

Unifying *-ing* without “participles”

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Two puzzles

- Why is *-ing* so morphologically uniform, despite its apparently diverse distribution?
- Why do the exponenda of *-ing* seem to have “mixed-category” properties?

INGVENTORY

1. **Prog-ING** (Progressive “participle”):
The children were **reading**.
2. Nominal “gerunds”: **N-ING** (“*ing-of*”):
The reading of books is rewarding.
3. Clausal “gerunds” (**S-ING** and **D-ING**):
 - **S-ING** (“*Acc-ing*”):
Him having read books is implausible.
 - **D-ING** (“*Poss-ing*”):
His having read books is impressive.
4. **A-ING**: (“participial” modifiers)
The **reading** children were quiet.
Any children **disliking pie** can have ice cream.

Assumptions

- Categorical properties arise from syntactic structure.
- “Morphemes” are explananda, not explanations
- Morphemes must have discoverable, non-disjunctive syntactic exponenda.

Common properties

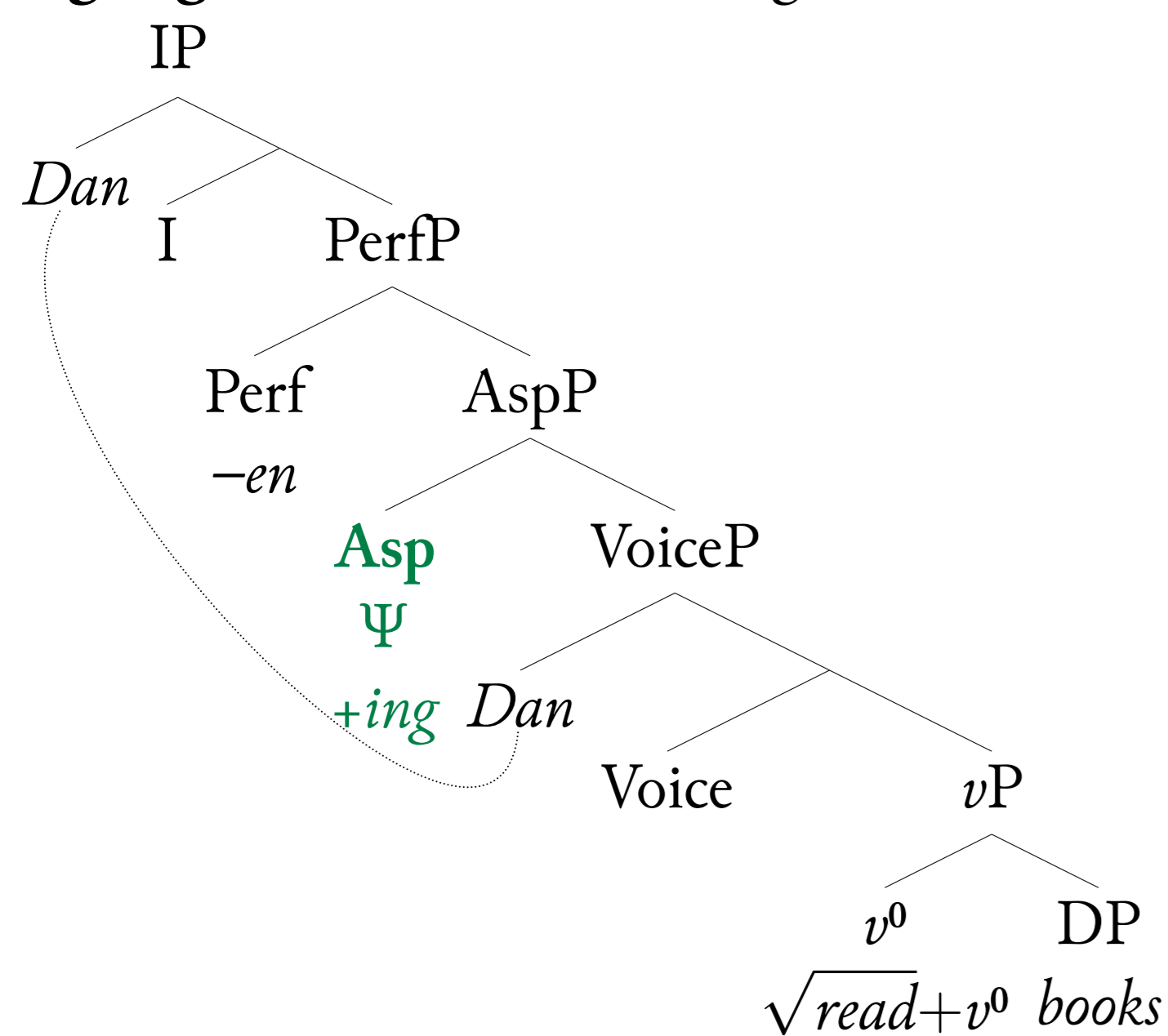
1. exceptionlessly productive
2. almost always semantically transparent
3. no allomorphic differences between types
4. “affix-hopping” pattern (cf. possessive *'s*)
5. Double-*ing* filter cuts across subtypes
6. can incorporate objects (even if verbal)

Interesting because:

- Syntactic environments seem to be arbitrary, disjunctive sets of exponenda
- If different, homophonous affixes, then similarities are coincidental.

Progressive ING

Prog-ing: Dan has been reading books.



Proposal

- *-ing* – progressive, adjectival, nominal, and clausal – realizes a formal feature [Ψ].
- [Ψ] composes with a predicate of eventualities, closing the event argument.
- [Ψ] appears on various syntactic heads.
- Shared morphological properties of diverse *-ing* forms are due to [Ψ].
- Differences are due to
 - different structural properties above or below the head bearing [Ψ]
 - other features on the head bearing [Ψ]

Background

- Gerunds encode a defective Infl⁰ (Horn 1975, Stowell 1981)
 - Perf OK, no modals, no finite tense.
- *-Ing* forms head various projections smaller than TP: *vP*, *VoiceP*, *ProgP*, *PerfP*
 - ING doesn’t c-select its complement.
- *vP*, *VoiceP*, *ProgP*, and *PerfP* all express predicates of eventualities (Parsons 1990, Kratzer 1993, Bach 1986, DeSwart 1998).
 - Possible semantic commonality? Call it [Ψ].

Interpretation of [Ψ]

- [Ψ] existentially binds the eventuality argument of its complement.
 - The event can be related to another event (item 1 of the INGVENTORY).
 - The event can be referred to (items 2, 3, and 4 of the INGVENTORY).
 - Tense and modals are not possible in the complement of ING. Why?
 - Tense and modality also saturate or bind the predicate of events.
 - [Ψ] requires an open eventuality argument to bind.
 - it can’t compose with TP or with a modal projection.

ING-CONSTRUCTIONS: structure and differences

Nominal “gerunds”: *-ing-of*

- Nominal, not clausal, syntax
- [Ψ] on a nominalizing head n^0
- n^0 takes a complement consisting only of \sqrt{root}
- No source for accusative structural case in *nP* → *of*-insertion
 - (1) The [_{*nP*} reading of poetry] is rewarding.

Clausal “gerunds”: *Acc-ing* and *Poss-ing*

- Both are clausal: they can contain perfect *have*.
 - (vs. Horn 1985; Abney 1987 for *poss-ing*)
 - (2) Mary/Mary’s having been rejected from the conference was unfortunate.
- [Ψ]-bearing head appears where a non-finite T head would.
 - This is the defective Infl⁰.
- If the subject moves to [spec,IP], it can move again:
 - (3) Who did you appreciate [_{IP}⟨who⟩ being invited to the conference]?
- or can remain there, receiving default accusative case if needed:
 - (4) We appreciated the undergraduates being invited to the conference.
- This is “*Acc-ing*”.

BUT: If a DP-layer appears above IP:

- The subject moves to [spec,DP] and receives genitive case.
- It cannot be further extracted:
 - (5) *Whose did you resent [_{DP}⟨whose⟩ having left early]?

This is “*Poss-ing*”.

Adjectival “participles”: **Actually clausal!**

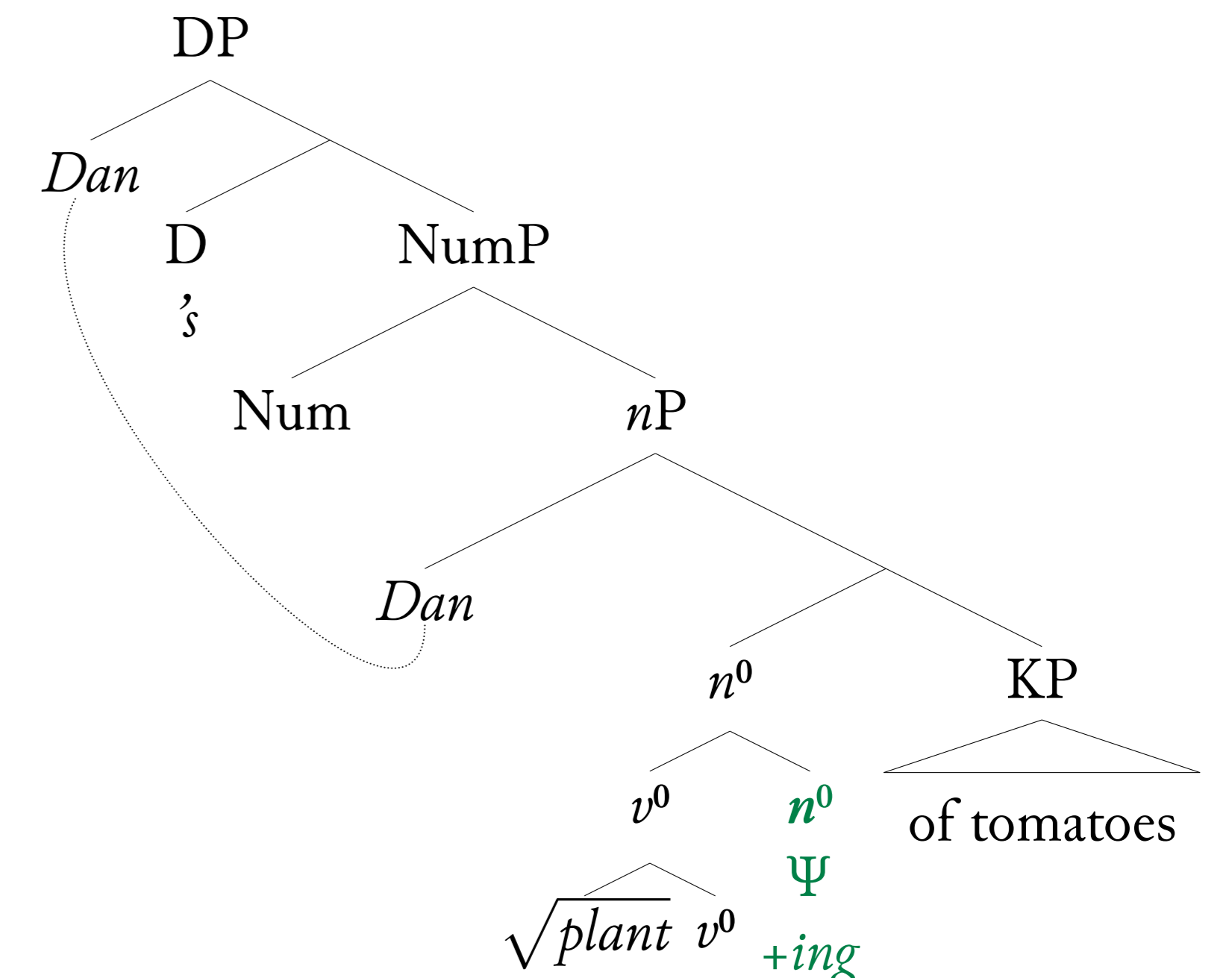
- Complement of *a-Psi* can be a PerfP:
 - (6) Students [having finished the test] may leave the room.
- Prosodically conditioned light modifier fronting derives prenominal cases.

Progressive “participle”: **Prog-ING**

- [Ψ] on the progressive aspect head existentially closes the eventuality argument of the verb phrase
- A separate aspectual feature on Asp provides the progressive aspect.

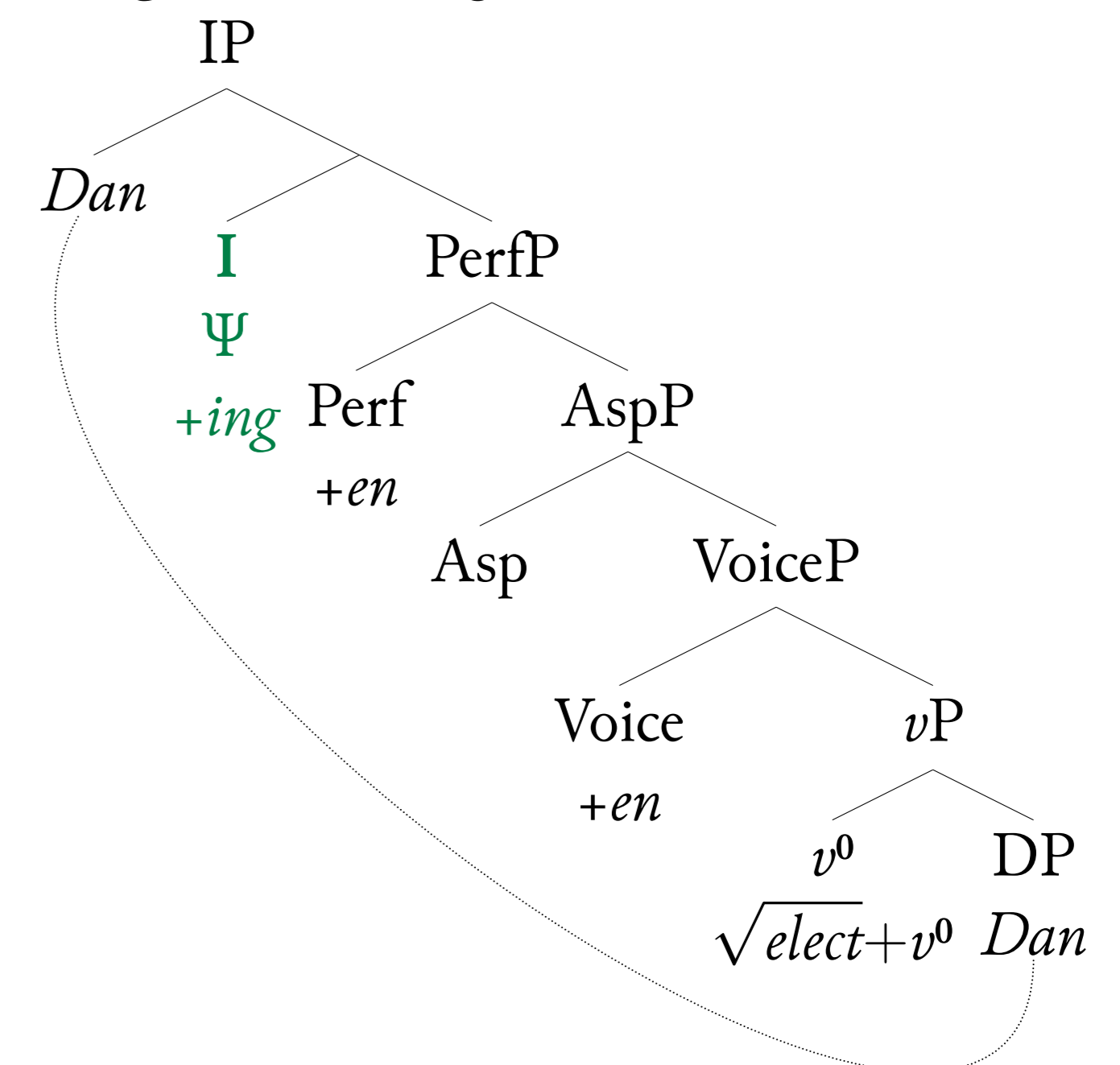
Nominal ING

N-ing: Dan’s planting of tomatoes

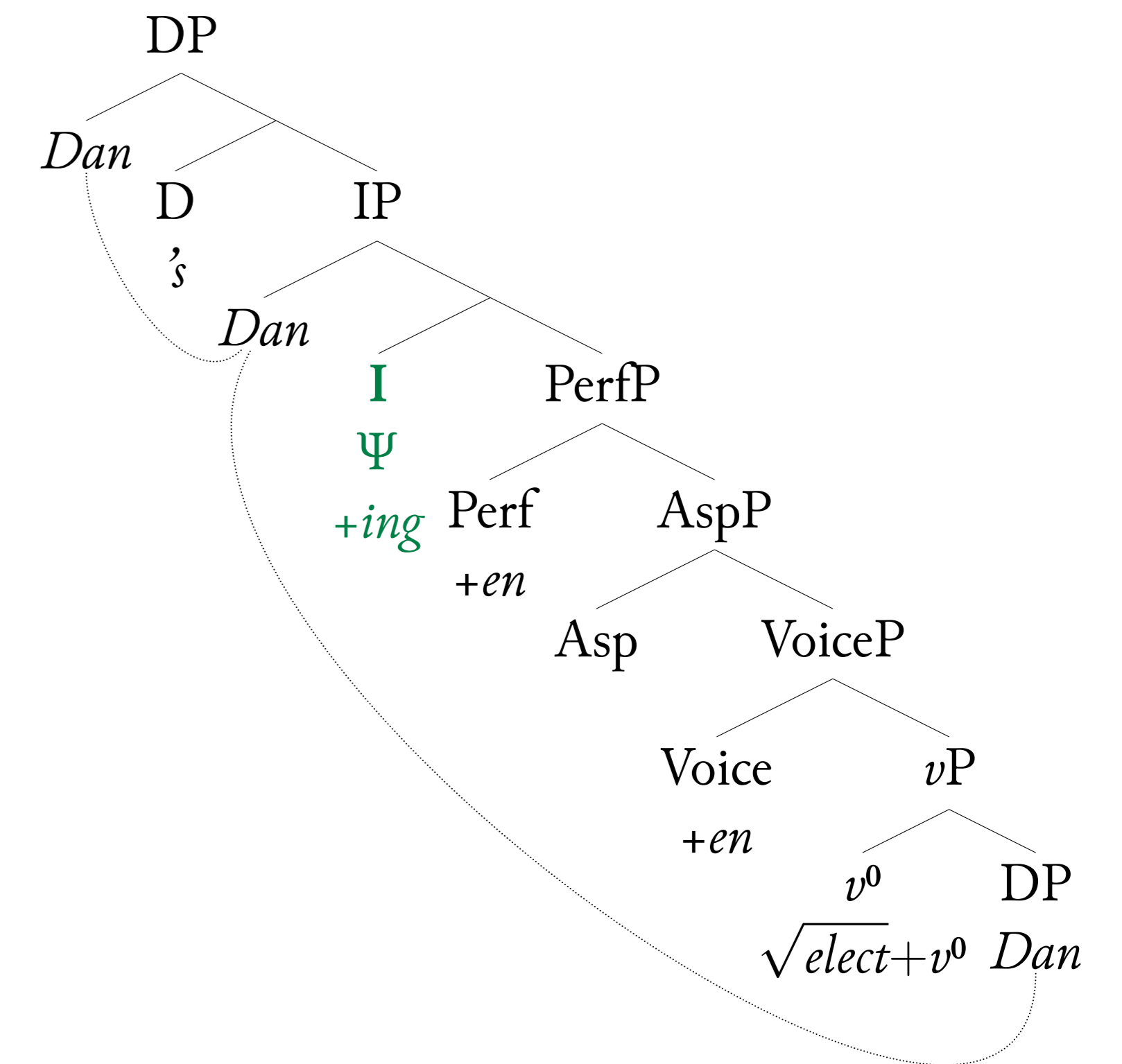


Clausal ING

Acc-ing: Dan having been elected



Poss-ing: Dan’s having been elected



A-ing: Any children disliking pie can have ice cream.

