The exception to the exception

An examination of V°-to-I°-movement in English (and Danish) and why finite auxiliaries in English don't move the way we expect them to

Christina Maria Møller

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What is V°-to-I°-movement?

- **We talk of V°-to-I°-movement when the finite verb moves to a position immediately succeeding the subject and preceding any adverbials.**

- **You can check whether something has moved from V° to I° by inserting a medial sentential adverbial.**
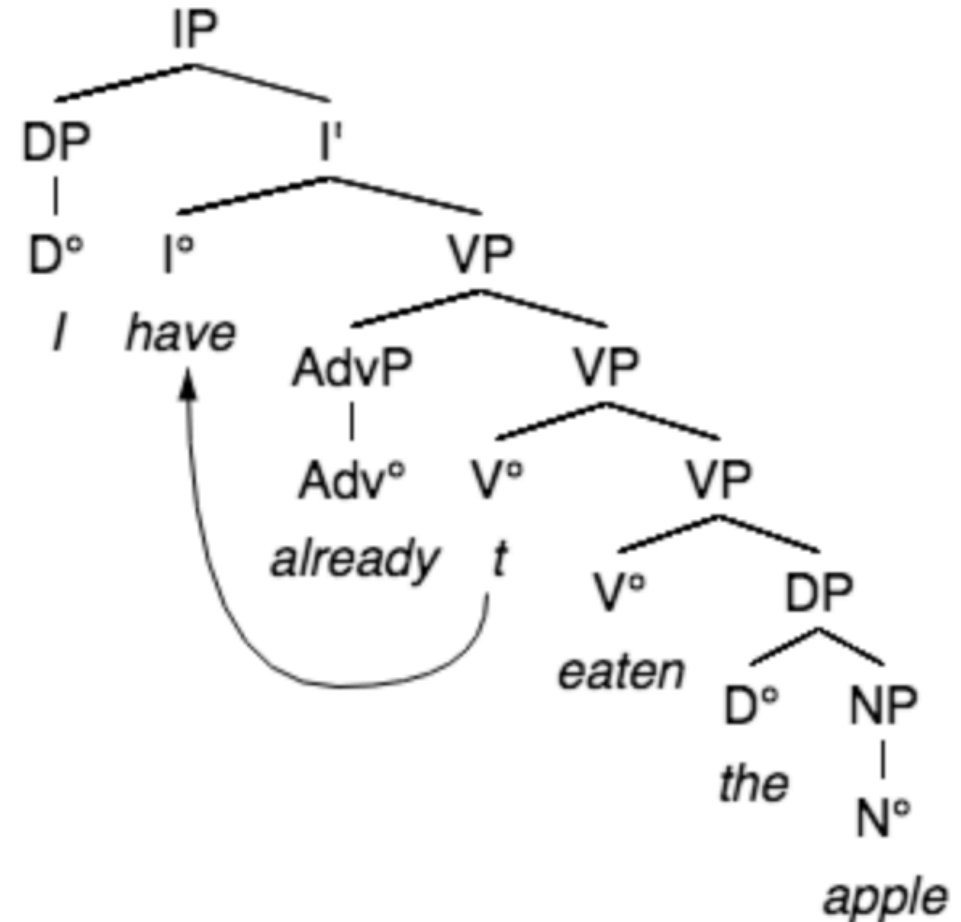
The history of V°-to-I°-movement in English

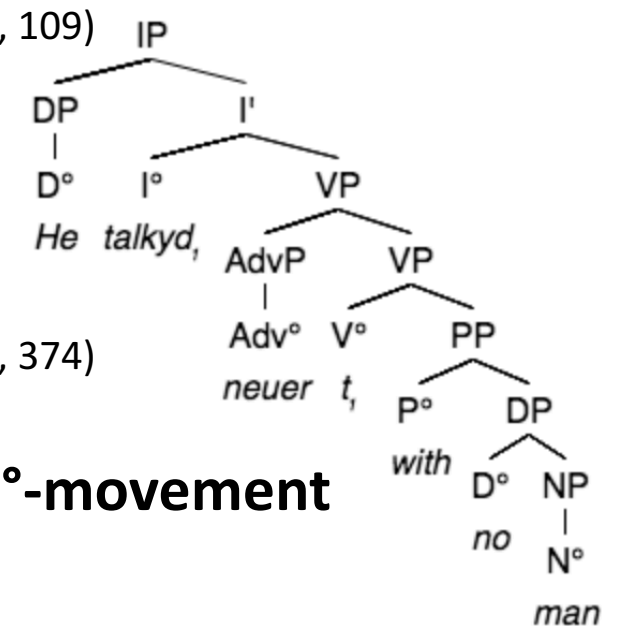**Until the beginning of EModE, English had V°-to-I°-movement of all verbs:**

      DP   **I°**   **Adv**

(1)a The Turkes … made anone redy a great ordonnaunce

(1482, Vikner 1999, 109)

             DP   **I°**   **Adv°**

(1)b … and he swore that he talkyd neuer wyth no man

(1460, Vikner 2020, 374)

Beginning from the EModE period, English began to lose V°-to-I°-movement

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The history of V°-to-I°-movement in Danish

The process is similar to that found in several other Germanic languages, e.g. Danish:

		DP	I°	Adv					

(2)   Lader oβ nu   see, om ui haffuer nogen tid   hört guds ord
       Let   us now see if we   have   any   time heard god's word

(1543, Vikner 1997, 206)

English, Danish, Swedish, Norwegian and Faroese are the only VO-languages without V°-to-I°-movement. All these languages used to have V°-to-I°-movement.

Why did English lose V°-to-I°-movement?

'An SVO-language has V°-to-I°-movement if and only if person morphology is found in all tenses' (Vikner 1997, 207).

English and the other languages that lack V°-to-I°-movement do not have inflectional differences in every tense.

Why bother with V°-to-I°-movement?

IP
DP
I'
I°
VP
AdvP
VP
V°
...

Modal auxiliaries and "dummy" *do* are generated in I°.

Auxiliary *have* (perfect), auxiliary *be* (progressive, passive), and main verb *be* (copula) are generated in V°. If and only if they are finite, they then move to I°.

Main verbs are generated in V° and never move.

(Vikner 2021, 65)

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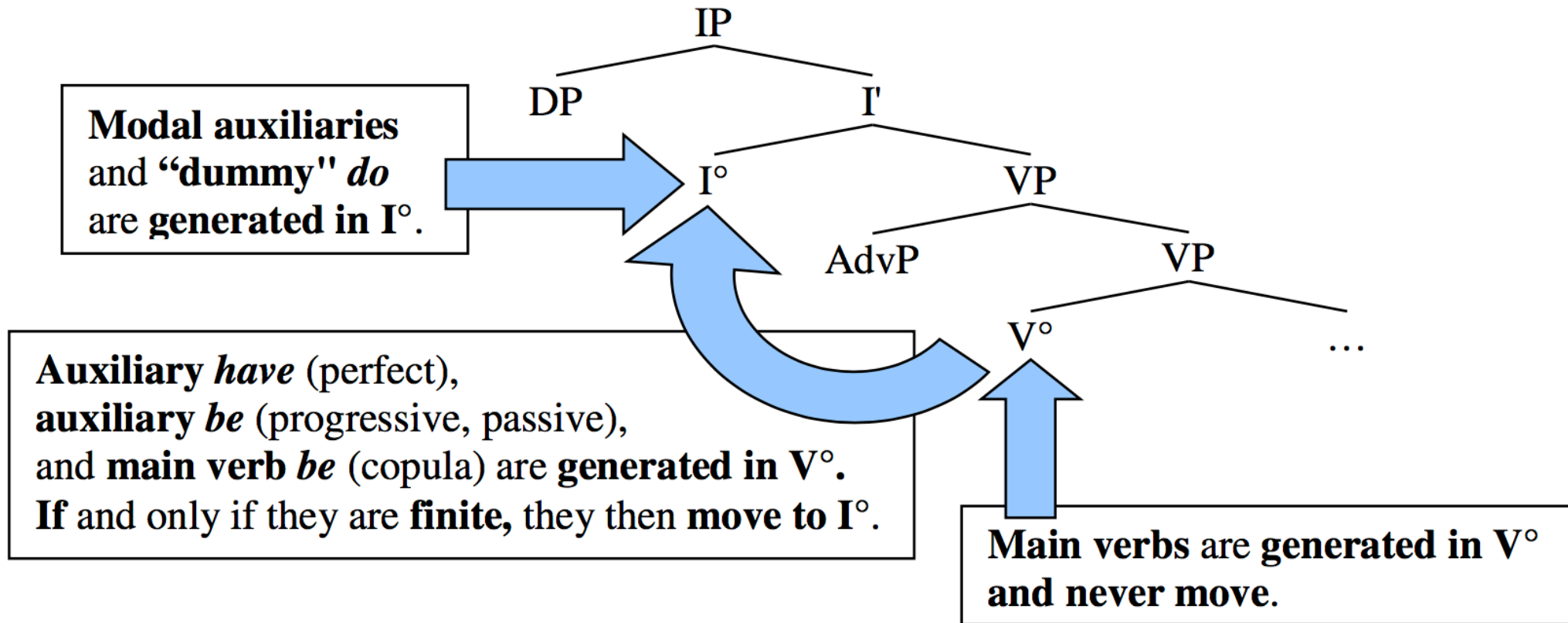
A quick reality check: V°-to-I°-movement(?)

Examples where the finite auxiliary is in I°:

    (3)a It will probably take 20 years   (COCA)

    (3)b I would really like a stealth option   (COCA)

    (3)c   He has certainly made a crossover   (COCA)

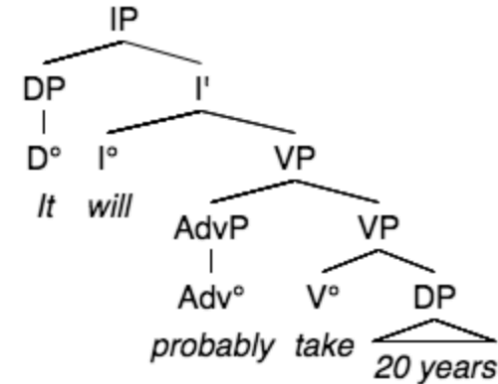**Examples where the finite auxiliary is in V°:**

    (4)a It probably will take a month   (COCA)

    (4)b I really would like a professional response to this   (COCA)

    (4)c   He certainly has made the most of it   (COCA)
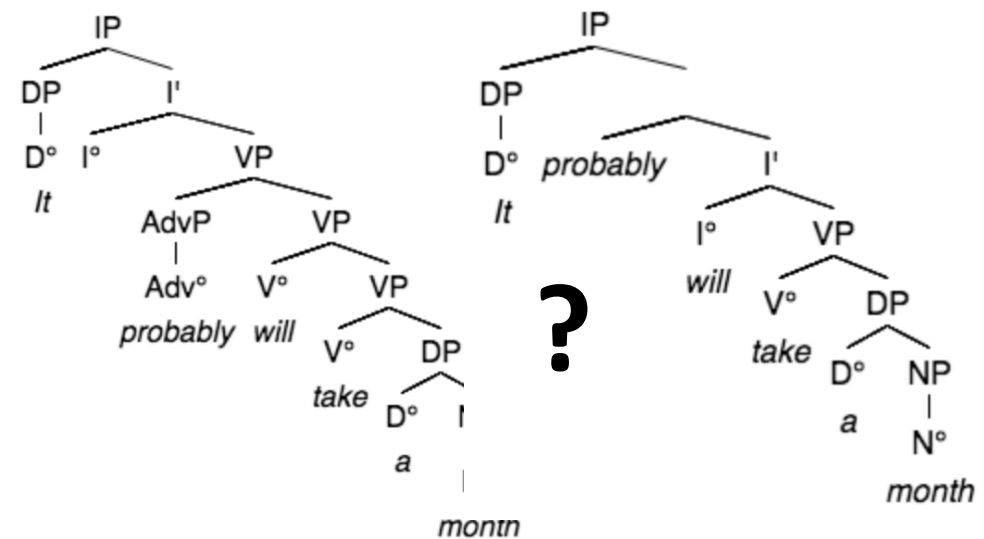
A quick reality check: V°-to-I°-movement(?)

Example where the finite auxiliary is in I°:

(5)a It will probably take 20 years (COCA)

Examples where the finite auxiliary is in V°:

(6)a It probably will take a month (COCA)

The exception to the exception

The exception: Even though English is no longer considered a language with V°-to-I°-movement, it still has V°-to-I°-movement of the auxiliaries *have* and *be* as well as main verb *be* in the cases where they are finite.

The exception to the exception: Even though English has V°-to-I°-movement of the auxiliaries *have* and *be* as well as main verb *be* in the cases where they are finite, these verbs seem to not always undergo V°-to-I°-movement even though we expect them to.

Contexts where the adverbial precedes the finite auxiliary

Adverbial placement in VP-ellipsis constructions

In VP-ellipsis constructions, adverbial precedes the finite auxiliary, as in (7)a and (8)a (Engels 2012, 50):

        DP I° Adv°   **DP   Adv° V°(?)**

(7)a   Fred has never been rude to grandfather, but John always has   _____.

        DP I° Adv°   **DP**   **I°   Adv°**

(7)b * Fred has never been rude to grandfather, but John   has always _____.

                                                     (Engels 2006,1)

        DP I°   Adv°   **DP   Adv°   V°(?)**

(8)a   John has [already] read this book, and Otto probably has   _____, too.

        DP I° Adv°   **DP**   **I°   Adv°**

(8)b * John has [already] read this book, and Otto   has probably _____, too.

                                                     (Engels 2006,1)

Adverbial placement in negated clauses

In negated clauses where the negation is cliticised onto the auxiliary, it is obligatory for wide-scope adverbials to be placed in front of the auxiliary as in (9)a and (10)a (Engels 2012, 58):

                  Adv°   V°?
(9)a   John probably hasn't made many mistakes
                  I°   Adv°
(9)b   * John hasn't probably made many mistakes
                                          (Engels 2012, 58)

                 Adv°   V°?
10(a)   He probably hasn't done anything
                 I°   Adv°
10(b) * He hasn't probably done anything
                              (COCA)

Adverbial placement in clauses with emphatic stress

Placement of the adverbial in either pre- or post-auxiliary position is impacted by emphatic stress (Baker 1989, 292-293).

                           I° Adv°

(11)a   John is often in his office

                           Adv° V°?

(11)b   John often IS in his office

                                   (Engels 2012, 51)

                          Adv°   V°?

(12)a   Bill never WAS much of an electrician

                          I°   Adv°
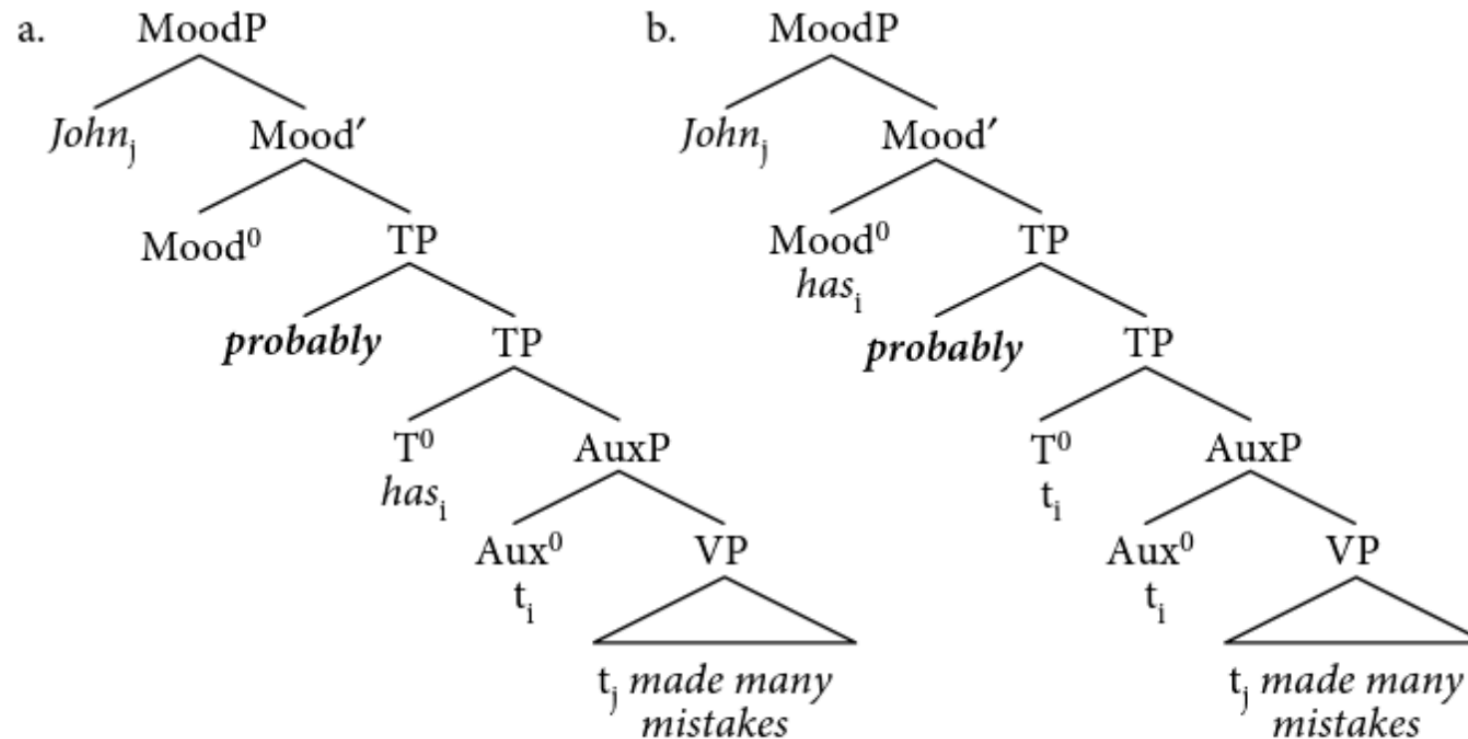
(12)b   * Bill WAS never much of an electrician

                                 (Baker 1989, 293)

Option 1:
Adverbials in pre- and post-auxiliary position occupy the same structural position

Adverbial placement in ellipsis constructions

A finite auxiliary in English will always move but it may target different positions, either T° or Mood° (Pollock 1997).

(Engels 2012, 51)

Option 2:

Adverbs in pre- and post-auxiliary position occupy different structural positions

# Adverbial placement in ellipsis constructions

Optimality theory

> Universal Grammar provides a set of constraints that are universal to all human languages. The constraints are violable and are used to decide between possible grammatical outputs. Humans choose the output that violate as few (important) constraints as possible.

According to Eva Engels (2012, 54), an important constraint is that it is obligatory for finite auxiliaries to undergo V°-to-I°-movement in English.

'For this reason, adverb occurrence in pre-auxiliary position must arise by adverb adjunctions to I'' (Engels 2012, 55-56).

Adverbial placement in ellipsis constructions
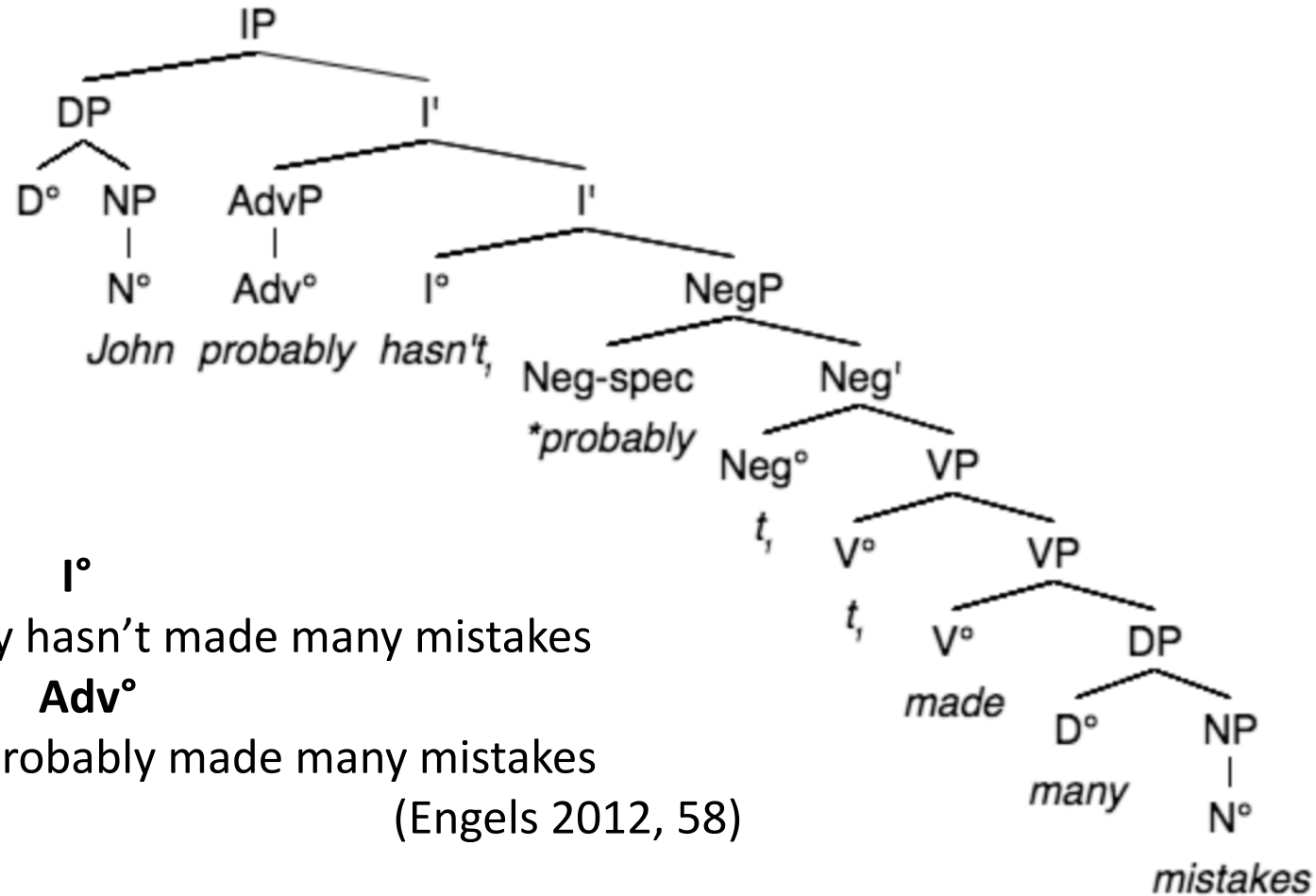
Adv°   I°

(9)a   John probably hasn't made many mistakes

**   I°   Adv°**

(9)b   * John hasn't probably made many mistakes

(Engels 2012, 58)

Corpus data

	ADVERBS	TOTAL HITS	PRE-AUXILLIARY
1.	Really	54,315	26,24%
2.	Allegedly	511	23,68%
3.	Personally	2,897	22,82%
4.	Certainly	9,289	21,55%
5.	Unfortunately	147	20,41%
6.	Frankly	140	16,43%
7.	Once	3,956	13,42%
8.	Usually	4,166	12,84%
9.	Clearly	3,933	10,88%
10.	Perhaps	968	10,54%
11.	Necessarily	440	10,46%
12.	Again	1,374	9,97%
13.	Possibly	3,663	9,72%
14.	Often	11,037	8,48%
15.	Probably	31,774	7,25%
16.	Quickly	2,828	6,19%
17.	Intentionally	385	5,97%
18.	Almost	8,991	5,95%
19.	Still	62,382	5,73%
20.	Already	45,028	3,49%
21.	Always	61,801	3,34%
22.	Completely	4,844	0,78%

ADVERBS: Adverbials that occur in medial position in the clause

TOTAL HITS: Number of clauses in COCA where the adverbial occurs in either pre- or post-auxiliary position

PRE-AUXILIARY: Percentage of clauses in which the adverbial occurs in pre-auxiliary position

Adverbial placement in no specific contexts(?)

(13)a   They **really** would like to have open borders (ABC Special 2018)

(13)b   It **certainly** would make an important psychological difference (PBS: NewsHour 2017)

(13)c   But he **clearly** is going to vote for the final one (Fox: Hume 2002)

(13)d   They **often** can get visas in less than a week (Washington Post 1994)

(13)e   I **almost** had forgotten it

(13)f   He **already** has taken one step (Washington Post 2012)

(13)g   When I read it, I **completely** was drawn to the context (NPR: News & Notes 2007)

Option 3:
Distinct types of adverbials appear in different positions

Adverbial placement in ellipsis constructions

Cinque (1999) argues in favour of a 'functional hierarchy of adverbs'.

There is only one structural position for each adverbial class. 'A cascade of of functional pro-jections … host the various types of adverbs in their speci-fiers' (Engels 2012, 52).

The structure provides a head position between any two ad-verbs where the finite auxiliary may be positioned.

a
$Mood_{speech\ act}$
$Mood_{evaluative}$
$Mood_{evidential}$
$Mod_{epistemic}$
$Tense_{past/future}$
$Mod_{necessity}$
$Mod_{possibility}$
$Aspect_{habitual}$
$Aspect_{delayed}$
$Aspect_{predispositional}$
$Aspect_{repetitive}$
$Aspect_{frequentative}$
$Mod_{volition}$
$Aspect_{celerative}$
$Tense_{anterior}$
$Aspect_{terminative}$
$Aspect_{continuative}$
$Aspect_{continuous}$
$Aspect_{retrospective}$
$Aspect_{proximative}$
$Aspect_{durative}$
$Aspect_{prospective}$
$Mod_{obligation}$
$Aspect_{frustrative}$
$Aspect_{completive}$
$Voice_{passive}$
Verb

b
$AdvP_{speech\ act}$ (frankly,…)
$AdvP_{evaluative}$ (oddly,…)
$AdvP_{evidential}$ (allegedly,…)
$AdvP_{epistemic}$ (probably,…)
$AdvP_{past/future}$ (then,…)
$AdvP_{necessity}$ (necessarily,…)
$AdvP_{possibility}$ (possibly,…)
$AdvP_{habitual}$ (usually,…)
$AdvP_{delayed}$ (finally,…)
$Aspect_{predispositional}$ (tendentially,…)
$AdvP_{repetitive}$ (again,…)
$AdvP_{frequentative}$ (frequently,…)
$AdvP_{volition}$ (willingly,…)
$AdvP_{celerative}$ (quickly,…)
$AdvP_{anterior}$ (already)
$AdvP_{terminative}$ (no longer,…)
$AdvP_{continuative}$ (still,…)
$AdvP_{continuous}$ (always,…)
$AdvP_{retrospective}$ (just,…)
$Aspect_{proximative}$ (soon,…)
$AdvP_{durative}$ (briefly,…)
$AdvP_{prospective}$ (imminently,…)
$AdvP_{obligation}$ (obligatorily,…)
$AdvP_{frustrative}$ (in vain,…)
$AdvP_{completive}$ (partially,…)
$AdvP_{manner}$ (well,…)
Verb

	ADVERB	TOTAL HITS	PRE-AUXILIARY	ADVERB TYPE	HIERARCHY
1.	Really	54,315	26,24%	Speech-act related	No. 1
2.	Allegedly	511	23,68%	Evidential	No. 3
3.	Personally	2,897	22,82%	Speech-act related	No. 1
4.	Certainly	9,289	21,55%	Epistemic	No. 4
5.	Unfortunately	147	20,41%	Evaluative	No. 2
6.	Frankly	140	16,43%	Speech-act related	No. 1
7.	Once	3,956	13,42%	Past	No. 5
8.	Usually	4,166	12,84%	Habitual	No. 10
9.	Clearly	3,933	10,88%	Evaluative	No. 2
10.	Perhaps	968	10,54%	Irrealis	No. 7
11.	Necessarily	440	10,46%	Necessity	No. 8
12.	Again	1,374	9,97%	Repetitive	No. 11
13.	Possibly	3,663	9,72%	Possibility	No. 9
14.	Often	11,037	8,48%	Frequentative	No. 25
15.	Probably	31,774	7,25%	Epistemic	No. 4
16.	Quickly	2,828	6,19%	Celerative	No. 14
17.	Intentionally	385	5,97%	Volitional	No. 13
18.	Almost	8,991	5,95%	Prospective	No. 23
19.	Still	62,382	5,73%	Continuative	No. 17
20.	Already	45,028	3,49%	Anterior	No. 15
21.	Always	61,801	3,34%	Perfect	No. 18
22.	Completely	4,844	0,78%	Completive	No. 24

ADVERBS: Adverbials that occur in medial position in the clause

TOTAL HITS: Number of clauses in COCA where the adverbial occurs in either pre- or post-auxiliary position

PRE-AUXILIARY: Percentage of clauses in which the adverbial occurs in pre-auxiliary position

ADVERB TYPE: Adverbial categories corresponding to the functional projections in Cinque's hierarchy

HIERARCHY: Number corresponding to how high the adverbial category is in Cinque's hierarchy

Summary

- There are certain contexts in which it is obligatory for adverbials to occur in pre-auxiliary position
  - E.g. in VP ellipsis contexts and in clauses with cliticised negation

- There are various theories aiming to explain the structure in clauses with an adverbial > finite auxiliary order
  - Cinque (1997) and Engels (2012) both argue that auxiliaries undergo V°-to-I°-movement and instead propose alternate positions for adverbial placement

In conclusion …

- I don't know whether auxiliaries undergo V°-to-I°-movement in clauses where medial sentential adverbials occur in pre-auxiliary position

- I don't know why adverbials which may occur in post-auxiliary position also sometimes occur in pre-auxiliary position

- I don't know why some adverbials occur in pre-auxiliary position more often than others

… to be continued

Reference list

Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. Oxford: Oxford University Press.

Corpus of Contemporary American English. 2022. Provo: Brigham Young University.

Baker, C. L. 1989. *English Syntax*. Cambridge: The MIT Press.

Engels, Eva. 2006. 'Adverb Placement in English VP Ellipsis Constructions.' Aarhus: University of Aarhus.

Engels, Eva. 2012. *Optimizing Adverb Positions*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Vikner, Sten, 1997. 'V°-to-I°-movement and inflection for persons in all tenses.' In *The New Comparative Syntax*, edited by Lilian Haegeman, 189-213. New York: Addison Wesley Longman Inc.

Vikner, Sten. 1999. 'V°-til-I°-flytning og personflektion i alle tempora.' Reykjavik: Islenkst mál.

Vikner, Sten. 2020. 'The Placement of Finite Verbs.' In *The Cambridge Handbook of Germanic Linguistics*, edited by Michael T. Putnam and B. Richard Page, 365-88. Cambridge: Cambridge University Press.