

WHY YOU CAN “EAT UP” AN APPLE BUT NOT “CONSUME UP” AN APPLE*

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1. The problem

English owes much of the richness of its lexicon to its double heritage of Romance and Germanic vocabulary. One of the reflections of this heritage is the existence of a class of high register verbs of French or Latin origin that can be paired with roughly synonymous lower register Germanic verbs, as in (1).

(1) <u>Germanic</u>	<u>Latinate</u>	<u>Germanic</u>	<u>Latinate</u>
mix	combine	eat	consume
scrape	abrade	drink	imbibe
slice	dissect	cook	concoct

These “Latinate” verbs were, for the most part, borrowed from French or Latin in the Early Modern English period. As used in the linguistics literature, however, the term “Latinate” does not usually refer to just any verb of this etymological origin, but rather to a class of verbs with particular morphophonological properties (see, for example, Gropen, Pinker, and Hollander 1989). Latinate verbs are consistently multisyllabic, carry word-final stress, and show morpheme-like recurrent partials, as for example in *con-sume*, *re-sume*, and *as-sume*.

Much of the linguistic interest in Latinate verbs has been devoted to their morphophonological properties (see, for example, Halle and Keyser 1971, Aronoff 1976). However, Latinate verbs also share some unique syntactic characteristics. The best studied is their apparent exclusion from double object constructions (see Gropen, Pinker, and Hollander 1989 and references therein). Much less studied is the fact that Latinate verbs also appear to be excluded from particle constructions. This paper offers a semantic account of this latter property of Latinate verbs.¹

In English, “verb particles” modify the aspectual properties of an event.

* My thanks to Daniel Currie Hall and Keren Rice for extensive discussion of this material and Jennifer Ormston for her helpful suggestions on its presentation here. A detailed treatment of this material is available in Smollett (2002).

¹Although double object constructions will not be discussed in this paper, it is possible that the semantic account offered here could be extended to account for the exclusion of Latinate verbs from these constructions as well (for discussion of this possibility, see Smollett 2002).

Specifically, the addition of a particle “delimits” the event; that is, it indicates that the event has an inherent endpoint. This added meaning can be sensed in the (b) sentences below. (I will define it more precisely in §3.)

- (2) a. Thomas mixed the milk and flour.
b. Thomas mixed up the milk and flour.
- (3) a. Kathleen ate an apple.
b. Kathleen ate up an apple.
- (4) a. Kenji cooked an unusual dish.
b. Kenji cooked up an unusual dish.

This process is fully productive with certain particles and verb classes; yet Latinate verbs seem to be systematically excluded, as shown in the (b) sentences below.

- (5) a. Thomas mixed up the milk and flour.
b. * Thomas combined up the milk and flour.
- (6) a. Kathleen ate up an apple.
b. * Kathleen consumed up an apple.
- (7) a. Kenji cooked up an unusual dish.
b. * Kenji concocted up an unusual dish.

This peculiarity of Latinate verbs, if mentioned at all, is generally characterized as an arbitrary syntactic property of a lexical class identified by its formal properties. So, for Fraser (1976:14), particle constructions are restricted to monosyllabic verbs, or bisyllabic verbs with initial stress. For Pinker (1989:120), the morphophonological properties of Latinate verbs allow speakers to identify them as a class of “non-basic” lexical items, and particle constructions specifically exclude members of this class. What is missing from these accounts is any explanation of why these particular formal properties or membership in this particular lexical class would determine specific syntactic behaviour. In this paper, I show that the exclusion of Latinate verbs from particle constructions can be predicted on the basis of a consistent semantic component of members of the class. Specifically, I argue that Latinate verbs include an aspectual component equivalent to that contributed by the particle in a verb-particle construction and that it is the presence of this semantic component that excludes the addition of a particle.

The relevance of the semantics of Latinate verbs to their compatibility with

particles is pointed to by speaker intuitions: when asked what is “wrong” with the sentences in (5b)-(7b), naïve speakers often respond that the particle is “redundant;” in other words, *consume* “means” *eat up*. However, language of course tolerates all kinds of redundancy. Our goal will therefore be twofold: to identify the precise semantic component of Latinate verbs that is repeated by the particle, and to explain why its repetition is ungrammatical. Just to complicate the picture however, at times Latinate verbs can in fact combine with a particle that repeats semantic material that is clearly part of the meaning of the verb. So for example, in (8), the verb clearly implies downward motion, yet the addition of *down* is relatively acceptable. Similarly, while the verb in (9) implies carrying something across a territory, the addition of *over* seems relatively acceptable.²

(8) ? After lunch, the hikers descended down again.

(9) ? The shipping company transported over the chair.

While these sentences seem somewhat redundant, they are not ungrammatical in the same way as those in (5b) to (7b). So in addition to explaining why the semantic component of the Latinate verbs in (5b) to (7b) cannot be repeated by the particle, we also need to explain how these sentences differ from those above.

A clue to the unique aspectual properties of Latinate verbs is the presence of historical prefixes such as *con-* and *de-*. In Latin, these prefixes conveyed directional and aspectual information, thus playing an equivalent role to that of particles in English (see §2). I will argue that the semantic contribution of these Latin prefixes has been maintained in the usage of Latinate verbs in English.³ Specifically, Latinate verbs are the aspectual equivalent of a Germanic verb plus a particle. The difference, however, between the sentences in (5b) to (7b) and those in (8) and (9) lies in the specific aspectual properties of the verbs in question. I will show that Latinate verbs like those in (5b) to (7b) are obligatorily delimiting while verbs like those in (8) and (9) are not. The addition of the particle to the verbs in (5b) to (7b) would therefore delimit the event twice. As we will see, there is independent evidence that this is impossible within a single clause, thus explaining the ungrammaticality of these expressions.

In §2 I show the parallel between the aspectual role of Latin prefixes and English particles. In §3, I define aspectual delimitation and examine the aspectual contribution of the verb, the object, and delimiting elements such as goal phrases

² For the purposes of this paper, no terminological distinction need be made between the aspectual elements in (5)-(7), and the directional ones in (8) and (9); although the latter are sometimes referred to as adverbs, here both types will be referred to as “particles” (see §2).

³ This does not presuppose that Latinate verbs are decomposable by English speakers—the meaning contributed by the prefix in Latin might now be associated with the word as a whole.

and resultatives. In §4, I show that Latinate verbs like those in (8) and (9) and those in (5b) to (7b) have distinct aspectual properties, and I illustrate how these aspectual properties predict their compatibility or incompatibility with particles.

2. Latin prefixes and English particles

The recurrent partials that are characteristic of Latinate verbs were, in Latin, semi-productive prefixes that contributed directional and/or aspectual meaning, much like English particles. Latin prefixes and English particles are both examples of elements that Bybee and Dahl (1989) term “bounders,” that is, elements that can supply an aspectual “bound” or limit to an event. These elements typically develop diachronically from directional adverbs and take the form of either derivational affixes, as in Latin, or independent “particles,” as in English.⁴ Latin verbal prefixes developed from the fusion of a simple verb and an independent directional adverb (Palmer 1954:287), later coming to play an aspectual role (see García-Hernandez 1989). Similarly, English particles developed from postposed directional adverbs that eventually took on aspectual meanings (see Brinton 1988 and Lutz 1997).

Synchronically, the same bounder can convey either directional or aspectual meaning. So, the Latin verb *de-duco* might mean literally to ‘lead away’, or it might mean to ‘spin out’ in the sense of an argument or a composition. Similarly, in (10), the particle *up* contributes concrete directional meaning, while in (11) it provides purely aspectual information.⁵

- (10) a. The hikers climbed up.
b. The movers carried the fridge up.

- (11) Mark wrote up a shopping list.

As we will see, both bounders that contribute concrete directional meaning, and those that do not, show the same aspectual properties when combined with verbs of a given aspectual class. Following Brinton (1988), both kinds of elements will be treated here as a single, graded semantic class.⁶

⁴ These elements correspond to Talmy’s “verb satellites.” He notes that, crosslinguistically, these elements express information both about spatial paths, and about aspect (Talmy 2000: 101-121).

⁵ The particle *up* (with *out* as a close second) has travelled the furthest along the path to becoming a grammaticalized marker of aspect—it can be used with no concrete spatial meaning, as in (11), and is fully productive with certain classes of verbs (§4.2).

⁶ Syntactically, particles can be used with an intransitive verb as in (10a), or a transitive one, as in (10b) and (11).

3. Aspectual delimitation

Tenny (1994:4) defines an undelimited situation as one that can “go on for an indefinite amount of time,” and a delimited situation as one having a “distinct, definite, and inherent endpoint in time.” This distinction is equivalent to the one between “activities” and “accomplishments” in the Vendler/Dowty situation typology (Vendler 1967, Dowty 1979); another pair of equivalent terms is “atelic” and “telic” (Comrie 1976). The most familiar linguistic “test” of the availability of undelimited and delimited readings consists in determining the felicitousness of the expression with temporal adverbials of the type “for x time” (indicating duration) and “in x time” (indicating the attainment of a limit). So the expression (12a) is shown to be undelimited by its felicitousness with *for 20 minutes* but not with *in 20 minutes*. In contrast, the expression in (12b) is shown to be delimited by its felicitousness with *in 20 minutes* but not *for 20 minutes*.

- (12) a. Mike drove **for 20 minutes**/* in 20 minutes. [*undelimited*]
 b. Mike drove to work * for 20 minutes/**in 20 minutes**. [*delimited*]

Since Verkuyl (1972) it has been generally accepted that delimitation is compositional: whether an expression receives an undelimited or a delimited reading is affected both by the semantic class of the verb and by the quantification of the object. Typically, verbs are divided into two broad classes as defined by the aspectual readings available when the verb is used with a count noun direct object. The standard assumption is that when used with a direct object of this type, verbs of one of these classes yield an obligatorily delimited expression, as illustrated in (13).⁷ Tenny terms such verbs “measuring-out verbs.” As she describes it, the aspectual properties of measuring-out verbs derive from the fact that a count noun as the direct object of a verb of this type provides a “scale” or “measure” along which the event advances. The end of the noun, the apple in this case, represents the end of the event (Tenny 1994:15).

- (13) Kathleen ate an apple ?*for a couple of minutes/**in a couple of minutes**.

The above sentence contrasts with (14), with a non-measuring-out verb, and (15) with a measuring-out verb but a mass noun direct object, both of which allow only an undelimited reading.

⁷ The judgement shown here is a usual one in the literature. It will be revised later.

- (14) Christine patted a cat for a couple of minutes/* **in a couple of minutes.**
 (15) Kathleen ate ice cream for a couple of minutes/* **in a couple of minutes.**

For our purposes, the problem with the standard account is that it leaves us at a loss in defining the aspectual contribution of particles. Tenny (1994:37), among others, analyzes particles as markers of delimitation (see also Brinton 1988:163-184). Yet, if (16a), repeated from (13), is in fact already delimited, then what exactly is the distinction in meaning between this sentence and (16b)?

- (16) a. Kathleen ate an apple.
 b. Kathleen ate up an apple.

Here I assume instead a revised account of the contribution of direct objects to delimitation, namely that with an appropriate context, all measuring-out verbs allow both undelimited and delimited readings. With some measuring-out verbs, both readings are readily available, as with the verb *polish* in (17).

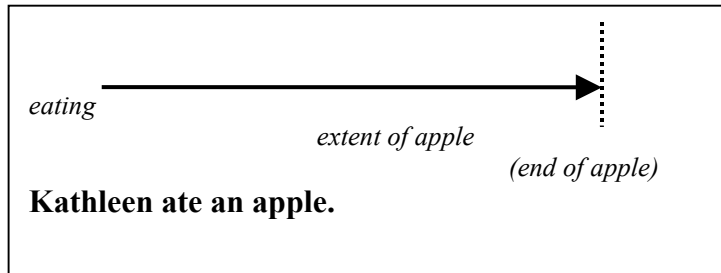
- (17) Keir polished the tabletop **for half an hour/ in half an hour.**

With others, such as *eat*, the delimited reading may be favoured. However, an undelimited reading can be made accessible with added context, as in (18), or by changing the entities referred to in the world, as in (19).

- (18) Kathleen ate an apple for a couple of minutes, and then she read her novel.
 (19) The ant ate a single apple for a week.

In contrast to Tenny, I propose that while a count noun as the direct object of a measuring-out verb does establish a “scale,” it does not obligatorily mark off an endpoint along that scale. (For a detailed discussion of this approach, see Smollett (forthcoming)). The two possible readings of (16a) might be pictured as below. (*The dotted line indicates an endpoint optionally supplied by world knowledge*).

(20)



The aspectual role of a count noun as the direct object of a measuring-out verb can be contrasted with the role of elements such as goal phrases and resultative secondary predicates, which I will term simply “delimiters.” Unlike direct objects, these elements delimit obligatorily, as shown in (21) and (22).

(21) Kathleen ate an apple to the core * for a couple of minutes/
in a couple of minutes.⁸

(22) Keir polished the tabletop smooth * for half an hour/**in half an hour.**

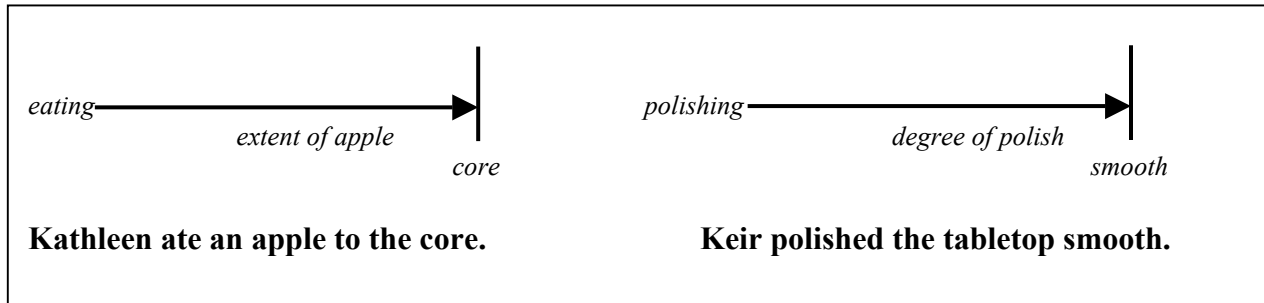
The addition of a delimiter eliminates the possibility of an undelimited reading even with a context that would normally favour one. So, whereas the added context in (18) makes available an undelimited reading with the verb *eat*, the addition of a delimiter in (23) excludes the undelimited reading even with this same context.

(23) *Kathleen ate an apple to the core for a couple of minutes, and then she read her novel.

The role of a delimiter can be pictured as obligatorily marking off an endpoint along the scale established by the direct object, as illustrated below:

⁸ An undelimited reading is possible if the expression is interpreted as iterative.

(24)



Tenny (1994:79) notes a property of delimiters that will be crucial for our analysis here, namely that it does not appear to be possible to “double” them within the same clause, as illustrated below.

- (25) a. * Kathleen ate an apple to the core to the last bite.
 b. * Mohammad wiped the table clean dry.
 c. * Keir polished the tabletop smooth to a shine.

If each delimiter is pictured as marking off an endpoint along the scale established by the direct object, this restriction can be understood as a restriction against marking off two potentially independent endpoints along the same scale.⁹

4. Aspectual properties of Latinate verbs and verb-particle combinations

Particles play a similar aspectual role to that of goal phrases and resultatives. However, their role varies depending on whether the Germanic verb with which they are combined belongs to the non-measuring-out or measuring-out class. As we will see, the Latinate counterpart of a Germanic verb of each class is the aspectual equivalent, not of the Germanic verb alone, but of that verb plus a particle. It is this distinction between the aspectual properties of these two types of Latinate verbs that will allow us to predict the compatibility of each with particles.

Our investigation here will be restricted to a subclass of each of the two broad aspectual classes, one that is fully productive with particles. This will ensure that the exclusion of comparable Latinate verbs is not due to lexical idiosyncrasy. In the case of non-measuring-out verbs, I will examine verbs of motion, and in the case of measuring-out verbs, I will examine verbs of change of state.

⁹ Goldberg (1991) explains this same phenomenon based on a restriction on the repetition of paths rather than goals.

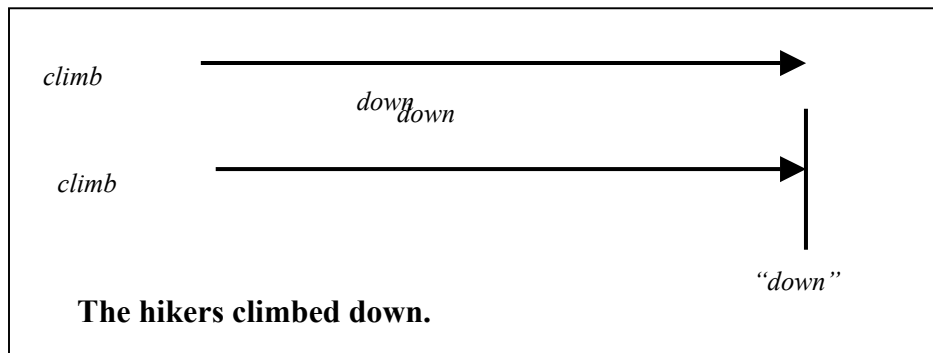
4.1. Non-measuring-out verbs: verbs of motion

I include as “verbs of motion” both verbs where the subject changes location (e.g., *climb*) and verbs where the object is displaced (e.g., *carry*). Since a particle with a verb of motion conveys concrete spatial information, these verbs can be combined with any particle that is pragmatically appropriate. Like non-measuring-out verbs in general, a “bare” Germanic verb of motion (i.e., one without a particle) allows only an undelimited reading (26). With the addition of a particle, a delimited reading becomes available (27).

- (26) a. The hikers climbed **for an hour**/* in an hour.
 b. The movers carried the fridge **for 5 minutes**/* in 5 minutes.
- (27) a. The hikers climbed down **for an hour/in an hour**.
 b. The movers carried the fridge down **for 5 minutes/in 5 minutes**.

In the sentences in (26), no scale is established: in (26a) there is no object, and though there is one in (26b), as the object of a non-measuring-out verb it does not establish a scale. The particle in the sentences in (27) can therefore play the same role as that played by a measuring-out object, that of establishing a scale, or path, along which the event proceeds. Alternatively, it can specify the goal of the event as provided by context—perhaps the bottom of the mountain in (27a) or the first floor in (27b). The two possible readings are represented below:

(28)



Latinate verbs such as *descend* or *transport* have the aspectual properties, not of a Germanic verb of motion, but of that verb plus a particle. They therefore allow both undelimited and delimited readings, as shown in (29).

- (29) a. The hikers descended **for an hour/in an hour.**
 b. The shipping company transported the chair **for a week/in a week.**

The semantic component of directional motion inherent to the meaning of the Latinate verb appears to be able to identify either the direction of the motion or the goal, in the same way as a particle used with a Germanic verb of motion.

4.2. *Measuring-out verbs: verbs of change of state*

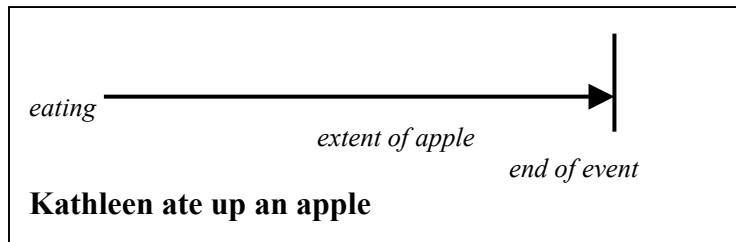
I include as “verbs of change of state” any verb whose object undergoes some necessary internal change, such as, *eat, build, polish, ripen* etc. Verbs of change of state combine productively with the particle *up*. (For example, having coined the new verb *microwave*, we can immediately ask someone to “microwave up some popcorn.”) As we saw in §4.1, a particle used with a verb of motion can identify either the path or the goal of the event, yielding either an undelimited or a delimited reading. The object of a measuring-out verb, however, itself establishes a scale, the aspectual equivalent of a spatial path. The only role it would seem the particle can play is therefore that of marking off an endpoint along the scale, yielding an obligatorily delimited event. While the bare Germanic verb of change of state plus a count noun object in (30) allows both undelimited and delimited readings, the addition of the particle in (31) eliminates the possibility of the undelimited reading.

- (30) a. Thomas mixed the milk and flour **for 5 minutes/in 5 minutes.**
 b. Kenji cooked an unusual dish **for 5 minutes/in 5 minutes.**
- (31) a. Thomas mixed up the milk and flour *for 5 minutes/**in 5 minutes.**¹⁰
 b. Kenji cooked up an unusual dish *for 5 minutes/**in 5 minutes.**

Like a goal phrase or resultative, a particle with a verb of change of state marks off an endpoint along the scale established by the direct object, as illustrated in (32); the one difference is that the particle does not provide any semantic information about the nature of that goal (cf., 24).

¹⁰ Note, this should be read as referring to a single set of ingredients. Also, some speakers accept an undelimited reading with an intensive interpretation (p.c. Diane Massam, Eleanor Smollett).

(32)



Once again, a Latinate verb of change of state shares the aspectual properties of a Germanic verb of change of state plus a particle. The Latinate verbs in (33), counterparts of the Germanic verbs in (31), are thus obligatorily delimiting.

- (33) a. Thomas combined the milk and flour *for 5 minutes/**in 5 minutes**.¹¹
 b. Kenji concocted an unusual dish *for 5 minutes/**in 5 minutes**.

Like the addition of the delimiter in (23), the addition of a particle to a Germanic verb of change of state eliminates the possibility of an undelimited reading even in a context that, with the bare verb, would favour it. This is shown by the contrast between (34), repeated from (18), and (35).

(34) Kathleen ate an apple for a couple of minutes, and then she read her novel.

(35) *Kathleen ate up an apple for a couple of minutes, and then she read her novel.¹²

The Latinate counterpart is excluded in this same context, as shown in (36), confirming that, like the Germanic verb plus the particle, the Latinate verb is obligatorily delimiting.

(36) *Kathleen consumed an apple for a couple of minutes, and then she read her novel.

4.3. Combining Latinate verbs and particles

Now that we have examined the aspectual properties of Latinate verbs and the aspectual contribution of particles, we are ready to look at what happens when we put them together. In §1, we saw that not all combinations of a Latinate verb and a

¹¹ Again, this should be read as referring to a single set of ingredients.

¹² Some speakers accept this sentence with an intensive reading.

particle are ungrammatical: while those in (37), below, seem somewhat redundant, they are not ungrammatical in the same way as those in (38). (Examples repeated from §1.)

- (37) a. ?The hikers descended down.
 b. ?The shipping company transported the chair over.
- (38) a. *Thomas combined up the milk and flour.
 b. *Kathleen consumed up an apple.

We are now in a position to explain this distinction. As we have just seen, Latinate verbs that correspond to a Germanic non-measuring-out verb plus a particle allow both undelimited and delimited readings, while Latinate verbs that correspond to a Germanic measuring-out verb plus a particle are obligatorily delimiting. Since the Latinate verbs in (37) allow an undelimited reading, a particle can be added, identifying the goal of the motion and delimiting the event. In contrast, since the Latinate verbs in (38) are obligatorily delimiting, a particle cannot be added without delimiting the event twice, which, as we saw in §3, appears to be impossible in a single clause.

If indeed it is the aspectual properties of Latinate verbs that predict their compatibility with particles, we would expect these aspectual properties to affect the compatibility of Latinate verbs with goal phrases and resultatives as well. This is exactly what we find. Both Germanic verbs of motion with a particle and their Latinate counterparts can be combined with a goal phrase, as in (39).

- (39) a. The hikers climbed down to the bottom of the mountain.
 b. The hikers descended to the bottom of the mountain.

In contrast, a Germanic measuring-out verb plus a particle cannot be combined with a goal phrase or resultative (40), nor can the corresponding Latinate verb (41).

- (40) a. ?*Alex sliced up the roast to the bone.
 b. ?*Raphael scraped up the surface clean.
- (41) a. ?*Alex dissected the frog to the bone.
 b. ?*Raphael abraded the surface clean.

The incompatibility of Latinate verbs of this class with delimiters offers strong independent evidence that their incompatibility with particles is based on their aspectual properties and not on a restriction that excludes them specifically from

particle constructions.

5. Conclusion

As discussed in §1, the exclusion of Latinate verbs from particle constructions is usually considered to be a property of a lexical class whose members are identified by their formal properties. I have shown that this exclusion can be explained on the basis of a consistent semantic property of Latinate verbs: their current meaning in English includes the aspectual information contributed by the original Latin prefixes. While the formal and the semantic definitions of this class both define the same set of verbs, the semantic account offered here explains why only some Latinate verbs are in fact categorically excluded from combining with particles. It also captures the generalization that the same Latinate verbs that do not combine with particles also fail to combine with delimiters such as goal phrases and resultatives. Most importantly, a semantic definition of the class, based on a property that can be traced to the etymological origin of these verbs, explains why it is verbs of this particular class that display this particular syntactic property.

An interesting question remains, however: why do the unique semantic properties of these verbs consistently correlate with unique formal properties? On the one hand, this correspondence can be accounted for based simply on the Latin origins of this class of verbs: their aspectual properties in English correspond to those of the same verbs in Latin; the verbs are multisyllabic and show recurrent partials because they were historically prefixed; and finally, these verbs are stressed in English on the same syllable that would have received the stress in Latin.¹³ However, what seems surprising is that all these properties have been maintained. Perhaps it is precisely the correspondence between the formal and semantic properties that has allowed speakers to identify these verbs as constituting a distinct lexical class, with the semantic properties reinforcing the maintenance of the formal ones, and vice versa. This class of English verbs might thus provide an ideal opportunity to study the role of formal and semantic properties, and their interaction, in the establishment and maintenance of lexical classes.

¹³ In Latin, stress fell on the penultimate syllable if it was heavy, otherwise on the antepenultimate (Palmer 1954: 211). The final syllables of Latinate verbs would have been the penultimate in Latin (the final syllable of the root) and they all appear to have been heavy.

References

- Aronoff, Mark. 1976. *Word formation in generative grammar*. Cambridge, MA: MIT Press. 134p.
- Brinton, Laurel J. 1988. *The development of English aspectual systems*. Cambridge: Cambridge University Press. 307 p.
- Bybee, Joan, and Östen Dahl 1989. 'The creation of tense and aspect systems in the languages of the world.' *Studies in Language* 13, pp. 51-103.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press. 142 p.
- Dowty, David R. 1979. *Word meaning and Montague Grammar*. Dordrecht: Reidel. 415 p.
- Fraser, Bruce. 1976. *The verb-particle combination in English*. New York: Academic Press. 125p.
- García-Hernandez, Benjamín. 1989. 'Les preverbes Latins. Notions latives et aspectuelles.' In M. Lavency and D. Longrée (eds.), *Proceedings of the Vth Colloquium on Latin Linguistics*, Louvain-La-Neuve: Cahiers de l'Institut de Linguistique de Louvain, pp. 149-159.
- Goldberg, A. E. 1991. It can't go down the chimney up: Paths and the English resultative. *Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society*, pp. 368-378.
- Gropen, Jess, Steven Pinker, and Michelle Hollander. 1989. 'The learnability and acquisition of the dative alternation in English.' *Language* 65, pp. 203-257.
- Halle, Morris and Samuel Jay Keyser. 1971. *English stress: its form, its growth, and its role in verse*. New York: Harper and Row. 206 p.
- Lutz, Angelika. 1997. 'Sound change, word formation and the lexicon: the history of the English prefix verb.' *English Studies* 78, pp. 258-90.
- Palmer, L.R. 1954. *The Latin Language*. London: Faber. 372 p.
- Pinker, Steven. 1989. *Learnability and cognition: The acquisition of argument structure*. Cambridge, MA: MIT Press. 411 p.
- Smollett, Rebecca. 2002. Why you can "eat up" an apple, but not "consume up" an apple: An aspectual account of the exclusion of Latinate verbs from particle constructions. Masters "forum paper," Department of Linguistics, University of Toronto.
- Smollett, Rebecca. Forthcoming. Quantized nouns don't delimit after all. In Hendrick Verkuyl, Henrietta de Swart, and Angeliek van Hout (eds.), *Perspectives on Aspect*. Dordrecht: Kluwer.
- Talmy, Leonard. 2000. *Toward a cognitive semantics*, Vol. II. Cambridge MA: MIT Press. 495 p.
- Tenny, Carol L. 1994. *Aspectual roles and the syntax-semantics interface*. Dordrecht: Kluwer. 245 p.
- Vendler, Zeno. 1967. *Linguistics in philosophy*. Ithica: Cornell University Press. 203 p.
- Verkuyl, H. 1972. *On the Compositional Nature of the Aspects*. Dordrecht: D. Reidel. 185 p.