

Two sources of initial consonant mutation in the Irish clause

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Introduction

Initial consonant mutation (ICM)

Systematic **phonological alternation** of word-initial consonants, depending on **morphosyntactic context**

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My claim

Two distinct sources of mutation-inducing material in the Irish clause

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Systematic **phonological alternation** of word-initial consonants, depending on **morphosyntactic context**

- (1) a. *ní dhíolfaidh siad é* [*díolfaidh*]
NEG L.sell.FUT they it
'They will not sell it.' (L = "Lenition")
- b. *an gcreideann tú í?* [*creideann*]
Q E.believe.PRS you her
'Do you believe her?' (E = "Eclipsis")
- c. *d'fhágfainn* [*fhágfainn*]
HIST L.leave.COND.1SG
'I would leave.'

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Trigger word account of ICM

- Floating phonological material on the right edge of a trigger word

- (2)
- a. *ní*-{L} *díolfaidh* → *ní* ***dhíolfaidh***
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- **Prediction:** trigger word cannot be sensitive to the post-mutation identity of the target
- Demonstrably fails to hold for “historic tense particle” *d'*

My proposal: Two sources of ICM in the Irish clause

Two sources of mutation in the Irish clause:

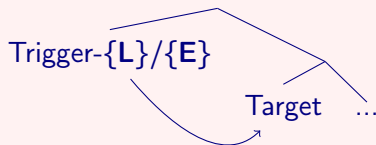
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Figure 1: Type 1 mutation



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Figure 1: Type 1 mutation

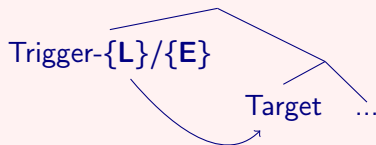
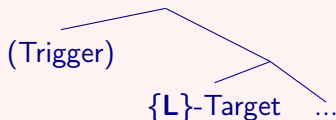


Figure 2: Type 2 mutation



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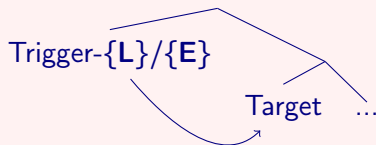
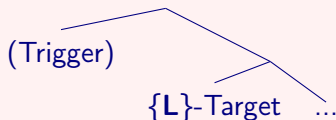


Figure 2: Type 2 mutation



Crucially: still compatible with an autosegmental model of ICM

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ICM in an autosegmental framework

Floating phonological material + Target consonant \longrightarrow Mutated target

e.g. floating features (Lieber 1983)

floating elements (Breit 2019)

floating geometric structure (Iosad 2014)

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Advantages:

- Compatible with strict modularity (Scheer 2010)
- No ad hoc diacritics (cf. Hamp 1951; Pyatt 1997)
- Captures phonological regularities (cf. Stewart 2004; Green 2006)

ICM in an autosegmental framework

Two questions:

- What is the **form** of the floating material?
- What is its **source**?

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- Objections:

(Green 2006)

- Linear non-adjacency: *ár*_[trigger] *dhá gcapall* ‘our two **E**.horses’
- No overt trigger: *dhúisigh mé* ‘I **L**.awoke’
- Morphosyntactic features: *muintir Sheáin* ‘**L**.Seán’s family’

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 - Morphosyntactic features: *muintir Sheáin* ‘**L**.Seán’s family’
- Not necessarily homogeneous (Duffield 1995; Iosad 2014; Laoide-Kemp to appear)

Pre-verbal particles as mutation triggers

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Lenition		Eclipsis	
<i>a^L</i>	direct relative particle	<i>a^N</i>	indirect relative particle
<i>má</i>	conditional particle	<i>go</i>	complementiser
<i>ní</i>	negative particle	<i>an</i>	interrogative particle
		<i>nach</i>	negative complementiser
<i>do/d'</i>	historic tense particle	<i>dá</i>	conditional particle
all <i>-r</i> forms of dependent particles		<i>cá</i>	'where'

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- Seems to be lexical property of each pre-verbal particle

Pre-verbal particles as mutation triggers

- Mutation triggered on **any** following consonant

- (3)
- a. *go* *dtuigim*
 COMP E.understand.1SG
 '...that I understand' (Christian Brothers 1960:213)
- b. *hata a* *dh'* *oirfeadh* *dom*
 hat REL.DIR L.HIST suit.COND to.me
 'a hat that suited me' (Gaois.ie 2022)
- c. *go* *mha* *mhór* *an ónóir* *í*
 COMP E.COP.HIST L.great the honour it
 '...that it was a great honour' (Gaois.ie 2022)

The puzzle of the historic tense particle

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Markers of historic tense:

- Pre-verbal particles
 - Independent: historic tense particle *d'*
 - Dependent: *-r* forms: *ní* vs. *níor*; *an* vs. *ar*
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- Appears only before words that are underlyingly vowel- or *f*-initial

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- a. *d'* ól mé
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'I drank.'
- b. *d'* *fhreagair* mé
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- c. *(*d')* *bhuaigh* mé
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The upshot

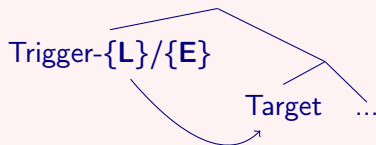
Given that insertion of d' is sensitive to the post-mutation form of the target word, it **cannot be the trigger of lenition**.

My proposal: two sources of ICM in the Irish clause

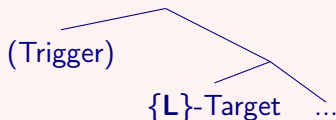
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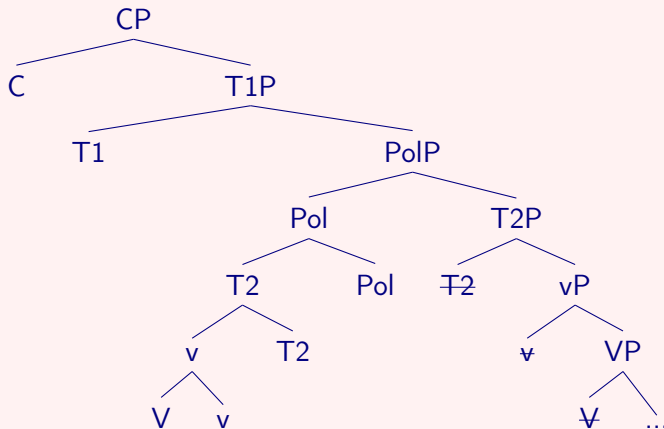
Type 2 mutation:



My proposal: two sources of ICM in the Irish clause

Structure of the Irish finite verb clause:

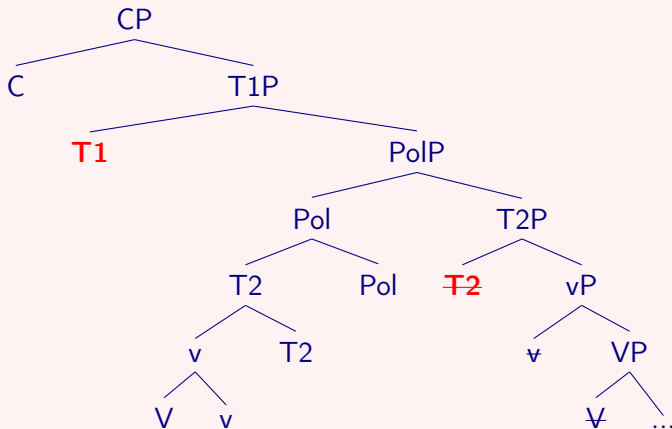
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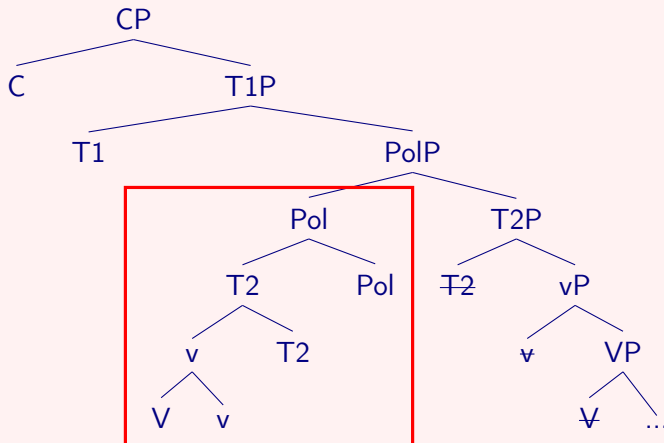


T1: historic/non-historic; **T2:** finer tense distinctions

My proposal: two sources of ICM in the Irish clause

Structure of the Irish finite verb clause:

(McCloskey 2017)



Verbal complex: {V-v-T2-Pol}

My proposal: two sources of ICM in the Irish clause

After linearisation: C - T1 - {verbal complex} - ...

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C-head:

- Hosts all pre-verbal particles *other* than *d'*
- Associated with **Type 1** mutation (trigger word)

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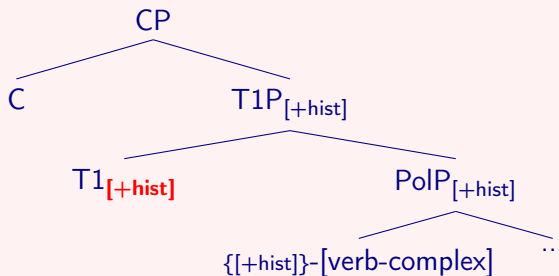
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T1-head:

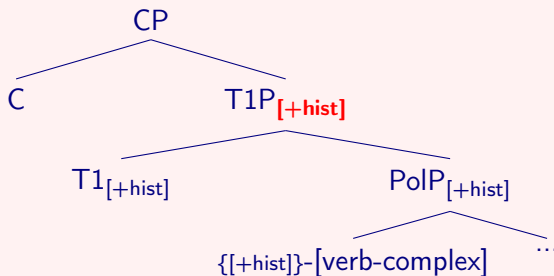
- Expresses historic/non-historic distinction
- Hosts historic tense particle *d'*
- Associated with **Type 2** mutation (prefixation on verb)

Historic tense lenition



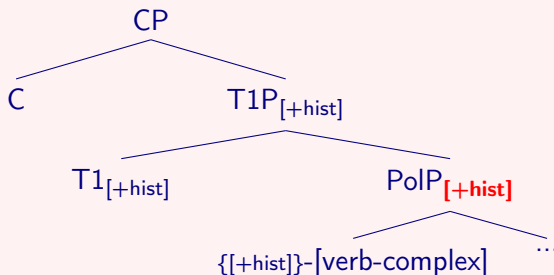
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Historic tense lenition



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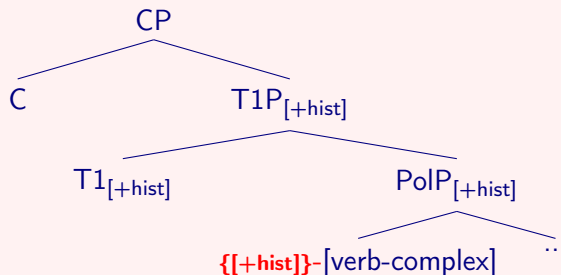
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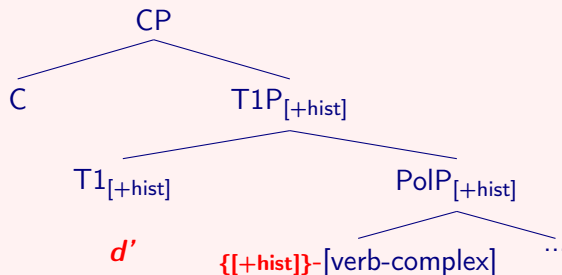


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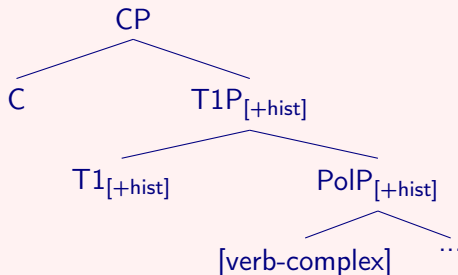
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- Pre-verbal *d'* inserted (if phonological conditions met)

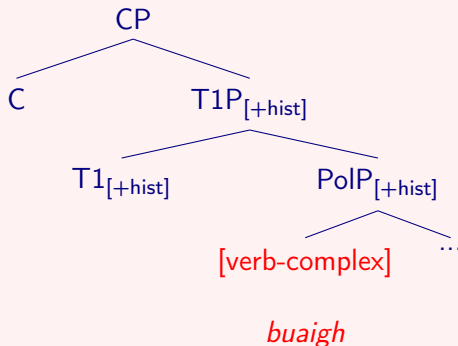
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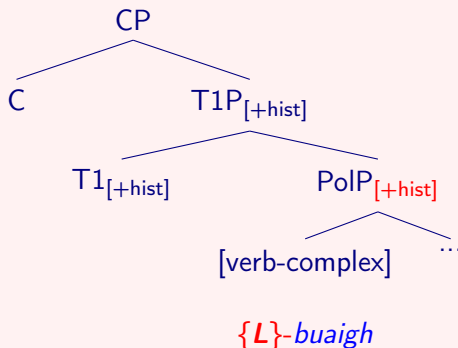
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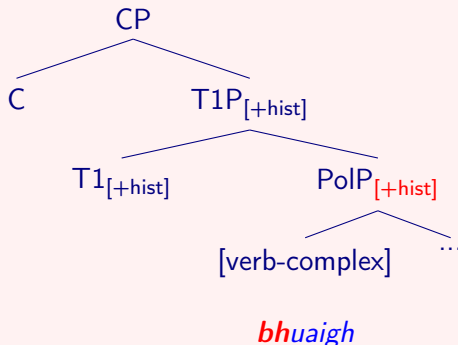
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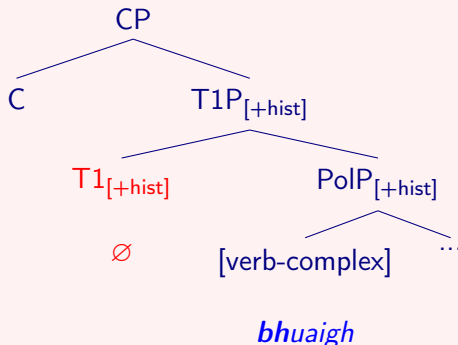
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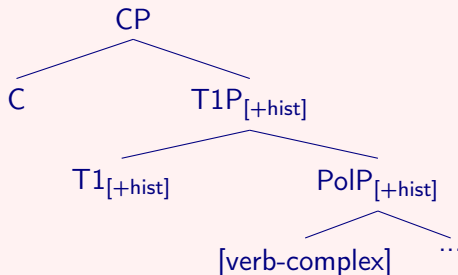
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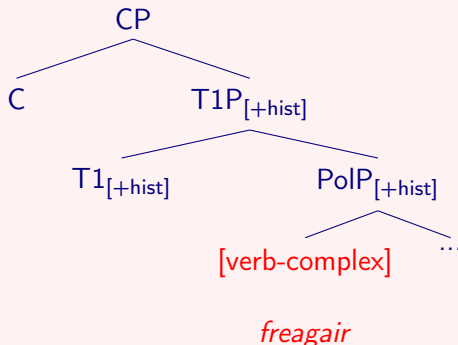
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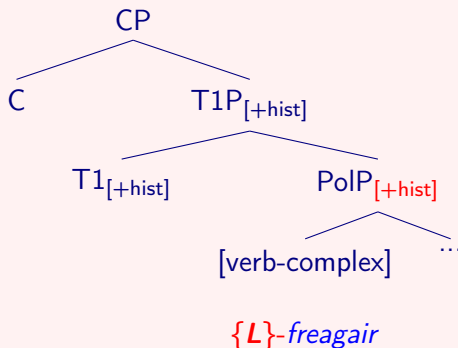
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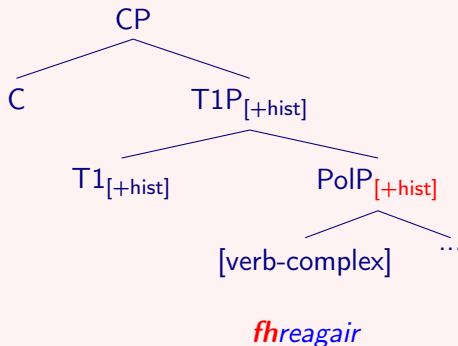
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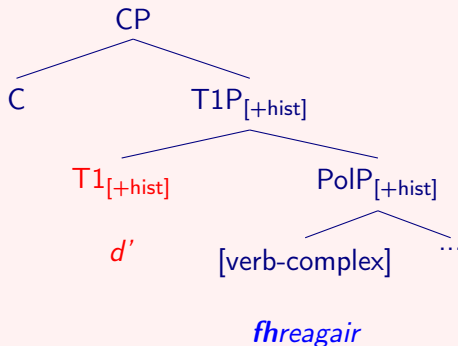
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Historic tense lenition

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 - Historic tense prefix {L}- triggers lenition
 - Historic tense particle *d'* inserted separately
- Spell-out timing paradox is resolved
- Retains all advantages of autosegmental account

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- **Further advantage:** possible extension to copular clauses?

Extending the analysis: copular clauses

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- Structure: Copular particle – Predicate – Subject
- Only distinguish historic vs. non-historic tense
- Historic tense → lenition on predicate

- (5)
- a. *is cosúil le taibhse é*
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'He is like a ghost.'
- b. *ba shaighdiúirí iad*
COP.HIST L.soldiers they
'They were soldiers.'

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Extending the analysis: copular clauses

Historic copular particle *-b*: similar pattern to *d'* (in some contexts)

- (6)
- a. *níor* *-bh* *ealaíontóir í*
NEG.HIST L.COP.HIST artist she
'She was not an artist.'
- b. *níor* *-bh* *fheirmeoir í*
NEG.HIST L.COP.HIST L.soldier she
'She was not a farmer.'
- c. *níor* *(*-bh)* *shaighdiúir í*
NEG.HIST (L.COP.HIST) L.soldier she
'She was not a soldier.'

(Note: Type 1 lenition on *-b* following mutation trigger *níor*-{L})

Summary and conclusions

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 - Unified treatment of historic tense lenition

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Summary and conclusions

Two sources of mutation in the Irish clause:

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 - Retains all advantages of autosegmental model

Go raibh míle maith agaibh! – Thank you!

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Appendix A: Phonology of mutations

Phonological alternations:

(adapted from Green 2006)

Radical	<i>p</i>	<i>t</i>	<i>k</i>	<i>b</i>	<i>d</i>	<i>g</i>	<i>f</i>	<i>s</i>	<i>m</i>	<i>n</i>	<i>l</i>	<i>r</i>
Lenited	<i>f</i>	<i>h</i>	<i>x</i>	<i>v</i>	<i>y</i>	<i>ɣ</i>	∅	<i>h</i>	<i>v</i>	—	—	—
Eclipsed	<i>b</i>	<i>d</i>	<i>g</i>	<i>m</i>	<i>n</i>	<i>ŋ</i>	<i>v</i>	—	—	—	—	—

Appendix B: Evidence for the empty consonantal slot

Evidence for empty consonantal slot in vowel-initial words:

- (7) a. *ithir* /ihir^j/ 'soil'
b. *an ithir* /ən^j ihir/ 'the soil' (Ní Chiosáin 1991:80)
- (8) a. *aois* /i:s^j/ 'age'
b. *an aois* /ən^j i:s/ 'the age' (Ní Chiosáin 1991:81)

Evidence for empty consonantal slot following lenition of *f*:

- (9) a. *feoil* /f^jo:ɲ/ 'meat'
b. *an f^heoil* /ən^j o:ɲ/ 'the meat' (Gussmann 1986:894)
- (10) a. *fáinne* /fan^jə/ 'ring'
b. *an f^háinne* /ən^j an^jə/ 'the ring' (Gussmann 1986:894)

Appendix C: alternative analyses of *d'* insertion

- Inserted to satisfy onset requirement?

- No – see (11)

(11) a. *d'* *fhliuch sí [...]* (12)

HIST L.wet she
'She wet [...].'

- b. *d'* *fhreagair sí*
HIST L.answer she
'She answered.'

a. *(*d')* *léim sé*
(HIST) jump he
'He jumped.'

- b. *(*d')* *rith sé*
(HIST) run he
'He ran.'

- Inserted if syllabification does not violate phonotactic constraints?

- No – see (12)

Appendix D: Vocabulary items

Two distinct effects of [+historic] feature:

- Historic tense **prefix** on verbal complex
- Historic tense **particle** in T1-head

(13) **Historic tense prefix:**

[Pol,+hist] \leftrightarrow {*L*}-

(14) **Historic tense particle:**

- [T1,+hist,+indep] \leftrightarrow /d/ / ____ {empty consonantal slot}
- [T1,+hist,+indep] \leftrightarrow \emptyset (elsewhere)

Appendix D: Vocabulary items

Two distinct effects of [+historic] feature (copular clauses):

- Historic tense **prefix** on predicate
- Historic tense **copular particle** in T1-head

(15) **Historic tense prefix:**
[Pol,+hist] \leftrightarrow {**L**}-

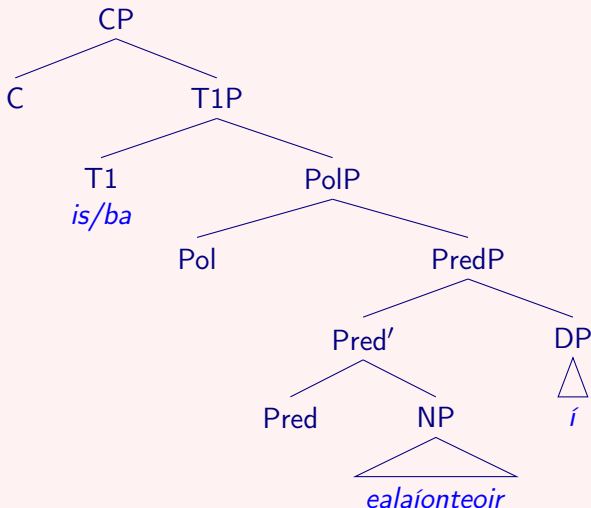
(16) **Historic tense copular particle:**

- [T1,+hist,+dep,+cop] \leftrightarrow /b/ / ____ {empty consonantal slot}
- [T1,+hist,+dep,+cop] \leftrightarrow \emptyset (elsewhere)

Appendix E: Extending the analysis to copular clauses

Structure of the Irish copular clause:

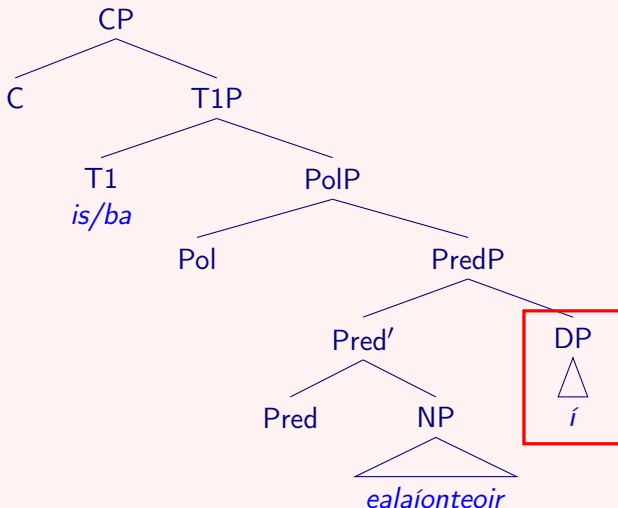
(Doherty 1996; McCloskey 2005)



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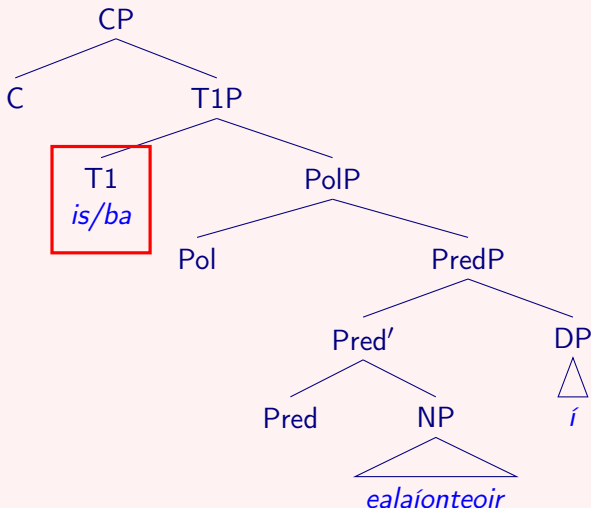
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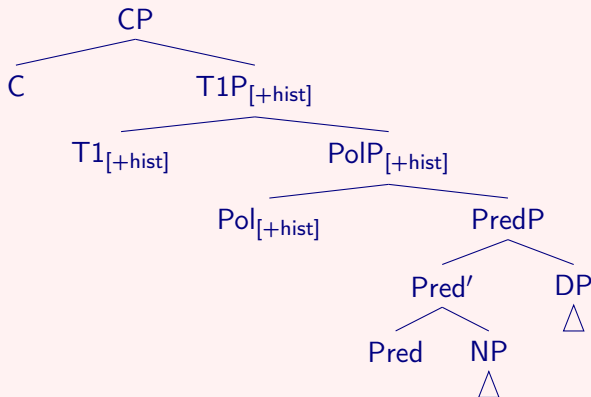
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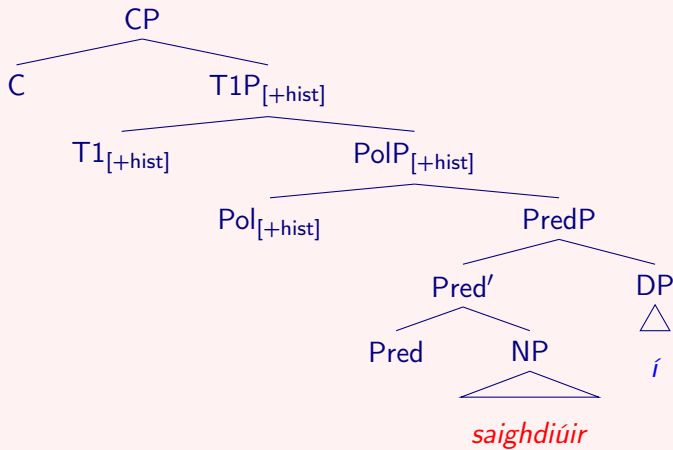
- **Example:** *níor(*-bh) shaighdiúir í* (unlenited form: *saighdiúir*)



Appendix E: Extending the analysis to copular clauses

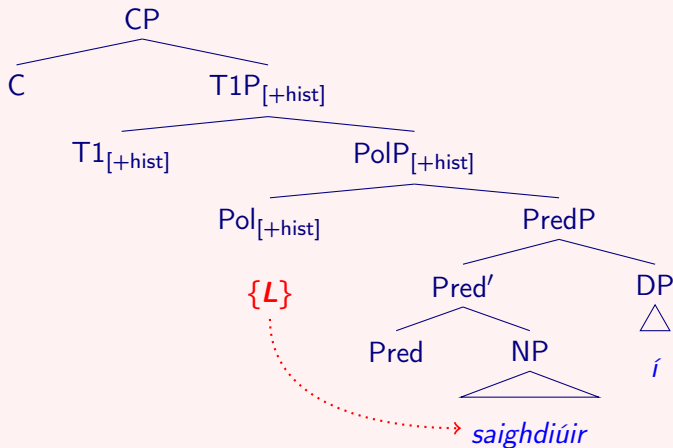
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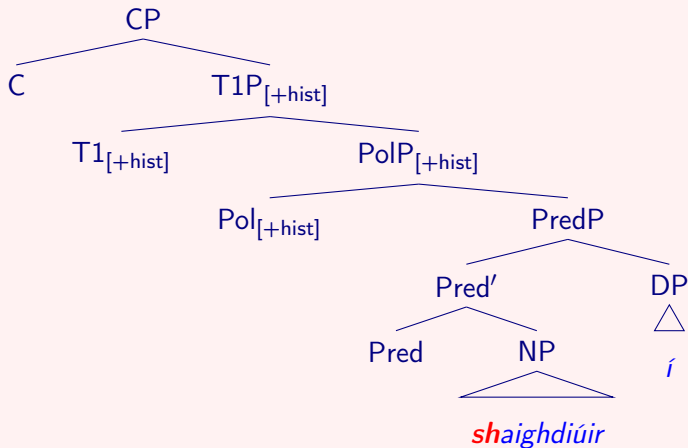
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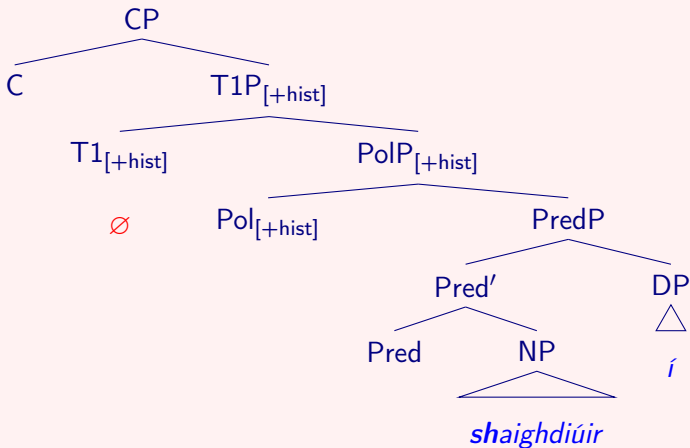
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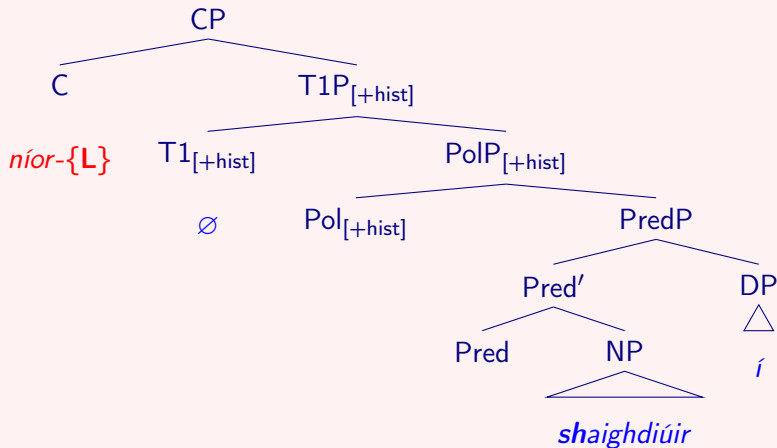
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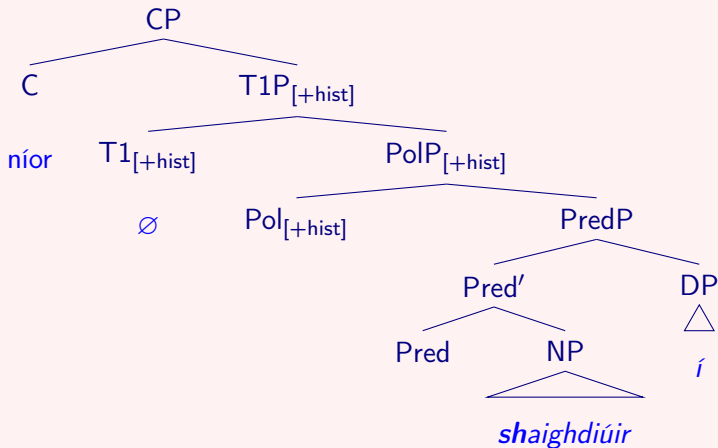
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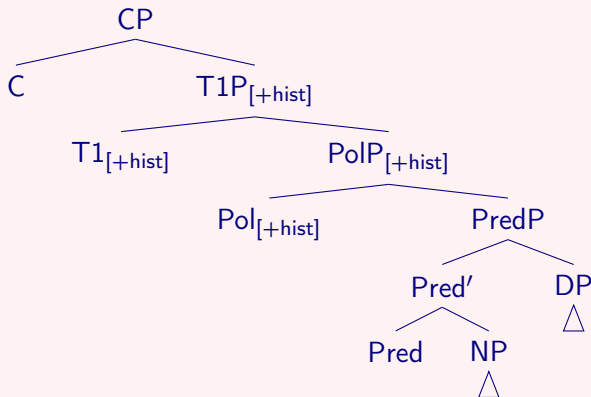
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Appendix E: Extending the analysis to copular clauses

- **Example:** *níor-bh fheirmeoir í*

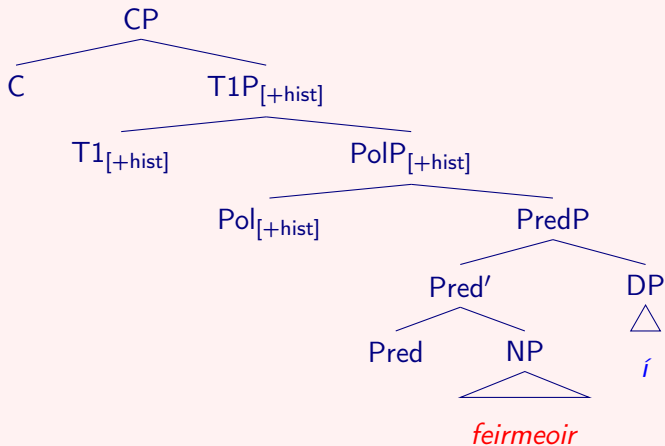
(unlenited form: *feirmeoir*)



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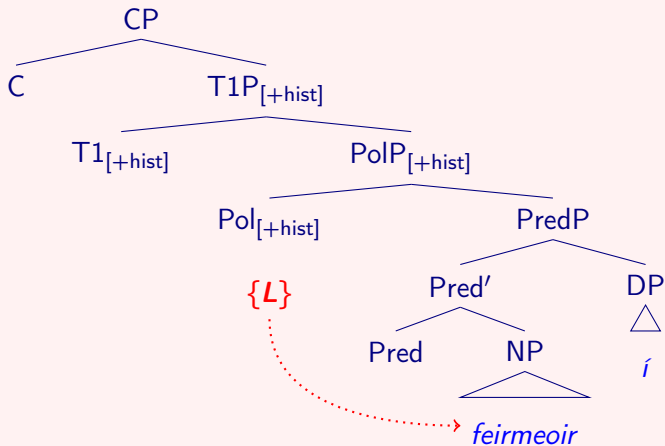
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- **Example:** *níor-bh fheirmeoir í*

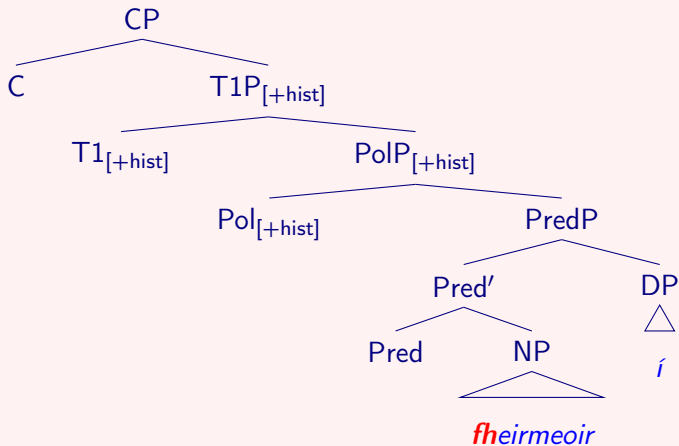
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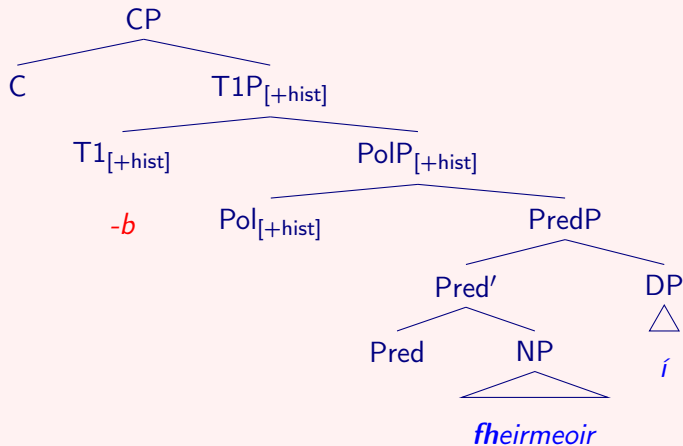
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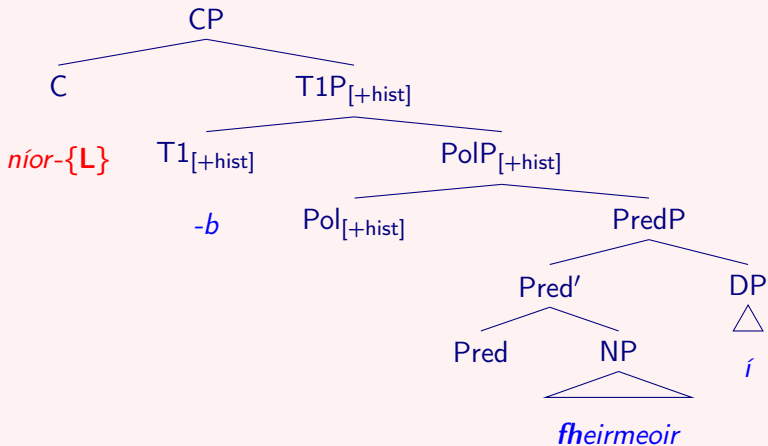
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