

Two syntactic positions for English Aspectual Verbs

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1. English aspectual verbs are ambiguous (Perlmutter 1968, 1970, Ross 1972).

▪ Subjects of aspectual verbs can be non-thematic (i.e. raising):

- (1) a. It began to rain. (the weather *it*)
 b. There began to be commotion. (the expletive *there*)
 c. Heed began to be paid to urban problems.
 d. Headway began to be made toward a solution. (idiom chunks)
- (2) a. The noise began to annoy Joe.
 b. Joe began to be annoyed by the noise. (active passive synonymy)

▪ Subjects of aspectual verbs can be thematic (i.e. control):

- (3) a. I_i tried [Δ_i to begin to work].
 b. I forced Tom_i [Δ_i to begin work]. (embedded under a control verb)
- (4) a. Begin to work!
 b. #Seem to work! (imperative formation)

➤ Aspectual verbs do not select their subjects (Fischer & Marshal 1969, Newmeyer 1975, Freed 1979, Brinton 1988)

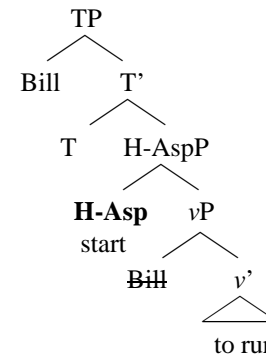
- (5) a. John asked him to listen/#hear
 b. John began to listen/hear.
 c. John asked him to begin to listen//hear.

▪ But the imperative fact (4) is puzzling under a pure raising analysis.

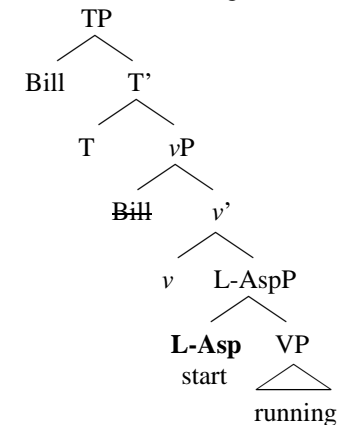
1.1 An alternative: the dual position analysis

- ✓ English aspectual verbs do not assign theta-roles to their subjects.
- ✓ English aspectual verbs occupy two positions, above and below vP (H-Asp and L-Asp)¹
- ✓ The difference is visible in the morphology and syntax: the complement of **H-Asp** (vP) is realized as **infinitive** and the complement of **L-Asp** (VP) is realized as **gerundive**.

(6) a. Bill started to run.



b. Bill started running.



- English aspectual verbs in these two positions have different structural relations with the external argument, which affect their interpretations. → the alleged ambiguity

Outline:

- ✓ provide arguments for the dual position analysis for English aspectual verbs.
- ✓ propose an account for the imperative fact based on the proposed analysis.

¹ I assume that external arguments are not arguments of verbs but introduced as the specifier of a projection of a functional head (i.e. v) (Kratzer 1994, 1996, Chomsky 1995, and many others).

2. Arguments for the two positions for English aspectual verbs

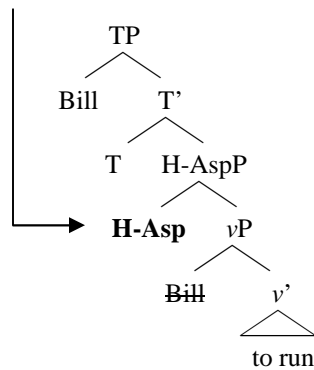
2.1 Complement selection

- Some English aspectual verbs take either infinitive or gerundive, while other can only take gerundive.
- Under the proposed analysis, the aspectual verbs that can appear in both positions take either infinitive or gerundive, while ones that can only be L-Asp only take gerundive.

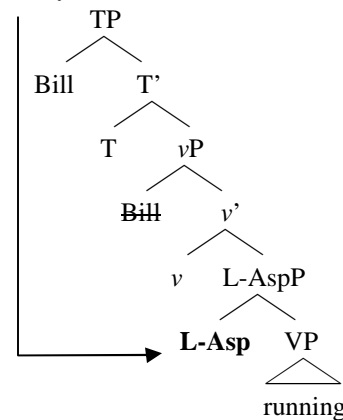
(7) The complement selection

| | Infinitive | gerundive | Positions |
|----------|------------|-----------|-------------|
| begin | ✓ | ✓ | H- or L-Asp |
| start | ✓ | ✓ | H- or L-Asp |
| continue | ✓ | ✓ | H- or L-Asp |
| cease | ✓ | ✓ | H- or L-Asp |
| keep | ✗ | ✓ | L-Asp |
| stop | ✗ | ✓ | L-Asp |
| finish | ✗ | ✓ | L-Asp |

(8) a. H-Asp
{begin, start, continue, cease}



b. L-Asp
{begin, start, continue, cease, keep, stop, finish}



2.2 The complements of the aspectual verbs are as large as vP.

- No 'unrealized future tense' with aspectual verbs (Bresnan 1972, Stowell 1982, Pesetsky 1991, Bošković 1997, Landau 2000, Martin 2001 etc.).²

- (9) a. Yesterday, John decided to leave tomorrow.
b. Today, John hopes to win someday.

- (10) a. ??Yesterday, John began to leave tomorrow.
b. ??Today, the law ceased to have its effect tomorrow.

- Aspectual verbs' complements cannot encode grammatical aspect (Akmajian, Steele, and Wasow 1979).

- (11) a. *John began [_{Progressive} being running down the road].
b. *John began [_{Perfective} to have finished his homework].

- (12) a. I will try [_{Perfective} to have finished the work] by the time....
b. We will let him [_{Progressive} be putting his clothes back on] when....

✓ The complements of aspectual verbs can only be as large as vP.

2.3 Infinitive is larger than gerundive

- Range of interpretation: Gerundive is more limited than infinitive with respect to a range of possible interpretations (Bolinger 1968, Freed 1979, Breton 1988).

- States are often unnatural with gerundive:

- (13) a. The problem ceased to exist/*existing
b. Nora began to know/*knowing right from wrong.

- Gerundive forces a single event reading, while infinitive can have 'a series of events' reading:

- (14) a. That continues/never ceases to amaze/??amazing me.
b. That students continued to fall asleep/??falling asleep in my class.

² See also Wurmbrand (2006, 2007) for arguments that English infinitives do not have tense even when they have the 'unrealized future' reading.

- **Adverb interpretations:** Infinitive is compatible with the ‘higher’ readings of ambiguous adverbs, but gerundive is not:

- (15) a. ...found everyone around me grew quiet as I began *stupidly to say* what I really think.³ → **speaker-oriented only or ambiguous**
- b.found everyone around me grew quiet as I began *stupidly saying* what I really think. → **manner only or strongly preferred.**

✓ Infinitive (vP) has a larger capacity syntactically and semantically than gerundive (VP)

2.4 Scope of quantifier subjects

- Raising predicates interact with quantifiers (May 1985):

- (16) Someone from NY is likely to win in the lottery
- someone > be likely (specific)
 - be likely > someone (existential)

- **A similar ambiguity is expected with H-Asp,** but not with L-Asp.

- (17) a. Someone from NY started to win the lottery. (infinitive = H-Asp)
- someone > start (specific) ✓
 - start > someone (existential) ✓

- b. Someone from NY started winning the lottery. (gerundive = L-Asp)
- someone > start (specific) ✓

ii) start > someone (existential) ??

(18) Summary:

| | Infinitive | Gerundive |
|--------------------------|------------|-----------------------|
| ‘future tense’ (2.2) | × | × |
| grammatical aspect (2.2) | × | × |
| stative verbs (2.3) | ✓ | × |
| ambiguous adverbs (2.3) | ambiguous | manner only/preferred |
| scope of ‘someone’ (2.4) | ambiguous | specific preferred |

³ <http://www.bat-girl.com/archives/000528.php>

3 Further support from other languages

- **The dual position analysis for aspectual verbs in other languages**

- Aspectual verbs allow for ‘*long passive*’ in **Romance** (Aissen & Perlmutter 1983, Cinque 2003), **German** (Wurmbrand 2001), and **Japanese** (Shibatani 1973, Nishigauchi 1993, Matsumoto 1996).
- **Long passive:** a passivization of an embedded object with the passive morpheme attached only to the matrix predicate:

(19) NP_i Matrix Verb+Passive [embedded verb t_i]

- **Japanese:** one (*owar* ‘finish₁’) only allows for an embedded passive (20a), another (*oe* ‘finish₂’) only long passive (20b):

(20) a. Rombun-ga [t_i kak -are]-owar (*-are) -ta
paper-NOM [t_i write-PASS]-finish₁ (*-PASS) -PERF
‘That paper finished being written.’ (embedded passive only)

b. Rombun_i-ga [t_i kaki (*-are) oe] -rare -ta
paper_i-NOM [t_i write (*-PASS) finish₂] -PASS -PERF
‘That paper finished being written.’ (long passive only)

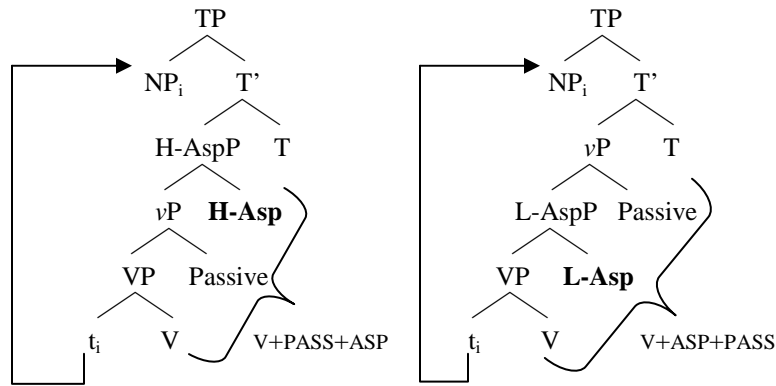
- Two others, *hajime* ‘begin’ and *tsuzuke* ‘continue’, allow for both:

(21) a. Rombun-ga [t_i kak -are] -hajime/tsuzuke -ta
paper-NOM [t_i write-PASS] -begin/continue -PERF
‘That paper began/continued to be written.’ (embedded passive)

b. Rombun_i-ga [t_i kaki hajime/tsuzuke] -rare -ta
paper_i-NOM [t_i write begin/continue] -PASS -PERF
‘That paper began/continued to be written.’ (long passive)

Solution: Aspectual verbs can appear either below or above the position for the passive morpheme (i.e. vP or VoiceP) (Wurmbrand 2001, Cinque 2003, Fukuda 2006)

(22)a. H-Asp = only embedded passive b. L-Asp = only long passive



Japanese aspectual verbs head functional projections, aspect phrases (Travis 1991), in two different positions (Fukuda 2006).

➤ **Long passive in English?**

- long passive is predicted to be possible with L-Asp.

- (23)a. When **the pies and cakes were finished baking**, it was about...⁴
 b. Defendant waited until **the sheets were finished washing** and ...⁵
 c. **The RV-9A was finished painting** last Sunday.⁶

✓ There are apparent cases of long passive with *finish*.⁷

⁴ <http://www.allairevillage.org/TradesandCrafts/Baking.htm>

⁵ <http://www.sconet.state.oh.us/rod/newpdf/10/2004/2004-Ohio-320.pdf>

⁶ <http://www.avsim.com/cgi-bin/news/mainpage/arc64.shtml>

⁷ There are several curious restrictions to long passive in English which I leave for future research. First, it is available only with *finish*, not with other L-Asp verbs.

- (i) These cakes were finished/*continued/*began/*stopped baking.

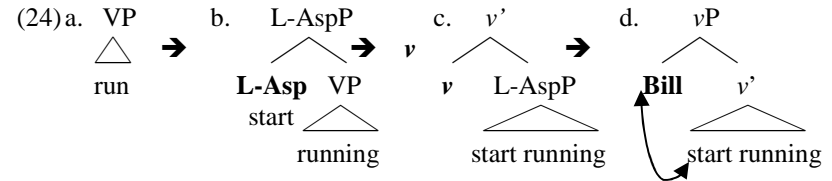
Second, the embedded event must be durative with an ‘affected’ internal argument.

- (ii) a. ??The plates were finished breaking. (not durative & affected)
 b. ??These movies were finished watching (durative & non-affected)
 c. These cakes were finished baking (durative & affected)

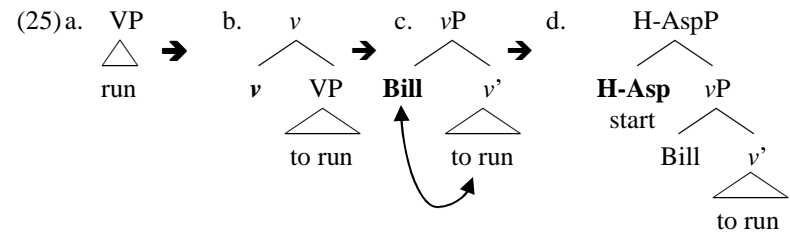
4. Imperative

How can the aspectual verbs be compatible with **imperative** if they do not assign theta-roles to their subjects?

- With **L-Asp**, the subject is identified with ‘L-Asp+VP’ complex:
 - *Bill* + [L-Asp + VP] = ‘Bill started running.’



- With **H-Asp**, the subject is identified with vP before an aspectual verb is introduced:
 - H-Asp + [*Bill* + VP] = ‘Bill started to run.’



✓ With L-Asp (24a), *Bill* is the subject of ‘start running’

➤ **Prediction 1:** Imperative should be more natural with gerundive (L-Asp) than with infinitive (H-Asp).

- Elicitations with fifteen native speakers of American English:
 (26) Situation: after giving a direction to a group of students who are about to write an in-class essay, the proctor says:

- a. Begin writing!! (93.3% or 14/15)
 b. Begin to write!! (6.7% or 1/15)

✓ Gerundive is overwhelmingly preferred with imperative

- **Prediction 2:** Passive should be more natural with infinitive (H-Asp) than with gerundive (L-Asp).
- Corpus search using the Wall Street Journal corpus (1987):

| | <i>begin</i> | <i>continue</i> | <i>start</i> | <i>cease</i> | total | % of passive |
|------------|--------------------|---------------------|--------------------|-------------------|---------------------|--------------|
| Gerundive | 199 ₍₁₎ | 49 _{(1)*} | 129 ₍₀₎ | 29 ₍₀₎ | 406 ₍₂₎ | 0.5% |
| Infinitive | 113 ₍₃₎ | 336 ₍₁₅₎ | 54 ₍₀₎ | 34 ₍₁₎ | 567 ₍₁₉₎ | 4% |
| total | 312 | 415 | 183 | 63 | 973 | |

() = the number of passive sentences, * = get passive

✓ Passive is more frequent with infinitive than with gerundive.

5. Conclusions

- ❖ The traditional control/raising (thematic vs. non-thematic subject) analysis of English aspectual verbs does not account for the data in full.
- ❖ I proposed the dual position analysis of English aspectual verbs, in which they occupy two different positions in a clause, above and below *vP* (H-Asp and L-Asp).
- ❖ The difference in the position of aspectual verbs is visible as the form of their complements (infinitive vs. gerundive).
- ❖ The evidence from previous studies as well as new findings was presented to argue for the proposal.
- ❖ Based on the proposed analysis, I proposed an account for the imperative fact (4) without assuming that aspectual verbs can be thematic.

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