Japanese, refer to the Japanese guideline on the ELSJ website>

Last revised October 2019

(1)Length

The length of an oral presentation manuscript, including notes and references, must not exceed seven A4 pages; that of a symposium report must not exceed four A4 pages; that of a special lecture or workshop report must not exceed two A4 pages. The manuscript should use a two-column format with 40 lines per column. Care should be taken to avoid overcrowding of characters or letters within the line.

(2) Format

Use the English sample file attached to the e-mail. Do not change the file extension (.doc) when you save the file. Note that presenters at the Spring Forum are not allowed to submit a Japanese manuscript.

a. Leave margins of 2.2cm at the top, 3.0 cm at the bottom, and 2.5cm on both sides.
b. The font size should be at least 11 point.
c. There should be 4 lines of space between the top of the page and the first paragraph on the first page. The title, the name and affiliation of all authors, and keywords (up to five words or short phrases) should all be centered. One line of blank space should be left between the title and the author name(s) as well as between the author affiliation(s) and the keywords. Two lines of blank space should be left below the keywords, at which point the main text should begin. Keywords should be written in the following format: Keywords: xxx, yyy, zzz (e.g. Keywords: syntax, Case assignment, Multiple Agree, light verb).
d. The title should be in bold type. Capitalize the first letter of every content word in the title.
e. Write the author's name in the order "First name - Surname" and capitalize only the initial letters. (e.g. Jane Smith).
f. Write acknowledgements above notes, if any. Put an asterisk at the beginning of the acknowledgements.
g. Notes should follow the main text but precede the references, with the heading "NOTES." DO NOT use MS-Word's command for inserting automatic footnotes and endnotes. Footnote numbers in the body of the text should be written as superscript numerals, and should be placed after punctuation marks.
h. Other details (including the references) should be formatted in accordance with *Information for Contributors* and the latest version of the *EL* style sheet (http://elsj.jp/english_linguistics-eng/information-for-contributors/). No abstract is necessary.

(3) Other instructions for submission

a . Manuscripts written in English should be checked by a native speaker of English. Under no circumstances may the title of the manuscript be changed in any way from that used at the time of presentation. English manuscripts are acceptable even when the oral presentations were made in Japanese if the English title listed in the Conference Handbook is used in the manuscript. Presenters at the International Spring Forum may submit only English manuscripts.
b. Do not include page numbers.
c. Please embed all fonts when creating pdf files in order to ensure that the fonts used are available on readers' computers. (*JELS* is published as a CD-ROM.)
d. Make sure that any figures or illustrations in the paper are consistent with copyright restrictions.
e. Manuscripts must be submitted by 11:59 am on January 11th (JST) of the year following the Spring Forum and the annual Conference. Manuscripts should be sent as attachments in both pdf and doc format to <conference-elsj☆kaitakusha.co.jp>*. The file name should include the author's name in Roman letters (e.g. NihonEiko.pdf/NihonEiko.doc). The title of e-mail should be "Annual Conference: name" or "Spring Forum: name" (e.g. "Annual Conference: Jane Smith"). Please note that a manuscript that has reached after the above deadline will not be accepted by the Conference Organizing Committee even if an automatic reply message confirms your submission.
f. Please note that manuscripts not in strict compliance with the *Rules for JELS* and the

present guidelines will not be accepted.

*The “@” in the e-mail address has been replaced by “☆” for security reasons.

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