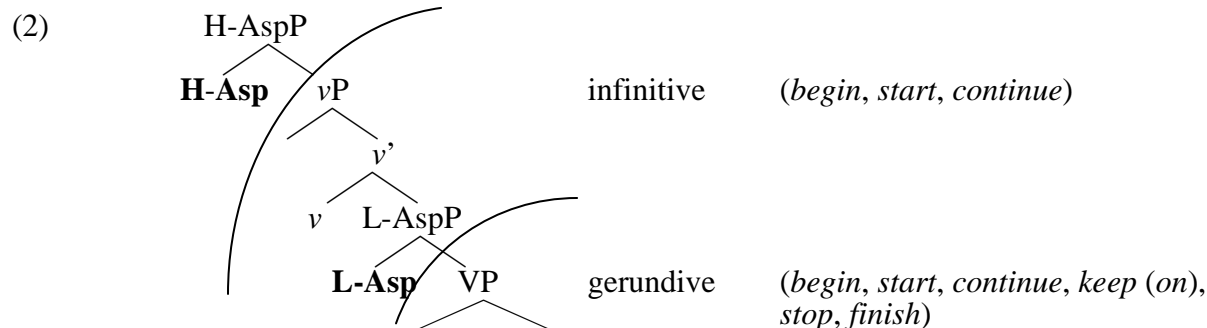# Two Syntactic Positions for English Aspectual Verbs

English aspectual verbs have been argued to be ambiguous between control and raising (Perlmutter 1970). Given the common assumption that the distinction derives from selectional restrictions imposed by lexical items, the null hypothesis for the ambiguity would be that it is lexical. However, recent studies have shown that aspectual verbs occur in two different positions in languages such as German (Wurmbrand 2001), Romance languages (Cinque 2003), Basque (Arregi and Molina-Azaola 2004), and Japanese (Fukuda 2006). Strikingly, in all four languages, the two positions that aspectual verbs are argued to occupy are below and above vP or *Voice*P, the projection that introduces an external argument. We take this cross-linguistic pattern to suggest that the control/raising ambiguity is actually a structural ambiguity, due to the different scope relations between the higher and lower positions of aspectual verbs and the external argument in [Spec, vP] (1). In this paper, we extend the structural ambiguity analysis of aspectual verbs to English. We argue that English aspectual verbs occupy two different positions: either above vP (*H(igh)-Asp*) or below vP (*L(ow)-Asp*), and a complement of *H-Asp* (vP) is realized as *infinitive* while that of *L-Asp* (VP) is realized as *gerundive* (2). We show that the proposed analysis captures the apparent control/raising ambiguity and its relation to the two complement types, *infinitive* and *gerundive*, as well as differences in distribution and interpretation of the two complement types. We also present syntactic evidence from adverb positions and passivization.

First, the proposed analysis makes clear predictions with respect to the control/raising ambiguity: the usual diagnostics for control/raising distinction should only identify an aspectual verb with a *gerundive* complement as control. Indeed, only with an *infinitive* complement, the active-passive synonymy obtains (3) and the idiomatic meaning of idiom chunks is preserved (4). Likewise, imperative is felicitous only with *gerundive* (5). The analysis also captures differences in distribution and interpretation of the two complement types under an aspectual verb. As is well known, some aspectual verbs take either of the two complement types, while others can only take *gerundive*. In the proposed analysis, this optionaility is captured by analyzing that some aspectual verbs occur either as *L-* or *H-Asp*, while others are restricted to be *L-Asp*. This analysis correctly predicts that *infinitive* can embed *gerundive*, but not vice versa (6). In contrast, simply assuming that the aspectual verbs optionally take either of the two complement types fails to account for (6). There is also a difference in possible interpretations of the two complement types (Freed 1979). While *infinitive* can have either a single or multiple event reading (7a), *gerundive* is restricted to the former (7b). Under the proposed analysis, *H-Asp* is predicated of vP; it can create an interpretation in which an entire event is repeated. In contrast, *L-Asp* is predicated of VP, which is only part of an event. Thus, *L-Asp* is confined to a single event reading. There is also syntactic evidence supporting the proposed analysis. Unambiguous speaker-oriented adverbs such as *probably* can be embedded under an aspectual verb *only with infinitive* ((8) and (9)), suggesting that only *infinitive* has a large enough structure to host the type of adverbs. Examples in (10) are naturally occurring data of apparent *long passive*, or passivization of an embedded object with the passive morpheme only on the embedding verb, involving *finish*. Assuming that *long passive* is the hallmark for lack of structural case provided by v in a complement (Wurmbrand 2001), (10) strongly supports the proposed analysis, according to which *finish*, which can only be *L-Asp*, has a VP complement. The proposed analysis, therefore, accounts for the differences among English aspectual verbs and between the two complement types. It is also a step forward to adding English as evidence for the cross-linguistic generalization for aspectual verbs: that they occur in two different positions in a clause.

(1) a. [**ASP**[$_{vP}$ external argument   [$_{v'}$ v[$_{VP}$ V]]]]   (interpreted as *raising*)
     b. […   [$_{vP}$ external argument   [$_{v'}$ v[**ASP** [$_{VP}$ V   ]]] (interpreted as *control*)

(2)   H-AspP

          H-**Asp** / vP   infinitive   (*begin*, *start*, *continue*)

                    v'

               v L-AspP

                  L-Asp / VP   gerundive   (*begin*, *start*, *continue*, *keep* (*on*),
                                                         stop, *finish*)

(3) a. Bill began *to interview* the inmates. ≈ The inmates began *to be interviewed* by Bill.
     b. Bill began *interviewing* the inmates. ≠ The inmates began *being interviewed* by Bill

(4) a. The shit began *to hit* the fun.   (the idiomatic meaning preserved)
     b. The shit began *hitting* the fun.   (only the literal meaning available)

(5) Context: After giving directions to students who are about to write an essay, a proctor says:
     a. Now, start *writing*!
     b. *Now, start *to write*!

(6) a. People began *to continue eating* fastfood/*continuing to eat* fastfood.
     b. People started *to continue eating* fastfood/*continuing to eat* fastfood.

(7) a. That student continued *to fall asleep* during my class. (multiple event reading available)
     b. *That student continued *falling asleep* during my class. (single event reading forced)

(8) a. Only in the final phase of Neolithic the situation *began **probably** to change*, and....
     b. The "microconglomeratic clays" *began **probably** to settle* during the stability phase...
(9) a.??Only in the final phase of Neolithic the situation *began **probably** changing*, and....
     b.??The "microconglomeratic clays" *began **probably** settling* during the stability phase...

(10) a. When **the pies and cakes were finished baking**, it was about mid afternoon….
     b. Defendant waited until **the sheets were finished washing** and then put them in…
     c. In 1.0, you couldn't move the scroll bar until **all the images were finished loading.**
     d. before six o'clock **all Mr. Burke's hay and rye were finished cutting**.

References: **Arregi, K & G. Molina-Azaola**. 2004. Restructuring in Basque and the theory of agreement. *WCCFL* 23, 101-114. **Cinque, G.** 2003. The interaction of passive, causative, and "restructuring' in Romance. In C. Tortora (ed.), *The Syntax of Italian Dialects*. p50-66 Oxford: Oxford University Press. **Freed, A. F.** 1979. *The Semantics of English Aspectual Complementation.* London: Reidel. **Fukuda, S.** 2006. The syntax of Japanese aspectual verbs. Paper presented at 3rd Workshop on Altaic in Formal Linguistics. **Perlmutter, D. M.** 1970. The two verbs *begin*. In R. A. Jacobs and P. S. Rosenbaum, (eds.), *Readings in English Transformational Grammar*. 107-19. Waltham, Mass: Blaisdell. **Wurmbrand, S.** 2001. *Infinitives: Restructuring and Clause Structure*. Berlin: Mouton de Gruyter.