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Particle-Verb Idioms in English: A Symmetric Analysis*

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ABSTRACT

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This paper investigates particle-verb constructions in English with focus on particle-verb idioms—idioms consisting of a particle-verb and a DP. Particle-verb idioms are classified into three subtypes according to the placement of the particle relative to the verb. First, there is a group of idioms that require the merged order of the verb and particle (e.g., <u>blow off</u> steam / *<u>blow</u> steam <u>off</u>). Another must appear in the split order (e.g., <u>let</u> the side <u>down</u> / *<u>let down</u> the side). The final group allows alternation between the two surface orders (e.g., *keep up one's end* / *keep one's end up*). Based on the finding that the flexibility in idiom interpretation is correlated with the amount of verbal structure associated (Punske and Stone 2014, Stone 2016), I argue against the derivational approach to the particle-verb construction. According to the derivational analyses, the merged and split order of particle-verbs share an underlying structure. Such an approach incorrectly predicts only two of the three groups of particle-verb idioms to be possible. I argue that a symmetrical treatment of the two surface orders of particle-verbs enables us to comprehensively account for the idiom facts. In particular, I propose that the merged and split order of particle-verbs involve two different syntactic structures. The two surface orders arise depending on whether the verbal root head-adjoins to the Part(icle) head or the verbalizing *v* head. The three groups of idioms realize either or both of the proposed structures. In addition to capturing the patterns of particle-verb idioms, I demonstrate that a number of traditional observations about the construction naturally follow. The analysis is shown to be robust in explaining the semantic contrast between the two surface orders, non-idiomatic particle-verbs with a fixed order, *right*-modification, and particle-verbs with an augmented argument structure.

KEYWORDS

1. Introduction

Particle-verb constructions are characterized by the two possible surface orders, as illustrated in (1). In this paper, I adopt the terminology of Nicol (2002) and label the order in (1a) the 'merged' order, where the lexical verb and particle together appear before the DP object. The order in (1b), in which the verb and particle are split up by the DP object is called the 'split' order.

(1) a. Bridget <u>threw away</u> the keys.   *merged order*
     b. Bridget <u>threw</u> the keys <u>away</u>.   *split order*

Due to the unique composition that requires at least two elements—a verb and a particle—to form a verb phrase and the concomitant syntactic peculiarities, the construction has attracted substantial attention throughout the tradition of generative grammar (Aarts 1989, Åfarli 1985, Basilico 2008, Blom 2005, Den Dikken 1995, Harley and Noyer 1998, Johnson 1991, Jung 2017, Kayne 1985, 1994, Koopman 1993, Larsen 2014, Neeleman 1994, 2002, Nicol 2002, Radford 1997, Ramchand and Svenonius 2002, Svenonius 1992, 1996, Toivonen 2003). This paper focuses on a somewhat different set of empirical phenomena that cut across two syntactic domains—particle-verb constructions and verb object idioms.

Particle-verb idioms (PVIs) consist of particle-verbs and their DP object (Cappelle 2005, Fraser 1970, Machonis 1985). PVIs can be classified into three subgroups as in (2)-(4), according to the word order among the verb, particle, and object that invoke the idiomatic interpretation. Specifically, idioms that belong to Group A require the merged order of the verb and particle, followed by a lexically fixed DP, to activate the idiomatic reading. Thus, for example, the idiomatic reading of <u>*blow off*</u> *steam* in (2) disappears in the split order <u>*blow*</u> *steam* <u>*off*</u>. Next, the idioms in Group B require the split order such that one can only say <u>*let*</u> *the side* <u>*down*</u> to express the idiomatic meaning, as in (3). Finally, the PVIs belonging to Group C allow either order as an idiom, as in (4).[1]

(2) **Group A:** Verb-Part(icle)-Object
     *blow off steam / *blow steam off*
     Idiomatic meaning: 'to talk or act in an unrestrained way to relieve stress'

     *put down roots / *put roots down*
     Idiomatic meaning: 'to begin to have a settled life in residence'

(3) **Group B:** Verb-Object-Part
     *let the side down / *let down the side*
     Idiomatic meaning: 'to fail to meet one's family or colleagues' expectations'

     *keep one's shirt on /*keep on one's shirt*
     Idiomatic meaning: 'to calm down'

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[1] See Cappelle (2005) and Fraser (1970) for more idiom examples that belong to each of the three subclasses in (2)-(4).

(4) **Group C:** Alternating
   keep up one's end / keep one's end up
   Idiomatic meaning: 'to perform well in competitive or difficult situations'

   roll up one's sleeves / roll one's sleeves up
   Idiomatic meaning: 'to get ready to do something difficult and intense'
                                                    (Adapted from Cappelle 2005: 214-216, Fraser 1970: 40-41)

The tripartite classification in (2)-(4) reveals a systematic interaction between the composition of particle-verbs and their respective idiomatic interpretations. Thus, a close scrutiny of PVIs in light of the theory of idiom formation (Harley 2002, Harley and Jung 2015, Larson 1988, 2017, Punske and Stone 2014, Stone 2016) will give us an insight into the structural representation of particle-verb constructions. This study aims to answer the following questions:

   1) What does the theory of idiom formation tell us about the structure of the idioms involving particle-verbs?
   2) Why do some PVIs require the merged order (i.e., Group A) while others require the split order (i.e., Group B), and yet the others allow for either order (i.e., Group C)?

In this study, I argue that a symmetric hypothesis about the particle-verb construction captures their properties with regard to PVIs. Independent studies on the syntactic structure of idioms reveal a correlation between the flexibility in idiomatic interpretation and the amount of verbal structure involved (Punske and Stone 2014, Stone 2016). I use this finding from the theory of idioms as a tool to evaluate previous analyses of particle-verb constructions. The results lead us to reject the derivational approach to particle-verbs (Answer to Q1). I then advance a symmetrical analysis of the construction, in which the merged and split orders are in no way derivationally related. The consequence is that the two subclasses of PVIs in (2) and (3) involve two distinct syntactic representations, while the alternating PVIs in (4) can appear in either of the two structures (Answer to Q2).

This paper is structured as follows. I open section 2 by reviewing two previous accounts of the particle-verb construction grounded on the assumption that the merged and split orders in (1) are derivationally related. In section 3, I outline the syntactic theories of idiom formation and link their conclusion to idioms formed with particle-verbs. Section 4 takes issues with the derivational analyses of particle-verbs with respect to PVIs. In section 5, I propose a non-derivational alternative and show how it correctly explains the PVI data. I then discuss some corollaries of the proposal in section 6. Section 7 presents theoretical implications and concludes.

2. Derivational Analyses of Particle-Verb Constructions

The two word orders of particle-verbs and their syntactic representations have been an interest of a majority of previous studies on the particle-verb construction. Many analyses assume that the two orders in (1) share an underlying structure (Aarts 1989, Åfarli 1985, Blom 2005, Den Dikken 1995, Harley and Noyer 1998, Kayne 1985, 1994, Johnson 1991, Jung 2017, Nicol 2002, Radford 1997, Svenonius 1992). With the technical details aside, one simple description reflecting this assumption would be that the particle in the merged order (1a) is shifted to follow the direct object, yielding the split order (1b), as below:

(5)   Bridget threw *t* the keys away.

In this section, I introduce two representative analyses in this line of effort—Aarts (1989) and Kayne (1994). While earlier generative investigations on particle-verbs have rarely concentrated on the topic of PVIs, Aarts (1989) and Kayne (1994) are the two studies that make clear predictions about the current set of PVI data. I will hence call the stance taken by Aarts (1989) and Kayne (1994) the derivational approach given that the two word orders are derivationally related in starting from a single underlying structure. In this section I examine the specifics of each of the analyses.

2.1 Aarts (1989)

Aarts (1989) further classifies the particle-verb construction into two sorts, depending on whether or not the verb and particle are transparently interpreted, and propose to treat them differently. According to Aarts (1989), the particle-verbs in (1), repeated in (6), and (7) belong to the transparent category. This is because the meaning of the verb *throw* and that of the particle *away* compositionally contribute to the meaning of the resulting phrasal verb *throw away*, for example.
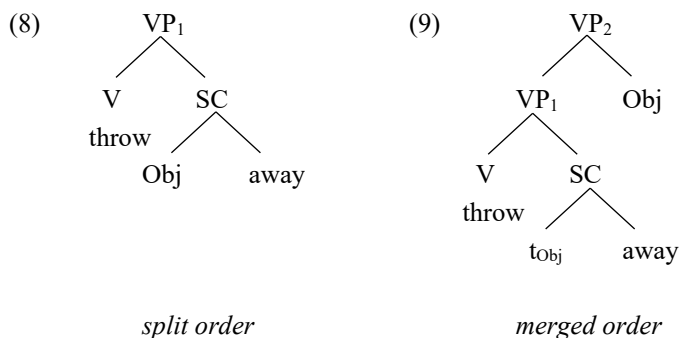
(6)   a. Bridget <u>threw away</u> the keys.   *merged order*
       b. Bridget <u>threw</u> the keys <u>away</u>.   *split order*

(7)   a. John <u>switched on</u> the radio.   *merged order*
       b. John <u>switched</u> the radio <u>on.</u>   *split order*

With respect to the PVIs in (2)-(4), recall that the idiomatic interpretation arises only when all of the elements—the verb, particle, and the DP object—are taken into account. Nonetheless, since the meaning of the particle-verbs to the exclusion of the DP object in (2)-(4) can be understood fairly transparently (e.g., *let* X *down*, *blow off* X, *keep* X *up/keep up* X), let us focus on Aarts (1989) account of transparent particle-verbs.[2]

Aarts (1989) argues that the split order in (6b)/(7b) serves as the base representation, as in (8). In (8) the object and particle form a small clause, SC, which is in turn selected by V. When the object later moves rightward to adjoin to VP, as in (9), the merged order in (6a)/(7a) results:

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[2] *Bring up* 'to look after a child' and *look up* 'to search for information' exemplify Aarts's (1989) nontransparent particle-verbs. These are hardly compositionally calculated from the meaning of its parts—the verb and particle—in contrast to the particle-verbs in (1)/(6) and (7). As a matter of fact, while transparent and nontransparent particle-verbs have different syntactic structures under Aarts (1989), they share the key property that the split order generates the merged order. Because of this, even if one were to apply Aarts's analysis of nontransparent particle verbs to the current PVI data, the bottom line is the same. That is, the merged order representation—the nontransparent equivalent of (9)—is derived from the split representation, corresponding to (8).

(8)   VP$_1$
       /   \
      V   SC
    throw   / \
          Obj   away

(9)   VP$_2$
            /   \
         VP$_1$ Obj
         / \
        V   SC
      throw / \
          t$_{Obj}$ away

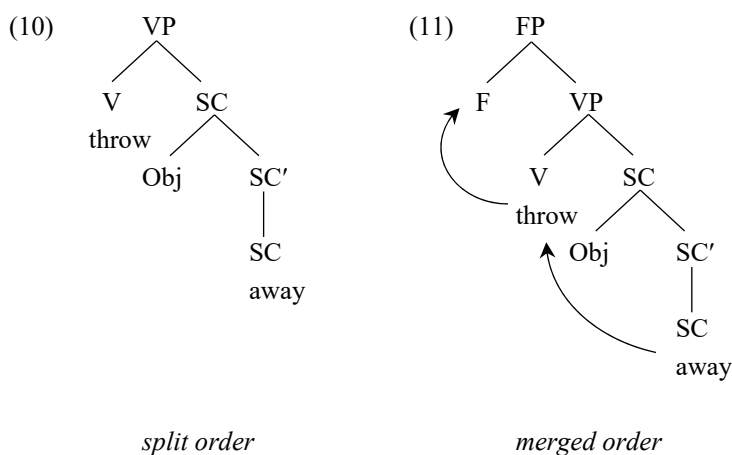*split order*   *merged order*

In short, under Aarts's treatment of particle verbs, the merged order is derived from the split order. The corollary is that the merged order in (9), being the later stage of derivation, involves more structure than the split order in (8).

2.2 Kayne (1994)

Kayne's (1985) earlier structure of particle-verb constructions has a lot in common with Aarts's (1989) in (8)-(9) in that derivation from the split order to the merged order is achieved through rightward movement of the DP object. A key difference between Kayne (1985) and Aarts (1989) is that in the former the DP so moved is extraposed to V′, instead of VP in (9).

Kayne (1994) revises his earlier (1985) account due to the independent reason that under his antisymmetry framework, rightward movement is not possible. However, Kayne (1994) still shares the insight of his (1985) analysis and Aarts (1989) in that the base representation underlying (6) is the split order. (10) and (11) are the structures constructed based on Kayne's (1994: 77) written description. In (10), the particle combines with the object to form a small clause, which is in turn selected by the lexical verb. The merged order results when a higher head, say F, is introduced to the structure, as in (11). Specifically, Kayne (1994) adopts Koopman's (1993) incorporation account of Dutch particle-verbs in assuming that the particle in (11) incorporates to V, which yields an illicit verbal morphology *awaythrow*. Because of this, the lexical verb *throw* must excorporate (Roberts 1991) and move to a higher head, leaving *away* behind. After this additional structure-building is completed, the merged order in (6a) is derived, as in (11):

(10)   VP
        /   \
       V   SC
     throw   / \
          Obj   SC′
                |
                SC
               away

(11)   FP
          /   \
         F   VP
               /   \
              V   SC
            throw   / \
                 Obj   SC′
                        |
                        SC
                       away

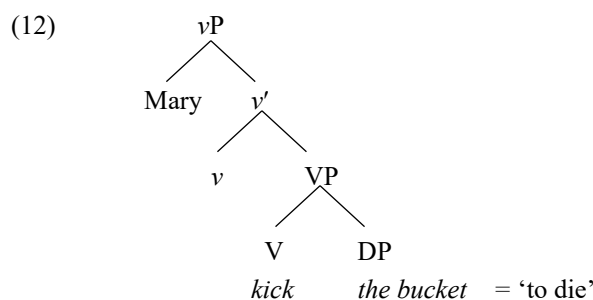*split order*   *merged order*

To sum up, in Kayne's (1994) account, just as in Aarts (1989), the merged order of particle-verb constructions involves more structure than its split order counterpart. While the split order is obtained by the VP level, the higher structural head must be introduced in the derivation to produce the merged order.

Having introduced two derivational analyses of particle-verb constructions, I outline the syntactic theories of idiom formation and discuss their implications for the current PVI data.

3. Idiom Formation in Syntactic Theory

A consensus among the syntactic theories of idiom formation is that phrasal idioms are subject to structural requirements. A specific line of this pursuit is grounded on the notion of constituency (Harley 2002, Harley and Jung 2015, Larson 1988, 2017, Punske and Stone 2014, Stone 2016). In particular, phrasal idioms are underlying constituents to the exclusion of non-idiomatic materials. Thus, for example, the individual elements in the verb-object idiom 'kick the bucket'—*kick*, *the*, and *bucket*—form a syntactic constituent, as represented in the diagram in (12). Crucially, the sentential subject is outside this constituent. This is why the subject does not contribute to the idiomatic interpretation:[3]

(12)

```
                vP
               /  \
            Mary    v′
                   /  \
                  v    VP
                      /  \
                     V    DP
                   kick  the bucket   = 'to die'
```
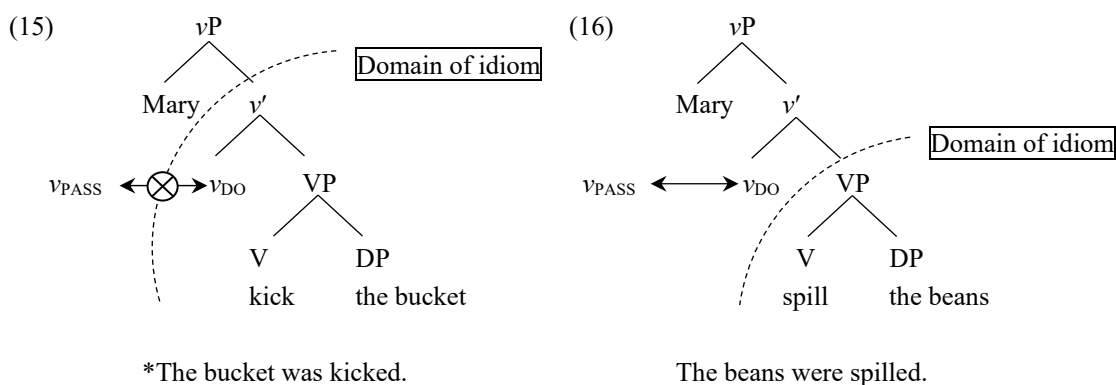
Verb-object idioms can be further classified based on their syntactic flexibility. While some verb-object idioms lose their idiomatic reading when passivized, others retain it (Fraser 1970, Newmeyer 1974, Nunberg et al. 1994, Punske and Stone 2014, Stone 2016). For example, 'kick the bucket' in (13a) no longer has the idiomatic meaning in the passive, as in (13b). In contrast, 'spill the beans' in (14a) can be passivized and still be understood as an idiom, as in (14b). Verb-object idioms of the type in (14) are thus said to be syntactically more flexible than those like (13).

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[3] There are other lines of research on syntactic idiom formation. Bruening (2010) and Everaert (2010) argue that idioms are formed via structural relationships between the selecting head(s) and the selected items. Thus, the same idiom *kick the bucket* receives an idiomatic interpretation under this view because the head verb 'kick' in (12) selects for the D/NP 'the bucket'. Bruening (2020) abandons his (2010) account to subsume idioms under a broader category of conventionalized expressions. Both analyses, however, do not make any prediction about the PVI data in (2)-(4). This is because they say nothing about the domain of idioms that is extended due to movement, which is particularly important for the derivational approach to particle-verbs. These approaches to idioms (Bruening 2010, 2020, Everaert 2010) thus cannot be extended to answer the question of whether the two orders of particle-verbs are derivationally related or not.

(13) a. Mary kicked the bucket.   *Inflexible verb-object idiom*
          Idiomatic reading: 'Mary died.'

      b. The bucket was kicked.
          No idiomatic reading available

(14) a. Mary spilled the beans.   *Flexible verb-object idiom*
          Idiomatic reading: 'Mary revealed the secret.'

      b. The beans were spilled.
          Idiomatic reading: 'The secret was revealed.'

Punske and Stone (2014) and Stone (2016) account for the contrast in (13)-(14) by appealing to the structural size of the idioms. A vital assumption of this analysis is that v_{DO} is the subcategory of the v head that hosts the subject in its specifier position in actives. In passives, v_{PASS} is present instead of v_{DO}.[4]

Punske and Stone (2014) and Stone (2016) argue that nonpassivizable verb-object idioms such as (13) are formed with a larger syntactic unit compared to passivizable idioms like (14). Specifically, nonpassivizble idioms require the head v_{DO} for the idiomatic interpretation to be activated, as in (15). In other words, the minimal domain to serve as an idiom includes the v_{DO} head, as marked by the dotted line in (15). For this reason, in the passive structure, where the v_{PASS} head replaces v_{DO}, the idiomatic reading of 'kick the bucket' is no longer accessible. Contrariwise, passivizable idioms involve a smaller syntactic unit—VP—than their nonpassivizable counterparts. In the representation in (16), v_{DO} is outside the idiomatic domain marked by the dotted line. This means that the syntactic unit necessary for the idiomatic interpretation, VP, is preserved in the passive structure. Consequently, the idiomatic reading is available regardless of whether v_{DO} or v_{PASS} merges with VP. This gives the idioms of the type in (14) the flexibility they exhibit.

(15) *v*P   Domain of idiom   (16) *v*P   Domain of idiom

        Mary   *v*′   Mary   *v*′

    v_{PASS} ←⊗→ v_{DO} VP v_{PASS} ←→ v_{DO} VP

                              V   DP   V   DP

                            kick the bucket   spill the beans

              *The bucket was kicked.   The beans were spilled.

To summarize, under the system of Punske and Stone (2014) and Stone (2016), the syntactic flexibility of verb-object idioms depends on the amount of syntactic structure required by the idiom. Passivizable, flexible idioms in

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[4] Punske and Stone (2014) and Stone (2016) employ the terms Voice$_{\text{DO/PASS}}$ in instead of $v_{\text{DO/PASS}}$, as they assume a more articulated VP structure. Because the choice between Voice and v makes no difference in assessing the derivational and non-derivational analyses of particle-verbs, this study opts for the simpler structure in which v hosts the external argument.

(14)/(16) contain less verbal structure, whereas nonpassivizable, thus inflexible, idioms in (13)/(15) require more verbal structure. In the next section, I adopt the conclusions of Punske and Stone (2014) and Stone (2016) and apply them to the idioms formed upon particle-verbs. The result is that the derivational analyses of particle-verbs introduced in section 2 cannot adequately explain the PVI data in (2)-(4).

4. Against the Derivational Approach to Particle-Verb Idioms

Let us now return to the PVI data in (2)-(4), repeated in (17)-(19). Given the reverse correlation between syntactic flexibility and the size of the verbal structure required by idioms (Punske and Stone 2014, Stone 2016), the tripartite classification in (17)-(19) cannot be addressed by the derivational analyses. Essentially, if the two surface structures of the particle-verb construction were to be derivationally related, either Group A or Group B idioms should exist, not both, contrary to the fact. The following two subsections are devoted to explicating this point.

(17) **Group A:** Verb-Part(icle)-Object
*blow off steam / *blow steam off*
Idiomatic meaning: 'to talk or act in an unrestrained way to relieve stress'

*put down roots / *put roots down*
Idiomatic meaning: 'to begin to have a settled life in residence'

(18) **Group B:** Verb-Object-Part
*let the side down / *let down the side*
Idiomatic meaning: 'to fail to meet one's family or colleagues' expectations'

*keep one's shirt on /*keep on one's shirt*
Idiomatic meaning: 'to calm down'

(19) **Group C:** Alternating
keep up one's end / keep one's end up
Idiomatic meaning: 'to perform well in competitive or difficult situations'

*roll up one's sleeves / roll one's sleeves up*
Idiomatic meaning: 'to get ready to do something difficult and intense'

(Adapted from Cappelle 2005: 214-216; Fraser 1970: 40-41)

4.1 The Puzzle for Aarts (1989) and Kayne (1994): Group B Unexplained

Recall from section 2.1 that in Aarts (1989), the structure that represents the split order in (20), repeated from (8), develops into the merged order structure in (21), previously (9). Specifically, the syntactic derivation from (20) to (21) proceeds as the object in VP_1 rightward-moves to attach to the higher VP_2 unit. The split order in (20), then involves a smaller verbal structure—VP_1—than the merged order structure with the additional VP_2 layer in (21).

(20) VP₁ — split order

(21) VP₂ — merged order

split order   *merged order*
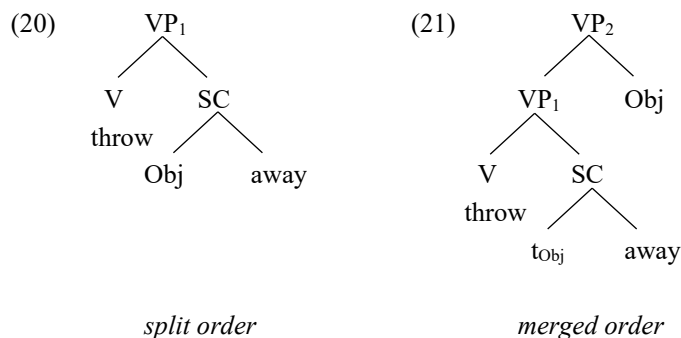
In view of the theory of idiom formation that flexible idioms require less amount of structure (Punske and Stone 2014, Stone 2016), this predicts that the smaller, split order structure should be more flexible with respect to idiom formation, as in (22), compared to the merged order in (23).

(22) Domain of idiom — VP₁

(23) Domain of idiom — VP₂

*split order PVIs* → flexible   *merged order PVIs* → inflexible
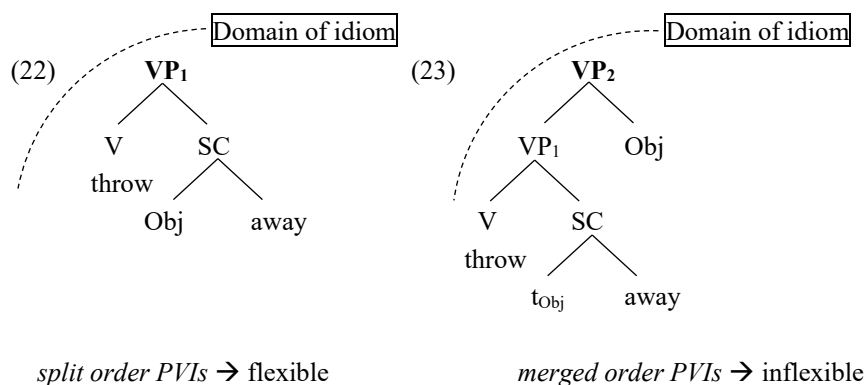
The reasoning is as follows. If a particle-verb idiom requires the merged order as represented in (23), it is because the minimal structure where the idiomatic interpretation starts is VP₂. Its idiomatic reading cannot start at an earlier stage of derivation corresponding to the split order—that is, when the elements form VP₁ in (23). This fits the profile of Group A idioms. These idioms activate the idiomatic reading by the time VP₂ is built in (23), which yields the merged order (e.g., *blow off steam*). The idiomatic reading is not yet available by the time VP₁ is formed in (23). This is why the split order is not allowed as an idiom (e.g., *blow steam off*).

On the other hand, if the idiomatic reading is available in the split order, which is the smaller structure in (22), then the merged order should also be possible. Because this type of PVIs only require the structure up to VP₁, nothing prevents from further derivation into the merged order to have the idiomatic interpretation. This predicts the existence of Group C—the alternating PVIs (e.g., *keep one's end up*, *keep up one's end*).

The problem for Aarts (1989) in light of the PVI data is that Group B is not expected to exist. As mentioned above, if one can get the idiomatic reading of a PVI in the split order with VP₁, as in (22), the idiomatic reading should also be accessible later in the derivation in the merged order. However, Group B PVIs strictly require the split order (e.g., *let the side down*, *let down the side*). If the split order is the less derived structure and develops into the merged order, as Aarts (1989) argues, then any PVIs available in the split order are predicted to retain the idiomatic reading in the merged order. This is not true with Group B PVIs. The existence of Group B PVIs thus poses an empirical challenge.

Essentially the same set of predictions and issue emerge from Kayne's (1994) account. Kayne's (1994)

structures introduced in (10) and (11) are replicated below in (24) and (25), respectively. Recall that starting from the split order representation in (24), the merged order in (25) is derived. The particle in the bottommost head in (25) incorporates to V. Later the lexical verb excorporates to a higher head, F, yielding the merged order:

split order   *merged order*
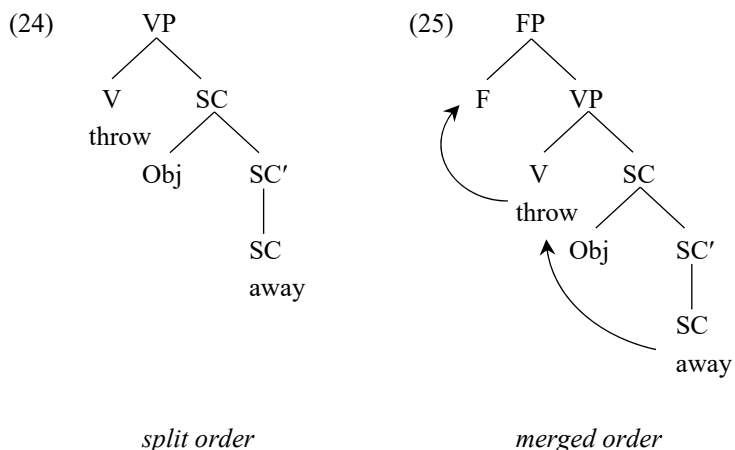
While the details of the analysis differs from Aarts (1989), Kayne's (1994) predictions about the PVI data are exactly the same. Kayne (1994) also predicts that the split order structure should be more flexible compared to the merged order structure (Punske and Stone 2014, Stone 2016). This is sketched in (26)-(27).[5]

split order PVIs → flexible   *merged order PVIs* → inflexible

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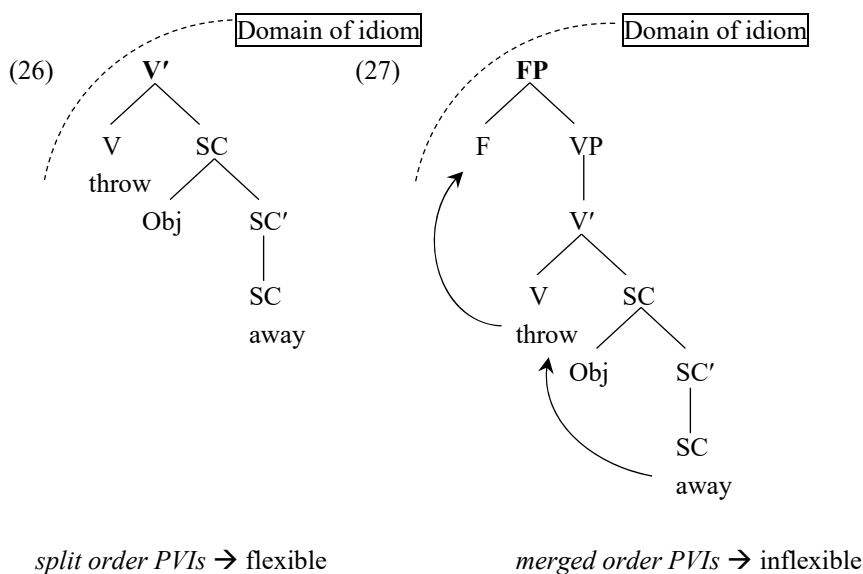
[5] Notice that the idiomatic domain for the PVIs in the split order in (26) is the substructure dominated by V′. This is because the particle undergoes head-movement to V in (25) as a step to deriving the merged order. Thus, the exact timing when the split order is established is by the time V′ is established *but* before the particle head-moves to V. Nothing prevents an intermediate projection from marking the domain of an idiom. Punske and Stone (2014) and Stone (2016) have similarly viewed a bar-level constituent—*v′* in (15)—as the minimal domain for nonpassivizable idioms.

Since the split order in (26) involves the less derived structure, they are expected to be flexible. This predicts the existence of the alternating Group C PVIs (e.g., *keep one's end up*, *keep up one's end*). This is because a PVI that is available in the split order is also expected to be available in the merged order. On the other hand, the merged order PVIs in (27) require more verbal structure, namely up to FP. Therefore, merged order PVIs are predicted to be inflexible. This is confirmed by Group A PVIs (e.g., *blow off steam*, **blow steam off*).

However, Kayne (1994) cannot deal with strictly split order PVIs. Specifically, it predicts that Group B idioms (e.g., *let the side down*, **let down the side*) should not exist. The analysis predicts that an idiom that can appear in the split order should also occur in the merged order. Group B idioms reveal that this is not the case, however.

In short, analyses that the split order representation of particle-verbs derives into the merged order (Aarts 1989, Kayne 1994) expect Groups A and C PVIs, but not Group B PVIs. As will be shown below, the same logical issue arises for a hypothetical analysis of particle-verbs in which the merged order is derived into the split order. The only difference is that for this account, it is the existence of Group A that is the mystery.

4.2 The Puzzle for Merged-as-base Analyses: Group A Unexplained

To my knowledge, no derivational analysis comparable to Aarts (1989) or Kayne (1994) exists that assumes that the merged order is derived into the split order structure. The closest is Blom (2005). However, the analysis does not meet the conditions for applying the results of Punske and Stone's (2014) and Stone's (2016) theory of idioms. Below I will briefly introduce Blom (2005) to illustrate an existing account where the merged order is established earlier than the split order in syntax. I then point out that a hypothetical analysis stemming from such an assumption fails to explain the PVI idioms.

Blom (2005) considers a particle merges with the lexical verb, which projects into the V′ category. The resulting structure further composes with the object to yield the VP with the merged order, as in (28):

(28)

```
            VP
           /  \
         V′    NP
        /  \   Obj
       V    X
     throw  away
```
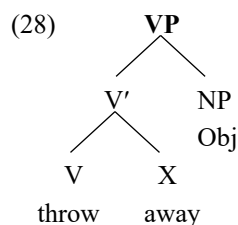
merged order

Blom (2005) argues that the split order involves a focus interpretation. When the verb and particle are focused, the particle moves to the sentence-final position, giving rise to the split order. She proposes a stylistic rule in (29) below:

(29)   [V-X]-NP > V-NP-X   (Blom 2005: 349)
        when [V-X] has focus

In Blom's (2005) system then the merged order structure serves as the base, from which the split order structure is generated. The order of derivation is thus opposite to that proposed by Aarts (1989) and Kayne (1985, 1994). Blom (2005) assumes that a rule like (29) is applied at the level of syntax. However, she makes it explicit that there is a separate syntactic component, called information structure, which is independent of the structure-building

syntactic component. The stylistic rule in (29) is relevant to this information-structural component in syntax. Because of this departure in the set of assumptions, Blom's (2005) analysis as it stands cannot be evaluated under current discussion.

However, one could find a way to extend Blom's (2005) reasoning considering that focus can be marked via adjunction to VP (Kiss 1995, Tuller 1992). For example, we could posit that the merged order structure in (28) develops into the split order representation via a focal movement of the particle to adjoin to the VP layer, as in (30).[6] This reflects the core idea of (29).

(30)

VP_2

VP_1

V′   NP
      Obj

V   X

throw away

split order
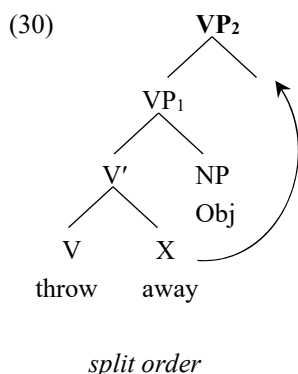
The hypothetical derivation between (28) and (30) can now be discussed in connection to Punske and Stone's (2014) and Stone's (2016) results about idiom formation. In (28), the merged order of particle-verbs emerges when the VP is completed. Despite starting from the same underlying structure as the merged order in (28), the split order in (30) requires more syntactic structure—specifically, up to VP_2. With respect to PVIs then, the hypothesis predicts that the merged order structure in (28) should be more flexible compared to the split order structure in (30).

This means that if the idiomatic reading of a certain PVI is available in the merged order in (28), then it should also be available in the split order in (30). This prediction is borne out since there are idioms with alternating orders—namely, Group C PVIs. According to this hypothesis then, these idioms have the unmarked merged order (e.g., *keep up one's end*) representation in (28). They thus require as much as the lower VP substructure—equivalent to VP_1 in (30)—as the minimal domain to access their idiomatic meaning. The idiomatic reading should still be accessible as the structure continues to form VP_2 and yields the split order, as in (30). As a result, the same idiom is predicted to be possible in the split order (e.g., *keep one's end up*).

On the other hand, if a PVI must be in the split order, it is because it requires more structure—VP_2 in (30). Then the idiomatic reading cannot start at an earlier stage of derivation—that is, by the time when VP_1 is formed. Group B idioms are consistent with this prediction. These idioms start delivering the idiomatic reading when the structure up to VP_2 is built in (30), producing the split order (e.g., *let the side down*). Thus, it is natural for this analysis that the elements constituting these idioms cannot convey the idiomatic reading earlier on, correctly ruling out the merged order (e.g., **let down the side*).

Nevertheless, the fact that some PVIs in the merged order are strictly banned in the split order—the existence of Group A—is a problem for this account. If a PVI starts expressing the idiomatic reading earlier on in the merged

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[6] The representation in (30) may need some adjustments in order to become more viable. We will not go into further details. This is because the purpose of this discussion is to point out that any syntactic view that the merged order derives into the split order expects only a subset of the three groups of PVIs in (2)-(4)/(17)-(19). The specifics of the analysis are thus immaterial.

order, this means the minimal domain for accessing the idiomatic reading is the VP in (28), or VP$_1$ in (30). Then the same idiomatic meaning should still be available as the structure later develops into the split order by completion of VP$_2$ in (30). This is not the case with the Group A PVIs (e.g., <u>*blow off* steam</u>, but *<u>*blow* steam <u>*off*</u></u>), however.

Regardless of whether the split order is the base representation (Aarts 1989, Kayne 1994) or the merged order is, the idea that the two surface orders of particle-verbs share an underlying structure cannot fully address the idioms formed with particle-verbs. This empirical setback calls into question the validity of the derivational analyses of particle-verb constructions. In the following section, the two surface orders of particle-verbs are argued to be in no way derivationally related. I show that this alternative offers a comprehensive explanation for the three groups of PVIs in (2)-(4)/(17)-(19).


5. Proposal: A Symmetrical Approach to Particle-Verb Idioms

The PVI data show that the two surface orders of particle-verb constructions cannot be in a derivational relationship. If so, either Group A or Group B idioms should exist, not both, contrary to the fact. In this study, I propose a non-derivational approach to particle-verbs. I argue that the two surface orders of particle-verbs are represented by two distinct syntactic structures.

Before getting into the details of the main proposal, I introduce several underpinning premises. This study is carried out within Distributed Morphology (Halle and Marantz 1993) (DM). According to DM, roots enter into derivation uncategorized. They later receive a syntactic category from functional heads (e.g., *v*, *n*, *a*). In addition, I assume that roots are introduced by adjunction, following the conclusions of Levinson (2007) and Folli and Harley (2020).

Finally, I adopt Harley (1995) and subsequent works that the verbalizing head *v* comes in a few subcategories, or "flavors". The particular flavor concerned here is the eventive subcategory of v_{CAUS}, which takes a small clause complement (Folli and Harley 2005, 2007). In the case of particle-verb constructions, I assume that the small clause is headed by the Part(icle) head.

With this background, I argue that the verbal root can either adjoin to the Part head denoting a result or to the verbalizing *v* denoting a manner. The two orders of particle-verbs then result from the two loci of root-adjunction. The structures in (31)-(32) represent the merged and split orders of particle-verbs respectively:

merged order   split order
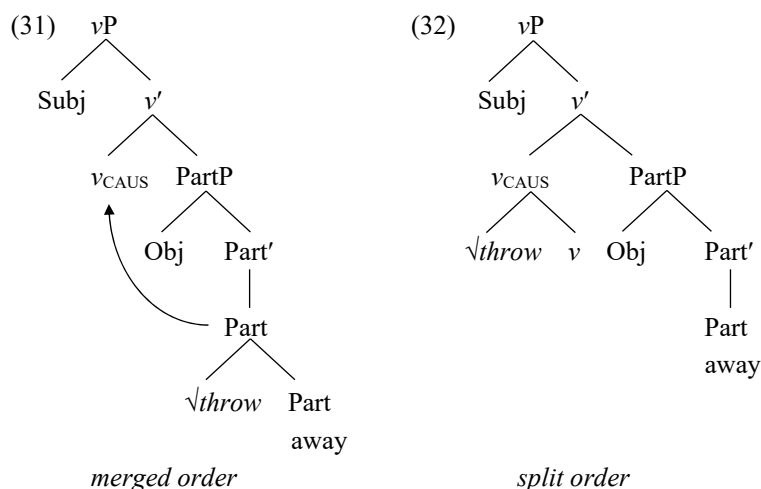
In the merged order representation in (31), the verbal root adjoins to Part. The complex Part head later moves to *v*, by which the root is categorized as a verb.[7] Contrariwise, in the split order structure in (32), the verbal root adjoins to *v* as a manner-of-causation modifier. The root is categorized as a verb in its base position.

To wit, there are two head-adjunction sites for the verbal root to be introduced in (31) and (32). Under the present analysis, the two surface orders of particle-verbs are represented by the distinct syntactic structures. They are not derivationally related with each other.

A symmetrical treatment of particle-verbs like (31) and (32) is compatible with the three classes of PVIs in (2)-(4)/(17)-(19). Under the present analysis, Group A idioms in (2)/(17) have the merged order structure in (33), while Group B idioms in (3)/(18) have the split order structure in (34). Finally, the alternating, Group C idioms are ones that are compatible with both merged and split structures, as in (35).

(33)
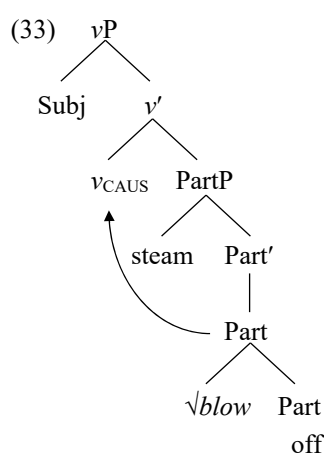
Group A idioms
(e.g., *blow off steam / *blow steam off*)

(34)
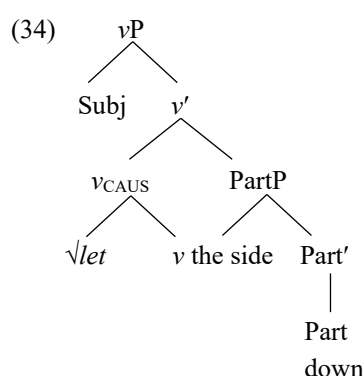
Group B idioms
(e.g., *let the side down / *let down the side*)

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[7] A reviewer questions whether Part in (31) has any relevance to assigning a syntactic category (i.e., verb) to the acategorial root. As discussed in the text, the root base-generated as an adjunct to Part becomes a verb after it undergoes movement to *v*. This implies that before the movement to *v*, the root does not yet have any syntactic category in the traditional sense. Folli and Harley (2020) also assume that a root is not necessarily verbalized upon its first merge with a functional head. Specifically, Folli and Harley (2020: 451) argue that in English Created Result constructions, a root which is base-generated via adjunction to the functional head Res remains in situ. It later obtains the status as a verb as the whole ResP complement merges with *v*.

(35)

Group C idioms

(e.g., *keep up one's end / keep one's end up*)

It is worth pointing out that the late insertion assumption, in combination with the availability of encyclopedia (Halle and Marantz 1993, Marantz 1995), is useful in dealing with the classification in (33)-(35). Because a late insertion model such as DM assumes that PF expressions are inserted after the entire syntactic structure is completed, the requirement of PVIs for a certain order has no relevance to the lexical items that consist of the idioms. For example, a Group A idiom such as *blow off steam* takes the syntactic structure of (33) not because of some property related to the lexical verb *blow.* Instead, the idiomatic information about *blow off steam* is retrieved from the encyclopedia, which provides guidance to how to interpret the terminal nodes comprising the PVIs concerned with (33). The same holds for the other two groups of PVIs.

Most importantly, under the current account the merged and split orders do not derive each other. It is therefore not surprising that Group A PVIs cannot appear in the split order and that Group B PVIs cannot appear in the merged order. The symmetric approach can thus accommodate the existence of both Group A and Group B, as well as the alternating Group C. This taxonomy of PVIs is not possible if one of the two surface order representations serves as the structural basis for the other.[8]

6. Consequences: Beyond Particle-Verb Idioms

So far I have demonstrated that the three groups of PVIs in (2)-(4)/(17)-(19) can only be explained under the non-derivational approach to particle-verbs. The existence of both Group A and B idioms is at odds with the idea that one surface order of the particle-verb construction is generated from the other order (Aarts 1989, Kayne 1994, among others).

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[8] The present analysis is not the only non-derivational account of particle-verbs. Previous analyses grounded on the symmetrical approach include Neeleman (1994, 2002), Toivonen (2003), Basilico (2008), and Larsen (2014). These accounts, assuming two distinct structures for the merged and split representations, fare better than variants of the derivational approach when it comes to the PVI data. It should be made clear that the two-fold purpose of this study is (i) to argue against the derivational approach to particle-verbs and (ii) to show *an* alternative—not *the* alternative—that makes a novel connection between the theory of idiom formation and the PVI data. Assessment of existing symmetrical accounts thus goes beyond the aims of this investigation. A full-fledged evaluation of other symmetrical analyses could start by examining their capacity to address the widely observed properties of the particle-verb construction discussed in section 6.
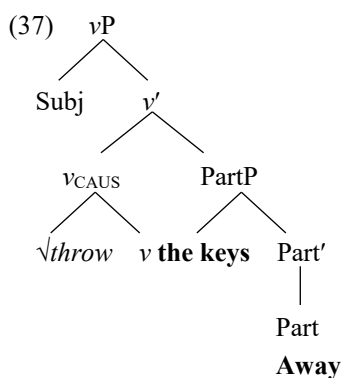
Below I present further arguments for the current symmetric proposal. Specifically, I show that previous observations about particle-verbs (Blom 2005, Bolinger 1977, Cappelle 2005, 2008, Cowan 2008, Den Dikken 1995, Harley and Noyer 1998, Nicol 2002, Ramchand and Svenonius 2002, Svenonius 1992, 1996) follow naturally if one assumes that the merged and split order involve independent syntactic structures. The four empirical phenomena to be examined are: the semantic contrast exhibited by the two orders, fixed order particle-verbs, *right*-modification, and particle-verbs with an augmented argument structure.

6.1 Two Structures, Two Meanings

The current analysis of particle-verbs predicts that with two different syntactic structures for the merged and split orders, we would expect a difference in meaning between (31) and (32). As Bolinger (1977) reports, this is indeed the case. He observes that particle-verbs in the split order, as in (36a), has more or less a resultative interpretation, as that of the canonical adjectival resultative construction like (36b). Notably, in both (36a) and (36b), the particle and the adjective are understood to be the predicate of the object, *the keys* and *the fence*, respectively. (36a) conveys the reading that *the keys* are *away* as a result of throwing them. This predicational relation between the object and particle is analogous to that expressed by the adjectival resultative construction. In particular, in (36b) *the fence* became *pink* as a result of Muriel's painting it.

(36)   a.   The manager <u>threw</u> **the keys** <u>away</u>.
         b.   Muriel <u>painted</u> **the fence** <u>pink</u>.

The split order structure in (37) reflects this observation in that the object *the keys* and the particle *away* form a small clause constituent—PartP—separately from the verbal root. The root in (37), by being adjoined to the v_{CAUS} head, serves to name the particular manner that brings about the caused result. This parallels Harley's (2005) analysis of the adjectival resultative in (36b), wherein the verb *paint* identifies the manner-of-causation that results in the *pink* state of *the fence*.[9]

(37)   *v*P
```
            vP
           /  \
        Subj   v′
              /  \
          v_CAUS  PartP
          /  \    /   \
     √throw  v the keys  Part′
                          |
                        Part
                        Away
```

        split order

---

[9] Since PVIs are fixed expressions consisting of a particular lexical verb, object, and particle in particular ordering, they are not necessarily expected to exhibit the syntactic properties of the construction itself that are addressed in this section. For example, the resultative interpretation invoked by the split order, being concerned with the compositional level of meaning, is not relevant at the idiomatic level.

In contrast, Bolinger (1977) reports that the merged order counterpart in (38) does not bear any systematic semantic resemblance to the adjectival resultative in (36b).

(38) The manager <u>threw away</u> the keys.

Under the present account, the lack of resultative-like interpretation in (38) can be attributed to the structural composition of the merged order structure in (39). Specifically, in (39), the verbal root head-adjoins to the Part head and together they undergo movement to the higher *v* head. In this sense, the verbal root and particle behave more like a compound in (39). This property differs from the predicational relation established between the object and particle in (37).

(39)   *v*P

   Subj   *v*′

      *v*CAUS   PartP

          the keys Part′

              Part

              √*throw*   away
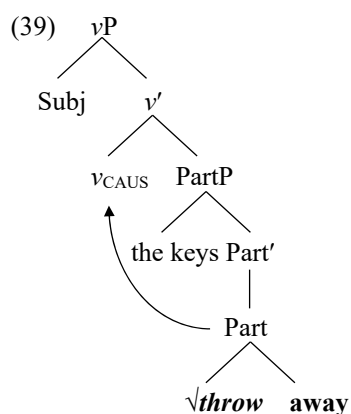
        merged order

The present analysis correctly predicts a difference in meaning, albeit a slight one, exhibited by particle-verbs in split and merged orders. The ambiguity of the construction is small but it exits, as emphasized by Bolinger (1977). This is all that is necessary to call for two distinct structures for the two surface orders of the construction.
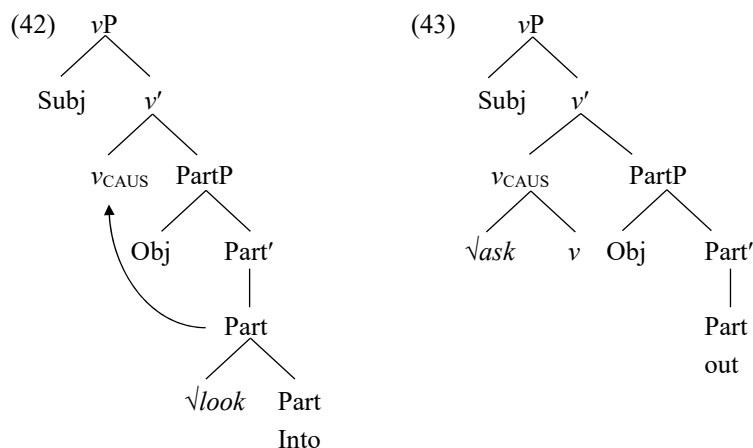
6.2 Particle-verbs in a Fixed Order

Another piece of evidence that the merged and split orders involve distinct syntactic structures comes from particle-verbs with a fixed order. Cowan (2008) observes that not all particle-verbs allow permutation in the placement of the particle. The particle-verbs below selected from Cowan (2008: 637-638) illustrate this:

(40)   a. look into X   (*look X into)   *fixed merged order*
       b. come by X   (*come X by)
       c. get over X   (*get X over)
       d. fall for X   (*fall X for)

(41)   a. ask X out   (*ask out X)   *fixed split order*
       b. narrow X down   (*narrow down X)
       c. see X through   (*see through X)
       d. get X down   (*get down X)

The particle-verbs in (40) are only possible in the merged order. Shifting the particle to follow the object results in ungrammaticality, as shown in the parentheses. Exactly the opposite holds for (41). These particle-verbs obligate the particle to follow the object, hence are only available in the split order.

The particle-verbs in (40)-(41) can be readily explained under the present account. In particular, the group of particle-verbs in (40) are associated with the Part-modifying root structure, as in (42). In contrast, those in (41) are only inserted in the *v*-modifying root structure, as in (43).

(42) *v*P
      Subj *v*′
           *v*CAUS PartP
                   Obj Part′
                        Part
                       √*look* Part
                                Into

(43) *v*P
      Subj *v*′
           *v*CAUS PartP
           √*ask* *v* Obj Part′
                            Part
                            out

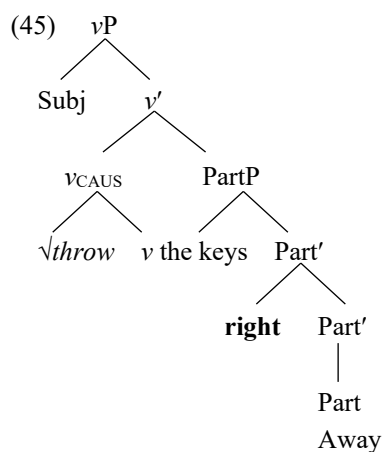*fixed merged order particle-verbs*   *fixed split order particle-verbs*

Alternatively, the derivational approach (Aarts 1989, Åfarli 1985, Den Dikken 1995, Harley and Noyer 1998, Johnson 1991, Jung 2017, Kayne 1985, 1994, Nicol 2002, Radford 1997, Svenonius 1992) can hardly, if at all, deal with the particle-verbs in (40)-(41). If a common base representation develops into both merged and split orders, one would need a stipulation that bans the split structure for (40) and another that bans the merged structure for (41). For instance, according to Aarts (1989) and Kayne (1994), the split order representation is derived into the merged order. If so, how are the particle-verbs in (40) derived into the merged order structure without going through the intermediate stage of derivation that corresponds to the split order? What prevents the split order particle-verbs in (41) from further projecting into the merged order representation? The fundamentally identical issue arises for any derivational analysis of particle-verbs. The gaps observed in (40)-(41) are thus a serious challenge to such an approach.

6.3 *Right*-modification

Another advantage of the present proposal is its capacity to capture the patterns of *right*-modification. Previous studies have observed that the adverb *right* only modifies the particle in the split order (Blom 2005, Cappelle 2005, 2008, Den Dikken 1995, Harley and Noyer 1998, Nicol 2002, Ramchand and Svenonius 2002, Svenonius 1992, 1996), as in (44a). In the merged order, the adverb can neither modify the particle (44b), nor follow the object (44c).

(44) a.   Mary <u>threw</u> the keys **right** <u>away</u>.
      b.   *Mary <u>threw</u> **right** <u>away</u> the keys.
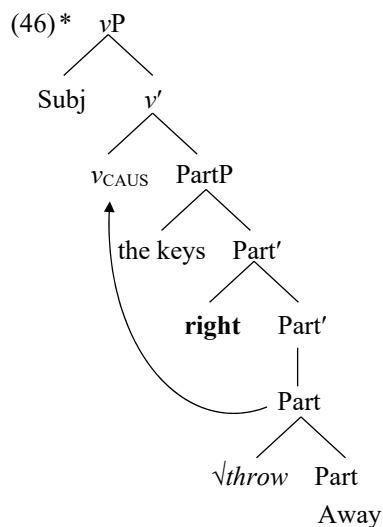   c.   *Mary <u>threw</u> <u>away</u> the keys **right**.

The present analysis distinguishes the merged and split orders by the head-adjunction site of the verb root. If we assume that *right* is a modifier of PartP (Ramchand and Svenonius 2002, Svenonius 1992), then the contrast in (44) naturally follows. For starters, with *right* being adjoined at the intermediate projection of PartP, the split order structure would be represented as in (45). Since nothing a priori prevents a structure like (45), the well-formedness of (44a) is correctly predicted.[10]

(45)   *v*P
        / \
     Subj   *v*′
           /   \
      *v*CAUS   PartP
         / \   /   \
   √*throw* *v* the keys Part′
                          /   \
                      right   Part′
                                  |
                                 Part
                                 Away

    split order

Contrariwise, according to the present merged order structure, the verbal root adjoins to Part with the resulting complex head moving to *v*. With the adverb adjoining to Part′, the merged order representation containing a particle-modifier would be as in (46).

---

[10] A reviewer expresses doubt on the intermediate projection of Part given its small clause status. However, the fact that small clauses lack a lexical verb does not necessarily leads to the lack of an intermediate projection in its syntax. In fact, Svenonius (1992) is a small clause analysis of the construction, according to which *right* is adjoined to the intermediate projection of the small clause headed by P (i.e., particle). In addition to Part permitting an intermediate level, as in (45)-(46), the present analysis assumes that Part can take its own complement, to be shown in (48)-(49). With the same pair of assumptions, a small-clause-based, derivational analysis such as Kayne (1994) can also capture the phenomena addressed in sections 6.3-6.4. However, recall that such an alternative cannot explain the PVI data. Also, the existence of the fixed order particle-verbs (section 6.2) remains problematic.

(46) * *v*P
          /\
      Subj   *v*′
            /\
       *v*_CAUS   PartP
              /\
         the keys   Part′
                   /\
               right   Part′
                          |
                        Part
                        /\
                   √*throw*   Part
                              Away

merged order

The structure in (46) correctly rules out both (44b) and (44c). As for (44b), it has to do with the timing of root-adjunction. In (46), the root-adjunction of √*throw* takes place at the head (i.e., Part) level. This is before the adverb *right* composes with the bar level (i.e., Part′). Therefore, the adverb cannot intervene between the lexical verb and particle in the merged order, rendering (44b) ungrammatical. In the case of (44c), the ungrammaticality arises due to the absence of the modifee for *right*. Specifically, after the complex Part head undergoes movement to *v* in (46), there is no modifiee left for *right* to modify. This correctly predicts (44c) to be ill-formed. In brief, particle-modifying adverbs such as *right* are not compatible with the merged order structure, as in (46).
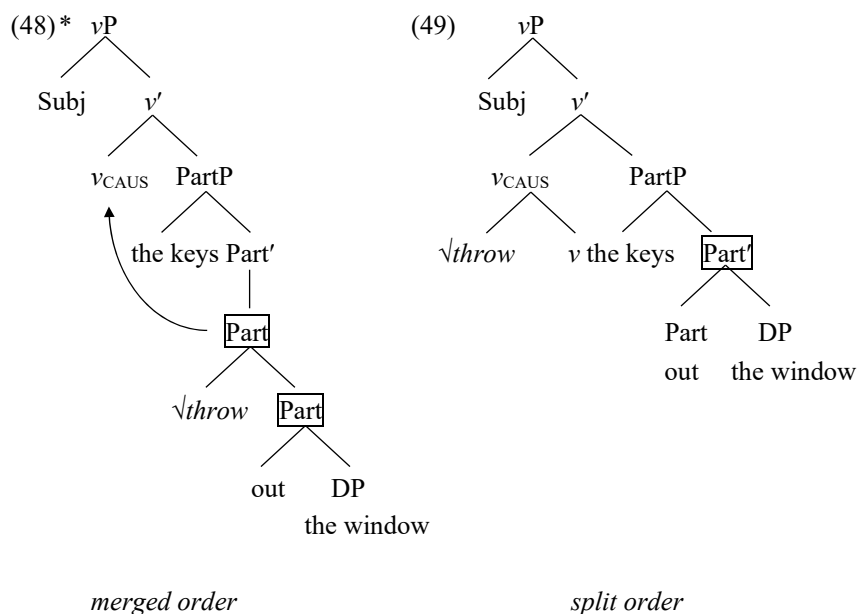
The present analysis simultaneously captures the grammaticality of *right*-modification in the split order in (44a) and its unacceptability in the merged order in (44b) and (44c). In what follows (section 6.4), I show that the proposal accounts for the behaviors of particle-verbs with an additional DP argument.

6.4 Augmented Particle-verb Structure

As noted by Svenonius (1996: 67), some particle-verbs allow an additional DP after the particle. In such case, only the split order is possible, as in (47a). The merged order cannot accommodate the additional DP, as shown in (47b):

(47) a.   Bridget <u>threw</u> the keys <u>out</u> **the window**.
      b.   *Bridget <u>threw out</u> the keys **the window**.

If we assume that the DP *the window* in (47) is introduced by the particle *out* given their semantic relationship, the contrast in (47) is an expected outcome under the current analysis. To begin with, the merged and split structures proposed would be extended as in (48) and (49) under the premise that Part selects for the additional DP as its complement:

(48) * vP
     Subj   v′
          v_CAUS   PartP
                the keys   Part′
                              Part
                         √throw   Part
                                out   DP
                                    the window

(49)   vP
     Subj   v′
          v_CAUS   PartP
          √throw   v the keys   Part′
                              Part   DP
                              out   the window

merged order   *split order*

As indicated by the two boxes, the merged order representation in (48) is illicit. This is because the Part head cannot simultaneously introduce the DP as its complement and allow for the verbal root to head-adjoin to it. This gives rise to two serious theory-internal problems. First, the structure in (48) runs counter to our assumption made at the outset of section 5 that verbal roots are introduced via head-adjunction (Folli and Harley 2020). Specifically, as soon as the Part head composes with its DP argument in (48), it is no longer a head. As a result, the root √*throw* cannot "head"-adjoin to the resulting substructure. Second, this subsequently makes impossible the "head"-movement of the complex Part, which would normally take place in the merged order structure. Overall then, the hypothetical structure in (48) is not predicted to be possible under the present proposal. This successfully accounts for the ungrammaticality of (47b) with no additional cost.

On the contrary, the split order structure in (49) represents the option for the particle to introduce the additional DP *the window*. In (49), Part with its DP complement projects into a bar-level constituent. This provides an adequate condition for the DP *the keys* to be merged with. The root in the split order structure head-adjoins to *v*, rather than to Part. Consequently, no issue raised about (48) arises for (49)—hence, the grammaticality of (47a).

To summarize, the hypothesis that the merged and split orders of particle-verbs involve distinct structures accounts for a number of independent syntactic properties of particle-verbs (Bolinger 1977, Den Dikken 1995, Svenonius 1992, 1996, Harley and Noyer 1998, Nicol 2002, Ramchand and Svenonius 2002, Blom 2005, Cappelle 2005, 2008, Cowan 2008). These empirical advantages, coupled with its strength in capturing the patterns of the particle-verb idioms (section 5), lend further support for the current symmetrical approach to particle-verb constructions.

7. Implications and Conclusions

In this study, I have argued against the derivational approach to the particle-verb construction. The premise that the two surface orders of particle-verbs involve an identical syntactic representation at some point of derivation is in conflict with the PVI data at issue (Cappelle 2005, Fraser 1970, Machonis 1985). At the very best, the

derivational approach predicts that only one of the merged or split order PVI types (Group A or B) should exist along with the alternating PVIs (Group C) (sections 2-4).

This conclusion is grounded on the independent evidence that there is a correlation between the amount of derivation and syntactic flexibility of idioms (Punske and Stone 2014, Stone 2016). (section 3). If the two surface orders of particle-verbs were to be derivationally related to each other, then they are subject to this condition on idiom formation. With particle-verb constructions, this predicts that the surface order which requires more verbal structure will preclude the other, less derived order from being interpreted as an idiom. As a result, only one of the merged order PVIs (i.e., Group A) or split order PVIs (i.e., Group B) should exist, depending on one's view on which surface representation is more derived (section 4).

That there exist both merged order and split order PVIs in addition to alternating PVIs is compelling evidence that the merged and split order are represented by two distinct syntactic configurations (section 5). Fleshing out this hypothesis, the present analysis distinguishes the merged and split representations based on the syntactic head to which the verbal root is head-adjoined. The consequences are as follows. The merged order PVIs (i.e., Group A) take the syntactic structure where the root adjoins to Part. The so-formed complex Part undergoes head-movement to the verbalizing *v* to be categorized as verb. On the other hand, the split order PVIs (i.e., Group B) involve the representation where the root directly adjoins to *v*, being determined as verb in its base position. Finally, the PVIs that allow permutation (i.e., Group C) are ones that are accepted in both configurations.

Besides the PVI data, the symmetrical analysis put forth in this study also adequately explains other curious properties of the construction (section 6). First, the slight ambiguity delivered by the construction is attributed to the distinct syntactic representations of the two orders. Second, the fact that there are particle-verbs which require one of the two orders is simply a consequence of the verbal root being associated with only one adjunction site. Notably, the presence of particle-verbs with a fixed surface order is just as much a mystery as the PVI data to the derivational analyses. Third, the analysis also expects that the particle-modifier *right* is distributionally more restricted in the merged order, in which the verbal root and Part form a constituent before composing with the adverb. Finally, the proposal achieves the desired result that the merged order structure disallows Part to select for an additional DP. This is because Part in the proposed merged structure must remain a head in order for the verbal root to adjoin to.

The consequences of this proposal make several broader implications. First of all, it offers support for the idea that acategorial verbal roots join the syntactic derivation by way of adjunction (Levinson 2007). Second, it also corroborates Folli and Harley's (2020) argument that verbal roots can adjoin either high or low in the structure. Under the current proposal, the particular high and low attachment sites of verbal roots are *v* and Part, respectively. Finally, with regard to the syntactic theory of idioms, the current results are in line with Bruening (2020) that adjuncts can be part of the syntactic conditions imposed on idiom formation. This is so because under the present account, verbal roots are adjuncts attached to a syntactic head in the derivational spine.

The results of this study offer a novel perspective on the classic PVI data (Cappelle 2005, Fraser 1970, Machonis 1985) by connecting them to the recent findings about the mechanism of idiom formation (Punske and Stone 2014, Stone 2016). The conclusion is that the derivational analyses of the permutation in particle-verbs cannot provide a satisfactory account of the three PVI groups. On the whole, the empirical benefits of the symmetrical analysis outweigh those of the derivational hypotheses.

References

Aarts, B. 1989. Verb-preposition constructions and small clauses in English. *Journal of Linguistics* 25, 277-290.

Åfarli, T. A. 1985. Norwegian verb particle constructions as causative constructions. *Nordic Journal of Linguistics* 8, 75-98.

Basilico, D. 2008. Particle verbs and benefactive double objects in English: high and low attachments. *Natural Language and Linguistic Theory* 26, 731-773.

Blom, C. 2005. *Complex Predicates in Dutch*. Ultrecht: LOT.

Bolinger, D. 1977. *Meaning and Form*. London and New York: Longman.

Bruening, B. 2010. Ditransitive asymmetries and a theory of idiom formation. *Linguistic Inquiry* 41, 519-562.

Bruening, B. 2020. Idioms, collocations, and structure: syntactic constraints on conventionalized expressions. *Natural Language and Linguistic Theory* 38, 365-424.

Cappelle, B. 2005. *Particle Patterns in English: A Comprehensive Coverage*. Doctoral dissertation, K.U. Leuven, Leuven, Belgium.

Cappelle, B. 2008. The grammar of complex particle phrases in English. In A. Asbury, J. Dotlačil, B. Gehrke, and R. Nouwen, eds., *Syntax and Semantics of Spatial P*, 103-145. Amsterdam: John Benjamins.

Cowan, R. 2008. *The Teacher's Grammar of English*. New York: Cambridge University Press.

den Dikken, M. 1995. *Particles: On the Syntax of Verb-Particle, Triadic, and Causative Constructions*. New York: Oxford University Press.

Folli, R. and H. Harley. 2005. Consuming results in Italian and English: Flavors of v. In P. Kempchinsky and S. Slabakova, eds., *Aspectual Inquiries*, 95-120. Dordrecht: Springer.

Folli, R. and H. Harley. 2007. Causation, obligation and argument structure: On the nature of little v. *Linguistic Inquiry* 38, 197-238.

Folli, R. and H. Harley. 2020. A head movement approach to Talmy's typology. *Linguistic Inquiry* 51, 425-470.

Fraser, B. 1970. Idioms within a transformational grammar. *Foundations of Language* 6, 22-42.

Halle, M. and A. Marantz. 1993. Distributed Morphology and the pieces of inflection. In K. Hale and S. Keyser, eds., *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger,* 111-176. Cambridge, MA: MIT Press.

Harley, H. 1995. *Subjects, Events and Licensing*. Doctoral dissertation, MIT, Cambridge, MA, USA.

Harley, H. 2002. Possession and the double object construction. *Yearbook of Linguistic Variation* 2, 29-68.

Harley, H. 2005. How do verbs get their names? denominal verbs, manner incorporation, and the ontology of verb roots in English. In N. Erteschik-Shir, and T. Rapoport, eds., *The Syntax of Aspect: Deriving Thematic and Aspectual Interpretation*, 42-64. New York: Oxford University Press.

Harley, H. and R. Noyer. 1998. Mixed nominalizations, short verb movements and object shift in English. In *Proceedings of the 28th North East Linguistic Society*, 143-157.

Harley, H. and H. K. Jung. 2015. In support of the P$_{HAVE}$ analysis of the double object construction. *Linguistic Inquiry* 46, 703-730.

Johnson, K. 1991. Object positions. *Natural Language and Linguistic Theory* 9, 577-636.

Jung, H. K. 2017. On the selectional properties of roots. *Studies in Generative Grammar* 27, 811-838.

Kayne, R. 1985. Principles of particle constructions. In J. Guéron, H. Obenauer and J. Pollock, eds., *Grammatical Representation*, 101-140. Dordrecht: Foris.

Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.

Kiss, K.1995. *Discourse Configurational Languages*. New York, NY: Oxford University Press.

Koopman, H. 1993. The structure of Dutch PPs. Ms. UCLA

Larson, R. 1988. On the double object construction. *Linguistic Inquiry* 19, 335-391.

Larson, R. 2017. On "dative idioms" in English. *Linguistic Inquiry* 48, 389-426.

Larsen, D. 2014. *Particles and Particle-verb Constructions in English and other Germanic Languages*. Doctoral dissertation, University of Delaware, Newark, DE, USA.

Levinson, L. 2007. *The Roots of Verbs*. Doctoral dissertation, New York University, New York City, NY, USA.

Machonis, P. 1985. Transformations of verb phrase idioms: passivization, particle movement, dative shift. *American Speech* 60, 291-308.

Marantz, A. 1995. A late note on late insertion. In Y.-S. Kim, B.-C. Lee, K.-J. Lee, K.-K. Yang, and J.-K. Yoon, eds., *Explorations in Generative Grammar*, 396-413. Hankuk Publishing Co., Seoul.

Marantz, A. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In *Proceedings of the 21st Annual Penn Linguistics Colloquium*, 201-225.

Neeleman, A. 1994. *Complex Predicates*. Utrecht: OTS Dissertation Series.

Neeleman, A. 2002. Particle placement. In N. Dehé, R. Jackendoff, A. McIntyre, and S. Urban, eds., *Verb-Particle Explorations*, 141-164. New York: Mouton de Gruyter.

Newmeyer, F. 1974. The regularity of idiom behavior. *Lingua* 34, 327-42.

Nunberg, G., I. Sag and T. Wasow. 1994. Idioms. *Language* 70, 491-538.

Nicol, F. 2002. Extended VP-shells and the verb-particle construction. In N. Dehé, R. Jackendoff, A. McIntyre, and S. Urban, eds., *Verb-Particle Explorations*, 165-190. New York: Mouton de Gruyter.

Punske, J. and M. Stone. 2014. Idiomatic expressions, passivization, and gerundization. Paper presented at the Linguistics Society of America 2014 Annual Meeting, Minneapolis, MN.

Radford, A. 1997. *Syntactic Theory and the Structure of English: A Minimalist Approach.* Cambridge: Cambridge University Press.

Ramchand, G. and P. Svenonius. 2002. The lexical syntax and lexical semantics of the verb-particle construction. In *Proceedings of the 21st West Coast Conference on Formal Linguistics*, 387-400.

Roberts, I. 1991. Excorporation and minimality. *Linguistic Inquiry* 22, 209-218.

Stone, M. 2016. *The Difference between Bucket-kicking and Kicking the Bucket: Understanding Idiom Flexibility*. Doctoral dissertation, University of Arizona, Tucson, AZ, USA.

Svenonius 1992. Movement of P^0 in the English verb-particle construction. *Syntax at Santa Cruz* 1, 93-113.

Svenonius 1996. The optionality of particle shift. *Working Papers in Scandinavian Syntax* 57, 47-75.

Toinoven, I. 2003. *Non-projecting Words*. Dordrecht: Kluwer.

Tuller, L. 1992. The syntax of postverbal focus constructions in Chadic. *Natural Language and Linguistic Theory* 10, 303-334.

Examples in: English
Applicable Languages: English
Applicable Level: All