

Little $p_$ in English and Japanese

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Prepositional forms in English and closely related Germanic languages have been described as a split class: some words are functional while others are more lexical (Hudson 2000; Zwarts 1997 among others). Furthermore, while terms such as *P-forms* (O’Dowd 1998) or *P- words* in (Miller 2006) have been used to capture the fact that the phonological form expressing particles (or intransitive prepositions) and prepositions is largely the same, it has been largely unclear why all prepositional forms do not function as particles and vice-versa. It has also been unclear why and how these *p-forms* operate in different “prepositional” domains.

If the inversion test is used to distinguish a certain class of particles from prepositions (e.g. John picked up his friend. → John picked **him** up; John looked at the book. → *John looked **it** at), it becomes clear that a smaller subset of prepositions (*at, from, to, with, by* (agentive) and *via*) never behave as particles while a larger set of forms *up, down, in, out* etc... function as both. The forms that are used as both prepositions and particles are also found in other lexical domains (1,2).

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|-----|-------------------------------------------------------------|-----------|
| (1) | a. The doctor <i>upped</i> the dosage. | Verb |
| | b. Michael Jordan had <i>ups</i> . | Noun |
| | c. The very <i>uppish</i> crowd disliked the newcomers. | Adjective |
| (2) | a. Turkey <i>downed</i> a Russian jet. | Verb |
| | b. We have to get a first <i>down</i> . (American football) | Noun |
| | c. He was the <i>downest</i> gangster I knew. ‘most real’ | Adjective |

To account for this, it is proposed that these multi-purpose prepositional forms are acategorial-root-items (Deacon 2014). These root-items are categorized by either a *little p_* head, creating a type of preposition or particle, or by another categorial head (creating types of nouns, verbs, and adjectives) as traditionally done in Distributed Morphology (DM) (Halle and Marantz 1993, 1994). In DM terminal nodes are qualitatively divided into L and F-nodes, roughly corresponding to the traditional lexical/functional distinction. However, within DM this distinction follows from whether a terminal node consists of morpho-syntactic features (an F-node) or does not (an L-node). Prepositional forms without a lexical distribution (*to, from, at*) are argued to be exponents of the $p_$ head itself, an F-node, composed of [PATH], [LOCATION] etc... relational features while the other forms with a lexical distribution are the product of $p_$ framing a concept/root as a spatio-temporal relational item. /a-/ or /be-/ prefixed prepositional forms (*aside* vs. *beside*) are argued to be exponents of $p_$; the fact that this categorial morpheme surfaces as a prefix instead of a suffix (as other categorial heads do in English) may be explained as a product of morphological rather than syntactic structure. While affix ordering is proposed to reflect syntactic hierarchical structure, the realization of an affix as a prefix or suffix is argued to be an idiosyncratic property of an affix (Noyer 1997) or one that is not derived from its syntactic role (Halle and Marantz 1993).¹

Interestingly this proposal of $p_$ seems to closely align with the division of Japanese functional postpositions and the lexical items (relational nouns) that add more detailed spatial information to the postpositional phrase.

(3) Functional Postposition

から *kara* ‘from’

に *ni* ‘to’

に *ni* ‘at’

(4) Relational Noun

上 *ue* ‘above/on/up’

下 *shita* ‘below/under/down’

中 *naka*/ 内 *uchi* ‘in/inside’

¹ In Tamazight, the prefix /n-/ realizes first person plural while the suffix /-y/ realizes first person singular.

で de ‘at’

外 soto ‘outside’

One major difference, however, is forms such as *shita* ‘down/under’ must occur with a functional postposition within a postpositional phrase. Unlike the roots in (1,2) in English, the lexical items in (4) never appear to function as postpositional markers themselves.

(5) eki *(no) shita *(ni)
Station GEN under at
‘under the station’

If the analysis for English is correct, I propose that the postpositions in (3) are in fact realizations of a p_head , as claimed for English. However, in Japanese $p_$ never categorizes a bare root. Otherwise, *shita* could function as the postposition in (5). It is thus proposed that $p_$ in Japanese is analogous to the kind of $n_$ in English that recategorizes a verb phrase into a deverbal nominal (i.e. English gerunds). In Japanese $p_$ selects nP while $p_$ in English either selects for a root or an nP.

Within DM, categorical features are responsible for grammatically framing root information for semantic interpretation. This proposal may thus help explain why floating numeral quantifiers cannot be associated with *locative* or *path* postpositional noun phrases (Miyagawa 1989; Hamano 1997 among others). That is, if the phrase is categorially a locative postposition, then that concept is not viable for count modification. On the other hand, other Case-marked noun phrases remain categorially nominal, permitting count modification.

This proposal thus uses the mechanisms of DM to continue to explain the lexical/functional behavior of adpositions, drawing parallels between English and Japanese. It suggests that parameters/specifications exist for where categorial features (specifically $p_$) may merge within the derivation and that these may be language specific.

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Evidentials and Presupposition Resolution

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1. Introduction In this paper, I investigate the Japanese inferential and reportative evidentials, *-yoo* and *-soo*, in relation to presupposition. As shown in the continuations (1a-c) and (1b-c), evidentially marked sentences presupposing ϕ cannot follow the preceding $\neg\phi$ or $\neg\phi$ +evidential.

- (1) a. Taro-wa tabako-o sut-tei-nak-atta.
 Taro-Top tobacco-Acc smoke-Prog-Neg-Past
 ‘Taro had not been smoking.’
- b. Taro-wa tabako-o sut-tei-nak-atta soo-da.
 Taro-Top tobacco-Acc smoke-Prog-Neg-Past soo-Cop
 ‘I infer/heard that Taro had not been smoking.’
- c. (following (1a) or (1b))
 #shikashi/soshite kare-wa tabako-o yameta yoo-da.
 but/and he-Nom tobacco-Acc stopped soo-Cop
 ‘but/and I infer/heard that he stopped smoking.’

For convenience of reference, proposition ψ presupposing ϕ will be written as $\psi \wedge \hat{\delta}\phi$. Below, I show that (1) is a problematic case for an influential previous work, and propose a system that can deal with both evidentials and presupposition adequately.

2. Matthewson *et al.* (2007) Matthewson *et al.* (2007) treat evidentials in St’át’imcets as epistemic modals and give the following modal-like semantics to the inferential *-k’a* and the reportative *-ku7*.

- (2) $\| -k’a \|^{c,w}$ is only defined if context c provides a modal base B such that for all worlds w' , $w' \in B(w)$ iff the inferential evidence in w holds in w' .

If defined, $\| -k’a \|^{c,w} = \lambda f_{\langle st, st \rangle} . \lambda p_{\langle s, t \rangle} . \forall w' [w' \in f(B(w)) \rightarrow p(w')]$

B is an epistemic modal base, and f is a choice function that picks up a subset of $B(w)$. The semantics of the reportative *-ku7* is the one in which *the inferential evidence* in (2) is replaced with *the reportative evidence*. If their analysis is applied to Japanese evidentials, the continuation of (1b-c) will be problematic; even if $\neg\phi$ is true in some worlds in $B(w)$ where the reportative evidence holds, $\psi \wedge \hat{\delta}\phi$ can be defined, for ϕ can be true in other worlds in $B(w)$ where the inferential evidence holds. Thus, in order to capture the behavior of Japanese evidentials, we have to adopt other methods.

3. Proposal The framework of my proposal is based on Update Semantics by Veltman (1996). He proposes that the information state σ is a triple $\langle W, \varepsilon, s \rangle$, where W is the set of all possible worlds, ε represents some ordering between each world, and s is a subset of W , representing the speaker’s knowledge. To deal with evidentials, similarly to McCready (2015), I add to this system two subsets of W , s_{Inf} and s_{Rep} , the former being a set of worlds compatible with what the speaker can infer from some evidence, and the latter of which being a set of worlds compatible with what she heard. Further, I assume in my system that ε is *the plausibility ordering*, the notion from McCready (2015), where worlds are ordered by \leq_a , according to the plausibility of each world, as in (4). Given these settings, I formulate forms of update for simple assertions and evidentially marked assertions as in (5) to (7).

- (3) The information state $\sigma = \langle W, \varepsilon, s, s_{Inf}, s_{Rep} \rangle$, where $s, s_{Inf}, s_{Rep} \subseteq W$
- (4) $s \leq_a t$ iff agent a considers world t to be at least as plausible as world s
- (5) $\sigma[\phi] = \langle W, \varepsilon', s \cap \|\phi\|, s_{Inf}, s_{Rep} \rangle$, where ε' is the same as ε except that $\forall v, u \in s [v \in \|\psi\| \wedge u \notin \|\psi\| \wedge v \leq_a u \rightarrow u \leq'_a v]$ (\leq'_a is the plausibility ordering after update)
- (6) $\sigma[E_{Inf}\phi-yoo] = \langle W, \varepsilon', s, s_{Inf} \cap \|\phi\|, s_{Rep} \rangle$, where ε' is the same as ε except that $\forall v, u \in s [v \in \|\psi\| \wedge u \notin \|\psi\| \wedge v \leq_a u \rightarrow u \leq'_a v]$
- (7) $\sigma[E_{Rep}\phi-soo] = \langle W, \varepsilon', s, s_{Inf}, s_{Rep} \cap \|\phi\| \rangle$, where ε' is the same as ε except that

$\forall v, u \in s [v \in \|\psi\| \wedge u \notin \|\psi\| \wedge v \leq_a u \rightarrow u \leq'_a v]$

($E_i\phi$ is proposition ψ with i evidence, where $i = \{\text{Inferential (Inf), Reportative (Rep), ...}\}$)

What ϕ does is to narrow down s so that s contains only ϕ -worlds, and to order ϕ -worlds in s higher than $\neg\phi$ -worlds in s . What $E_i\phi$ does is to narrow down s_i and order ϕ -worlds in s higher.

Next, move on to the treatment of presupposition. Generally, if ϕ is not in the context, in processing $\psi \wedge \partial\phi$, ϕ is integrated into the context before ψ is processed. Suppose that you say *I have to pick up my sister* and the utterance is rejected by the addressee who does not know that you have a sister. Even then the proposition presupposed by the definite description, *the speaker has a sister*, is accepted and remains (Stalnaker 2002). This phenomenon is called *accommodation*. There are two types of accommodation. For example, when sentences like *John believes that the king of France is bald* are processed, what is accommodated is (i) *there is a king of France*, or (ii) *John believes that there is a king of France*. The former is *global accommodation*, and the latter is *local accommodation*. Furthermore, when there is an option between the two types of accommodation, global accommodation is preferred (Heim (1992)).

Evidentially marked sentences also have this option; the *yoo*-version of (1c) can presuppose *it is raining* (global accommodation) or *there is inferential evidence indicating that it is raining* (local accommodation). As with *John believes that it is raining*, global accommodation is preferred in the case of evidentially marked sentences, as is found in (8). Thus, when interpreting $E_i[\psi \wedge \partial\phi]$, what is accommodated is normally ϕ , but not $E_i\phi$. Therefore, the update will be of the following form.

(8) (The speaker does not know whether Taro had been smoking)

??Taro-wa	tabako-o	yameta	soo/yoo-da.
Taro-Nom	tobacco-Acc	stopped	soo/yoo-Cop.

‘I infer/heard that Taro stopped smoking.’

(9) $\sigma[E_i[\psi \wedge \partial\phi]] = \sigma[\phi][E_i\psi]$ when the presupposition of $E_i[\psi \wedge \partial\phi]$ has not been satisfied.

4. Illustration Henceforth, propositions *Taro had been smoking* and *Taro stopped smoking* are represented as ϕ and $\psi \wedge \partial\phi$, respectively. In the continuation (1a-c), (1a) narrows down s , only $\neg\phi$ -worlds being left in s , (by (5)), and when (1c), $E_{Inf}[\psi \wedge \partial\phi]$, is interpreted, (9) is applied because ϕ is present neither in s nor s_{Inf} (i.e. the presupposition of $E_{Inf}[\psi \wedge \partial\phi]$ is not satisfied). As a result, s will be an empty set, (i.e., *absurd state* by the terminology of Veltman (1996)), hence unacceptability. As for the continuation (1b-c), (1b) narrows down s_{Inf} , and orders $\neg\phi$ -worlds in s higher than ϕ -worlds, and, in the same way as (1a-c), σ accommodates (is updated by) ϕ before $E_{Inf}\psi$ is processed (by (9)). Accordingly, the $\neg\phi$ -worlds ordered higher by (1b) are immediately reordered lower than ϕ -worlds by the accommodation. In other words, the ordering by the first sentence is nullified by the second sentence. If we posit some pragmatic principle like (10), we can correctly predict the unacceptability of the continuation of (1b)-(1c).

(10) In $\sigma[\phi \wedge \psi]$, if ordering by $\sigma[\phi]$ is not left in $\sigma[\phi \wedge \psi]$, it is inadequate.

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Epstein, Kitahara and Seely (EKS) (2015) propose that Passives are derived by external pair merge of R and v.

- (1) a. John was hit (by Mary).
 b. [ϕ, ϕ John [_T T [_{R+v} R+v John]]]
-

In (1), v has lost its ϕ -feature as a result of the external pair merge of R and v. Therefore, transfer does not occur until C phase is completed, which enables *John* to move to [Spec, T].

However, EKS (2015) cannot cover Bahasa Indonesia. This language has two kinds of passives as shown in (2b, c).

- (2) a. Ali mem-batja buku itu. b. Buku itu di-batja (oleh) Ali.
 A. Trans-read book the book the Pass-read by A.
 ‘Ali read the book.’ ‘The book was read by Ali.’
 c. Buku itu saja batja.
 book the I read
 ‘The book, I read.’

(Chung (1976))

(2b) is called canonical passive (CP) and (2c) is called object preposing (OP). At first sight (2c) may be seen as a kind of topicalization, but Chung (1976) shows much evidence which shows that (2c) is actually a kind of passive construction.

While CP can be explained by EKS (2015), OP cannot. This is because thematic subject cannot be omitted in OP. (3a) is an example of CP and (3b) is that of OP.

- (3) a. Orang itu di-pukul. b. *Orang itu pukul.
 man the Pass-hit man the hit
 ‘The man was hit.’ ‘The man was hit.’

(Chung (1976))

The fact that OP obligatory has a thematic subject means that it is actually an argument. Therefore, EKS (2015) leaves it unclear why *buku itu* moves to the subject position over *saja*.

As for OP, I propose that it is derived by the system based on θ -features. Actually, there are some languages which cannot be covered by the Labeling Algorithm proposed in Chomsky (2013, 2014), which is based on ϕ -features. Chomsky (2013, 2014) proposes two strategies to label [XP, YP] configuration. One is to move either XP or YP to higher position and the other is to label with certain agreed feature, namely ϕ -feature. First, consider Flemish, where subjects stay inside vP.

- (4) Oan der moisten meer studenten dienen boek kuopen, ...
 if-3PL there must-PAST-3PL more students that book buy
 ‘If more students had to buy that book ...’

(Haegeman (2012))

Flemish has SOV order and auxiliaries precedes verbs. In (4), the subject and the object move to a higher position leaving the auxiliary *moisten*. Here, it is hard to stipulate that a movement of the subject occurs between the auxiliary and the object, which means that the [XP, YP] configuration is not resolved.

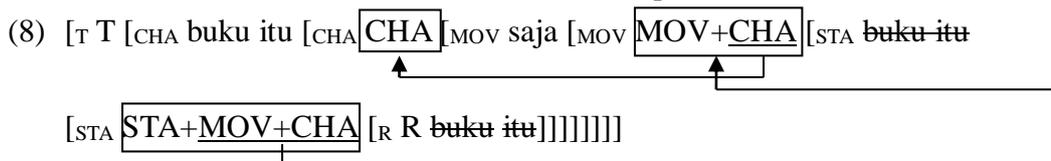
Another language which cannot be explained by Chomsky (2013, 2014) is Japanese. Saito (2007)

and Şener and Takahashi (2010) claim that Japanese lacks ϕ -features based on the fact that Japanese allows argument ellipsis. If it is true, Japanese cannot label [XP, YP] with ϕ -features, so an alternative strategy is necessary.

The two problems can be solved by the assumption that in some languages Labeling Algorithm is based on θ -features. I assume that θ -roles are formal features, which work as criterial features in the sense of Rizzi (1997). Furthermore, I separate traditional θ -roles into some Proto-Roles following Dowty (1991) as shown in (5) and (6), and these Proto-Roles have the hierarchy described in (7).

- (5) Contributing properties for the Agent Proto-Role:
 - a. volitional involvement in the event or state (VOL) b. sentience (SEN)
 - c. causing an event or change of state in another participant (CAU) d. movement (MOV)
- (6) Contributing properties for the Patient Proto-Role:
 - a. undergoes change of state (CHA) b. incremental theme (INC)
 - c. causally affected (AFF) d. stationary relative to movement of another participant (STA)
- (7) CHA > VOL > SEN > CAU > AFF > MOV > INC > STA

In numeration, each DP is assigned θ -features. At the same time, the same θ -features as are assigned to DPs are amalgamated to be v . When certain criterion is satisfied, v dissolves and moves to higher position leaving the satisfied θ -feature. In this framework, (2c) is derived as follows. I omit the arrow line which shows the movement of *buku itu* in order to avoid complication.



Considering the meaning of the sentence, *saja* has [MOV] while *buku itu* has [STA] and [CHA]. The crucial point in (8) is that *buku itu* can move to [Spec, CHA] over *saja*, since *buku itu* has the criterial feature which must be satisfied in that position.

The proposal above implies that the subject stays below T. Actually, this implication is borne out. CP and OP are different in what they can control. (9a) and (9b) are CP and OP respectively.

- (9) a. ?? Sendjata itu di-buka (oleh) Ali untuk mem-perbaiki-nja.
 weapon the Pass-open by A. for Trans-repair-it
 ‘The gun was opened by Ali to repair.’
- b. (?) Sendjata itu kita buka untuk mem-perbaiki-nja.
 weapon the we open for Trans-repair-it
 ‘The gun, we opened to repair.’

The difference of acceptability between (9a) and (9b) is explained by the difference of the positions of the subjects. *Sendjata itu* is in [Spec, T] in (9a) while it is in [Spec, v(CH A)] in (9b). In other words, in (9b) the subject is nearer to its controllee than in (9a). This difference of distance makes (9b) more acceptable than (9a).

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A Morphological Template and Old English Derivational Morphology

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It has been cross-linguistically agreed that more than one affix can combine with a single base to express a larger set of semantic meanings, or to derive new words and word forms. However, of all possible affix combinations in a language, a relatively limited number are attested, which poses a question: What principles are responsible for the existing combinations? A recent publication of the two-issue volume (Vol. 20) of the journal *Morphology* provides evidence that suffix combinations are constrained by a variety of linguistic principles (Manova and Aronoff 2010, Zirkel 2010, among others).

However, it has also been observed that in some languages (e.g, Athapaskan languages) suffix combinations are not regulated by structural or processing factors, but rather described as consisting of a template, or string of fixed order positional classes (Kari 1989, Rice 2000). In this type of languages a template orders the suffixes, each of which is marked for the position (slot) in the template that it occurs.

In Old English (OE) a number of suffix combinations are attested but the issue concerning the order of the suffixes and a morphological device regulating the order has not been examined yet. Addressing the research gap in OE morphology, this paper aims to account for the OE suffix combinations in terms of a morphological template. To achieve the goal, this paper introduces a template as a morphological device to order suffixes occurring in sequence, and then attempt to account for the suffix combinations and some other OE morphological processes in terms of the template. The issues to be discussed include inflectional suffixes having the function of derivation (present and past participle endings, the adverbial genitive suffix *-es*, and case endings like *-a*, *-e*, *-o*, *-u*), the redundant occurrence of the derivational suffix *-lic*, and suffix combinations. It will be shown that the OE template serves as a useful device for word formation and works well in ordering a variety of suffix combinations and accounting for these different issues in a unified way.

[Guest speaker from The English Linguistic Society of Korea (ELSOK)]

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Canadian Raising: Evidence for or against Rule Ordering

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Phonologists have been entangled in the argument over the tenability of rule ordering for several decades. Canadian raising (henceforth CR) is perhaps a language phenomenon that is most frequently involved with rule ordering discussions. To understand CR, an introduction to the following two rules must be made.

- (1) Canadian Raising Rule (Chambers (1989))
/ai/ → [ʌi] / _____ [-voice]
- (2) Intervocalic Voicing Rule (Chomsky and Halle (1968))
/t/ → [d] / V _____ V

In the Canadian Raising Rule (1), /ai/ is realized as [ʌi] before a voiceless coda, such as /t/ or /p/. In other words, /ai/ is raised into [ʌi] before a voiceless coda, which is why this phonological phenomenon is termed as Canadian Raising. Celebrated exemplifications in this regard include the contrast between [ɾʌit] and [raid] (*write* and *ride*). In the Intervocalic Voicing Rule (2), an intervocalic /t/, that is /t/ between vowels, is voiced into /d/, as a result, “*latter = ladder*” (Joos (1942: 143)).

Joos (1942) first brought CR to phonologists’ attention. Joos (1942: 143) pointed out that speakers of certain dialects in Canada are “divide[d] into two groups according to their pronunciation of words like *typewriter*. Group A says [tʌipɾʌidə], while Group B says [taipɾaidə].” Halle (1962) interpreted the reason as the following: (a) in Group A, [taipɾaitə] (*typewriter*) is firstly converted by the Canadian Raising Rule (1) into [tʌipɾaitə], which is then turned by the Intervocalic Voicing Rule (2) into [tʌipɾaidə]; (b) the ordering of Rule (1) and Rule (2) is reversed in Group B, as [taipɾaitə] is first turned by the Intervocalic Voicing Rule (2) into [taipɾaidə] and then by the Canadian Raising Rule (1) into [tʌipɾaidə]. Halle (1962: 386) further claimed that the necessity of rule ordering is confirmed by CR, due to the fact that, “in the grammar of [G]roup A,” the Canadian Raising Rule (1) precedes the Intervocalic Voicing Rule (2), “while in the grammar of [G]roup B, the reverse order obtains.”

If the picture is as clear as what is just described, then CR is highly possible to be taken as a solid piece of evidence for the validity of rule ordering. However, opinions of disagreement over the issue are not rare either. To name a few, Boberg (2014: 150) describes that CR “is not ... a completely uniform or invariant feature of Canadian English.” And Hall (2005: 192) implies that her study questions “the assumed predictions of traditional phonological rules”; namely, Hall (2005) does not think that CR can even be well explained by traditional phonological rules.

The problem is clear now: to answer the question whether CR is evidence for or against rule ordering, a thorough understanding and explanation of CR is the first and also an indispensable step. In the present study, I adopt the concept of *variation* and *variable rules* and propose to treat CR as variation and explain it in terms of variable

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rules. I assume that CR, in addition to phonetic environments, is as well influenced by extra linguistic factors, such as ethnic origin, age, education background, gender, social class, and so on. With such a theoretical background, the application of rules for CR is not either 0 or 1; namely, those rules are not categorical (Sankoff and Labov (1979)). The same term applies to rule ordering as well: the ordering between the Canadian Raising Rule (1) and the Intervocalic Voicing Rule (2) depends on both internal linguistic factors and extra linguistic factors; with every change in one factor, the ordering may vary too.

With respect to data, I will mainly refer to data in open corpora or open databases and data from works of scholars concerned with CR. I will use the software GoldVarb X to carry out variable rule analysis, by focusing on the next three points: (a) find out which factors are significant for the applicability of Canadian Raising Rule (1), and the relative contribution of each factor; (b) uncover which factors are significant for the applicability of Intervocalic Voicing Rule (2), and the relative contribution of each factor; (c) reveal whether there is a correlation between Canadian Raising Rule (1) and Intervocalic Voicing Rule (2); if there is a correlation between the two rules, also reveal which factors are significant for the correlation between the two rules and the relative contribution of each factor. At the present stage, I assume that the correlation between Canadian Raising Rule (1) and Intervocalic Voicing Rule (2) is both influenced by linguistic factors and extra linguistic factors, such as age, education background, ethnic origin, gender, social class, etc.

If the present study can prove that there is a correlation between Canadian Raising Rule (1) and Intervocalic Voicing Rule (2), and also reveal what factors are significant for the correlation between the two rules and the relative contribution of each factor, then I may claim that CR seems to be a piece of evidence for rule ordering and accordingly strengthen the justification of rule ordering.

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Shifted Indexicals in Partial Control

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0. Background/Goal: Since Landau (2000), attention to two distinct types of complement control has surged: one involves attitude predicates such as *hope*, *ask*, and *promise*, in which partial control is allowed and a *de se* reading is obligatory; and the other is associated with predicates such as *begin*, *manage* and *force*, where partial control is unavailable and *de se* is not obligatory (Grano (2012), Landau (2015)). Some studies have converged on the assumption that the former type involves context shifting (Anand and Nevins (2004), Pearson (2013), Landau (2015)). However, exactly how partial control is derived in shifted complements remains a puzzle. The present study addresses this issue.

1. Context-Shifting Approaches: A basic assumption behind these approaches is as follows:

(1) Speech context: Sarah is talking to David.

[CP <Speaker, Addressee> [TP John told Mary [CP <Speaker', Addressee'> [TP to leave]]]].
speech event context matrix event context

In all roots and some complement clauses, the context of speech/belief is represented in the left periphery. The context tuple consists of *Speaker*, *Addressee*, *Time*, and *World*. Here I focus on the *Speaker* and *Addressee* coordinates. In roots, they represent the speaker/addressee of the actual utterance context. In (1), *Speaker* in the matrix CP represents Sarah, *Addressee* David. In attitude complements, the context shifts to the matrix event context, leading to overwriting of context coordinates: *Speaker'* and *Addressee'* represent the referents of *John* and *Mary* respectively.

Anand and Nevins (2004) maintain that PRO is a shifted speaker in subject control and a shifted addressee in object control. Landau (2015) argues that PRO is just a minimal pronoun connected to a relevant shifted coordinate by predication, and the coordinate is in turn bound to a matrix argument. Obligatory *de se* arises from shifted indexicals. Either proposal, however, cannot account for partial control because PRO refers only to the shifted speaker/addressee.

2. Partial Control (PC) and Associative Semantics: PC examples often contain a collective element such as *meet* in (2), but such an element is not required to induce PC.

(2) The chair_{*i*} preferred PRO_{*i*+} to meet at 6. (Landau (2000))

(3) Mary asked John_{*i*} PRO_{*i*+/i+} to move the piano.

(3), adapted from Pearson (2013), illustrates that if the contextual information is properly set,

PC naturally arises; the piano is too heavy for John alone to move. Note, however, that an exhaustive reading is still available in (3), if John is considered strong enough to move it alone. Syntactically, attitude control complements are always ambiguous between partial and exhaustive readings. Set theoretically, a subset relation holds between the controller and PRO.

A subset relation also holds between the speaker and the 1st person pronoun. It is often taken that the notions of 1st person and speaker are equivalent; they are not. The 1st person reference set is identical to the speaker only when its cardinality is one; in the other cases it refers to the speaker plus others; and similarly for the 2nd person. The associative plural nature of the 1st/2nd person pronouns has long been known (Postal (1969), Wechsler (2010)), but it often escapes linguists' attention. At the core of the person system are reference sets distinguished by inclusion (+) and/or exclusion (-) of the *Spk(eaker)* and the *Addr(essee)*: 1st person exclusive is defined +*Spk*/-*Addr*; 1st person inclusive +*Spk*/+*Addr*; 2nd person -*Spk*/+*Addr*; and 3rd person -*Spk*/-*Addr*.

3. Proposal: My proposal generalizes the associative nature of 1st/2nd person to interpretation of PC. The key assumptions are as follows: PRO is a variable without inherent number/person features; attitude infinitival complements denote a property, λ -abstraction taking over the subject (Chierchia (1990), Pearson (2013)); shifted speaker and addressee are represented in the complement CP, more specifically in FinP; Fin head has certain $\pm Spk/Addr$ values selected by the matrix predicate; a null Operator with the same values is located at spec FinP; and this Operator binds PRO. The syntactic representation of (3) is (4):

(4) Mary asked John [_{FinP} Op_{<-Spk', +Addr'>} Fin_{<-Spk', +Addr'>} [_{TP} PRO to [_{VP} *t* move the piano]]].

The Op in (4) is, in essence, like the *wh*-quantifier *who* with more restrictions: not only +*human* but -*Spk* and +*Addr*. Force/Fin unification brings the Op to the clausal edge.

My proposal properly captures ambiguity associated with PC: if the cardinality of the Op reference is one, an exhaustive reading obtains; if more than one, a partial reading is derived. The *de se* nature is ensured by the shifted speaker/addressee.

Although the Op is valued $\pm Spk/Addr$, it is never 1st/2nd person itself; an additional tense feature is required to be 1st/2nd person as suggested in Schlenker (2003). It is not a mystery that a 3rd person reflexive appears in the complement as in (5).

(5) Mary asked John to behave *himself*.

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A Constructional Approach to the Complex Motion Predicate Construction in English

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The goal of this paper is to challenge the principle of no synonymy, proposed by Goldberg (1995: 67), by making use of the concepts of argument structure and inheritance relation. To precisely capture the relationship between constructions in these respects, I discuss a construction exemplified in (1) and its relation to other constructions.

- (1) a. My son went running to Irene's house to see what was the matter. (BNC-HH3)
b. James came running up the stairs as she came out of the office. (BNC-FRS)

I name this construction the 'Complex Motion Predicate Construction' since it involves two verbs, constituting a single complex predicate (see also Alsina et al. 1997: 1, cf. Morishita 2014).

This construction, at first sight, seems to be a characteristic construction in that two verbs are serialized. The Complex Motion Predicate Construction is not as idiosyncratic as Goldberg (2006: 50–52) points out. Indeed, Goldberg stresses the idiosyncratic properties of this construction.

However, in regard to argument structure, the Complex Motion Predicate Construction is the same as the Intransitive Motion Construction. The argument roles of both constructions are **theme** and path. In the case of the Complex Motion Predicate Construction, the participant roles of a complex predicate are fused with **theme** and path in the same way as the Intransitive Motion Construction. Moreover, the mechanism in which the participant roles of a complex predicate are fused with the two argument roles is compatible with the semantic coherence principle and the correspondence principle (Goldberg 1995: 50).

The Complex Motion Predicate Construction can be handled in precisely the same fashion as the Intransitive Motion Construction in respect to inheritance relation as well. As discussed by Goldberg (1995: Chapter 3), the Intransitive Motion Construction is related to the Caused-Motion Construction and the Resultative Construction via a subpart link and a metaphor link, respectively. The Complex Motion Predicate Construction is also related to the two constructions via a subpart link and metaphor link. Examples of constructions related to the Complex Motion Predicate Construction are given in (2).

- (2) a. My screams of terror awoke my parents and brought them rushing into my room. (BNC-A6C)
- b. Leeds Utd went surging ahead on the commercial front last year. (BNC-J1H)

As I have already noted, this paper challenges the principle of no synonymy suggested by Goldberg. On the basis of her claims, the Complex Motion Predicate Construction seems to be distinct from the Intransitive Motion Construction in that the former involves two verbs, while the latter involves only one. However, there are not obvious semantic/pragmatic distinctions between the two constructions. Rather, these two constructions should be the same in regard to argument structure and inheritance relation even though the superficial syntactic forms of both constructions differ from each other.

Constructionists are apt to assume various kinds of constructions, and are fond of pointing out the differences between them (cf. Croft 2001). This trend is widely recognized but I cannot completely agree with it, for generalizations between constructions may fail to be captured. The principle of no synonymy, suggested by Goldberg, assumes that syntactic distinctions lead to semantic/pragmatic differences. However, what the phrase "syntactic distinctions" means is somewhat obscure. In addition, differences between the superficial forms of two constructions do not necessarily ensure that they distinct constructions. A construction should be differentiated from and identified with another in regard to argument structure and inheritance relation.

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Competition in Word-Formation: Deverbal Nominalization by *-ment* vs. Conversion

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1. Introduction

Aronoff (1976: 43) defines the notion of morphological blocking as “the nonoccurrence of one form due to the simple existence of another.” For example, although the suffix *-ness* can derive a noun from an adjective, the form **decentness* (< *decent* + *-ness*) does not occur. This is because it is pre-empted by *decency* as the nominal form of *decent* that is derived by the competitive suffix *-cy* (Aronoff (1976: 55)). Given the notion of blocking, we can predict that an earlier derivative wins out over a later derivative if they share the same base and are in a competitive relationship. The examination of this prediction raises an interesting question when we consider deverbal result nominals (Grimshaw (1990)). Of particular significance is the fact that result nominals can be formed not only by suffixation (e.g., *a development*) but also by conversion (e.g., *a work*). Marchand (1969) and Kiparsky (1982), among others, argue that conversion is zero-suffixation. If so, nominal suffixes like *-ment* have a rivalry with the zero nominalizer \emptyset . This means that these suffixes should be in complementary distribution, as with the case of *-ness* and *-cy*, resulting in the blocking of a later result nominal by an earlier one. However, this is not always the case; data collected from the *Oxford English Dictionary (OED)* reveal that a later form can occur despite the existence of an earlier form even when they share the base and are synonymous. Then, why can they co-exist? I aim to answer this question by focusing on the processes that produce result nominals.

2. Observation

First, I will show that a suffixed noun and a converted noun do not block each other by observing result nominals formed by deverbal *-ment* suffixation and those formed by V-to-N conversion. According to Marchand (1969: 331), *-ment* came into Middle English from continental Old French and Anglo-French and its derivative pattern seems to have been stabilized after 1450. Lindsay and Aronoff (2013) show that the productivity of *-ment* started to decline in the 17th century. Excluding the examples directly loaned from French and examining *-ment* nouns derived during the productive period, I focus on the *-ment* nouns that are first attested from 1450 to 1600 and are not obsolete. My search of the *OED* found that 248 *-ment* nouns appeared during the period in question, among which 44 instances have converted noun counterparts. Table 1 classifies the 44 doublets of *-ment* and converted nouns according to (i) the semantic difference between the two forms (whether they are synonymous or not) and (ii) the diachronic order of their first occurrence.

Certainly, there are cases that support the prediction from Aronoff’s discussion (5 doublets, approximately 11%). In the other cases (approximately 88%), however, the two forms of a doublet coexist even though they are synonymous, regardless of the order of appearance. For example, the prior existence of *attire* does not block the suffixed synonymous noun *attirement*, which has the same meaning as the former (i.e., ‘dress, apparel’). Likewise, *discontentment* does not block the converted synonymous noun *discontent*, which means dissatisfaction. This fact cannot be easily explained by the zero-suffixation approach to V-to-N conversion because the zero-suffix should compete with *-ment*

and thus they should be mutually exclusive, as observed in the case of *-ness* and *-cy*. Therefore, I take a different approach to V-to-N conversion.

Table 1.

		(i)	
		Synonymy	No synonymy
(ii)	The converted noun appeared earlier.	23 doublets <i>approach/approachment,</i> <i>attire/attirement,</i> <i>gaze/gazement, etc.</i>	3 doublets <i>furnish/furnishment,</i> <i>manage/management,</i> <i>require/requirement</i>
	The <i>-ment</i> noun appeared earlier.	15 doublets <i>arraignment/arraign,</i> <i>discontentment/discontent, etc.</i>	2 doublets <i>endorsement/endorse,</i> <i>renouncement/renounce</i>
	The two forms appeared in the same year.	1 doublet <i>allure/allurement</i>	0 cases

3. Proposal

I propose that competition that leads to blocking, compares not only the rivaling forms themselves but the processes that produce them. That is, if the two forms are produced by the same process (e.g., suffixation), they are exclusive. Conversely, if they are created by different processes, they can coexist even when they are synonymous. Under this proposal, the facts can be explained by adopting Naya's (to appear) analysis of nouns converted from verbs. Naya (to appear) argues that converted nominals are not formed by suffixation but by combining the base verbs with phonetically null nouns such as *ENTITY*, *PROCESS*, and *RESULT*, which are silent variants of semantically light nouns called "semi-lexical nouns" (cf. Corver (2008)). This analysis has an advantage over the zero-derivation analysis in that it successfully accounts for why V-to-N conversion exclusively forms result nominals. Under this analysis, the noun *attire* is formed by combining the verb *attire* and *ENTITY*, resulting in the structure $[[attire\ v]\ [ENTITY\ N]\ N]$. This process is different from the one that produces *attirement*; *attirement* is formed through derivation. Therefore, *attire* and *attirement* do not compete and can coexist.

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An Analysis of the Use of the First-Person Pronoun in Japanese and English Interaction

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One of the significant differences between Japanese and English language use is whether to refer to the subject or speaker him/herself. Previous studies have shown that Japanese does not usually require this, unlike English. However, there are some cases where Japanese uses the first-person pronoun. This study focuses on the use of the first-person pronoun in Japanese and English conversation, and especially considers in which cases or for what purposes Japanese uses the first-person pronoun.

Previous studies which compare the properties of the subject in languages including Japanese and English have shown that Japanese does not need the subject itself, while English does. From a cognitive semantic point of view, Ikegami (1991) points out that the Japanese language is classified as a BECOME-language, where the representation emphasizes “BECOMing” and “the human individual, if any is involved, tends to be suppressed and merged with the environment” (Ikegami 1991: 318). On the other hand, English is a DO-language, where the dominant schema of representation is “someone DOing something,” and it “tends to focus on the human being as agent and likes to represent it prominently” (Ikegami 1991: 318). In addition, from a discourse pragmatic point of view, Ide (2006: 219) claims that Japanese does not need a subject. Accordingly, Japanese has an inside or subjective point of view and the speaker is buried in the context or *ba* (field) as one of the elements, assuming each element involving the listener in the *ba* is shared knowledge. Then the speaker decides what needs to be stated, depending on the *ba* of talk. A reference to the speaker, for instance, does not need to be indicated because that it is the person now speaking is understandable for the listener.

Based on the fact that Japanese does not always require the first-person pronoun, unlike English, this study explores for what purpose Japanese use the first-person pronoun, with data from the Japanese and English conversation in the Mister O Corpus¹. The subjects are female teachers and students, and native Japanese and English speakers: teacher-student pairs and student-student pairs. Each pair talks about the topic, “What were you most surprised at?” for 5 to 8 minutes. In this study, 13 teacher-student pairs (T-S pairs) and 13 student-student pairs (S-S pairs) are used.

¹ The ‘Mister O Corpus’ is a cross-linguistic video corpus collected under a Grant-in-Aid for Scientific Research from the Japan Society for the Promotion of Science (No. 15320054, 18320069, directed by Sachiko Ide, and 20320064, 23320090, directed by Yoko Fujii). It consists of three types of interactions — conversations, narratives, and problem-solving tasks — in Japanese, American English, Korean, Libyan Arabic, and Thai.

The first-person pronouns seen in the Japanese conversations include *watashi*, *watakushi*, *atashi*, *atakushi*, and *jibun*, as compared to English, where there is only “I.” The number of first-person pronouns in English is about 7.7 times greater than in Japanese. In many cases in the Japanese conversation data, the first-person pronouns are not used even when the subject of the proposition is the speaker herself. For example, the utterance *Ano kaado-wa nandat-ta-n darout-te __ bikkuri si-ta.* which means “(I) was surprised at what those cards were.”, is observed. On the other hand, in the English conversation data, first-person pronouns are always used when the speaker is the subject of the proposition, including as a “cognitator” of thinking (Dixon 2009) with a proportion of 15% for the T-S pairs and 18% for the S-S pairs. This is not generally seen in the Japanese.

This result suggests that not using first-person pronouns is the default for Japanese conversation and using first-person pronouns itself has certain meanings. In my analysis, the functions of first-person pronouns are classified into the following categories: 1) presentation of an episode; 2) emphasis (the speaker uses a first-person pronoun to emphasize that the subject is herself although this is understandable from the discourse or sentence structure) ; 3) distinction (the speaker uses it to distinguish the subject as herself among other individuals in a discourse.); 4) contrast (the speaker uses it to contrast the subject to others); 5) conformity (the speaker uses it to conform to the listener); 6) objectification (the speaker uses it to objectify herself).

As seen in this study, the use of the first-person pronoun in Japanese and English interaction is different: in Japanese, since not mentioning the subject is the default, explicit use which entails the functions above is marked and indexical, whereas in English, explicit use as the subject involving agentivity is necessary.

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The Use of Distal Demonstratives in Quasi-Internal Monologues in Japanese and American English

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In daily life, one might likely hear a family member talking to himself/herself while searching for his/her eyeglasses: "Where is *that* thing?" In these kinds of situations, the speaker's full and partial internal monologues are sometimes not particularly directed to a recipient; the line which lies between discourse and internal monologue is defined as "*quasi-internal monologue* (Noda 2006)." The speaker's internal monologue is defined as a statement that the speaker utters that is considered his/her full internal monologue; on the other hand, partial internal monologue is defined as a statement that the speaker utters that is a mixture between dialogue that is spoken to the recipient and internal monologue that is unexpectedly revealed. Noda (2006) states that quasi-internal monologue does not require a recipient at all, but I strongly believe that in Japanese and American English internal monologue does have a communicative function in the presence of another person. Therefore, this study attempts to show how the speaker uses the distal demonstratives *are* and *that* in full and partial quasi-internal monologue when others are present.

In this study, task data corpus from the "Mister O Corpus" is used, and the subjects for the Mister O Corpus are female teachers and students. Each pair, either teacher-student or student-student, is asked to arrange 15 picture cards and make a coherent story but told that there are no "correct" stories and no time constraints.

Reviewing this task-solving corpus data extensively based on the 4 explicit monologic features that Moriyama (1997) and Mimaki (2013) list, full and partial quasi-internal monologues in Japanese and American English are obtained. Since quasi-internal monologues sound monologic, the utterances are equivocal and not specifically directed to the listener; when the speaker's utterance sounds monologic, it is plausible that the listener does not feel the speaker's utterance is an imposing and interrogative statement. In addition, both the demonstratives *are* and *that* make the speaker's utterance more inexplicit than what the distal demonstrative refers to, so it is hard for the listener to recognize what is really meant. This is because the grammatical function of the distal demonstrative suggests that a referent invisibly exists during the speech event.

In Japanese conversation, when speakers utter quasi-internal monologue, it does not sound like an imposition on the recipient and/or does not make the recipient respond. Although quasi-internal monologues do not require the recipient's reply, the results from the analysis suggest that the demonstrative *are* draws the recipient's attention and induces a response, as if the recipient shares the speaker's thoughts. Therefore, it is conceivable to point

out that, together with the demonstrative *are*, in quasi-internal monologues the speaker's thoughts are shared with the recipient. For English conversation, even in quasi-internal monologues, the recipient definitely responds to the speaker. In other words, all utterances are considered discourse that requires the recipient's reply. As a consequence, both Japanese and English conversations show that regardless of the quasi-internal monologues, interactions are preceded by the distal demonstrative.

Fujii, who studies cross-cultural linguistic differences, explains that Japanese speakers place themselves as if they were in the other person's shoes. Physically, the speaker and the recipient have two different minds, but work towards the same task, of one mind. On the other hand, American speakers place themselves separately from each other and their interaction shows that they have independent and individual minds (Fujii 2012). In consequence, Japanese participants influence each other by sharing and merging each individual mind, but American participants' selves are more likely to be independent. From this perspective, the demonstratives *are* and *that* explicate the differences in the two language practices even in quasi-internal monologues.

Altogether, in Japanese interaction, the demonstrative *are* draws the recipient's attention and induces his/her response without any imposing and interrogating of the other. On the other hand, in American English interactions, the demonstrative *that* has the function of an interrogative statement where the recipient responds to the speaker.

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Labeling, *Gross Minimality*, and Embedded Imperatives

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Synopsis: This paper explores labeling of (embedded) English imperatives ((embedded) EImps) based on Chomsky's (2013, 2015) labeling algorithm (LA). We assume (Miyagawa 2010, Suzuki 2013) that EImps, with no ϕ -feature agreement between the subject & verb, are a discourse-configurational language (DC-language; e.g., Japanese; keeping to subject omission). Then, following Chomsky's (2015) observation that "In terms of labeling theory, Italian T, with rich agreement, can label TP ..." & that there is little reason for assuming *pro* in null subject languages, we take T's topic-/focus-features in DC-languages & EImps to be "rich" enough to label TP, & the "empty" DC-language/EImp subject to be "radically empty." Specifically, we explore a *Gross Minimality* (Cecchetto & Donati 2015) account of the problem of the absence of an overt subject in embedded EImps (with the (embedded) EImp examples here taken largely from Crnić & Trinh MS., MIT & Shuhama 2014).

Proposal: We follow Miyagawa (2010) in assuming the dichotomy between agreement-based languages (A-languages; e.g., English) & DC-languages in terms of ϕ -features and topic-/focus-features (respectively) inherited by T from C for the purpose of triggering A-movement to T. We further assume (Miyagawa 2010) that "Topic (– focus) is default and focus is marked, with probing taking place only for a focus," with the additional assumption that the overt Imp subject receives a <+focus>-feature. Then keeping to the syntactic object SO in need of labeling: ' {XP, YP}, neither a head,' Chomsky's (2013) LA provides three 'labeling' categories a)-c): **a)** ... XP ... {~~XP~~, YP}: SO, labeled based on YP, raising of XP; **b)** {XP_[+F], YP_[+F]}: SO, labeled based on [+F], 'feature-sharing'; & **c)** *{XP, YP}: SO, unlabeled in the absence of a) or b). The basic paradigm to explain is summarized in (1, 2) for unembedded & embedded EImps without & with an overt subject, respectively:

- (1) a. Open the door! b. Somebody open the door!
(2) a. John said open the door. b. *John said somebody open the door.

Our proposal for account of distinctions between (1a,b, 2a, b) is summarized below in (3a,b, 4, 5a, a') respectively:

- (3) a. [_T T-<(-focus/) topic> [_{vP} open the door]] (= (1a))

T inherits (-focus/) topic from C. (3a) is labeled as 'T/topic' based on the <topic>-feature.

- b. [_α-<+focus> somebody-<+focus> [_T T-<(-focus/) topic>/<+focus>
[_{vP} (somebody-<+focus>) open the door]] (= (1b))

T inherits from C two <- focus>-features, one of which it receives as a <(-focus/) topic>-feature on T & the other of which serves as a probe for the focus *somebody*, ending up as <+focus> on T (Miyagawa 2010). α is labeled as '<+focus>,' which is shared by *somebody* & TP. See Saito (2007) & Suzuki (2011) for the necessity of a <topic>-feature on Imp T.

- (4) [John said T] (= (2a); label 'T/topic' is visible for Merge between *said* & itself)

Gross Minimality Blocks Overt Subjects in Embedded Imps: Crnić & Trinh (MS., MIT) observe that pronouns and indexicals in embedded Imps must be evaluated with respect to the

“**actual speech context.**” We take this to point to the necessity of the *embedded Imp T inheriting features from the matrix C*. This may limit the categorial status of the embedded Imp to TP so that it may be phase-wise accessible to the matrix C, with the consequence of the complementizer *that* not being allowed in embedded Imps. Look at (5a) (= (2b)):

(5) a. *John said [somebody open the door]. (= (2b))

a'. *[C-(~~focus~~), <-focus> => <+focus>) [John said [somebody-<+focus> [T T-<(-focus/) topic>/<+focus> [vP (somebody-<+focus>) open the door]]]]]

Probing of *somebody*-<+focus> in the embedded vP by the matrix C's <-focus>-feature is blocked by intervening *John* due to *Gross Minimality* effects of Cecchetto & Donati (2015: chapter 5). I.e., we take (5a, a') to be a case where the <-focus>-prober may target a larger set of elements with a feature N on them not incompatible with <+focus> rather than *somebody*-<+focus> alone. It is not semantics/pragmatics that blocks overt subjects in embedded Imps. See grammatical (6a) containing an embedded Imp with an overt subject:

(6) a. ... I say [don't you worry about no artificial things]. (= Shuhama's 2014)

a'. [C-(<-focus>) [I say [T don't-<(-focus/) topic>/<+focus> [(NEG) (not-<-focus>) [RP(-<+focus>) you-<+focus> worry ...]]]]]

The focus of sentential negation is taken to be Root Phrase (RP). Negation with its own <-focus>-feature probes the focus element, RP, enters into agreement with it, & is valued as <+focus> (see <+focus> on *don't*; Chomsky 2015, Zeijlstra 2013), perhaps with the subsequent 'focus-shift': RP => *you* (Reinhart 2006). <+Focus> identification of *you* by negation does not induce a violation of *Gross Minimality*.

Why Wh-Movement out of an Embedded Imp is OK :

(7) a. ?Who did John say (who) call at three?

b. [_Q (who-<+focus>) [T T-<(-focus/) topic>/<+focus> [vP (who-<+focus>) call at three]]]

α in (7b) corresponds to the embedded Imp in (7a). It is an instance of category a) of Chomsky's (2013) LA, where α is labeled based on T's feature(s) as a result of raising of *who*. Movement of *who* over *John* does not seem to induce *Gross Minimality effects* since the presence of a *wh*-feature on the relevant *wh*-phrase forces *Relativized Minimality* to operate.

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Head Movement and Its Consequences in the Right Periphery

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Synopsis

It has often been reported in the literature that the head movement (HM) in general plays a significant role derivationally. **Bošković** (2014), (2015) claim that the HM grants the argument-extractions from the Double-Phase Structures (DPS) like (5). Conspicuous examples of HMs given in **Bošković** (2015) are English C-to-P and P-to-N movements. There, HM (phase-collapsing) sanctions argument-extractions, while crucially, it does not save adjunct-extractions. Examples are omitted for spatial reasons.

In this paper, I will show that such HM leading to the ‘phase-collapsing’ à la **Bošković** can be found in Japanese right periphery as well. Especially, what is observable in the Complement Nominal Clauses (CNC) epitomizes the effect of HM (phase-collapsing).

T-Topic

Japanese cannot host a Thematic topic (T-topic) in the nominalized clauses headed by *koto/no* when they show up alone (1). However, they can host T-topic when *koto* is directly preceded by an Epistemic Modal (EMod) like *kamoshirenai*.

The reason why suddenly the T-topic position is allowed with *koto* can be found in the HM (T-to-Mod); also, the EMod-insertion indirectly shows the expansion of the embedded CP in that it gains the escape-hatch for extraction. This state of affairs gives further credence to the HM in the Nominative Genitive Conversion (NGC) in Japanese.

Proposal and Discussions

In Taguchi (2008), NGC is possible when the optional T-to-D movement and AGREE obtain, and it is impossible when C is there. When C is present, T-to-D movement is blocked by the T-to-C movement.

If Taguchi’s C-intervention-effect is correct, inserting EMod between T and $C_{\text{(affixal)}}$ would break up T-to-D movement as well. Indeed, this prediction is borne out. I assume that T-to-Mod movement prevents further movement of T; thereby we do not get NGC. Here, adapting Taguchi (2008), and Hiraiwa (2002), I argue that NGC is possible when the *whole-HM* (T- $C_{\text{(affixal)}}$ -D movement) is completed, and HM has a tendency to freeze, (though not obligatory), when T-to- $C_{\text{(affixal)}}$ movement completes. The *whole-HM* is decisively suspended if interveners like (Mod) comes in; T-to-Mod movement does not prevent $C_{\text{(affixal)}}$ -to-D movement. Rather, Mod-insertion feeds (makes this HM obligatory) $C_{\text{(affixal)}}$ -to-D movement. Here, CNC constitutes DPS consisting of C and D. The fact that the argument extraction is allowed in the DPS indicates the presence of phase-collapsing.

The feeding relation between the Mod-insertion and the HM gives a further credit to the Raising to Object (RtO) construction in Japanese. RtO involves extraction out of the embedded CP. RtO is well-formed with *to*, and T-topic can felicitously appear under *to*. Importantly, *to* with GEN is untenable, due to the overt $C_{\text{(nonaffixal)}}$ -intervention-effect as in (2).

Observe (4). The ungrammatical RtO case in (3) is somewhat ameliorated in (4). Note that CNC can host T-topic position. Of course, the property of the selecting matrix Verb is one possible factor. Yet, before Mod-insertion, what we get is an ungrammatical RtO output. Thus, it seems safe to say that the Mod-insertion facilitates the $C_{\text{(affixal)}}$ -to-D movement, which is previously rather hard to get, as the grammaticality of (RtO) indicated in (3). With this phase-collapsing, a previously impossible argument extraction (RtO) becomes (more or less) possible. Therefore, (3)-(4) serve as an empirical supporting

evidence for the DPS and the phase-collapsing.

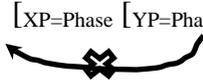
Nevertheless, there remains a question: *what is koto and no?* Although NGC is possible with *koto* and *no* they are far from perfect, compared to the content nominal counterpart. Both in Hiraiwa (2002) and Taguchi (2008), if NGC is obtainable, C-intervention-effect is absent. Put differently, if *koto* and *no* allow NGC, they are nouns or C_{null} . Hiraiwa predicts that *no* should always allow NGC because it is a realization of HMed C_{null} . If *koto* and *no* are the same nominal as the lexical content nominals, the reason why *koto*, and *no* cases are less well-formed is a mystery.

As to answer the question, I claim that *koto* and *no* which head CNC are actually, $C_{(affixal)}$. I also argue that they are not the same nominal as the content nominals in that they can bear both nominal and C's properties. This dual-property is acquired through $C_{(affixal)}$ -to-D movement and AGREE. Due to the presence of C-property within *koto* and *no*, they trigger the lower grammatical status with NGC. In other words, they show a weaker version of C-intervention effect. Conversely, due to the presence of D-property within *koto* and *no*, NGC is somehow allowed though it is not perfect. Absolute C like *to* will never have that option since it lacks D-property.

To recapitulate, my approach can entertain the ungrammaticality of NGC (**no*) with the Mod-insertion case in (4). The Mod-insertion triggers T-to-Mod movement, and this feeds $C_{(affixal)}$ -to-D movement, but the whole T-to- $C_{(affixal)}$ -to-D movement is fatally severed by the Mod. Thus, though topicalization and extraction (RtO) are somewhat felicitous, NGC should be disallowed.

Data:

- (1) Hanako-ga/*wa(*T-topic sense)/no utsukushii **koto]**
 Hanako-NOM /*TOP /GEN beautiful **koto**
- (2) John-wa [Hanako-ga/-o/-wa/-*no Amerikazin-dearu] to minuita.
 John-TOP Hanako-NOM/ACC/TOP/*GEN American-COP C (discerned)
- (3) John-wa [Hanako-ga/*o/(?)wa/-?(?)no Amerikazin-dearu] *koto/no*-o minuita.
 John-TOP Hanako-NOM/ACC/TOP/GEN American-COP C -ACC (discerned)
- (4) John-wa [Hanako-ga/?(?)o/wa/-*no Amerikazin-dearu kamoshirenai] *koto/no*-o minuita.
 John-TOP Hanako-NOM/ACC/TOP/*GEN American-COP maybe C -ACC (discerned)

- (5)  (DPS) (adapted from Bošković 2015:4)

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Maintaining the Direct Object Restriction

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Introduction

This paper focuses on the issue of whether the Direct Object Restriction (DOR) of resultative constructions, which is shown in (1), should be maintained.

- (1) Result XPs are predicated of underlying direct objects. (Rappaport and Levin 2001: 766)

In the literature, counter-examples against this generalization have been provided. They are called subject-oriented resultatives (SORs). See (2).

- (2) a. **Robin** danced *out of the room*. (ibid.: 782)
b. **The wise men** followed the star *out of Bethlehem*. (Wechsler 1997: 313)

However, Rothstein (2004) argues from a semantic viewpoint that the PPs in the SORs are locative expressions, and that they are not resultative constructions. I argue from a syntactic point of view that SORs do not have the same properties as the object-oriented resultatives (OORs), and that they should be treated as motion verb constructions, suggesting that DOR should be maintained independently.

Differences between Object-Oriented Resultatives and Subject-Oriented Resultatives

OORs and SORs have different properties. First, OORs cannot appear in the sentence-initial position, but SORs can, as shown in (3) and (4).

- (3) a. John painted **the wall** *red*.
b. **Red* John painted **the wall**.
(4) a. *Out of the room* **Robin** danced.
b. *Out of Bethlehem* **the wise men** followed the star.

Second, more than one resultative predicate cannot be used in the same clause, but SORs allow two PPs in one clause, as shown in (5) and (6).

- (5) a. Mary washed **the clothes** *clean*.
b. Mary washed **the clothes** *white*.
c. *Mary washed **the clothes** *clean white*.
(6) a. **Robin** danced *out of the room into another room*.
b. **The wise men** followed the star *out of Bethlehem into another town*.

Third, SORs can be used in the locative inversion construction, but the OORs cannot, as shown in (7) and (8).

- (7) Out of the room danced Robin.
(8) a. The lake froze solid.
b. *Solid froze the lake.

Fourth, the resultative predicates in OORs are limited to bounded ones, but the PPs in SORs are not restricted to bounded ones, as illustrated in (9) and (10).

- (9) a. Tom wiped **the table** *clean*.
b. *Tom wiped **the table** *beautiful*.

- (10) a. **The wise men** followed the star *out of Bethlehem* in one hour.
 b. **The wise men** followed the star *toward Bethlehem* for one hour.

From the examples above, it is reasonable to conclude from syntactic and semantic perspectives that the SORs do not have the same properties as the OORs.

Similarities between Motion Verb Constructions and Subject-Oriented Resultatives

This section presents the syntactic properties of the motion verb construction, and I argue that SORs have the same property as the motion verb constructions.

First, the PPs of motion verb constructions can be positioned sentence-initially, as shown in (11).

- (11) a. The balloon floated *in the cave*.
 b. *In the cave* the balloon floated.

Second, more than one locative expression is allowed in one clause. See (12).

- (12) The balloon floated *out of the town into another village*.

Third, the telicity changes in accordance with the PPs, as shown in (13).

- (13) a. The balloon floated *in the cave* *in / for minutes.
 b. The balloon floated *into the cave* in / *for ten minutes.

Fourth, the motion verb construction can be employed in the locative inversion construction. Observe (14).

- (14) a. *In the cave* floated the balloon.
 b. *Into the cave* floated the balloon.

As we have observed in the previous section, SORs have these properties. Thus, I conclude that the SORs should be treated as an instance of the motion verb constructions. Therefore, the DOR should be maintained.

Conclusion

In this paper, I have argued that SORs are not real resultative constructions from syntactic and semantic perspectives, suggesting that the DOR of resultative constructions should be maintained. Another difference between OORs and SORs is whether the resultee DP serves to measure out the event of the sentence. In OORs, the resultee DP delimits the event, but that of SORs does not. Witness (15) and (16).

- (15) a. John painted the wall red in / *for ten minutes.
 b. John painted walls red *in / for ten minutes.
 (16) a. The wise men followed the star out of Bethlehem in / for two hours.
 b. Wise men followed the star out of Bethlehem in / for two hours.

Rappaport and Levin (2001) propose that a DP must be assigned a “Force-recipient” thematic role in order to be predicated of by a resultative predicate, whether it is an OOR or SOR. Thus, the resultee DPs of OORs and SORs should show the same semantic behavior, contrary to the fact, as shown in (15) and (16). Therefore, the properties of the constructions cannot be captured under their analysis.

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Two Types of External Causes

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It has been observed that the causative alternation is possible with verbs denoting change of state that can come about without an external cause (or an agent) (e.g. Levin and Rappaport (1995), Alexiadou, Anagnostopoulou and Schäfer (2015)).

(1)a. John broke the vase.

b. The vase broke.

(2)a. John cut the carrot.

b. * The carrot cut.

The event of the vase breaking does not necessarily specify an external cause, so *break* allows the causative alternation. The event of the carrot being cut, on the other hand, necessitates the intervention of an instrument such as a knife, which must be used by an agent, so *cut* cannot participate in the causative alternation. In this way, the causative alternation is possible with verbs that have no causal specification.

Cooking verbs (e.g. *bake*, *cook*, and *fry*) (Levin (1993)), however, seem to be problematic because they lexically specify a cause but do not forbid the causative alternation.

(3)a. Jennifer baked the potatoes.

b. The potatoes baked.

(Levin (1993:243))

Bake, for example, entails the use of an oven or heat. Note that *cut* and *bake* resist the denial of using any instrument, as in (4).

(4)a. # John cut the carrot without using any instrument.

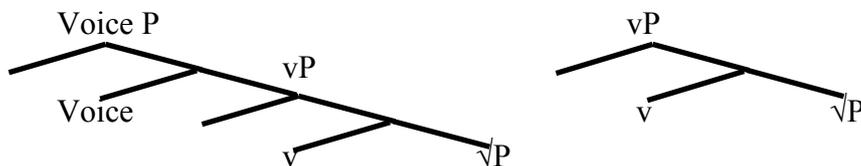
b. # John baked the potatoes without using any instrument.

This fact indicates that they lexically specify the existence of an external cause.

Alexiadou, Anagnostopoulou and Schäfer (2015) give a syntactic analysis of the causative alternation. They argue that roots specifying an external cause require Voice and an external argument (i.e. (5a)) whereas those that do not specify it can occur without them (i.e. (5b)).

(5)a. Causative structure

b. Anti-causative structure



They argue that the causative alternation is possible when the roots have no specification of an external cause (or agentivity).

This paper aims to account for the availability of the causative alternation of cooking verbs. I propose that external causes can be divided into two types, those associated with Voice (hereafter, Voice-causes) and those relating to *v* (hereafter, *v*-causes). Voice- and *v*-causes are both lexical meanings specified by roots. They are only different with respect to the functional heads they require. The verb *cut* (and other cutting verbs such as *carve* and *slash*) lexicalizes a Voice-cause and cooking verbs entail *v*-causes.

This dichotomy is supported by the different types of modifiers that indicate external causes. Voice-causes can be instantiated by instrumental *with*-phrases such as *with a knife* in *John cut the carrot with a knife*. *v*-causes can be exemplified by instrumental locative phrases (cf. Levin (1979)) such as *in the oven* in *John baked the potatoes in the oven*. Notice that instrumental *with*-phrases are only compatible with causative verbs, as in (6), whereas instrumental locative phrases go along with both causative and anti-causative verbs, as in (7).

(6)a. John broke the vase with a hammer.

b. * The vase broke with a hammer.

(7)a. John baked the potatoes in the oven.

b. My mother can fry up chicken in a pan, but my pop won't eat it until it has baked in the oven for another hour. (Maryam Wade, *Chickasaw*, underline is mine)

The unacceptability of (6b) indicates that instrumental *with*-phrases require Voice. The acceptability of (7b) suggests that the instrumental locative phrases are associated with *v* and therefore they can occur in both causative and anti-causative structures.

The verb *cut* lexically specifies Voice-causes, as exemplified by the *with*-phrase *with a knife*, which requires Voice, so it cannot permit the anti-causative variant. Cooking verbs, on the other hand, only lexicalize *v*-causes, as exemplified by the locative phrase *in the oven*, which does not need Voice, so they permit the anti-causative variants.

The distinction between Voice- and *v*-causes can be attributed to the encyclopedic information of the causes specified by roots. Voice-causes (e.g. a knife in *cut*) must be directly controlled by an agent whereas *v*-causes (e.g. an oven in *bake*) can act on the object autonomously. In fact, the event of cutting the carrot cannot happen if the agent is away, as in (8a), whereas the event of baking the potatoes can occur even if the agent is away, as in (8b).

(8) (Situation: there was nobody in the kitchen except John.)

a. # John went to the supermarket while the carrot was being cut.

b. John went to the supermarket while the potato was being baked.

Consequently, Voice-causes are closely associated with Voice, which is the locus of agentivity, whereas *v*-causes are not.

To sum up, this paper showed that there are two types of external causes. Although it has been observed that the presence of an external cause is sensitive to the unavailability of the causative alternation, this observation only holds of Voice-causes. Verbs specifying *v*-causes permit the causative alternation.

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Locality in Phonological Operation
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Synopsis: The aims of this paper are to provide (i) an account for condition of sequential voicing within the theory of Distributed Morphology, and moreover, (ii) a piece of evidence that head-head locality yields a special phonological operation.

Sequential Voicing: One restriction of sv is known as Lyman's Law (cf. Otsu 1980, Ito and Mester 1986 a.o.). This effect is regarded as a phonological effect as in (1). Moreover, syntacosemantic condition is observed: If the compounded items obtain contrastive interpretation (2)a, sv is blocked, while (2)b with a regular interpretation undergoes sv. This shows that there are not only phonological but also syntacosemantic motivations for the sv. Furthermore, sv applies only when a potential sv segment is in a right branch constituent at the lowest level as in (3).

Issue: Japanese has productive RED processes. For instance, in (4)a,d RED denotes emphasis, while in (4)b, c RED denotes plurality. However, the superficially same RED process produces two distinct out-puts; sv sensitive RED and sv insensitive RED. This has been argued as a result of specification of vocabulary origin, yet the mechanism has remained unaccounted for.

Assumption: I assume the theory of DM and the phase based locality (Embick 2010, Bobaljik 2012). Moreover, according to Bobaljik and Harley (to appear), a phonological shape might be determined by a structural relation between two items (cf. Hiaki participant suppletive.) Thus, here I assume head-head relation construed via the incorporation triggers [voi] feature assignment.

Analysis: The syntacosemantic motivation is further supported by contrastive cases illustrated in (5). Here, I assume the [XP [& YP]] (Hiraiwa and Chino 2014, Yoda 2013) structure for (5), since the interpretation of the compound is equivalent to “*siro* {*to/ka*} *kuro*”, where two items are coordinated by a coordinator “*to*” or “*ka*” (&). Following Yoda (2015), conjunctions must be phases, and thus a conjunct cannot undergo sv since the vocabulary is specified when the items spell-out. Now let us look at the structure of sv-sensitive dvandva compounds. Following Sato (2010), Tornton (2015), I assume the [_{#P} [_{n/vP} ...]] structure and event/participant plurality is specified by #⁰. Adopting the structure, examples in (4)b,c which involve plural events or participants are illustrated as in (6)a, and, following Harley (2005), the $\sqrt{\text{change/flower}}$ incorporates into #, and then yielded structure is something like (6)b. Targeting the (6)b, VI takes place, and due to the head-sister relation, the exponent of RED undergoes sv. Now, let us turn to the case in (4)a. It involves emphasis, which is specified by Δ , and its structure is something like (7). Thus, the same mechanisms as (6) implement the sv on the $\sqrt{\text{ }}$ and the sv on RED is yielded.

Mimetics Special Cases?: First, Japanese has two types of dvandva mimetic compounds as in (8). (Here the Upper-case letters indicate accented items and Q stands for a geminated special mora.) Ones like (8)a does not allow multiple occurrence of RED, while ones like (8)b allow multiple occurrence of RED (as indicated by a bracket.) The crucial point is that mimetic dvandva compounds never undergo sv. A reason for (8)a not to undergo sv is provided by Nasu (2001) and he claims that its accent pattern is same as Sino-Japanese, such as “*ZEni-kane*” (money-money), and thus, it is excluded from the target of sv. However, (8)b, where Q carries either plurality or emphasis, has not accounted for yet. Now, I assume the current proposed structure as in (6)a and (7)a, and (8)b has the structure like (9) and the RED in the spec. #/ Δ P cannot undergo incorporation,

