In this paper, based on an analysis of the scope properties of objects in Japanese, I argue that (i) an entire phase is transferred when a higher phase is completed, and (ii) the movement of objects and adjuncts is constrained by anti-locality. I propose that in the potential construction, the movement of accusative objects is more constrained than the movement of nominative objects owing to the interaction between phasal transfer and anti-locality, which leads the accusative and nominative objects to exhibit distinct scope behaviors. This analysis leads us to conclude that negation in Japanese is an adjunct. Furthermore, the analysis correctly predicts the movement of objects in simple transitive sentences and the non-movement of nominative phrases in certain cases.
1 Introduction

This paper investigates the interaction between phases/transfer domains and the anti-locality of movement. It has been generally assumed that transfer, whose domain is defined by phases (Chomsky 2000), sends relevant semantic and phonological features to the conceptual–intentional and sensory–motor interfaces, respectively, and is applied multiple times during syntactic derivations. Once transferred, syntactic objects are assumed to be inaccessible for further syntactic computation, which reduces the computational load. Since Chomsky (2000), the “standard” hypothesis has been that \( v^\bullet Ps \) and CPs constitute phases, and what is transferred are phasal complements (VPs and TPs, respectively). However, there is still debate about what should count as phases/transfer domains (Uriagereka 1999; Chomsky 2000; 2008; 2015; Bobaljik & Wurmbrand 2005; Boeckx & Grohmann 2007; Takahashi 2010; 2011; Bošković 2005; 2007; 2014a; 2015; 2016a; b; Saito 2017a; b; 2020; Holmberg et al. 2019; Sheehan & Cyrino to appear, among others). Another related issue is (anti-)locality. Although it is generally accepted that movement cannot be too long, many authors have also argued based on various phenomena that movement cannot be too short (Bošković 1994; 1997; 2005; 2014a; 2016a; b; Ishii 1999; Abels 2003; Grohmann 2003; Funakoshi 2015; Erlewine 2020; Branan 2023, among others). A ban on movement that is too local is called anti-locality (Grohmann 2003); however, its precise definition is still being debated.

This paper aims to advance our understanding of the aforementioned issues by providing a novel analysis of the scope properties of objects in Japanese. Transitive objects in Japanese can receive accusative Case or nominative Case when a transitive predicate is accompanied by a potential suffix, which is \([ + \text{ stative}]\) (Kuno 1973; Saito 1982; Takezawa 1987):

(1)  Kodomo-tati-ga kanzirensyu-o/\(^*\)ga tuzuke-ru.
    child-PL-NOM kanji.practice-ACC/NOM continue-PRS
    ‘Children continue kanji practice.’

(2)  Kodomo-tati-ga kanzirensyu-o/ga tuzuke-rare-ru.
    child-PL-NOM kanji.practice-ACC/NOM continue-can-PRS
    ‘Children can continue kanji practice.’

(Takahashi 2021a: 154)

The transitive object kanzirensyu ‘kanji practice’ in (1) can only receive accusative Case from the transitive verb tuzuke ‘continue’, which is \([ – \text{ stative}]\). In (2), tuzuke ‘continue’ has a potential suffix -rare ‘can’, which is \([ + \text{ stative}]\). The transitive object kanzirensyu ‘kanji practice’ in (2) can receive either nominative Case or accusative Case.\(^1\) Significantly, accusative and nominative objects show distinct scope behaviors (Sano 1985; Tada 1992; 1993; Koizumi 1994; 1998; Saito & Hoshi 1998; Ura 1999; Wurmbrand 2001; Takano 2003; Bobaljik & Wurmbrand 2005; 2007;

\(^1\) The potential suffix is realized as -rare when the verb stem ends with a vowel and as -e when the stem ends with a consonant.
Nomura 2005; Saito 2010a; 2012; Takahashi 2010; 2011; 2021a; Funakoshi & Takahashi 2014; Shimamura & Wurmbrand 2014; Kasai 2018; Ochi & Isono 2021; Moritake 2022, among others).

The scope properties of nominative objects have received considerable attention in the literature (see Section 2 for an overview). In this paper, I provide further evidence for a previous proposal that a nominative object moves into the TP domain when it takes scope over the potential suffix (Koizumi 1994; 1998; Nomura 2005; Ochi & Isono 2021). Furthermore, given that transitive objects can usually take scope over negation (Kato 1985; Han et al. 2004; Kataoka 2006; Shibata 2015), I argue that what requires more articulated explanation is the obligatory narrow scope behavior of the accusative object in the potential construction, which has received relatively little attention in the literature (cf. Shibata 2015). Specifically, the accusative object in the potential construction fails to move into the TP domain via scrambling owing to the interaction between phasal transfer (Bošković 2016a; Saito 2017a; b; 2020) and anti-locality (Bošković 2005; 2014a; 2016b).

This paper is organized as follows. In Section 2, I present some core observations that the paper addresses and show that previous analyses cannot fully explain them. In Section 3, I provide an analysis of the observations, which crucially relies on the interaction of phasal transfer, anti-locality, and scrambling. In Section 4, I discuss the consequences of the proposed analysis. First, I discuss the status of negation in Japanese and suggest that it is an adjunct, which leads us to an analysis of the scope properties of objects in simple transitive sentences. Second, I discuss cases where nominative phrases apparently undergo movement in violation of the constraints introduced in the previous sections. I show that these nominative phrases do not in fact undergo movement, which lends further credence to the proposed analysis.

2 Core observations and previous analyses

In this section, I introduce three core observations that are discussed in the following sections, and point out that previous analyses fail to provide a unified account of them. In particular, I discuss (i) accusative/nominative objects that co-occur with nominative subjects, (ii) adjuncts that follow accusative/nominative objects, and (iii) nominative objects that co-occur with instrumental subjects.

First, nominative objects, but not accusative objects, can take scope over the potential suffix when preceded by nominative subjects (Sano 1985; Tada 1992; 1993; Koizumi 1994; 1998; Saito & Hoshi 1998; Ura 1999; Wurmbrand 2001; Takano 2003; Bobaljik & Wurmbrand 2005; 2007; Nomura 2005; Saito 2010a; 2012; Takahashi 2010; 2011; 2021; Funakoshi & Takahashi 2014; Shimamura & Wurmbrand 2014; Kasai 2018; Ochi & Isono 2021; Moritake 2022, among others):2

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2 As noted by Koizumi (1994; 1998), accusative objects may take scope over the potential suffix when they are stressed. I discuss the scope properties of unstressed accusative objects in the main text; however, I return to the case of stressed accusative objects in footnote 21.
Observation 1: scope of accusative/nominative objects

Scenario for the *can > only* reading: the children are able to concentrate on their kanji practice without engaging in other activities such as listening to music or watching TV.

Scenario for the *only > can* reading: among several activities such as listening to music, watching TV, and kanji practice, the children cannot continue anything except for kanji practice.

   child-PL-NOM kanji.practice-only-ACC continue-can-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue kanji practice without continuing anything else.’ (can > only)
   ‘It is only kanji practice that children can continue.’ (?*only > can)

   child-PL-NOM kanji.practice-only-NOM continue-can-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue kanji practice without continuing anything else.’ (can > only)
   ‘It is only kanji practice that children can continue.’ (only > can) (Takahashi 2021a: 154)

Whereas the accusative object in (3a) must take scope under the potential suffix, the nominative object in (3b) can take scope either under or over the potential suffix (see Nomura 2005; Takahashi 2010; 2011; Funakoshi & Takahashi 2014; Shimamura & Wurmbrand 2014; Kasai 2018; Ochi & Isono 2021 for the availability of the narrow scope interpretation of the nominative object; see below for further evidence).

Second, the Case of the object affects the scope of *dake ‘only’* contained in an adjunct (Saito & Hoshi 1998; Bobaljik & Wurmbrand 2007; Takahashi 2010; 2011. cf. Takano 2003).

Observation 2: scope of adjuncts following accusative/nominative objects

Scenario for the *can > only* reading: the children have the ability to continue kanji practice with only a pen; they do not need pencils, notes, sheets of papers, or anything else that might be used for kanji practice.

Scenario for the *only > can* reading: among writing materials that could be used for kanji practice, the children can only use a pen, and they cannot use any other tools for kanji practice.

   child-PL-NOM kanji.practice-ACC pen-only-with continue-can-PRS
   ‘Children can continue kanji practice with only a pen.’
   ‘Children can continue kanji practice with a pen and nothing else.’ (can > only)
   ‘It is only a pen that children can continue kanji practice with.’ (?*only > can)
   child-PL-NOM kanji.practice-NOM pen-only-with continue-can-PRS
   ‘Children can continue kanji practice with only a pen.’
   ‘Children can continue kanji practice with a pen and nothing else.’ (?can > only)
   ‘It is only a pen that children can continue kanji practice with.’ (only > can)

*Note that dake ‘only’ in (4a) and (4b) is contained in the adjunct. It takes scope under the potential suffix when the object receives accusative Case (4a). It can also take scope over the potential suffix when the object receives nominative Case (4b).\(^3\)

Third, the scope of the objects is affected by subject marking. I show below that nominative objects do not take scope over potential suffixes in the presence of instrumental subjects (Ebina 2020; Takahashi 2021a). In Japanese, subjects can appear with the instrumental marker -de, which is a postposition used to mark instruments (e.g., naifu-de ‘with a knife’; see Takubo 1984; Inoue 1998; Kishimoto 2005; 2010; 2017). Following Kishimoto (2005; 2010), I use the term instrumental subjects to refer to subjects marked with -de (see Kishimoto 2010; 2017 for evidence of the subjecthood of instrumental subjects). Significantly, nominative objects must take scope under the potential suffix when subjects appear with -de ‘with’ (Ebina 2020; Takahashi 2021a):\(^4\)

(5) Observation 3: scope of nominative objects following instrumental subjects
   child-PL-NOM kanji.practice-only-NOM continue-can-PRS
   ‘Children can continue only kanji practice.’
   ‘It is only kanji practice that children can continue.’ (only > can) (= (3b))

   child-PL-with kanji.practice-only-NOM continue-can-PRS
   ‘Children can continue only kanji practice.’
   ‘It is only kanji practice that children can continue.’ (?*only > can) (Takahashi 2021a: 156)

---

\(^3\) Note that dake ‘only’ in (4) precedes the postposition -de. However, dake ‘only’ can follow -de ‘with’, and in such cases, dake ‘only’ must take scope over the potential suffix (Kuno and Monane 1979; Shoji 1986; Futagi 2004; Shibata 2015, among others):

(i) Kodomo-tati-ga kanzirensyuu-o/ga pen-de-dake tuzuke-rare-ru.
   child-PL-NOM kanji.practice-ACC/NOM pen-with-only continue-can-PRS
   (*can > only, only > can)
   ‘Children can continue kanji practice only with a pen.’

Dake ‘only’ follows -de ‘with’ in (i) and obligatorily takes scope over the potential suffix regardless of the Case of the object. I do not discuss this type of construction in this paper.

---

\(^4\) Instrumental subjects must be plural (Takubo 1984; Kishimoto 2005; 2010). The relevant examples in the text thus contain plural subjects.
In (5a), where the subject receives nominative Case, the following nominative object can take scope over the potential suffix. However, in (5b), where the subject is accompanied by the instrumental marker -de ‘with’, the nominative object must take scope under the potential suffix.⁵

Let us now consider how previous analyses fare with the above observations. Here, I focus on two approaches: (i) the Case-movement analysis and (ii) the Quantifier Raising (QR) analysis.⁶ A well-known analysis of the scope puzzle is what I call the Case-movement analysis (Tada 1992; 1993; Koizumi 1994; 1998; Nomura 2005; Ochi & Isono 2021, among others). This analysis suggests that objects may appear in distinct positions depending on their Case, which immediately captures the first observation (3). In this analysis, the accusative object in (3a) remains within the vP complement selected by the potential suffix, which is responsible for the narrow scope behavior of the accusative object:

(6) Case-movement analysis: accusative object (3a)
   a. Constructing the vP phase and accusative Case assignment:
      \[ \text{vP PRO [vP OBJ}_{\text{ACC}} \text{ V] v} \]
   b. Transfer of the VP complement:
      \[ \text{vP PRO [vP OBJ}_{\text{ACC}} \text{ V] v} \]
   c. Constructing the v_{can}P:
      \[ \text{v_{can}P SUBJ [vP PRO [vP OBJ}_{\text{ACC}} \text{ V] v} \text{ v}_{\text{can}} \]
   d. Movement of the nominative subject:
      \[ \text{TP SUBJ}_{\text{NOM}} [v_{can}P \text{ Ti} [\text{vP PRO [vP OBJ}_{\text{ACC}} \text{ V] v} \text{ v}_{\text{can}}] \text{T}] \]

In (6a), the vP phase is constructed. The embedded object receives accusative Case from the v-head (Chomsky 2000; 2008; 2015).⁷ In (6b), the VP complement is transferred.⁸ In (6c), the

---

⁵ The scope interpretation of the accusative object is not affected by subject marking:
(i) Kodomo-tati-ga/de kanzirenṣu-nde dake-o tuzuke-rare-ru.
   *Children can continue only kanji practice.*
   *Children can continue kanji practice without continuing anything else.* (can > only)
   *It is only kanji practice that children can continue.* (?*only > can)

Here, the accusative object must take scope under the potential suffix with either kind of subject.

⁶ There are, in fact, many other approaches to the scope puzzle under consideration. Among them are the complex-head analysis (Saito & Hoshi 1998), the covert excorporation analysis (Saito 2012), and the prolepsis analysis (Takano 2003). Although they differ from one another in detail, all three analyses assume that nominative objects are always base-generated above the potential suffix. As they do not predict the availability of the narrow scope interpretation of the nominative object (5b), I set these analyses aside in the main text (see Nomura 2005; Bobaljik & Wurmbrand 2007; Takahashi 2010; 2011; 2021a for relevant discussion).


⁸ I assume with Chomsky (2000; 2008; 2015) that the VP complement is transferred upon the completion of the vP phase for the sake of the exposition.
potential suffix and the subject are introduced into the derivation, constructing the \( \nu_{can} \)P. In (6d), the nominative subject moves to Spec, TP. As the accusative object remains within the \( \nu P \), it takes scope under the potential suffix. However, the nominative object in (3b) can move into the TP domain, which is responsible for the wide scope behavior of the nominative object. For the sake of exposition, I assume here that the potential suffix directly selects the VP complement (Wurmbrand 2001; Bobaljik & Wurmbrand 2005; 2007; Nomura 2005):

(7) Case-movement analysis: nominative object (3b)

a. Constructing the TP and nominative Case assignment:

\[
[\text{TP} [\text{\nu_{canP SUBJ}_{NOM} [\text{VP OBJ}_{NOM} V] \nu_{can}]} T]
\]

b. Movement of the nominative phrases:

\[
[\text{TP SUBJ}_{INOM} OBJ_{NOM} [\text{\nu_{canP t_i [\text{VP t_j V] \nu_{can}]} T}]
\]

In (7a), the subject and the object receive nominative Case from T (Hiraiwa 2001; Nomura 2005; Takahashi 2010; 2011; 2021a; Ochi & Isono 2021, among others).\(^9\) In (7b), the subject and the object move into the TP domain (Koizumi 1994; 1998; Nomura 2005; Ochi & Isono 2021, among others). Therefore, the nominative object can take scope over the potential suffix in the TP domain.\(^10\)

The Case-movement analysis can also account for the third observation (5) concerning subject marking if we assume that (i) nominative objects can remain in their base-generated positions (Nomura 2005; Ochi & Isono 2021) and (ii) whereas nominative subjects move to Spec, TP, instrumental subjects remain in their base-generated positions (i.e., they do not undergo movement to Spec, TP; Ebina 2020; Takahashi 2021a; cf. Fukui 1986; Kuroda 1988; Kishimoto 2010; 2017; see Section 3.2 for a concrete analysis of instrumental subject constructions).

(8) Case-movement analysis:

a. Nominative object and nominative subject (5a):

\[
[\text{TP SUBJ}_{INOM} OBJ_{NOM} [t_i [\text{VP t_j V] \nu_{can}]} T]
\]

b. Nominative object and instrumental subject (5b):

\[
[\text{TP SUBJ}_{INS} OBJ_{NOM} [\text{VP OBJ}_{NOM} V] \nu_{can}]} T]
\]

In (8a), the nominative subject moves to Spec, TP, and the following nominative object can also move into the TP domain, taking scope over the potential suffix. In (8b), the instrumental subject remains in its base-generated position, and the following nominative object must remain in the VP, taking scope under the potential suffix.\(^11\)

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\(^9\) Note that \( \nu_{can} \)P does not project a phase (Nomura 2005), which means that the VP complement is not transferred upon the completion of \( \nu_{can} \)P. Hence, T can assign nominative Case to the object.

\(^10\) The narrow scope interpretation of the nominative object in (3b) may be obtained by reconstruction of the nominative object. Alternatively, the nominative object may stay in its base-generated position. See footnote 11.

\(^11\) I assume here that quantified elements do not need to move to a node of type \( \tau \) for scope interpretation.
However, under the Case-movement analysis, the second observation regarding adjuncts (4) remains unexplained because *dake* ‘only’ is contained in the adjuncts, which do not undergo Case-movement (Saito & Hoshi 1998; Bobaljik & Wurmbrand 2007; Takahashi 2010; 2011. cf. Takano 2003):

(9) Case-movement analysis:

- Accusative object (4a):
  \[
  [\text{TP}]\ [\text{SUBJ}_{\text{INOM}}] [_{\text{v} \text{can}P} \ t_i] [_{\text{VP}} \ {\text{PRO} \ [_{\text{VP}} \ \text{OBJ}_{\text{ACC}} \ \text{Adjunct(only)} \ V] \ v] \ v_{\text{can}}] \ T]
  \]

- Nominative object (4b):
  \[
  [\text{TP}] \ [\text{SUBJ}_{\text{INOM}} \ \text{OBJ}_{\text{NOM}}] [_{\text{v} \text{can}P} \ t_i] [_{\text{VP}} \ t_j \ \text{Adjunct(only)} \ V] \ v_{\text{can}}] \ T]
  \]

As the Case-movement analysis attributes the scope contrast to the positions of the Case-marked objects, it remains unclear why the scope of *dake* ‘only’ contained in the adjunct is affected by the (non)-movement of the objects. In particular, while the narrow scope behavior of *dake* ‘only’ in (9a) may be accounted for by the adjunct’s position below the potential suffix, it remains unclear why *dake* ‘only’ can take scope over the potential suffix in (9b).

The other analysis discussed here is what I call the QR-analysis (Bobaljik & Wurmbrand 2007; Takahashi 2010; 2011). I examine Takahashi’s (2010; 2011) analysis, which suggests that *dake* ‘only’ alone undergoes Quantifier Raising (Bobaljik & Wurmbrand 2007), which is bound to domains of Case-valuation. The QR analysis can accommodate the first observation (3) because the accusative object and the nominative object receive the Case from distinct probes (note that Takahashi (2010; 2011) assumes that the potential suffix selects *vP* regardless of the Case of the embedded object):

(10) QR analysis:

- Accusative object (3a):
  \[
  [\text{TP}] \ [\text{SUBJ}_{\text{INOM}}] [_{\text{v} \text{can}P} \ t_i] [_{\text{VP}} \ {\text{PRO} \ [_{\text{VP}} \ \text{OBJ}_{\text{ACC}} \ \text{(only)} \ V] \ v} \ v_{\text{can}}] \ T] \]

- Nominative object (3b):
  \[
  [\text{TP}] \ [\text{SUBJ}_{\text{INOM}} \ \text{OBJ}_{\text{NOM}}] [_{\text{v} \text{can}P} \ t_i] [_{\text{VP}} \ t_j \ \text{(only)} \ V] \ v_{\text{can}}] \ T]
  \]

In (10a), the object receives accusative Case from the embedded *v*. Takahashi (2010; 2011) assumes that *dake* ‘only’ has to adjoin to the node of type *t* and that further movement of *dake* ‘only’ is impossible after the movement for type-resolution. *Dake* ‘only’ contained in the accusative object thus moves to the embedded *vP* and takes scope there, which captures the obligatory narrow scope interpretation of *dake* ‘only’. In (10b), the embedded object (and the

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12 I thank Michael Yoshitaka Erlewine for clarifying this point.

13 For Takahashi (2010; 2011), the domains of Case-valuation are phases.
subject) receive nominative Case from T. As the embedded \(v\) does not assign accusative Case to the object, \textit{dake} ‘only’ contained in the object can move beyond the embedded \(vP\). \textit{Dake} ‘only’ takes scope over the potential suffix by adjoining to the TP projection and takes scope under the potential suffix by adjoining to the \(vP\) complement.

This QR analysis naturally captures the second observation concerning adjuncts (4), which is problematic for the Case-movement analysis, because what undergoes movement is not the Case-marked NPs but the scope-bearing element \textit{dake} ‘only’:

(11) QR analysis:

a. Accusative object (4a):

\[
\begin{align*}
[TP & \quad \text{SUBJ}_{\text{NOM}} \quad \text{[vcan]} \quad t_1 \quad [vP \quad \text{PRO} \quad [VP \quad \text{OBJ}_{\text{ACC}} \quad \text{Adjunct}(\text{only}) \quad V] \quad v] \quad \text{vcan}] \quad T] \\
\end{align*}
\]

b. Nominative object (4b):

\[
\begin{align*}
[TP & \quad \text{SUBJ}_{\text{NOM}} \quad \text{[vcan]} \quad t_1 \quad [vP \quad \text{PRO} \quad [VP \quad \text{OBJ}_{\text{NOM}} \quad \text{Adjunct}(\text{only}) \quad V] \quad v] \quad \text{vcan}] \quad T] \\
\end{align*}
\]

In (11a), the object receives accusative Case from the embedded \(v\), and \textit{dake} ‘only’ contained in the adjunct thus moves to the embedded \(vP\) and takes scope there. Accordingly, \textit{dake} ‘only’ takes scope under the potential suffix. In (11b), the embedded object receives nominative Case from T. As the embedded \(v\) does not assign accusative Case to the object, \textit{dake} ‘only’ in the adjunct can move beyond the embedded \(vP\) and can take scope over or under the potential suffix when it adjoins to the TP or the \(vP\), respectively.

However, the third observation concerning instrumental subjects (5) remains problematic because it is at least unclear why in-situ subjects block the QR of \textit{dake} ‘only’ (I assume that the instrumental subject is in Spec, \(vP\); see Section 3.2):

(12) QR analysis:

a. Nominative object and nominative subject (5a):

\[
\begin{align*}
[TP & \quad \text{SUBJ}_{\text{NOM}} \quad \text{[vcan]} \quad t_1 \quad [vP \quad \text{PRO} \quad [VP \quad \text{OBJ}(\text{only})_{\text{NOM}} \quad V] \quad v] \quad \text{vcan}] \quad T] \\
\end{align*}
\]

b. Nominative object and instrumental subject (5b):

\[
\begin{align*}
[TP & \quad \text{[vcan]} \quad t_1 \quad [vP \quad \text{SUBJ}_{\text{INS}} \quad [VP \quad \text{OBJ}(\text{only})_{\text{NOM}} \quad V] \quad v] \quad \text{vcan}] \quad T] \\
\end{align*}
\]

In both (12a) and (12b), the embedded object receives nominative Case from T. Hence, the scope behavior of \textit{dake} ‘only’ contained in the object should be the same regardless of the Case of the
subject (unless we stipulate that the instrumental subject somehow blocks movement of *dake*
‘only’).

Let me summarize the results obtained thus far:

<table>
<thead>
<tr>
<th>Observation</th>
<th>Case-movement analysis</th>
<th>QR analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation 1 (object) (3)</td>
<td>✓ (6)/(7)</td>
<td>✓ (10)</td>
</tr>
<tr>
<td>Observation 2 (adjunct) (4)</td>
<td>* (9)</td>
<td>✓ (11)</td>
</tr>
<tr>
<td>Observation 3 (instrumental subject) (5)</td>
<td>✓ (8)</td>
<td>* (12)</td>
</tr>
</tbody>
</table>

As shown above, the two analyses reviewed have different empirical coverage. Although the Case-movement analysis can account for Observation 3 concerning instrumental subjects, it cannot explain Observation 2 concerning adjuncts. In contrast, although the QR analysis can account for Observation 2, it fails to explain Observation 3. Hence, we need a “hybrid” analysis that combines the insights of both approaches. Specifically, we need to ensure that (i) the scope properties of objects reflect their positions (as in the Case-movement analysis for Observation 3) and (ii) a scope-bearing element contained in an adjunct can be located in a high position in certain cases (as in the QR analysis for Observation 2). Furthermore, there is one important observation that requires consideration: it has been shown that objects in Japanese generally take a wide scope over negation (Kato 1985; Han et al. 2004; Kataoka 2006; Shibata 2015). Therefore, what seems to require a more articulated explanation is the obligatory narrow scope behavior of accusative objects in the potential construction, rather than the wide scope property of nominative objects.

3. An analysis: Phasal transfer, anti-locality, and scrambling as adjunction

In this section, I provide a new analysis that accounts for the three observations discussed in the previous section. First, I introduce some theoretical ingredients of the new analysis: phasal transfer, anti-locality, the condition on multiple phase edges, and scrambling as adjunction. Then, I provide a concrete analysis of the three observations.

3.1 Theoretical ingredients

3.1.1 Phasal transfer

Since Chomsky (2000), there have been various approaches to phases and transfer domains (Uriagereka 1999; Chomsky 2000; 2008; 2015; Bobaljik & Wurmbrand 2005; Boeckx & Grohmann 2007; Takahashi 2010; 2011; Bošković 2005; 2007; 2014a; 2015; 2016a; b; Saito 2017a; b; 2020; Holmberg et al. 2019; Sheehan & Cyrino to appear, among others). Among them, Saito (2017a; b; 2020) proposes the following hypothesis (see also Chomsky 2000 and Bošković 2016a):
A phase is transferred upon the completion of the next phase up. (Saito 2017a: 64)

This hypothesis captures the well-known difference between English and Japanese concerning the locality of reflexive binding (Yang 1983), and the analysis assumes that Japanese lacks phi-feature agreement:

\[(14) \quad \text{A phase is transferred upon the completion of the next phase up. (Saito 2017a: 64)}\]

\[(15) \quad \text{a. *Mary insisted that herself saw it.} \]
\[(15) \quad \text{b. Hanako-wa [CP [TP zibunzisin-ga sore-o mi-ta] to] syutyoosi-ta. Hanako-TOP self-self-NOM it-ACC see-PST COMP insist-PST} \]
\[\text{‘Hanako insisted that she (= Hanako) saw it.’ (Saito 2017a: 61)}\]

As shown in (15a), reflexive binding in English is impossible across a finite clause boundary; the reflexive herself, which is the embedded subject, cannot refer to the matrix subject Mary. In contrast, as shown in (15b), reflexive binding in Japanese is possible across a finite clause boundary; the reflexive zibunzisin ‘self-self’ refers to the matrix subject Hanako. Saito (2017a; b; 2020) argues that the hypothesis in (14) provides a principled account of this contrast. Assuming that (i) a reflexive must be c-commanded by its antecedent at the end of each phase before transfer (Quicoli 2008) and (ii) T and V inherit phasehood from C and v* as well as uninterpretable phi-features in languages with phi-feature agreement (cf. Chomsky 2008; 2015), Saito (2017a; b; 2020) analyzes (15a) and (15b) as follows:

\[(16) \quad \text{a. [CP [TP herself [T[+AGR] [vP/vP \ldots]]]]] (= (15a))} \]
\[(16) \quad \text{b. [CP [TP self-self [T[-AGR] [vP/vP \ldots]]]]] (= (15b))} \]

In (16a), the embedded T inherits uninterpretable phi-features from the embedded C, which makes the embedded TP a phase. Once the embedded CP is completed, the embedded TP is transferred. As the reflexive herself is transferred before the matrix subject Mary c-commands it, herself cannot refer to Mary. In (16b), the embedded T does not inherit uninterpretable phi-features from the embedded C (owing to the lack of uninterpretable phi-features). Therefore, the embedded TP is not a phase. When the embedded CP is completed, the embedded vP, but not the embedded TP, is transferred. The CP complement is not transferred until the matrix vP is completed. As the matrix subject c-commands the embedded reflexive before the reflexive is transferred, the reflexive zibunzisin ‘self-self’ can refer to the matrix subject Hanako. The analysis presented below extends Saito’s (2017a; b; 2020) hypothesis to the potential construction.\(^\text{14}\)

\(^\text{14}\) As one reviewer correctly points out, the contrast in (15) is subsumed under the anaphor agreement effect (Rizzi 1990; Woolford 1999; Tucker 2012; Preminger 2019):

(i) The anaphor agreement effect (Rizzi 1990: 26)

\[\text{Anaphors do not occur in syntactic positions construed with agreement.}\]
3.1.2 Anti-locality

The second theoretical assumption employed in this paper concerns anti-locality. Many authors have claimed that movement cannot be too local (Bošković 1994; 1997; 2005; 2014a; 2016a; b; Ishii 1999; Abels 2003; Grohmann 2003; Funakoshi 2015; Erlewine 2020; Branan 2023). In this paper, I adopt the version of anti-locality proposed by Bošković (2005: 16):

(17) Each chain link must be at least of length 1, where a chain link from A to B is of length \( n \) if there are \( n \) XPs that dominate B but not A.

The condition in (17) requires movement to take place across a full phrase (i.e., a segment of a phrase does not count as a full phrase). Bošković (2005) claims that the anti-locality condition in (17) and the phase impenetrability condition (PIC), which dictates that only a phase head and its edges are accessible for movement targeting positions outside the phase (Chomsky 2000), explain the impossibility of left-branch extraction in English:

(18) *Beautiful, he saw [\( t_i \) houses]. (Bošković 2005: 2)

Bošković (2005) claims that the impossibility is explained by an interaction of anti-locality and the PIC:

(19) \[
\begin{array}{c|c|c|c}
\text{[DP}} & \text{[NP}} & \text{[NP]} \\
\text{Adjective} & \text{[NP]} & \\
\end{array}
\]

* anti-locality

* PIC

The adjective \textit{beautiful} in (19) is adjoined to the NP, which is dominated by the DP. Assuming that DP is a phase in English, the PIC requires that the adjective be inaccessible for movement to a position outside the DP complement unless the adjective moves to Spec, DP. However, the movement of the adjective to Spec, DP is prohibited by anti-locality because it does not cross a full phrase boundary. Thus, the impossibility of left-branch extraction in English is explained by the interaction between the PIC and the anti-locality condition on movement.

3.1.3 Condition on multiple phase edges

Another important component of the analysis proposed below concerns the contextuality of phase edges. Whereas there have been proposals in the literature that the phasehood of a particular phrase is determined contextually (Bobaljik & Wurmbrand 2005; Bošković 2005;
2014a; Takahashi 2010; 2011), Bošković (2014b; 2016a) proposes that phase edges must also be determined contextually. Specifically, essentially following Wurmbrand (2013) and Bošković (2014b; 2016a), I assume the following condition on phase edges, which I dub the condition on multiple phase edges:

(20) Condition on multiple phase edges
When there is more than one element at a phase edge, only the highest element is accessible to operations outside of the phase.

For instance, when a phase XP contains multiple specifiers/adjuncts, only the highest element is accessible for movement and feature-valuation:

(21) \[
\text{XP}^* \text{AP} \quad \text{BP} \quad [x' \text{CP} \text{X}]
\]

The AP and BP in (21) are located at the edge of the XP phase. As the AP is located above the BP, the AP, but not the BP, is accessible for operations outside the XP phase. Furthermore, I assume with Wurmbrand (2013) and Bošković (2014b) that the multiple edge condition is evaluated at PF. When an element in the lower specifier/adjunct at the phase edge moves across a higher element at the edge, the latter receives a *, which causes a crash at PF. However, a PF crash can be avoided if the offending higher specifier/adjunct is turned into a lower copy of the movement, which is deleted at PF.

(22) \[
\text{YP} \quad \text{AP} \quad \text{BP} \quad [\text{XP}^* \text{AP} \quad \text{BP} \quad [x' \text{CP} \text{X}]])
\]

In (22), the BP on the lower edge of the XP phase moves across the AP on the higher edge of the XP phase, resulting in the *-marking of the AP. However, as the AP also moves, the lower copy of the AP, which contains the * responsible for the PF crash, is now deleted. Hence, there is no PF crash.

### 3.1.4 Scrambling as an adjunction to an outer edge

Finally, following previous analyses, I make several assumptions concerning scrambling. I assume, along with Saito (1985; 1989; 1992), Abe (1993), Tada (1993), and Funakoshi (2015), among others, that scrambling is an adjunction operation. Moreover, following Takano (2010) and Takita (2010), I assume that scrambling is not a tucking-in operation in the sense of Richards (2001). Taking this all together, we see that when scrambling of an object targets a vP that involves an external argument, the object must be located at the outer vP-adjoined position:

(23) \[
[\text{TP} \quad [\text{vP OBJ}_{\text{ACC}} \quad [\text{vP SUBJ} \quad [\text{vP } t_i \text{ V} \text{V}]]] \text{T}]
\]

\(^{15}\) I do not intend to claim that all types of movement must always target outer edges (see Wurmbrand 2013; Bošković 2016b; Longenbaugh 2019; Newman to appear, among others, for further discussion). Based on a paradigm concerning long-distance scrambling observed by Saito (1985), Takita (2010) argues that scrambling to vP must target the outer vP edge. I refer the reader to Takita (2010) for details.
Given the anti-locality constraint in (17), the object in the vP-adjoined position is too close to the TP, which will be a crucial component of the analysis in the next section.

### 3.2 Analysis

I now provide an analysis of the key observations discussed in Section 2. First, I provide an analysis of the potential constructions, after which I provide a complete analysis of the three observations discussed above. A relevant example of the potential construction is repeated below:

(24) Kodomo-tati-ga kanzirensyuu-o/ga tuzuke-rare-ru.
    child-PL-NOM kanji.practice-ACC/NOM continue-can-PRS
    ‘Children can continue kanji practice.’ (= (2))

In the presence of a potential suffix, the embedded object can receive either accusative or nominative Case. I assume that when a phase head X is adjoined to another head Y (i.e., Y is pair-merged with X), X loses its status as a phase head and ceases to assign Case (Epstein et al. 2016; see also Nomura 2020 and Saito 2020 for relevant discussions). I assume the following structures for (24) (Moritake 2022):

(25) a. \[[TP \text{SUBJ}_{\text{NP}} \text{v}^\text{can} \text{SUBJ}_{\text{VP}} \text{PRO} \text{[VP \text{OBJ}_{\text{ACC}} \text{V}] \text{v}^\text{can} \text{v}_{\text{can}}]} \text{T}]\]
    b. \[[TP \text{SUBJ}_{\text{NP}} \text{v}^\text{can} \text{SUBJ}_{\text{VP}} \text{[VP \text{OBJ}_{\text{NOM}} \text{V}] \text{v}^\text{can} \text{v}_{\text{can}}]} \text{T}_{\text{NOM}}]\]

In (25a), the potential suffix selects a vP complement, where the object receives accusative Case. In (25b), the embedded v and the potential suffix are externally pair-merged; consequently, the embedded v ceases to be a phase head that assigns Case (see Ura 1999; Takahashi 2010; 2011; Moritake 2022). Hence, the object receives nominative Case from T. This analysis reconciles two apparently conflicting insights in earlier studies regarding the potential suffix. That is, whereas Ura (1999) and Takahashi (2010; 2011) assume that \text{v}^\text{can} selects vP, Wurmbrand (2001), Nomura (2005), and Bobaljik & Wurmbrand (2005; 2007) assume that \text{v}^\text{can} directly selects VP. According to the analysis presented above, \text{v}_{\text{can}} is directly associated with both the VP complement and the v-head. Additionally, I assume that Case assignment is not contingent on phi-feature agreement (Bošković 2007; Saito 2018).

Having spelled out the relevant assumptions concerning the potential construction, we can return to the first observation, repeated below:

(26) Observation 1: scope of accusative/nominative objects
    a. Kodomo-tati-ga kanzirensyuu-\text{dake}-o tuzuke-\text{rare}-ru.
       child-PL-NOM kanji.practice-only-ACC continue-can-PRS
       ‘Children can continue only kanji practice.’
       ‘Children can continue kanji practice without continuing anything else.’ (can > only)
       ‘It is only kanji practice that children can continue.’ (?*only > can)
   child-PL-NOM kanji.practice-only-NOM continue-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue practice kanji practice without continuing anything else.’
   (can > only)
   ‘It is only kanji practice that children can continue.’ (only > can) (= (3))

The nominative object, but not the accusative object, can take scope over the potential suffix. Assuming that objects can move into the TP domain via scrambling in other contexts, I propose to exclude scrambling of the accusative object in (26a). I claim that the movement of the accusative object violates anti-locality and assume that both the vP and the vcanP project phases here:16

(27) Movement of the accusative object:
   a. Constructing the vP phase and accusative Case assignment:
      \[\text{\text{vP PRO \[\text{vP OBJ_{ACC} \[V] v}\]}\]
   b. Constructing the vcanP phase:
      \[\text{\text{vcanP SUBJ \[\text{vP PRO \[\text{vP OBJ_{ACC} \[V] v}\]} v_{can}\]}\]
   c. Movement of the accusative object to the edge of the vcanP and transfer:
      \[\text{\text{vcanP OBJ_{ACC} \[\text{vcanP SUBJ \[\text{vP PRO \[\text{vP t_{\text{canP}} V] v}\]} v_{can}\]}\]
   d. Movement of the nominative subject and the accusative object:
      \[\text{TP SUBJ_{NOM} OBJ_{ACC} \[\text{vcanP t_{\text{canP}} \[\text{vP PRO \[\text{vP t_{\text{canP}} V] v}\]} v_{can}\]}\] T}\]

In (27a), the vP phase is constructed, and the embedded object receives accusative Case. In (27b), the potential suffix and the subject are introduced into the derivation, constructing the vcanP phase. According to the theory of phasal transfer (14), the vP phase is transferred upon the completion of the vcanP phase; thus, the accusative object adjoins to the outer vcanP edge via scrambling (see Section. 3.1.4), as shown in (27c). Given the condition on multiple phase edges in (20), the object in (27c) must move out of the vcanP so that the subject can move to Spec, TP and receive nominative Case from T. In (27d), the subject and the object move into the TP domain. However, the movement of the object is prohibited owing to anti-locality (17); although the subject movement does not violate anti-locality (i.e., the subject crosses the full vcanP), the movement of the object does violate anti-locality (only the higher segment of the vcanP is crossed). Thus, the accusative object cannot move to a position above the potential suffix, and it remains within the vP complement:

16 Saito (2017a; b; 2020) argues that passive and unaccusative vs are also phases (see also Legate 2003 and Takahashi 2021b).
The object stays in the base-position and takes scope under the potential suffix.

The wide scope interpretation of the nominative object in (26b) also follows from this analysis. The movement of the nominative object does not violate anti-locality.

(29) Movement of the nominative object:
   a. Constructing the TP and nominative Case assignment:
      \[
      \text{TP} \quad [\text{v-canP SUBJ_NOM} \quad t_i \quad [\text{VP OBJ_ACC V} \quad v-v_{\text{can}}] \quad T] \]
   b. Movement of the nominative phrases:
      \[
      [\text{TP SUBJ_NOM OBJ_NOM} \quad t_i \quad [\text{VP t_j V} \quad v-v_{\text{can}}] \quad T] \]

In (29a), the subject and the object receive nominative Case from T. In (29b), the subject and the object move into the TP domain without violating anti-locality. The subject moves across the \(v_{\text{can}}\) P, and the object moves across the \(v_{\text{can}}\) P and the VP. The object can thus take scope over the potential suffix.\(^{17}\)

Let us now consider how the current analysis accounts for the second observation regarding adjuncts:

(30) Observation 2: scope of adjuncts following accusative/nominative objects
   a. Kodomo-tati-ga kanzirensyuu-o \(\text{pen-dake-de tuzuke-rare-ru.}
      \) child-PL-NOM kanji.practice-ACC pen-only-with continue-can-PRS
      ‘Children can continue kanji practice with only a pen.’
      ‘Children can continue kanji practice with a pen and nothing else.’ (can > only)
      ‘It is only a pen that children can continue kanji practice with.’ (?*only > can)
   b. Kodomo-tati-ga kanzirensyuu-ga \(\text{pen-dake-de tuzuke-rare-ru.}
      \) child-PL-NOM kanji.practice-NOM pen-only-with continue-can-PRS
      ‘Children can continue kanji practice with only a pen.’
      ‘Children can continue kanji practice with a pen and nothing else.’ (?can > only)
      ‘It is only a pen that children can continue kanji practice with.’ (only > can) (= (4))

\(\text{Dake ‘only’ is contained in the adjunct and takes scope under the potential suffix when the object}
\) receives accusative Case, as shown in (30a). When the object receives nominative Case, as shown in (30b), \(\text{dake ‘only’ contained in the adjunct can take scope over the potential suffix. Under the current analysis, dake ‘only’ in (30a) cannot take scope over the potential suffix because the}
\) movement of the accusative object and the adjunct violates anti-locality.

\(^{17}\) I argue below that objects and adjuncts following subjects in principle can undergo scrambling into the TP domain. Therefore, it is possible that the movement of the nominative object into the TP domain is an instance of scrambling rather than Case-movement. See Saito (2010a; 2012) and Takahashi (2010) for further discussion of the Case-movement analysis.
(31) Movement of the accusative object and the VP adjunct:
   a. Constructing the vP phase and accusative Case assignment:
      \[ [vP \text{ PRO} [vP_{\text{OBJ}_{\text{ACC}}} \text{ Adjunct} V] v] \]
   b. Constructing the vcanP phase:
      \[ [\text{scanP}_{\text{SUBJ}_{\text{NOM}}} [vP \text{ PRO} [vP_{\text{OBJ}_{\text{ACC}}} \text{ Adjunct} V] v] v_{\text{can}}] \]
   c. Movement and transfer:
      \[ [\text{scanP}_{\text{SUBJ}_{\text{NOM}}} \text{ Adjunct}_{\text{k}} [\text{scanP}_{\text{SUBJ}_{\text{NOM}}} \text{ PRO} [vP t_j t_k V] v_{\text{can}}]] \]
   d. Movement into the TP domain:
      \[ [\text{TP}_{\text{SUBJ}_{\text{NOM}}} \text{ OBJ}_{\text{ACC}} \text{ Adjunct}_{\text{k}} [\text{scanP}_{\text{SUBJ}_{\text{NOM}}} \text{ PRO} [vP t_j t_k V] v_{\text{can}}]] T] \]

In (31a), the object receives accusative Case within the vP phase. In (31b), the potential suffix and the subject are introduced into the derivation, constructing the vcanP phase. In (31c), the object and the adjunct move to the vcanP edge, and the vP phase is transferred. In (31d), the movement of the object and the adjunct violates anti-locality. Hence, the adjunct and the object remain in their base-positions, as shown in (32):

(32) \[ [\text{TP}_{\text{SUBJ}} t_i [\text{scanP} \text{ PRO} [vP_{\text{OBJ}_{\text{Adjunct}} V] v] v_{\text{can}}]] T] \]

The movement of the subject does not violate anti-locality. As the adjunct stays below the potential suffix, dake ‘only’ contained in the adjunct must take scope under the potential suffix.

Regarding (30b), the dake ‘only’ contained in the adjunct can take scope over the potential suffix because the adjunct can move into the TP domain via scrambling without violating anti-locality:

(33) Movement of the nominative object and the adjunct:
   a. Constructing the vcanP phase and nominative Case assignment:
      \[ [vP_{\text{NOM}} [vP_{\text{OBJ}_{\text{NOM}}} \text{ Adjunct} V] v_{\text{can}}]] T] \]
   b. Movement of the nominative phrases and the adjunct:
      \[ [\text{TP}_{\text{SUBJ}_{\text{NOM}}} \text{ OBJ}_{\text{NOM}} \text{ Adjunct}_{\text{k}} [\text{scanP}_{\text{SUBJ}_{\text{NOM}}} \text{ PRO} [vP t_j t_k V] v_{\text{can}}]] T] \]

In (33a), the subject and the object receive nominative Case from T. In (33b), the subject, the object, and the adjunct move into the TP domain (cf. Shibata 2015). There is no anti-locality.
violation. The subject moves across the $v_{can}P$, and the object and the adjunct move across the $v_{can}P$ and the VP. Thus, *dake* ‘only’ can take scope over the potential suffix. Note that the movement of the adjunct (and the object) is optional; if the adjunct stays in its base-position, *dake* ‘only’ contained in the adjunct takes scope under the potential suffix:18,19

The contrast regarding the adjunct still holds even if the ordering of the adjunct and the object is reversed:

(i)

a. Kodomo-tati-ga pen-*dake*-de kanzirensuu-o tuzuke-*rare*-ru.
   child-PL-NOM pen-only-with kanji.practice-ACC continue-can-PRS
   (can > only, *only > can)

b. Kodomo-tati-ga pen-*dake*-de kanzirensuu-ga tuzuke-*rare*-ru.
   child-PL-NOM pen-only-with kanji.practice-NOM continue-can-PRS
   (?can > only, only > can)

‘Children can continue kanji practice with only a pen.’

The contrast in (i) is relevant to an interesting alternative analysis of the contrast in (30) suggested by one reviewer. The reviewer asks if the contrast in (30) can be accounted for in terms of movement into a Focus Phrase (FocP) between TP and $vP$ (Hoshi & Miyoshi 2007). If elements containing *dake* ‘only’ move to FocP between TP and $vP$, the accusative object in (30a), which stays within the $vP$, blocks the movement of the adjunct, yielding the narrow scope interpretation of *dake* ‘only’ contained in the adjunct. However, the nominative object in (30b), which can move into the TP domain, does not block such movement and yields the wide scope interpretation of *dake* ‘only’ contained in the adjunct. Although the alternative may accommodate the contrast in (30), it cannot be extended to the contrast in (i). As the adjunct precedes the object, the latter should not interfere with the movement of the former. The contrast therefore remains puzzling under this alternative analysis.

Another reviewer asks if the contrast we observe in (i) holds for ditransitive constructions. As shown in (ii), the Case of direct objects impacts the scope of indirect objects when the former precede the latter:

(ii)

Scenario for the *can > only* reading: Taro, Hanako, John, and Mary are in a room. Taro can teach English only to Hanako after taking John and Mary to another room so that John and Mary do not have to learn English together.

Scenario for the *only > can* reading: Taro, Hanako, John, and Mary are in a room. Taro tries to teach English to Hanako, John, and Mary. However, only Hanako is willing to learn English, and neither John nor Mary listens to him.

a. Taroo-ga eego-o Hanako-*dake*-ni osie-*rare*-ru.
   Taro-NOM English-ACC Hanako-only-DAT teach-can-PRS
   ‘Taro can teach English to only Hanako.’
   ‘Taro can teach English to Hanako without teaching it to any other people.’ (can > only)
   ‘It is only Hanako that Taro can teach English to.’ (?*only > can)

b. Taroo-ga eego-ga Hanako-*dake*-ni osie-*rare*-ru.
   Taro-NOM English-NOM Hanako-only-DAT teach-can-PRS
   ‘Taro can teach English to only Hanako.’
   ‘Taro can teach English to Hanako without teaching it to any other people.’ (?can > only)
   ‘It is only Hanako that Taro can teach English to.’ (only > can)

The indirect object that contains *dake* ‘only’ fails to take scope over the potential suffix in the presence of the preceding accusative object (iia). In contrast, the indirect object takes scope over the potential suffix in the presence of the preceding nominative object (iib). Interestingly, the contrast seems to disappear or become significantly weaker when the indirect object precedes the direct object (I thank the reviewer for bringing this point to my attention):
(34) Non-movement of the adjunct:

\[
(\text{TP} \quad \text{SUB}_NOM \quad \text{OBJ}_NOM \quad [\text{v}_{\text{can}} \quad \text{t}_i \quad \text{t}_j \quad \text{Adjunct V}] \quad v_\text{-can}) \quad \text{T})
\]

Finally, let us consider the third observation concerning instrumental subjects. Before examining
the relevant examples, I provide an analysis of instrumental subject constructions, as exemplified
below:

(35) Kodomo-tati-de kanzirensyu-o tuzuke-ru.

child-PL-with kanji.practice-ACC continue-PRS

‘Children continue kanji practice.’

The subject *kodomo-tati* ‘children’ in (35) appears with the instrumental marker *-de*, and the
object *kanzirensyu* ‘kanji practice’ receives accusative Case. I propose that (i) instrumental
subjects are base-generated in the lower specifier of an (agentive) v and (ii) a pro base-generated
in the higher specifier of the agentive v moves to Spec, TP.

(36)

\[
[\text{TP} \quad \text{pro} \quad \text{t}_i \quad \text{t}_j \quad \text{vP} \quad \text{SUB}_I \quad \text{v}) \quad \text{T})
\]

There are two thematic subject positions in (36), and only the instrumental subject is overtly realized
(I assume, following Saito (2017b; 2017c), that two NPs can receive the same theta-role from a
predicate in violation of the theta-criterion (see also Kuroda 1988)). The instrumental subject remains
within the vP. The analysis in (36) makes several predictions that are borne out. First, the analysis
predicts that the higher thematic subject may be overtly realized, which is confirmed by examples
involving “subject doubling”. Interestingly, nominative subjects and instrumental subjects can co-occur
(cf. Takubo 1984; Kishimoto 2017; see Saito 2017b; c; Kuroda 1988 for doubling of arguments):

(iii) a. Taroo-ga Hanako-dake-ni eego-o osie-rare-ru.

Taro-NOM Hanako-only-DAT English-ACC teach-can-PRS

‘Taro can teach English to only Hanako.’

‘Taro can teach English to Hanako without teaching it to any other people.’ (can > only)

‘It is only Hanako that Taro can teach English to.’ (only > can)


Taro-NOM Hanako-only-DAT English-NOM teach-can-PRS

‘Taro can teach English to only Hanako.’

‘Taro can teach English to Hanako without teaching it to any other people.’ (can > only)

‘It is only Hanako that Taro can teach English to.’ (only > can)

In (iiiia) and (iiib), the indirect object can take scope over the potential suffix regardless of the Case of the direct
object. As the structure of ditransitive constructions is still a matter of debate (Hoji 1985; Takano 2008, among oth-
ers), I will not delve further into (iii) and will leave it for future investigation.

19 Note that the scrambling of the adjunct under consideration does not result in word order permutation. See footnote 21.
(37) Kodomo-tati-ga otokonoko-tati-de kanzirensyuu-o tuzuke-ta.
    child-PL-NOM boy-PL-with kanji.practice-ACC continue-PST
    ‘Lit. Children are such that boys continued kanji practice.’

In (37), *kodomo-tati* ‘children’ receives nominative Case, and *otokonoko-tati* ‘boys’ appears with the instrumental marker *-de* ‘with’. This example is fully acceptable.

Second, both the nominative and instrumental phrases under consideration behave as genuine subjects (cf. Kishimoto 2010; 2017). This is demonstrated by the following example, which involves the subject-oriented reflexive *zibun-tati-zisin* ‘self-PL-self’:

(38) Kodomo-tati_{i/-}-ga otokonoko-tati_{j/-} de zibun-tati-zisin_{i/-}-no-hon-o sute-ta.
    ‘Lit. Children, are such that boys_{i/-} discarded their_{j/-} books.’

In (38), either *kodomo-tati* ‘children’ or *otokonoko-tati* ‘boys’ can be the antecedent of the reflexive *zibun-tati-zisin* ‘self-PL-self’. When *kodomo-tati* ‘children’ is chosen as the antecedent, (38) means that the boys discarded books owned by the children, including the boys. However, when *otokonoko-tati* ‘boys’ is chosen as the antecedent, (38) denotes that the boys discarded books owned by the boys. Assuming that Spec, vP counts as the subject position responsible for the binding of subject-oriented reflexives (Saito 2006), the ambiguity of (38) shows that both the nominative phrase *kodomo-tati* ‘children’ and the instrumental phrase *otokonoko-tati* ‘boys’ are located in Spec, vP.

Finally, instrumental subjects cannot be selected by stative predicates, which suggests that instrumental subjects must be associated with agentive/volitional predicates (Takubo 1984; Kishimoto 2005). Instrumental subjects are not allowed with *wakar-* ‘understand’:

(39) Watasi-tati-ga/nia/-*de eego-ga wakar-u.
    we-PL-NOM/DAT/-with English-NOM understand-PRS
    ‘We understand English.’

*Wakar-* ‘understand’ usually takes a nominative object, which is available when a predicate is [+ stative] (Kuno 1973; Saito 1982). Although the nominative and the dative subject can co-occur with *wakar-* ‘understand’, the instrumental subject cannot appear with it. The contrast indicates that instrumental subjects are not available with stative predicates.

We are now ready to discuss the derivation of the potential construction with the instrumental subject:

(40) Observation 3: scope of nominative objects following instrumental subjects
    a. Kodomo-tati-ga kanzirensyuu-**dake**-ga tuzuke-**rare**-ru.
       child-PL-NOM kanji.practice-**only**-NOM continue-**can**-PRS
       ‘Children can continue only kanji practice.’
       ‘Children can continue kanji practice without continuing anything else.’ (can > only)
       ‘It is only kanji practice that children can continue.’ (only > can) (= (5a))
   child-PL-only-NOM kanji.practice-only-NOM continue-can-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue kanji practice without continuing anything else.’ (can > only)
   ‘It is only kanji practice that children can continue.’ (?*only > can) (= (5b))

Whereas the nominative object in (40a) follows the nominative subject and can take scope over the potential suffix, the nominative object in (40b) follows the instrumental subject and must take scope under the potential suffix. Recall that the instrumental subject is located in the lower specifier of the agentive \(v\) in (39). This suggests that the instrumental subject cannot be in the specifier of the potential suffix, which is a stative predicate (contra Takahashi 2021a). Hence, I assume that the instrumental subject is located in the lower specifier of the embedded agentive \(v\):

\[
\text{(41) a. } \left[ \text{TP} \text{ SUBJ}_{\text{NOM}} \right. \text{ OBJ}_{\text{NOM}} \left[ \text{v} \text{ canP} \text{ t} \left[ \text{vP} \text{ V} \right] \text{ T}_{\text{NOM}} \right] \right) \text{ (= (40a))}
\]

\[
\text{b. } \left[ \text{TP} \text{ pro} \left[ \text{v} \text{ canP} \text{ t} \left[ \text{vP} \text{ PRO}_{\text{INS}} \text{ SUBJ} \text{ OBJ}_{\text{NOM}} \text{ V} \right] \text{ T}_{\text{NOM}} \right] \right) \text{ (= (40b))}
\]

In (41a), the embedded \(v\) is externally adjoined to the potential suffix \(\text{v}_{\text{can}}\) (i.e., the potential suffix is externally pair-merged with the embedded \(v\)). Both the nominative subject and the nominative object move into the TP domain without violating anti-locality (see (29b)). In (41b), the instrumental subject is base-generated in the lower specifier of the embedded \(vP\), and the higher specifier is realized as a PRO, which is controlled by the pro selected by the potential suffix. The embedded \(v\) is adjoined to the potential suffix via movement (i.e., the potential suffix is pair-merged with the embedded \(v\)) and ceases to be a phase head that assigns accusative Case (cf. Bošković 2015; 2016a). Hence, the embedded object receives nominative Case from T. As the object in (41b) follows the instrumental subject, which remains within the embedded \(vP\), it must take scope under the potential suffix.

The proposed analysis is supported by several observations. First, as the instrumental subject is located below the potential suffix, the former must take scope under the latter. This prediction is borne out:

\[
\text{(42) a. } \text{Kodomo-tati-} \text{dake-ga kanzirensyuu-ga tuzuke-rare-ru.}
\]

\[
\text{child-PL-only-NOM kanji.practice-NOM continue-can-PRS}
\]

‘Only children can continue kanji practice.’

‘Children can continue kanji practice without any other people around.’ (*can > only)

‘It is only children who can continue kanji practice.’ (only > not)
child-PL-only-with kanji.practice-NOM continue-can-PRS
‘Only children can continue kanji practice.’

‘Children can continue kanji practice without any other people around.’ (can > only)
‘It is only children who can continue kanji practice.’ (*only > not) (Takahashi 2021a: 165)

Whereas the nominative subject in (42a) must take scope over the potential suffix, the instrumental subject in (42b) must take scope under the potential suffix. I assume that the obligatory wide scope interpretation of the nominative subject in (42a) is attributed to the well-known observation that sentence-initial nominative phrases with an individual predicate must receive an exhaustive-listing interpretation (Kuno 1973). Importantly, the obligatory narrow scope interpretation of the instrumental subject in (42b) follows from the current analysis because the instrumental subject is located below the potential suffix.

Furthermore, the proposed analysis predicts that the accusative object should be able to move to a position above the nominative subject, taking scope over the potential suffix:

(43) Movement of the accusative object:
  a. Movement of the accusative object to the edge of the \( v_{can} \) P and transfer (= (27c))
     \[
     \begin{array}{c}
     \langle \text{vcanP OBJjACC} \rangle \\
     \langle \text{vcanP SUBJ} \rangle \\
     \langle \text{vcanP PRO} [vP t_j V] \rangle \\
     \end{array}
     \]
  b. Movement of the nominative subject and the accusative object
     \[
     \begin{array}{c}
     \langle \text{CP OBJjACC} \rangle \\
     \langle \text{TP SUBJ NOM} \rangle \\
     \langle \text{vcanP PRO} [vP t_j V] \rangle \\
     \end{array}
     \]

In (43a), the object moves to the edge of the \( v_{can} \) P phase, and the \( vP \) phase is transferred. In (43b), the nominative subject moves to Spec, TP, and the accusative object moves into the CP domain, which does not violate anti-locality (the object moves across the TP).\(^{20}\) Recall that if the higher specifier/adjunct is turned into a lower copy of the movement, a violation of the condition on multiple phase edges (20) can be avoided (see Section 3.1.3). As the higher \( vP \) edge is the trace/lower copy of the accusative object, the movement of the nominative subject does not violate the condition on multiple phase edges.

\(^{20}\) The scrambling of the object in (43b) targets CP, which is often assumed to be an A'-position. However, it is well-known that clause-internal scrambling exhibits characteristics of both A'-movement and A-movement (Saito 1992; Abe 1993; Tada 1993, among others) (I thank one reviewer for this point). I leave investigations into the properties of clause-internal scrambling for future study.
In (44), the accusative object in sentence-initial position can take scope over the potential suffix, as predicted by the present analysis.21

21 As Koizumi (1994; 1998) notes, the accusative object following the nominative subject may take scope over the potential suffix when the former is stressed, which Koizumi (1994; 1998) attributes to focus movement/scrambling. Note that in such a case, there is a pause after the accusative object:

   child-PL-NOM   kanji.practice-only-ACC continue-can-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue kanji practice without continuing anything else.’ (can > only)
   ‘It is only kanji practice that children can continue.’ (only > can)

Of relevance here is Ko’s (2005a) observation that a subject and a following object may both undergo (string-vacuous) scrambling to a CP domain when there is a pause after the object (see also Miyagawa & Arikawa 2007). Following this insight, I suggest that (i) should be analyzed in terms of (string-vacuous) scrambling of the subject and the object to the CP domain:

(ii) [CP  SUBJ [NOM OBJ [ACC [TP  t_i  [vcanP  t_j  [vcanP  t_i  [vP  [vP  t_j  V  [vIP  vcan]]]]]]]]

The subject and the object move into the CP domain from Spec, TP and Spec, vcanP, respectively. There is no anti-locality violation here, and the accusative object takes scope over the potential suffix. I assume here that clause-internal scrambling to the CP domain is not subject to radical (total) reconstruction (I thank one reviewer for clarifying this point). Note also that the instrumental subject and the following nominative object may take scope over the potential suffix when they are followed by a pause:

    child-PL-with   kanji.practice-only-NOM continue-can-PRS
    ‘Only children can continue kanji practice.’
    ‘Children can continue kanji practice without continuing anything else.’ (can > only)
    ‘It is only children who can continue kanji practice.’ (only > not)

The nominative object in (iii) and the instrumental subject in (iv) can take scope over the potential suffix. I assume that the elements before the pause in (iii) and (iv) undergo scrambling to the CP domain (I thank one reviewer for suggesting that I consider such derivations). It is often claimed, or at least tacitly assumed, that such string-vacuous scrambling is impossible (Hoji 1985; Takita 2008). However, the status and empirical scope of the ban on string-vacuous scrambling do not seem to be clear at this point. Importantly, the double movement of the subject and object is indeed claimed to be possible (Ko 2005a; Miyagawa & Arikawa 2007; Shibata 2015; Sato & Maeda 2021). Hence, the analysis in the text is in line with the more recent understanding of string-vacuous scrambling, and I leave further investigations of the nature of the ban on string-vacuous scrambling for future study. Note that (33) and (51) also involve string-vacuous scrambling of the object and the adjunct.

(ii) [CP  SUBJ [NOM OBJ [ACC [TP  t_i  [vcanP  t_j  [vcanP  t_i  [vP  [vP  t_j  V  [vIP  vcan]]]]]]]]

The subject and the object move into the CP domain from Spec, TP and Spec, vcanP, respectively. There is no anti-locality violation here, and the accusative object takes scope over the potential suffix. I assume here that clause-internal scrambling to the CP domain is not subject to radical (total) reconstruction (I thank one reviewer for clarifying this point). Note also that the instrumental subject and the following nominative object may take scope over the potential suffix when they are followed by a pause:
To summarize, I have provided an analysis of the core observations discussed in the previous section. The accusative object (and the following adjunct) fail to move into the TP domain because of an interaction between phasal transfer and anti-locality, whereas the nominative object (and the following adjunct) can move into the TP domain without violating anti-locality. Thus, the analysis provides new evidence in favor of phasal transfer and anti-locality.

4 Consequences

In this section, I explore some consequences of the present analysis. First, I suggest that negation in Japanese is an adjunct and extend the current analysis to simple transitive sentences, where accusative objects take scope over negation. I then discuss cases where nominative phrases apparently undergo illicit movement into the TP domain. I argue that such cases should be analyzed in terms of the base-generation of the nominative phrases, which provides further credence to the current analysis.

4.1 Negation as an adjunct

In this subsection, I discuss the implications of the proposed analysis for the status of negation. The accusative object in the potential construction must take scope under negation, whereas the nominative object can take scope over negation (Koizumi 1994; 1998; Nomura 2005):

One reviewer asks whether an analysis in terms of cyclic linearization (Fox & Pesetsky 2005; Ko 2005b; Takita 2008; 2010) can provide an analysis of the facts under consideration (I thank the reviewer for suggesting this alternative analysis). Although this analysis may accommodate some of the data discussed in the text, it is unclear how this analysis accounts for the obligatory narrow scope interpretation of the accusative object in the potential construction, which is the main focus of the current analysis. Under the alternative analysis, the relative order between elements established in a lower spell-out domain cannot be contradicted by the relative order established in a later spell-out domain. Specifically, this analysis allows elements contained in a lower spell-out domain to be accessible to operations after spell-out and undergo movement, as long as the movement does not yield ordering contradiction in a later spell-out domain. Therefore, elements contained in a spell-out domain do not have to move to the edge of the domain to be accessible to operations after the spell-out. The alternative analysis is thus silent about the obligatory narrow scope interpretation of the accusative object in the potential construction:

(i)

As shown in (ia), the object remains in the vP complement, which is spelled-out upon the completion of the vP phase. As the embedded PRO subject is phonetically empty, the embedded object is the only relevant phrase for establishing the relative word order. Hence, no relative order is created among phrases (V and w are set aside, as they always follow NPs owing to the head-finality of Japanese; see Takita 2010). Furthermore, in (ib), both the subject and the object can move into the TP domain without creating an ordering conflict or violating anti-locality. Nothing thus seems to block (i).

I thank one reviewer for his/her helpful comments that led to the reconsideration of the discussion in this section.

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22 One reviewer asks whether an analysis in terms of cyclic linearization (Fox & Pesetsky 2005; Ko 2005b; Takita 2008; 2010) can provide an analysis of the facts under consideration (I thank the reviewer for suggesting this alternative analysis). Although this analysis may accommodate some of the data discussed in the text, it is unclear how this analysis accounts for the obligatory narrow scope interpretation of the accusative object in the potential construction, which is the main focus of the current analysis. Under the alternative analysis, the relative order between elements established in a lower spell-out domain cannot be contradicted by the relative order established in a later spell-out domain. Specifically, this analysis allows elements contained in a lower spell-out domain to be accessible to operations after spell-out and undergo movement, as long as the movement does not yield ordering contradiction in a later spell-out domain. Therefore, elements contained in a spell-out domain do not have to move to the edge of the domain to be accessible to operations after the spell-out. The alternative analysis is thus silent about the obligatory narrow scope interpretation of the accusative object in the potential construction:

(i)

a. Spell-out of the vP phase

\[
\{\text{vP phase}\} \quad \text{SUBJ} \quad \text{PRO} \quad \{\text{vP} \quad \text{NP} \quad v \} \quad \text{vP}\]

Movement of the nominative subject and the accusative object:

b. \{\text{TP}\} \quad \text{SUBJ} \quad \text{OBJ} \quad \{\text{vP} \quad \text{TP} \quad \text{TP} \quad \text{NP} \quad v \} \quad \text{vP}\}

As shown in (ia), the object remains in the vP complement, which is spelled-out upon the completion of the vP phase. As the embedded PRO subject is phonetically empty, the embedded object is the only relevant phrase for establishing the relative word order. Hence, no relative order is created among phrases (V and w are set aside, as they always follow NPs owing to the head-finality of Japanese; see Takita 2010). Furthermore, in (ib), both the subject and the object can move into the TP domain without creating an ordering conflict or violating anti-locality. Nothing thus seems to block (i).

23 I thank one reviewer for his/her helpful comments that led to the reconsideration of the discussion in this section.
Although the accusative object in (45a) must take scope under negation, the nominative object in (45b) can take scope over negation. The problem here is that the accusative object may take scope over negation (and the potential suffix) when there is a NegP projection above the $v_{can}$P:

(46)  

(a) Movement of the nominative subject and the accusative object:

Movement of the accusative object and transfer (= (27c)):

\[
[\text{vcan} \text{P OBJ}_{\text{ACC}} \text{ subj}] \rightarrow [\text{vcan} \text{P PRO} [\text{vP} t j \text{V}] v_{can}]\]

(b) Merger of Neg, constructing the NegP:

\[
[\text{NegP} [\text{vcan} \text{P OBJ}_{\text{ACC}} \text{ subj}] \rightarrow [\text{vcan} \text{P PRO} [\text{vP} t j \text{V}] v_{can}] \text{ Neg}]\]

(c) Movement of the nominative subject and the nominative object:

\[
[\text{TP SUBJ}_{\text{NOM}} \text{ OBJ}_{\text{ACC}} \text{ NegP} [\text{vcan} \text{P OBJ}_{\text{ACC}} \text{ subj}] \rightarrow [\text{vcan} \text{P PRO} [\text{vP} t j \text{V}] v_{can}] \text{ Neg} \text{ T}]\]

In (46a), the object moves to the edge of the $v_{can}$P phase, and the $v$P phase is transferred. In (46b), Neg is introduced into the derivation, constructing the NegP. In (46c), the nominative subject moves to Spec, TP. The accusative object moves into the TP domain, which does not violate anti-locality (the accusative object moves across the NegP). Thus, if NegP exists between $v_{can}$P and TP, the obligatory narrow scope interpretation of the accusative object may not be predicted by the present analysis. However, notice that many authors argue that Neg in Japanese is located within $v$P/VP (Takubo 1985; Han et al. 2004; Kataoka 2006). Building on these insights, I propose that Neg is an adjunct to $v$P. Given this proposal, when Neg and $v_{can}$P are merged, the resulting syntactic object is $v_{can}$P and not NegP:

24 Interestingly, based on an analysis of subject-oriented floating quantifiers, Branan (2023) argues that Neg and some aspectual heads in Japanese should project NegP and AspP, respectively, above $v$P. These projections allow subject movement from Spec, $v$P to obey a version of anti-locality employed in Branan (2023). It is an interesting task to examine how we can reconcile the results of this paper with those obtained in Branan (2023), which I leave for future study.
Returning to the obligatory narrow scope of the accusative object in (45a), the anti-locality analysis remains intact, as shown in (48):

(48) Movement of the nominative subject and the accusative object:
   a. Movement of the accusative object and transfer (= (46a)):

   \[
   \begin{array}{c}
   (v_{canP} \ OBJ_{ACC} \ v_{canP} \ SUBJ) \\
   (vP \ PRO \ [vP \ t \ V] \ v_{can})
   \end{array}
   \]

   b. Merger of Neg, constructing the \( v_{canP} \):

   \[
   \begin{array}{c}
   (v_{canP} \ OBJ_{ACC} \ v_{canP} \ SUBJ) \\
   (vP \ PRO \ [vP \ t \ V] \ v_{can}) \text{ Neg}
   \end{array}
   \]

   c. Movement of the nominative subject and the accusative object:

   \[
   \begin{array}{c}
   (TP \ SUBJ_{NOM} \ OBJ_{ACC} \ v_{canP} \ OBJ_{ACC} \ V) \\
   (vP \ PRO \ [vP \ t \ V] \ v_{can}) \text{ Neg} \ T
   \end{array}
   \]

In (48a), the object moves to the edge of the \( v_{canP} \) phase, and the vP phase is transferred. In (48b), Neg is introduced, constructing the \( v_{canP} \) (see (47b)). In (48c), the nominative subject moves into Spec, TP. The movement of the object violates anti-locality (the object moves across segments of the \( v_{canP} \)). The object must remain in its base-position and take scope under negation and the potential suffix:

(49) \[
\begin{array}{c}
(TP \ SUBJ_{NOM} \ [v_{canP} \ SUBJ_{NOM} \ OBJ_{ACC} \ V]) \\
(v_{canP} \ OBJ_{ACC} \ v_{can}) \text{ Neg} \ T
\end{array}
\]

The above analysis makes a further prediction, which is indeed borne out. Recall that the accusative object in the potential construction fails to move into the TP domain via scrambling because there are two phases (\( v_{canP} \) and vP), with transfer of the vP complement. The movement of the object to the edge of the \( v_{canP} \), which is immediately below the TP, brings the object too close to the TP domain. Thus, the analysis predicts that accusative objects can move into the TP domain when they do not have to move to a phase edge immediately below the TP. Accusative objects in simple transitive sentences can take scope over negation (Kato 1985; Han et al. 2004; Kataoka 2006; Shibata 2015):
The ambiguity of (50) is correctly predicted by the present analysis as transitive sentences involve only one phase (= the vP phase):

(51)

a. Constructing the vP phase:

\[
[\phi \text{SUBJ }] [\phi \text{VP OBJ}_{\text{ACC}} V] V
\]

b. Merger of Neg, constructing the vP:

\[
[\phi \text{SUBJ }] [\phi \text{VP OBJ}_{\text{ACC}} V] V \text{Neg]
\]

c. Movement of the subject and the object:

\[
[\phi \text{SUBJ}_{\text{NOM}} \text{OBJ}_{\text{ACC}} \text{SUBJ} \text{INS}_1 [\phi \text{VP OBJ}_{\text{ACC}} V] V] \text{Neg]} T
\]

In (51a), both the subject and the object are base-generated within the vP phase. In (51b), Neg is introduced, constructing the vP (see (47b)). In (51c), the object and the nominative subject move into the TP domain (cf. Shibata 2015). The movement of the object does not violate anti-locality. Therefore, the object can take scope over negation.

The above analysis also predicts that the accusative object must take scope under negation when the former follows an instrumental subject:

(52) Non-movement of the accusative object

a. Constructing the vP phase:

\[
[\phi \text{pro SUBJ}_{\text{INS}}] [\phi \text{VP OBJ}_{\text{ACC}} V] V
\]

b. Merger of Neg:

\[
[\phi \text{pro] [\phi t_i \text{SUBJ}_{\text{INS}} [\phi \text{VP OBJ}_{\text{ACC}} V] V \text{Neg] T}
\]

In (52), the instrumental subject, the pro, and the object are base-generated within the vP. In (52), Neg is introduced, constructing the vP. The instrumental subject remains within the vP and the pro moves to Spec, TP. The object remains within the VP, taking scope under negation. This prediction is borne out (Niinuma 2021):

(53) Kodomo-tati-de kanzirensyuu-dake-o tuzuke-na-i.

child-PL-with kanji.practice-only-NOM continue-NEG-PRS

‘Children do not continue only kanji practice.’

‘Children do not continue kanji practice without continuing anything else.’ (not > only)

‘It is only kanji practice that children do not continue.’ (?*only > not)
The accusative object in (53), which follows the instrumental subject, must take scope under negation.

### 4.2 Apparent illicit movement of nominative phrases

I have argued above that the movement of VP-internal elements is constrained by phasal transfer and anti-locality (see (27) and (31)). In this subsection, I discuss some apparent counterexamples to this analysis and show that such cases in fact support it.

There do seem to be cases where nominative “objects” are in the TP domain even when an embedded object receives accusative Case (Tada 1992; 1993; Takano 2003).

    child-PL-NOM kanji.practice-GEN applicant-ACC find-can-PRS

    child-PL-NOM kanji.practice-NOM applicant-ACC find-can-PRS

‘Children can find applicants for kanji practice.’

In (54a), *kanzirensyuu* ‘kanji practice’ receives genitive Case. Given that genitive Case is usually assigned to NP-internal elements (Kitagawa & Ross 1982), *kanzirensyuu* ‘kanji practice’ is within the NP headed by *kiboosya* ‘applicant’. In contrast, in (54b), *kanzirensyuu* ‘kanji practice’ receives nominative Case. Whereas (54a) can be analyzed as a case of the potential construction with the accusative object (26a), (54b) requires further discussion. The analysis developed above may predict that *kanzirensyuu* ‘kanji practice’ in (54b) cannot move into the TP domain:

(55) Movement of the nominative object:

a. Movement of the “object” to the edge of the \( v_{out} \)P and transfer:

\[
[\text{\textbf{v}_{canP}} \text{OBJ}] \rightarrow [\text{\textbf{v}_{canP}} \text{SUBJ} [\text{\textbf{v}_{PRO}} [\text{\textbf{v}_{TP}} \text{OBJ}_{\text{\textbf{v}_{canP}}} \text{SUBJ} \text{[\text{\textbf{v}_{PRO}} \text{[\text{\textbf{v}_{TP}} \text{OBJ}_{t_{a}} \text{SUBJ} \text{[\text{\textbf{v}_{PRO}} \text{[\text{\textbf{v}_{TP}} \text{OBJ}_{t} N_{\text{ACC}} V] \text{\textbf{v}}_{\text{canP}}} \text{\textbf{v}_{canP}}] T]}}]
\]

b. Movement of the nominative subject and the “object”:

\[
[\text{\textbf{v}_{canP}} \text{OBJ}_{\text{\textbf{v}_{canP}}} \text{SUBJ}] \rightarrow [\text{\textbf{v}_{canP}} \text{OBJ}_{\text{\textbf{v}_{canP}}} \text{SUBJ} \text{[\text{\textbf{v}_{PRO}} \text{[\text{\textbf{v}_{TP}} \text{OBJ}_{t_{a}} \text{SUBJ} \text{[\text{\textbf{v}_{PRO}} \text{[\text{\textbf{v}_{TP}} \text{OBJ}_{t} N_{\text{ACC}} V] \text{\textbf{v}}_{\text{canP}}} \text{\textbf{v}_{canP}}] T]}}]
\]

Here, *kanzirensyuu* ‘kanji practice’ in (55) moves out of the host NP headed by *kiboosya* ‘applicant’. However, there are several reasons to set aside this option. First, whether such a movement exists in Japanese is still debated, and even if it does, the alleged movement from the possessor position seems quite restricted (Funakoshi 2017). Moreover, if the NP under consideration could raise out of its host, the alleged movement into the TP domain should be blocked by anti-locality. As the extracted NP in (55) is at the outer edge of the \( v_{out} \)P, it is too close to the TP domain. However, if the NP does not move, then the subject cannot be accessed by T because of the condition on multiple phase edges in (20).
Thus, we are led to conclude that the nominative phrase in (54b) is base-generated within the TP region (cf. Saito 1982):

(56) Non-movement of the nominative phrase:

\[
\text{TP SUBJ}_{\text{DOM}} \text{ NP}_{\text{DOM}} \{\text{v}_{\text{canP}} \text{ t} \ [v \text{P PRO} \ [vP \ [\text{NP} \text{pro} \text{jN} \text{ACC} \text{V} \text{v} \text{can} \text{T}]]]}
\]

In (56), the nominative subject moves to Spec, TP and the other nominative phrase is base-generated within the TP. The nominative phrase binds a pro associated with it.\(^{25}\) As the

\(^{25}\) One reviewer points out that the movement analysis in (56) should predict that a bound pronoun contained within the moved subject can be bound by the base-generated nominative phrase as a quantifier via reconstruction. However, as the reviewer correctly observes, such reconstruction is impossible (the following examples are provided by the reviewer (the judgment is the reviewer’s)):


\[\text{most-GEN job-NOM it-ACC quit-want-PROG-PRS person-NOM replacement-ACC find-can-NEG-PRS}\]

b. *[sore\_o yame-ta-gatei-ru hito-ga]\_ hotondo-no sigoto\_ga t\_ koonin-o mituke-rare-na-i.

\[\text{it-ACC quit-want-PROG-PRS person-NOM most-GEN job-NOM replacement-ACC find-can-NEG-PRS}\]

‘Most of the jobs are such that those who want to quit them cannot find a replacement.’

When the base-generated nominative phrase hotondo-no sigoto ‘most of the jobs’ precedes the moved nominative phrase sore-o yame-ta-gatei-ru hito ‘those who want to quit them’, as in (ia), sore ‘it’ can be bound by hotondo-no sigoto ‘most of the jobs’. The unacceptability of (ib) is puzzling given that pronominal variable binding is claimed to be possible via reconstruction (Fox 2000); the movement analysis seems to predict that (ib) should be as acceptable as (ia). However, the contrast between (ia) and (ib) does not undermine the movement analysis proposed in the text. First, I assume that in (ia), the nominative phrase hotondo-no sigoto ‘most of the jobs’ is base-generated above the moved nominative phrase, which makes the pronominal variable binding in question possible. Second, nominative phrases in potential constructions in general do not seem to permit reconstruction for pronominal variable binding (see Takano 2003 for relevant discussion), which makes the unacceptability of (ib) consistent with the movement analysis. Pronouns contained in objects can be bound by quantificational subjects when the former follow the latter regardless of the Case of the latter:

(ii) a. Hotondo-no kigyoo\_ga soko\_o danseezyu-gyooin-o suguni kaiko-deki-ru.

\[\text{most-GEN company-NOM it-GEN male.employee-ACC immediately fire-can-PRS}\]

b. Hotondo-no kigyoo\_ni(-wa) soko\_o danseezyu-gyooin-ga suguni kaiko-deki-ru.

\[\text{most-GEN company-DAT-TOP it-GEN male.employee-NOM immediately fire-can-PRS}\]

‘Most companies can fire their male employees immediately.’

The pronoun soko ‘it’, contained within the accusative object in (iia) and the nominative object in (iib), can be bound by the nominative subject and the dative subject, respectively. Importantly, when the objects in (ii) are moved to sentence-initial position, pronominal variable binding is not available with the nominative object:

(iii) a. Soko\_o danseezyu-gyooin-o hotondo-no kigyoo\_ ga t\_ suguni kaiko-deki-ru.

\[\text{it-GEN male.employee-ACC most-GEN company-NOM immediately fire-can-PRS}\]

b. *Soko\_o danseezyu-gyooin-ga hotondo-no kigyoo\_ni(-wa) t\_ suguni kaiko-deki-ru.

\[\text{it-GEN male.employee-NOM most-GEN company-DAT-TOP immediately fire-can-PRS}\]

‘Most companies can fire their male employees immediately.’
nominative phrase does not undergo movement, there is no anti-locality violation. This analysis is supported by several observations. First, the nominative phrase in (54b) obligatorily takes scope over negation:

    child-PL-NOM kanji.practice-only-GEN applicant-ACC find-can-NEG-PRS
    ‘Children cannot find applicants for only kanji practice.’ (not > only)
    ‘It is only kanji practice that children cannot find applicants for.’ (*only > not)

    child-PL-NOM kanji.practice-only-NOM applicant-ACC find-can-NEG-PRS
    ‘Children cannot find applicants for only kanji practice.’ (*not > only)
    ‘It is only kanji practice that children cannot find applicants for.’ (only > not)

Whereas kanzirensyuu-dake ‘only kanji practice’ with genitive Case must take scope under negation in (57a), kanzirensyuu-dake ‘only kanji practice’ with nominative Case must take scope over negation in (57b). The contrast follows from the present analysis (recall that negation is an adjunct; see (47)):

(58) a. [TP SUBJ NOM [vNP [vTP [vPRO [vNP [vGEN N] ACC V] v]]]](Neg) T](= (57a))

b. [TP SUBJ NOM NP NOM [vNP [vTP [vPRO [vNP [vPRO N] ACC V] v]]]](Neg) T](= (57b))

The obligatory narrow scope interpretation of dake ‘only’ in (57a) follows because kanzirensyuu-dake-no ‘only kanji practice-GEN’ is within the accusative NP that stays within the vP. The obligatory wide scope interpretation of dake ‘only’ in (57b) follows because the nominative phrase is base-generated above the potential suffix and negation in the TP domain. The absence of the narrow scope interpretation in (57) can be confirmed by the following example modeled afterNomura (2005) (see also Ochi & Isono 2021):

(59) Kodomo-tati-ga kanzirensyuu-dake-no/#ga kiboosya-o mituke-rare-ru no-wa
    child-PL-NOM kanji.practice-only-GEN/NOM applicant-ACC find-can-PRS NMLZ-TOP
    sit-tei-ta ga, keesanrensyuu-dake-no kiboosya-o mituke-rare-ru
    know-PROG-PST but calculation.practice-only-GEN applicant-ACC find-can-PRS
    no-ni-wa odoroi-ta.
    NMLZ-DAT-TOP be.surprised-PST
    ‘I have known that children can find applicants for only kanji practice, but I am surprised to
    know that they can also find applicants for only calculation practice.’

While the pronoun sore ‘it’ within the scrambled accusative object can be bound by the nominative subject, as shown in (iiia), the pronoun sore ‘it’ within the scrambled nominative object fails to be bound by the dative subject, as shown in (iiib). Given that the moved nominative object in (iiib) does not reconstruc for pronominal variable binding, it is not surprising that the moved subject in (ib) also does not reconstruc for pronominal variable binding. I leave investigations of this restriction for future study.
Example (59) forces dake ‘only’ to take scope under the potential suffix. The context ensures that kanzirensyuu ‘kanji practice’ cannot be the only thing that the students can find applicants for. This example is a non-contradictory statement when kanzirensyuu-dake ‘kanji practice-only’ receives genitive Case. This means dake ‘only’ in this case can take scope under the potential suffix. In contrast, this example is clearly a contradictory statement when kanzirensyuu-dake ‘kanji practice-only’ receives nominative Case; dake ‘only’ in this case cannot take scope under the potential suffix. This contrast provides additional evidence for the structures in (58).

Note that the nominative “object” can take scope over the potential suffix when it precedes the instrumental subject:

(i) Kanzirensyuu-dake-ga kodomo-tati-de tuzuke-rare-ru.
   kanji.practice-only-NOM child-PL-with continue-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue kanji practice without continuing anything else.’ (can > only)
   ‘It is only kanji practice that children can continue.’ (only > can) (Takahashi 2021a: 162)

Kanzirensyuu-dake ‘only kanji practice’ is in sentence-initial position and can take scope over the potential suffix. Given that nominative phrases can be base-generated in the TP domain, (i) may indeed be structurally ambiguous: (i) may involve movement of kanzirensyuu-dake ‘only kanji practice’ to the TP domain or base-generation of kanzirensyuu-dake ‘only kanji practice’ within the TP domain (irrelevant parts are omitted below).

(ii) a. [CP NP_{_NOM} [iNOM [vp SUBJ_{NS} [iSUBJ [vp [t_i] SUBJ_{NS} [iSUBJ [vp [pro_v] SUBJ_{NS} [iSUBJ [vp [v_{_NOM}] [iV] v_{_NOM} ] TP] (= (i))]
   b. [CP NP_{_NOM} [iNOM [vp SUBJ_{NS} [iSUBJ [vp [pro_v] SUBJ_{NS} [iSUBJ [vp [v_{_NOM}] [iV] v_{_NOM} ] TP] (= (i))]

Anti-locality is not violated by either option. I leave further investigations of this point for another occasion. The analysis in the text also predicts that when the instrumental subject undergoes A′-movement into a CP domain, the following nominative phrase may take scope over the potential suffix (I thank one reviewer for suggesting that I consider such cases; see also footnote 21):

(iii) [CP SUBJ_{INS} [iSUBJ [vp NP_{_NOM} [iNOM [vp [t_i] SUBJ_{NS} [iSUBJ [vp [pro_v] SUBJ_{NS} [iSUBJ [vp [v_{_NOM}] [iV] v_{_NOM} ] TP] (= (i))]

In (iii), the instrumental subject moves to Spec, CP, and the following nominative phrase, which may be base-generated in the TP domain or move into the TP domain, is located above the potential suffix. This prediction is borne out:

(iv) Kodomo-tati-de-wa kanzirensyuu-dake-ga tuzuke-rare-ru.
   child-PL-with TOP kanji.practice-only-NOM continue-PRS
   ‘Children can continue only kanji practice.’
   ‘Children can continue kanji practice without continuing anything else.’ (can > only)
   ‘It is only kanji practice that children can continue.’ (only > can)

The instrumental marker -de ‘with’ is a postposition. Given that topicalization of PPs involves movement into the CP domain (Saito 2010b), the availability of the wide scope interpretation of the nominative object in (iv) bears out the prediction shown in (iii). Example (v), modified from the example given by the reviewer, also illustrates this point:

(v) Rokunensee-de-mo_sensee-wa [cp t_i kanzirensyuu-dake-ga tuzuke-rare-ru to] omot-ta.
   sixth.graders-with-even teacher-TOP kanji.practice-only-NOM continue-PRS COMP think-PST
   ‘Lit. Even the sixth-graders, the teacher thinks that t_i can continue only kanji practice.’
   ‘The teacher thinks that even the sixth-graders can continue kanji practice without continuing anything else.’ (can > only)

   ‘The teacher thinks that it is only kanji practice that even the sixth-graders can continue.’ (only > can)

In (v), the instrumental subject moves out of the complement clause, and the embedded nominative phrase can take scope either over or under the potential suffix. As the nominative phrase can be located within the embedded TP via either base-generation or movement, the former can take scope over the potential suffix.
5. Conclusion

I have argued in this paper that the scope properties of Japanese objects are derived through an interaction between phasal transfer and anti-locality. The proposed analysis provides a unified account of the scope properties of objects and adjuncts in potential constructions. Additionally, assuming that Neg is an adjunct, the proposed analysis accounts for the scope properties of objects in simple transitive sentences. Furthermore, I discussed cases where nominative phrases apparently undergo illicit movement into the TP domain and showed that such cases can indeed be analyzed in terms of the base-generation of the nominative phrases, which provides additional evidence in favor of the proposed analysis. As the proposed analysis relies crucially on phasal transfer and a specific version of anti-locality, it offers new evidence in their favor.
Abbreviations
ACC = accusative, COMP = complementizer, DAT = dative, GEN = genitive, INS = instrumental, NEG = negation, NMLZ = nominalizer, NOM = nominative, PL = plural, PROG = progressive, PRS = present, PST = past, TOP = topic

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Competing interests
The author has no competing interests to declare.

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