

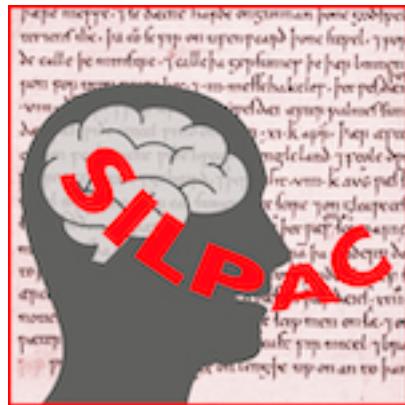
The emergence of English *-ing*-complements

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SILPAC

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About this talk

We propose a new account of the emergence of the English alternation between *-ing* and *to*-infinitive non-finite complements, as illustrated by (1) and (2).

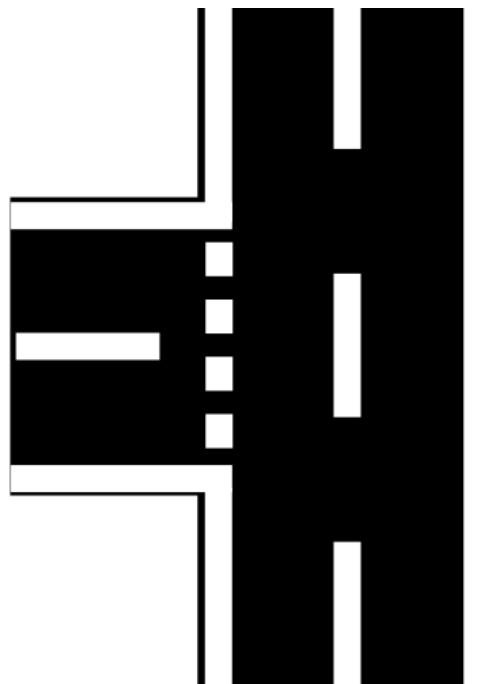
- (1) a. She likes **reading** books.
 b. She likes **to** read books.

- (2) a. She remembered **reading** that book.
 b. She remembered **to** read that book.

This is a change that has received no attention (as far as we are aware) in the diachronic generative literature, aside from a few remarks in Miller (2002, ch. 11).

Roadmap

- 1 Introduction
- 2 Background and previous research
- 3 Our questions and methods
- 4 Findings
- 5 Discussion
- 6 Summary and conclusion



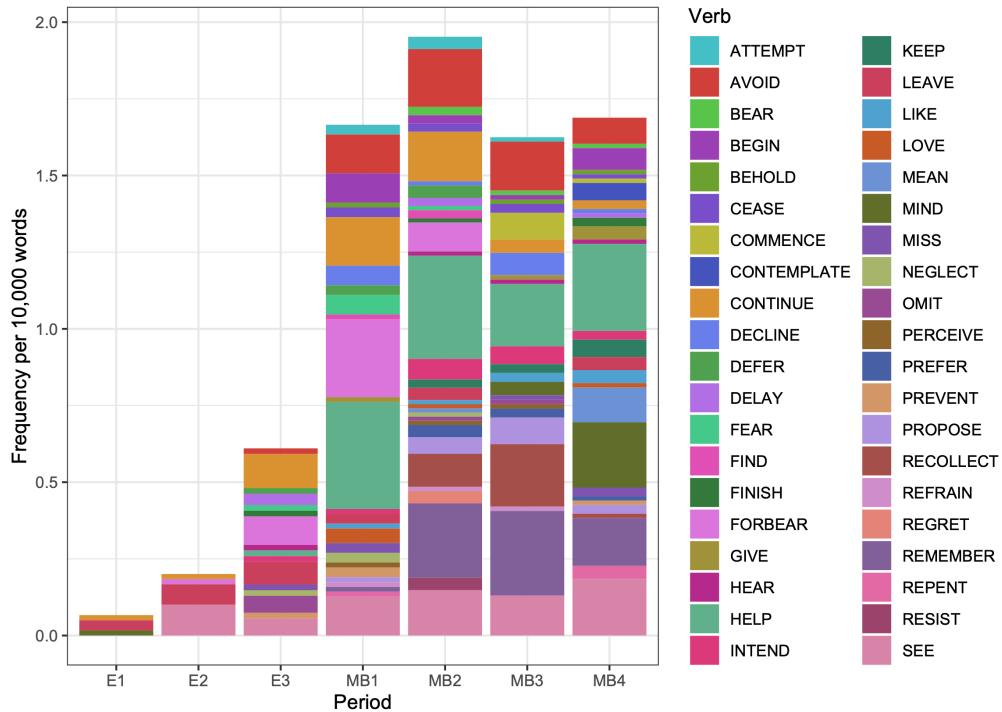
The Great Complement Shift

- Between Old and Middle English, *to*-infinitives take over much of the functional load of finite *that*-clauses (Los, 2005), especially as complements to verbs
- *-ing*-complements first appear circa 1500 (Rudanko, 1989; Fanego, 1996, 2004; Miller, 2002; De Smet, 2013)

(3) hee can not refraine **telling** them.
(Hoby, 1561; from Fanego, 1996, 38)

- Between 1500 and 1760, *-ing*-complements spread dramatically, mostly at the expense of *to*-complements (Rudanko, 1989; Fanego, 2004)
- Rohdenburg (2006, 143) refers to this ‘massive restructuring of [English’s] system of sentential complementation’ as the ‘Great Complement Shift’

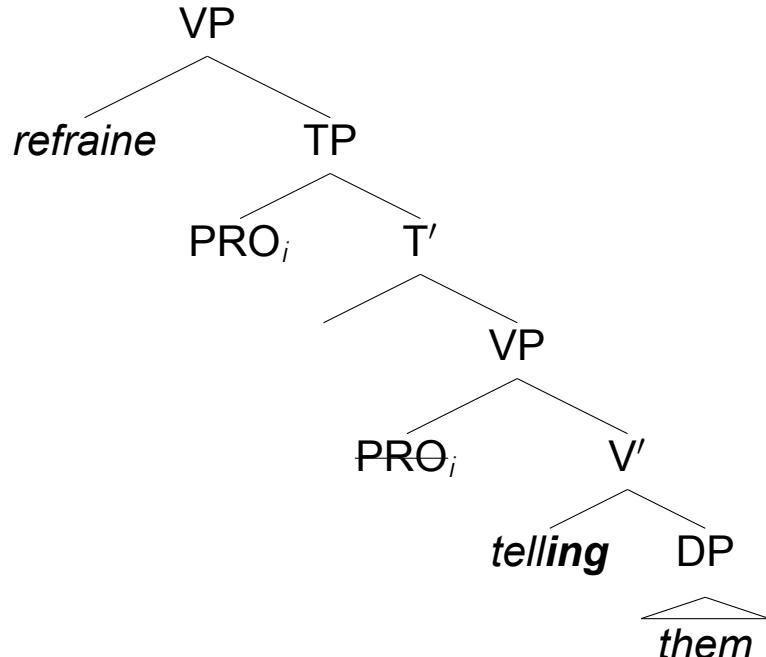
The rise of -ing-complements



- PPCEME
(Kroch et al., 2004)
 - E1: 1500–1569
 - E2: 1570–1639
 - E3: 1640–1720
 - PPCMBE2
(Kroch et al., 2016)
 - MB1: 1707–1759
 - MB2: 1760–1812
 - MB3: 1813–1862
 - MB4: 1863–1914

Syntactic structure

- We focus on clausal *-ing*-complements with no overt subject, which we analyse as involving subject control, just like control *to*-infinitives.
- There is some debate (and some ambiguity) around verbal vs. nominal *-ing*-complements (see e.g. Fonteyn, 2019)
- Verbal *-ing*-structures were probably innovated via reanalysis of ‘ambiguous’ nominal *-ing*-structures (Fanego, 2004)
- We’ll return to this later



Semantic motivations

Sometimes there's a clear semantic correlate of the distinction between *-ing*-complements and *to*-complements, as with retrospective verbs (2), repeated here.

Most of the time it's not clear at all, as in (1), repeated here.

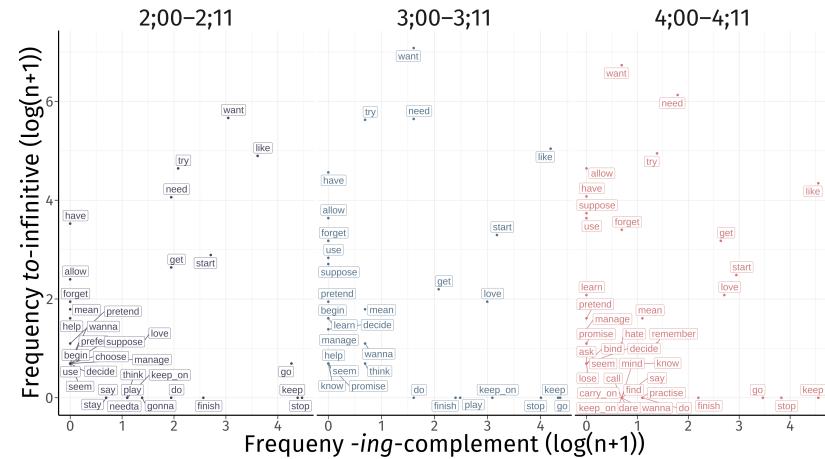
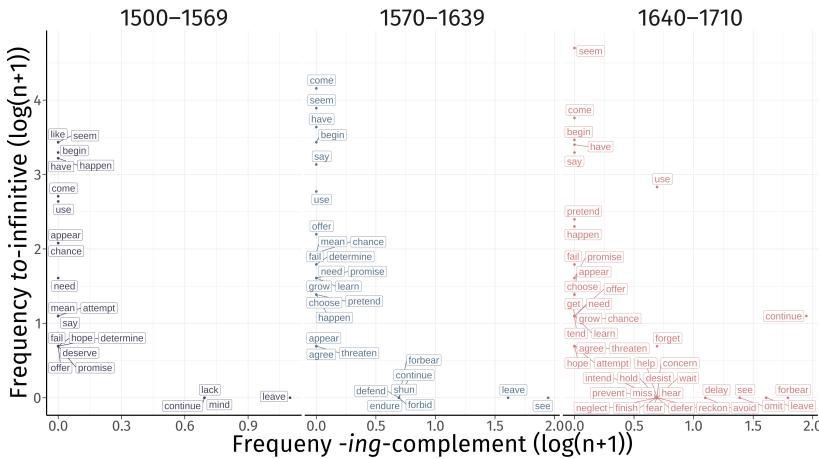
- (5) a. She likes reading books.
 b. She likes to read books.

The spread of *-ing*-complements at the expense of *to*-complements does not seem explicable purely in terms of semantic factors.

It has been considered a case of lexical diffusion (Fanego, 2004; De Smet, 2013).

A blurred distinction

In Early Modern English, the verbs that take *to-infinitive* and *-ing*-complements hardly overlap. In present-day English (CHILDES data) the overlap is substantial.



Negative implicative verbs have been suggested to play a role (e.g. by Fanego, 1996).

Research goals

- Reconsider the spread of *-ing*-complements from perspective of learners
- Model learners' treatment of verbs taking *-ing*-complements
- Yang's (2016) Tolerance Principle and Sufficiency Principle as learning model
- Explore the interaction with other coinciding developments in the English grammar

The Tolerance and Sufficiency Principles (TSP)

The **Tolerance Principle** (TP) is a learning model that predicts at which point learners treat a rule R as productive (Yang, 2005, 2016)

$$(6) \quad e \leq \theta_N \text{ where } \theta_N := \frac{N}{\ln N}$$

- a. e = exceptions to R
- b. N = items in the rule domain

If the number of exceptions remains at or below θ_N , it will be more efficient for learners to treat the rule as productive.

The **Sufficiency Principle** (SP) is a corollary of the TP and predicts the point at which learners generalise a rule R

$$(7) \quad N - M < \theta_N \text{ where } \theta_N := \frac{N}{\ln N} \text{ (Yang, 2016, 177)}$$

- a. N = items in the rule domain
- b. M = items that follow rule

The rule domain: a challenge

Each rule exhibits a domain over which the rule is defined, but what constitutes the relevant domain for *-ing*-complements?

- Descriptive grammars group verbs taking *-ing*-complements into lists based on their semantic and syntactic properties (e.g. Quirk et al., 1985; Huddleston & Pullum, 2002)
 - Not always informative (e.g. in Quirk et al. 1985: type i = emotive verbs, type ii = aspectual verbs, type iii = miscellany)
- Shared semantic features of verbs taking *-ing*-complements have been noted in the diachronic literature (Fanego, 1996; De Smet, 2013)

How can class members be identified that do not take *-ing*-complements? (Trips & Rainsford's (2022) **class size problem**)

- Semantic distance in WordNet, cluster analyses of large corpora, etc.
- We follow the approach of Trips & Rainsford (2022) who use the verb classes proposed by Levin (1993) as starting point

English verb classes

Extensive list of English verb classes has been compiled by Levin (1993)

- 49 distinct matrix classes, some with further subclasses
- Verbs may belong to multiple classes (e.g. *leave*)
 - *Verbs of Future Having* (13.3); *Verbs of Fulfilling* (13.4.1); *Get Verbs* (13.5.1); *Keep Verbs* (15.2); ...
- Underlying assumption “[that the] behavior of a verb, particularly with respect to the expression and interpretation of its arguments, is to a large extent determined by its meaning” (Levin, 1993, 1)
- Verbs in each class show similar behaviour with respect to diathesis alternations & other properties
- No claim to be fully exhaustive, consistent, or accurate

Data annotation

- Identification of verb classes of the verbs taking *-ing*-complements in PPCEME & PPCMBE2
- Not all verbs feature in Levin (1993) and thus required manual classification
- All verbs of the relevant classes were annotated for various properties using the OED:
 - Etymological origin
 - First attestation
 - Number of syllables (BE)
 - Position of word stress (BE)
 - Transitivity (nominal or clausal complements)
 - First transitive use (assumption of continuous transitive use)
 - Last transitive use (e.g. *arrive*, 1850)

Applying the TSP to Levin's (1993) verb classes

- Application of TSP by period (i.e. E1, E2, E3, MB1, MB2, MB3, MB4)
- Levin's (1993) classes were filtered by excluding...
 - ...all verbs without nominal and clausal complements
 - ...verbs that do not take nominal or clausal complements in examined period
- Coding of verbs
 - Rule-confirming: verbs in verb class attested with *-ing*-complements in a given period
 - Exception: verbs in verb class not attested with *-ing*-complements in a given period
- No disambiguation of use for verbs that are members of multiple verb classes

Early Modern English (PPCEME)

- E1 (1500–1569):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Leave Verbs	1	2	2	TRUE	FALSE

- E2 (1570–1639):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Leave Verbs	1	2	2	TRUE	FALSE
Avoid Verbs	2	9	4	FALSE	FALSE
Begin Verbs	2	16	6	FALSE	FALSE

Early Modern English (PPCEME)

- E3 (1570–1639):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Leave Verbs	1	2	2	TRUE	FALSE
Verbs of Lingering	2	3	3	TRUE	FALSE
Remove Verbs	2	32	9	FALSE	FALSE
Characterize Verbs	2	32	9	FALSE	FALSE
See Verbs	2	32	9	FALSE	FALSE
Admire Verbs	2	44	12	FALSE	FALSE
Verbs Of Contiguous Location	2	43	11	FALSE	FALSE
Avoid Verbs	4	7	4	FALSE	FALSE
Fit Verbs	2	10	4	FALSE	FALSE
Begin Verbs	5	13	6	FALSE	FALSE

Modern British English (PPCMBE2)

- MB1 (1707–1759):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Leave Verbs	1	2	2	TRUE	FALSE
Verbs of Lingering	1	5	3	FALSE	FALSE
Get Verbs	4	29	9	FALSE	FALSE
Characterize Verbs	4	58	15	FALSE	FALSE
Admire Verbs	5	41	12	FALSE	FALSE
Verbs Of Contiguous Location	6	39	11	FALSE	FALSE
Avoid Verbs	5	6	4	FALSE	FALSE
Begin Verbs	7	11	6	FALSE	FALSE

Modern British English (PPCMBE2)

- MB2 (1760–1812):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Bring And Take	1	1	2	TRUE	TRUE
Keep Verbs	2	2	2	TRUE	FALSE
Bulge Verbs	1	2	2	TRUE	FALSE
Leave Verbs	1	2	2	TRUE	FALSE
Get Verbs	4	30	9	FALSE	FALSE
Characterize Verbs	7	56	15	FALSE	FALSE
Admire Verbs	6	40	12	FALSE	FALSE
Say Verbs	3	21	7	FALSE	FALSE
Avoid Verbs	3	8	4	FALSE	FALSE
Verbs Of Lingering	3	4	3	FALSE	FALSE
Begin Verbs	7	12	6	FALSE	FALSE

Modern British English (PPCMBE2)

- MB3 (1813–1862):

Class	-ing	non-ing	θ	TP	SP
Keep Verbs	1	3	2	FALSE	FALSE
Characterize Verbs	5	61	15	FALSE	FALSE
Admire Verbs	3	43	12	FALSE	FALSE
Avoid Verbs	3	8	4	FALSE	FALSE
Begin Verbs	7	11	6	FALSE	FALSE

→ *Bring and Take, Bulge Verbs & Leave Verbs* no longer productive

Modern British English (PPCMBE2)

- MB4 (1863–1914):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Keep Verbs	2	2	2	TRUE	FALSE
Leave Verbs	1	2	2	TRUE	FALSE
Characterize Verbs	7	59	15	FALSE	FALSE
Admire Verbs	7	39	12	FALSE	FALSE
Verbs Of Inherently Directed Motion	3	16	6	FALSE	FALSE
Avoid Verbs	5	8	5	FALSE	FALSE
Begin Verbs	8	10	6	FALSE	FALSE

Forbearing *forbear*?

Our results suggest that learners treat *-ing*-complementation as an unproductive rule. The only exceptions seem to be classes with few members ($N < 4$).

- Child-directed speech differs from adult writing (Trips & Rainsford's (2022) **Data Compatibility Problem**)
- Child-directed speech can be approximated by frequency trimming the data (Kodner, 2019): removal of infrequent types from data

Goal: Rerun the TP analysis on frequency-trimmed verb classes

- Calculate the token frequency of verbs taking complement clauses in PPCEME & PPCMBE2
- Include only verbs with the highest token frequency ($n = 100$, $n = 200$, $n = 300$)

Early Modern English (PPCEME) – frequency-trimmed

- E1 (1500–1569):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Keep Verbs	1	1	2	TRUE	TRUE
Leave Verbs	1	0	Inf	TRUE	TRUE

- E2 (1570–1639):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Keep Verbs	1	0	Inf	TRUE	TRUE
See Verbs	1	1	2	TRUE	TRUE
Leave Verbs	1	0	Inf	TRUE	TRUE
Avoid Verbs	1	1	2	TRUE	TRUE
Begin Verbs	2	4	3	FALSE	FALSE

Early Modern English (PPCEME) – frequency-trimmed

- E3 (1570–1639):

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Remove Verbs	1	2	2	TRUE	FALSE
Verbs Of Fulfilling	1	1	2	TRUE	TRUE
Hold Verbs	1	0	Inf	TRUE	TRUE
Keep Verbs	1	1	2	TRUE	TRUE
See Verbs	2	1	2	TRUE	TRUE
Leave Verbs	1	0	Inf	TRUE	TRUE
Avoid Verbs	1	0	Inf	TRUE	TRUE
Characterize Verbs	3	9	4	FALSE	FALSE
Fit Verbs	2	4	3	FALSE	FALSE

Modern British English (PPCMBE2) – frequency-trimmed

- MB1 (1707–1759)

Class	-ing	non-ing	θ	TP	SP
Remove Verbs	1	2	2	TRUE	FALSE
Give Verbs	1	2	2	TRUE	FALSE
Verbs Of Fulfilling	1	1	2	TRUE	TRUE
Keep Verbs	1	1	2	TRUE	TRUE
See Verbs	1	2	2	TRUE	FALSE
Sight Verbs	2	1	2	TRUE	TRUE
Admire Verbs	2	2	2	TRUE	FALSE
Investigate Verbs	1	0	Inf	TRUE	TRUE
Verbs Of Modes Of Being Involving Motion	1	0	Inf	TRUE	TRUE
Verbs Of Contiguous Location	1	2	2	TRUE	FALSE
Leave Verbs	1	0	Inf	TRUE	TRUE
Chase Verbs	1	0	Inf	TRUE	TRUE
Avoid Verbs	2	0	2	TRUE	TRUE
Begin Verbs	4	3	3	TRUE	FALSE
Characterize Verbs	4	10	5	FALSE	FALSE

→ Hold Verbs no longer productive

Modern British English (PPCMBE2) – frequency-trimmed

- MB2 (1760–1812) :

Class	-ing	non-ing	θ	TP	SP
Remove Verbs	1	2	2	TRUE	FALSE
Verbs Of Possessional Deprivation: Steal Verbs	1	0	Inf	TRUE	TRUE
Bring And Take	1	1	2	TRUE	TRUE
Verbs Of Fulfilling	1	2	2	TRUE	FALSE
Keep Verbs	1	0	Inf	TRUE	TRUE
Performance Verbs	1	2	2	TRUE	FALSE
See Verbs	2	1	2	TRUE	TRUE
Sight Verbs	1	2	2	TRUE	FALSE
Leave Verbs	1	0	Inf	TRUE	TRUE
Avoid Verbs	1	0	Inf	TRUE	TRUE
Cost Verbs	1	1	2	TRUE	TRUE
Characterize Verbs	5	7	4	FALSE	FALSE
Admire Verbs	3	4	3	FALSE	FALSE
Say Verbs	3	6	4	FALSE	FALSE
Begin Verbs	3	4	3	FALSE	FALSE

→ Give Verbs, Investigate Verbs, Verbs Of Modes Of Being Involving Motion, Verbs Of Contiguous Location & Chase Verbs no longer productive

Modern British English (PPCMBE2) – frequency-trimmed

- MB3 (1813–1862) :

Class	<i>-ing</i>	non- <i>ing</i>	θ	TP	SP
Remove Verbs	1	1	2	TRUE	TRUE
Give Verbs	1	2	2	TRUE	FALSE
See Verbs	2	2	2	TRUE	FALSE
Sight Verbs	1	2	2	TRUE	FALSE
Complain Verbs	1	1	2	TRUE	TRUE
Advise Verbs	1	0	Inf	TRUE	TRUE
Exist Verbs	1	2	2	TRUE	FALSE
Appear Verbs	1	2	2	TRUE	FALSE
Avoid Verbs	1	1	2	TRUE	TRUE
Begin Verbs	4	3	3	TRUE	FALSE
Characterize Verbs	4	10	5	FALSE	FALSE

→ Verbs Of Possessorial Deprivation: Steal Verbs, Bring And Take, Verbs Of Fulfilling, Keep Verbs, Performance Verbs, Leave Verbs & Cost Verbs no longer productive

Modern British English (PPCMBE2) – frequency-trimmed

- MB4 (1863–1914) :

Class	-ing	non-ing	θ	TP	SP
Give Verbs	1	2	2	TRUE	FALSE
Verbs Of Fulfilling	1	2	2	TRUE	FALSE
Keep Verbs	2	0	2	TRUE	TRUE
Verbs Of Image Impression	1	0	Inf	TRUE	TRUE
Verbs Of Preparing	1	1	2	TRUE	TRUE
See Verbs	2	2	2	TRUE	FALSE
Want Verbs	2	3	3	TRUE	FALSE
Advise Verbs	1	2	2	TRUE	FALSE
Braid Verbs	1	0	Inf	TRUE	TRUE
Verbs Of Calibratable Changes Of State	1	1	2	TRUE	TRUE
Exist Verbs	1	2	2	TRUE	FALSE
Meander Verbs	1	1	2	TRUE	TRUE
Verbs Of Inherently Directed Motion	2	3	3	TRUE	FALSE
Leave Verbs	1	0	Inf	TRUE	TRUE
Avoid Verbs	1	0	Inf	TRUE	TRUE
Put Verbs	2	1	2	TRUE	TRUE
Characterize Verbs	3	10	5	FALSE	FALSE
Begin Verbs	4	4	3	FALSE	FALSE

→ Remove Verbs, Sight Verbs, Complain Verbs, Exist Verbs & Appear Verbs no longer productive

Discussion

TSP analyses on frequency-trimmed and non-trimmed data provide similar results

- Learners treat some verb classes as productive, but only small ones
- Many productive classes feature only one rule-conforming element
- Aspectual verbs (*Begin Verbs*) walk the tight rope
- Loss of generalisation within verb classes towards end of Modern British English period (1914)
- No broad generalisations of *-ing*-complements based on verbal semantics
- Purely semantic-based accounts of the spread of *-ing*-complements not supported from a learner's perspective
- Results compatible with a lexical diffusion account
- Fully idiosyncratic system of *-ing*-complementation

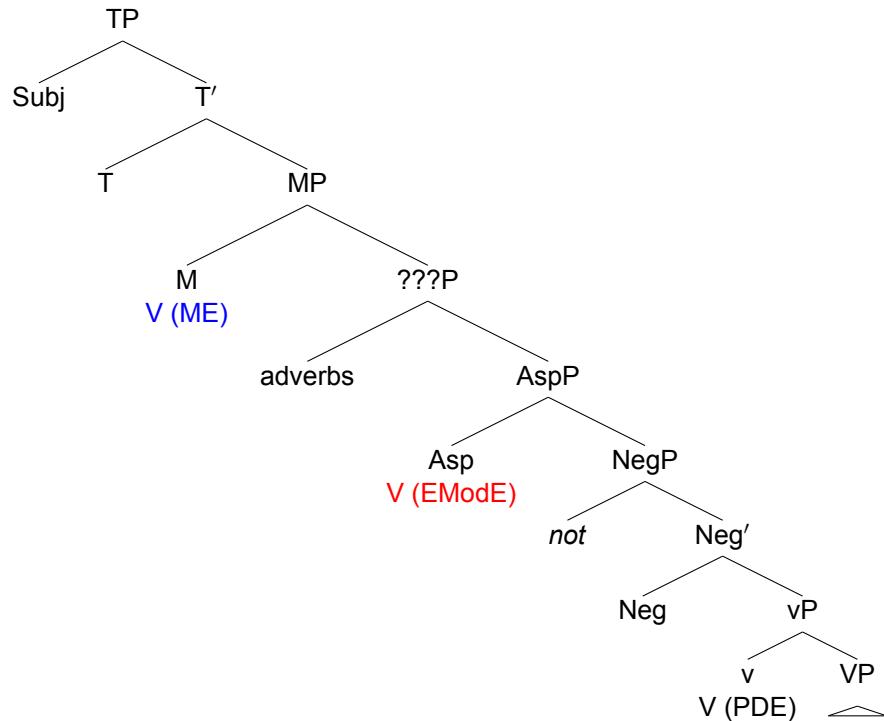
Methodological problems

Using Levin's (1993) classes as a basis for TSP analyses is not unproblematic.

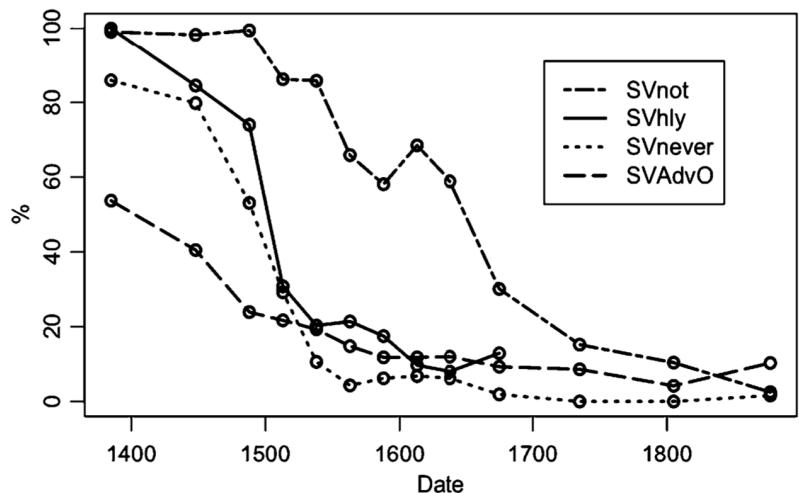
- General focus on verbs taking NP & PP complements, verbs taking sentential complements have been mostly ignored
- No systematic treatment of morphologically derived verbs (e.g. *dis-*, *un-*, *-ify*, *-ise*)
- Verb (meanings) that have fallen out of use remain unaccounted for
- Verbs may have become a member of a class after being attested as *-ing*-complement-taking

Concomitant changes

- Haeberli & Ihsane (2016): the loss of finite verb movement in English proceeds in (at least) two steps
 1. Loss of **V-to-M** (C15th–C16th)
 2. Loss of **V-to-Asp** (C16th–C18th)
- This is also the period when the progressive rises dramatically in usage (Elsness, 1994)



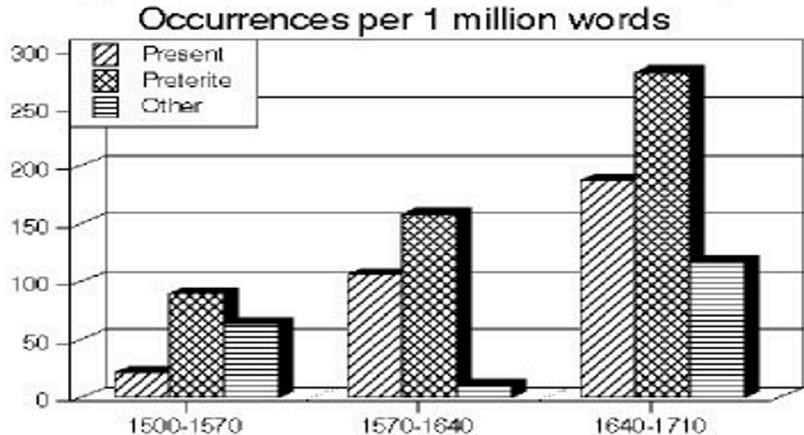
Loss of V-to-Asp, rise of the progressive, 1500–1710



Loss of **V-to-Asp**

(Haeberli & Ihsane, 2016, 523, their fig. 2)

Progressives in Helsinki Corpus



Rise of the progressive

(Elsness, 1994, 11, his fig. 1)

A connection?

- Present forms with a progressive reading are gradually replaced by forms with auxiliary be.

- This involved a gradually increasing frequency of verbal -ing forms.
 - Hypothesis: this meant that learners were primed to analyse nominal -ing complements as verbal, when they were formally ambiguous.

- The spread of verbal *-ing*-complements is then at least partly a case of 'multiple reactuation' (Willis, 1998; Walkden, 2014).

Summary and conclusion

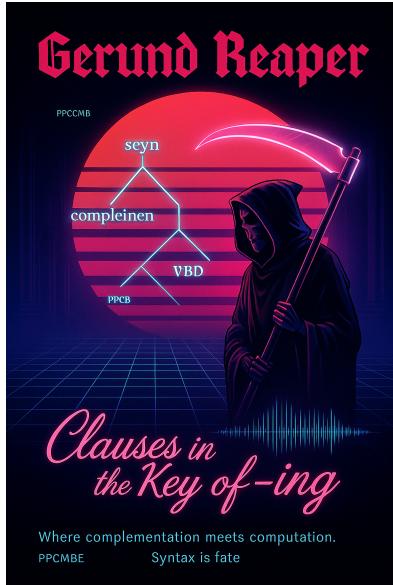
- -ing-complements rise dramatically in frequency between 1500 and 1760
- Spread of -ing-complements as process of lexical diffusion
- Small-scale productive classes exist
- Development related to changes in the expression of aspect in Modern English
- TSP as useful tool for diagnosing change via semantic factors

Thanks for listening!

- Thanks also to the DFG for funding our project (project H4 of FOR 5157 ‘Structuring the Input in Language Processing, Acquisition and Change’)
- Thanks to H4 team members and SILPAC friends, especially Sigríður Björnsdóttir, Lisa Gotthard, Chiara Riegger, Carola Trips and Charles Yang
- Pictured: Marc, Sirri, Charles, Carola and George about to drop a new album



Gerund Reaper Album drop



Gerund Reaper
Syntax never dies. It just reprojects.

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Verb classes – E1 & E2

E1:

- (10) a. Leave Verbs (TP): *abandon, desert, leave*

E2:

- (11) a. Leave Verbs (TP): *abandon, desert, leave*
- b. Avoid Verbs: *avoid, dodge, duck, elude, evade, shun, eschew, forbear, prevent, escape, help*
- c. Begin Verbs: *begin, cease, commence, continue, end, finish, keep, proceed, repeat, resume, start, stop, terminate, desist, forbear, prevent, refrain, require*

Verb classes – E3

- (12)
- a. Leave Verbs (TP): *abandon, desert, leave*
 - b. Verbs of Lingering (TP): *dally, delay, loiter, tarry, defer*
 - c. Remove Verbs: *abstract, cull, delete, discharge, disengage, disgorge, dislodge, dismiss, draw, eject, eliminate, eradicate, evict, excise, excommunicate, expel, extirpate, extract, extrude, lop, omit, ostracize, oust, reap, remove, separate, sever, shoo, subtract, uproot, withdraw, wrench, fail, forget*
 - d. Characterize Verbs: *accept, address, appreciate, bill, cast, certify, characterize, choose, cite, class, confirm, count, define, describe, disguise, employ, engage, enlist, enroll, enter, establish, esteem, hail, herald, hire, honor, identify, imagine, incorporate, induct, intend, lampoon, offer, oppose, paint, portray, praise, qualify, rank, recollect, recommend, regard, reinstate, reject, remember, represent, repudiate, reveal, salute, see, select, stigmatize, take, train, treat, use, value, view, advocate, plan, purpose, refuse*
 - e. See Verbs: *detect, discern, feel, hear, notice, see, sense, smell, taste*
 - f. Admire Verbs: *abhor, admire, adore, appreciate, cherish, deplore, despise, detest, disdain, dislike, distrust, dread, enjoy, envy, esteem, exalt, execrate, fancy, favor, fear, hate, idolize, lament, like, loathe, love, miss, mourn, pity, prize, regret, relish, resent, respect, revere, rue, savor, stand, support, tolerate, treasure, trust, value, venerate, worship, scruple*
 - g. Verbs Of Contiguous Location: *abut, adjoin, blanket, border, bound, bridge, cap, contain, cover, cross, dominate, edge, encircle, enclose, fence, fill, flank, follow, frame, head, hit, hug, intersect, line, meet, miss, overhang, precede, rim, ring, skirt, span, straddle, support, surmount, surround, top, touch, underlie, attend, involve, lack, neglect, signify, imply*
 - h. Avoid Verbs: *avoid, dodge, duck, elude, evade, shun, eschew, forbear, prevent, escape, help*
 - i. Fit Verbs: *carry, contain, feed, fit, hold, house, seat, serve, sleep, store, take, use*
 - j. Begin Verbs: *begin, cease, commence, continue, end, finish, keep, proceed, repeat, resume, start, stop, terminate, desist, forbear, prevent, refrain, require*

Verb classes – MB1

- (13)
- a. Leave Verbs (TP): *abandon, desert, leave*
 - b. Verbs of Lingering: *dally, delay, hesitate, loiter, tarry, defer*
 - c. Get Verbs: *book, buy, call, catch, charter, choose, earn, fetch, find, gain, gather, get, hire, keep, lease, leave, order, pick, pluck, procure, pull, reach, rent, reserve, save, secure, shoot, slaughter, steal, vote, win, deserve, merit*
 - d. Characterize Verbs: *accept, address, appreciate, bill, cast, certify, characterize, choose, cite, class, confirm, count, define, describe, disguise, employ, engage, enlist, enroll, enter, establish, esteem, hail, herald, hire, honor, identify, imagine, incorporate, induct, intend, lampoon, offer, oppose, paint, portray, praise, qualify, rank, recollect, recommend, regard, reinstate, reject, remember, represent, repudiate, reveal, salute, see, select, stigmatize, take, train, treat, use, value, view, advocate, plan, purpose, refuse*
 - e. Admire Verbs: *abhor, admire, adore, appreciate, cherish, deplore, despise, detest, disdain, dislike, distrust, dread, enjoy, envy, esteem, exalt, execrate, fancy, favor, fear, hate, idolize, lament, like, loathe, love, miss, mourn, pity, prize, regret, relish, resent, respect, revere, rue, savor, stand, support, tolerate, treasure, trust, value, venerate, worship, scruple*
 - f. Verbs Of Contiguous Location: *abut, adjoin, blanket, border, bound, bridge, cap, contain, cover, cross, dominate, edge, encircle, enclose, fence, fill, flank, follow, frame, head, hit, hug, intersect, line, meet, miss, overhang, precede, rim, ring, skirt, span, straddle, support, surmount, surround, top, touch, underlie, attend, involve, lack, neglect, signify, imply*
 - g. Avoid Verbs: *avoid, dodge, duck, elude, evade, shun, eschew, forbear, prevent, escape, help*
 - h. Begin Verbs: *begin, cease, commence, continue, end, finish, keep, proceed, repeat, resume, start, stop, terminate, desist, forbear, prevent, refrain, require*

Verb classes – MB2

- (14)
- a. Bring And Take (TP, SP): *bring*, ***take***
 - b. Keep Verbs (TP): *hoard*, *keep*, ***leave***, *store*
 - c. Bulge Verbs (TP): *bristle*, *bulge*, ***seethe***
 - d. Leave Verbs (TP): *abandon*, *desert*, ***leave***
 - e. Get Verbs: *book*, *buy*, *call*, *cash*, *catch*, *charter*, *choose*, *earn*, *fetch*, ***find***, *gain*, *gather*, *get*, *hire*, ***keep***, *lease*, ***leave***, *order*, *pick*, *pluck*, *procure*, *pull*, *reach*, *rent*, *reserve*, *save*, ***secure***, *shoot*, *slaughter*, *steal*, *vote*, *win*, *deserve*, *merit*
 - f. Characterize Verbs: *accept*, *address*, *appreciate*, *bill*, *cast*, *certify*, *characterize*, *choose*, *cite*, *class*, *classify*, *confirm*, *count*, *define*, *describe*, *disguise*, *employ*, *engage*, *enlist*, *enroll*, *enter*, *establish*, *esteem*, *hail*, *herald*, *hire*, *honor*, *identify*, *imagine*, *incorporate*, *induct*, ***intend***, *lampoon*, *offer*, *oppose*, *paint*, *portray*, *praise*, *qualify*, *rank*, ***recollect***, ***recommend***, *regard*, *reinstate*, *reject*, *remember*, *represent*, *repudiate*, *reveal*, *salute*, ***see***, *select*, *stigmatize*, ***take***, *train*, *treat*, *use*, *value*, *view*, *advocate*, *plan*, *purpose*, *refuse*
 - g. Admire Verbs: *abhor*, *admire*, *adore*, *appreciate*, *cherish*, *deplore*, *despise*, *detest*, *disdain*, *dislike*, *distrust*, ***dread***, *enjoy*, *envy*, *esteem*, *exalt*, *execrate*, *fancy*, *favor*, ***fear***, *hate*, *idolize*, *lament*, ***like***, *loathe*, ***love***, *miss*, *mourn*, *pity*, *prize*, ***regret***, *relish*, *resent*, *respect*, *revere*, *rue*, *savor*, *stand*, *support*, *tolerate*, *treasure*, *trust*, *value*, *venerate*, *worship*, ***scruple***
 - h. Say Verbs: *announce*, *articulate*, *blab*, *blurt*, *claim*, *confess*, *confide*, *convey*, *declare*, ***mention***, *note*, *observe*, *proclaim*, ***propose***, *recount*, *reiterate*, *relate*, *remark*, *repeat*, *report*, *reveal*, *say*, ***state***, *suggest*
 - i. Avoid Verbs: ***avoid***, *dodge*, *duck*, *elude*, *evade*, *shun*, *eschew*, ***forbear***, *prevent*, *escape*, ***help***
 - j. Verbs Of Lingering: *dally*, *dawdle*, ***delay***, ***hesitate***, *loiter*, *tarry*, ***defer***
 - k. Begin Verbs: ***begin***, *cease*, *commence*, ***continue***, *end*, ***finish***, *halt*, ***keep***, *proceed*, *repeat*, *resume*, *start*, *stop*, *terminate*, *desist*, ***forbear***, *prevent*, ***refrain***, *require*

Verb classes – MB3

- (15) a. Keep Verbs: *hoard, keep, leave, store*
- b. Characterize Verbs: *accept, address, appreciate, bill, cast, certify, characterize, choose, cite, class, classify, confirm, count, define, describe, diagnose, disguise, employ, engage, enlist, enroll, enter, envisage, establish, esteem, hail, herald, hire, honor, identify, imagine, incorporate, induct, intend, lampoon, offer, oppose, paint, portray, praise, qualify, rank, recollect, recommend, regard, reinstate, reject, remember, represent, repudiate, reveal, salute, see, select, stigmatize, take, train, treat, use, value, view, visualize, advocate, plan, purpose, refuse*
- c. Admire Verbs: *abhor, admire, adore, appreciate, cherish, deplore, despise, detest, disdain, dislike, distrust, dread, enjoy, envy, esteem, exalt, execrate, fancy, favor, fear, hate, idolize, lament, like, loathe, love, miss, mourn, pity, prize, regret, relish, resent, respect, revere, rue, savor, stand, support, tolerate, treasure, trust, value, venerate, worship, scruple*
- d. Avoid Verbs: *avoid, dodge, duck, elude, evade, shun, eschew, forbear, prevent, escape, help*
- e. Begin Verbs: *begin, cease, commence, continue, end, finish, halt, keep, proceed, repeat, resume, start, stop, terminate, forbear, prevent, refrain, require*

Verb classes – MB4

- (16) a. Keep Verbs (TP): *hoard, keep, leave, store*
b. Leave Verbs (TP): *abandon, desert, leave*
c. Characterize Verbs: *accept, address, appreciate, bill, cast, certify, characterize, choose, cite, class, classify, confirm, count, define, describe, diagnose, disguise, employ, engage, enlist, enroll, enter, envisage, establish, esteem, hail, herald, hire, honor, identify, imagine, incorporate, induct, intend, lampoon, offer, oppose, paint, portray, praise, qualify, rank, recollect, recommend, regard, reinstate, reject, remember, represent, repudiate, reveal, salute, see, select, stigmatize, take, train, treat, use, value, view, visualize, advocate, plan, purpose, refuse*
d. Admire Verbs:
e. Verbs Of Inherently Directed Motion: *abhor, admire, adore, appreciate, cherish, deplore, despise, detest, disdain, dislike, distrust, dread, enjoy, envy, esteem, exalt, execrate, fancy, favor, fear, hate, idolize, lament, like, loathe, love, miss, mourn, pity, prize, regret, relish, resent, respect, revere, rue, savor, stand, support, tolerate, treasure, trust, value, venerate, worship, scruple*
f. Avoid Verbs: *avoid, boycott, dodge, duck, elude, evade, shun, sidestep, eschew, forbear, prevent, escape, help*
g. Begin Verbs: *begin, cease, commence, continue, end, finish, halt, keep, proceed, repeat, resume, start, stop, terminate, forbear, prevent, refrain, require*