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The morphosyntax of the modern Irish verb: Insights from initial mutation

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Abstract. This paper proposes a novel analysis of the Modern Irish verbal complex based on the distribution of Initial Consonant Mutation. I argue that the widely assumed Trigger-Word Hypothesis, which states that Mutation is induced by preceding morphemes, does not adequately account for Irish verbal morphology. Instead, I propose that Mutation is the phonological realization of specific functional morphemes. This analysis captures cases in which Mutation appears without an overt trigger and cases in which putative triggers occur without Mutation. I further argue that this approach supports a more articulated clausal structure for Irish than previously thought. Furthermore, this paper shows that Irish verbal morphology provides evidence for theories of allomorphy that take the conditioning environment to be the entire complex morphosyntactic head. By identifying the morphosyntactic features associated with verbal Initial Consonant Mutation in this way, this paper contributes to a more principled understanding of the role of Mutation in Irish morphosyntax.

Keywords. Irish Initial Consonant Mutation; Verbal Morphology; Nonconcatenative Morphology; Syntax

1. INTRODUCTION. Irish, like all modern Celtic languages, exhibits a rich system of word-initial consonant alternations known as Initial Consonant Mutation (ICM), which occurs across a range of morphosyntactic environments (1).

(1)

a. *bean* bʲanˠ 'woman'	c. *buidéal* bˠɪdʲeːlˠ 'bottle'	e. *bris* bʲɾʲɪʃ 'break'
b. *an* ***bh****ean* ə(nʲ) vʲanˠ 'the woman'	d. *an buidéal* ə(nˠ) bˠɪdʲeːlˠ 'the bottle'	f. ***bh****ris* vʲɾʲɪʃ 'broke'

The data in (1) show that the mutation, called Lenition, is conditioned by morphosyntactic factors rather than phonological ones.[1] For example, in (1b) and (1d), the phonological environment is identical, yet Lenition occurs only with the feminine noun *bean* 'woman' and not with the masculine noun *buidéal* 'bottle'. Moreover, Lenition surfaces after the definite article (1b) but not

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[1] Throughout this paper, Initial Mutations are marked in bold. The Lenition mutation (ᴸ) is a process that generally takes stops and makes them fricatives. The Eclipsis mutation (ᴺ) is a process that makes voiceless consonants voiced and voiced consonants nasal. The phonology of these mutations will be set aside in this paper.

with bare nouns (1a). Taken together, these facts indicate that the distribution of Lenition is sensitive to morphosyntactic features such as gender and definiteness, rather than to phonological context.[2]

The absence of a phonological conditioning environment is further illustrated by the tense alternation in (1e) and (1f). Although the phonological context remains constant, Lenition appears only in the past tense. This contrast further illustrates that the distribution of Lenition is determined by morphosyntactic features (in this case, tense features) rather than phonological factors.

Because ICM is an example of the morphosyntactic conditioning of phonological processes, it has been extensively studied in the phonology and morphology literature (e.g., Hamp 1951; Massam 1983; Lieber 1983; Gussmann 1986; Lieber 1987; Ní Chiosáin 1991, 1994; Pyatt 1997; Green 2006, 2007; Iosad 2010, 2012; Hannahs 2013; Iosad 2014; Pruett 2023; Laoide-Kemp 2024; Pruett 2024, 2025b,a, 2026). Despite this vast literature, relatively little work has addressed the morphosyntactic functions of (Irish) ICM (e.g., Duffield 1995; McCloskey 1990, 2001, 2002; Pruett 2025b). This paper contributes to this second line of research by examining the function of ICM in the Irish verbal complex.

In this paper, I set aside the phonology of ICM and instead focus on its distribution and function in the Irish verbal domain. I argue that ICM is the realization of specific morphosyntactic functional heads, rather than a morphophonological process that results from the presence of a preceding trigger morpheme. This novel approach is framed under the theory of Distributed Morphology (Halle & Marantz 1993, 1994) and accounts for both the appearance of Mutation in the absence of overt triggers and the presence of putative triggers without Mutation, capturing asymmetries that have not been systematically addressed in previous work. In addition, the proposed analysis is a first step in the development of an approach to the distribution of Irish ICM that reduces it to Vocabulary Insertion. In this way, the present proposal is novel and distinct from previous Distributed Morphology approaches to ICM that rely heavily on readjustment rules (Pyatt 1997).

The remainder of this paper proceeds as follows. Section 2 reviews the widely-accepted Trigger-Word Hypothesis for Celtic ICM and highlights its empirical limitations. Sections 3 and 4 present evidence from Tense-Sensitive Lenition and Eclipsis, respectively, demonstrating the challenges the Trigger-Word Hypothesis faces with respect to Irish verbal morphology. Section 5 develops the proposed analysis. Finally, section 6 discusses the implications of the proposal, provides directions for future research, and concludes.

2. Background on Irish Initial Consonant Mutation. Two broad approaches to Celtic ICM have been proposed in the literature. One treats ICM as contextual suppletive allomorphy affecting lexical roots in specific morphosyntactic environments (Green 2006, 2007; Hannahs 2013). On this view, forms such as *bean* (1a) and *b**h**ean* (1b) 'woman' are analyzed as distinct allomorphs, where the latter is selected in the presence of the definite article *an*. While this approach captures the distribution of mutated forms, it treats mutation as an idiosyncratic alternation and does not attribute an independent morphosyntactic function to ICM nor does it recognize the phonological regularity of the mutations. Thus, mutated forms are not derived in the synchronic grammar, they are simply stored forms that developed diachronically.

The second, and more widely adopted, approach is the Trigger-Word Hypothesis (TWH: e.g.,

[2] This description is overly simplified. The conditioning environment is more complex, referencing number and case features in addition to gender and definiteness.

Hamp 1951; Lieber 1983; Massam 1983; Gussmann 1986; Lieber 1987; Ní Chiosáin 1991, 1994; Pyatt 1997). Under this view, ICM is induced by a floating autosegment or diacritic associated with and located at the right edge of a preceding morpheme. Under this analysis, Lenition occurs in (1b) because the definite article bears a Lenition trigger at its right edge ($^{\text{L}}$), which causes the phonological changes of Lenition to occur on the following word (2). In this approach, ICM is a property of trigger morphemes as opposed to having an independent morphosyntactic function. On this view, ICM is nothing more than a morphologically conditioned phonological process.

(2) *an*$^{\text{L}}$ *bean* $\longrightarrow$ *an* *b**h**ean*
DEF$^{\text{L}}$ woman $\longrightarrow$ DEF woman
'the woman'

Although this analysis accounts for data such as (2), it faces difficulties with examples like (1f), where Lenition appears in the absence of any preceding morpheme. In such cases, there is no overt element that could serve as a Mutation trigger. This raises two possibilities: either the TWH must be revised to accommodate such data, or an alternative analysis is required. I adopt the latter approach, as previous attempts to revise the TWH to account for cases such as (1f) have required additional stipulations.

For example, one possible solution would be to posit two distinct mechanisms for ICM. One mechanism would be driven by trigger morphemes and the other would be tied directly to morphosyntactic environments/contexts. However, this approach reduces the explanatory power of the TWH, as it requires an additional mechanism to account for data like (1f). If both trigger-based and construction-specific processes are needed to account for the full range of ICM data, then the role of trigger morphemes becomes unclear and the analysis risks redundancy.

A second possibility is that all ICM are caused by trigger morphemes, but that these triggers are not always overtly realized. While this preserves the core assumptions of the TWH, it requires additional stipulations, including phonological deletion processes that lack independent motivation elsewhere in the language's phonology. As a result, this second possibility shifts the explanatory burden to the phonological component of the grammar without resolving the underlying empirical issues and in doing so, it creates a more powerful phonological module that risks over-generating.

Given these challenges, I adopt an alternative analysis in which ICM is treated as the phonological realization of independent morphosyntactic functional heads. On this view, ICM is the exponent of feature bundles introduced in the syntactic derivation, rather than the result of trigger morphemes. This approach provides a unified account of cases in which ICM appears without an overt trigger and cases in which purported triggers appear without ICM. I illustrate this analysis through two case studies: Tense-Sensitive Lenition and Eclipsis, both of which show that ICM is realized independently of any triggering morpheme.

3. TENSE-SENSITIVE LENITION. One mutation affecting Irish verbs is what I term Tense-Sensitive Lenition (TSL). This mutation occurs across the past tense system: verbs surface in their lenited form in the completive past (3), the past habitual (4), and the conditional (5), the latter involving past tense agreement morphology on a future stem.[3]

[3] I follow Acquaviva (2014) in separating the Irish past tenses into a completive past tense and a non-completive past tense. This distinction has also been said to be a habitual/non-habitual contrast (Ó Siadhail 1989). Given that the past

(3) *b**h**ris* *sé* *an* *chathaoir*
L.break.PAST.COMPL 3.M.NOM.SG DEF chair
'He broke the chair.'

(4) *c**h**eannaío-dh sé* *bláth-anna d-á* *bhean chéile*
L.buy-PAST 3.M.NOM.SG flower-PL for-3.M.SG.POSS wife
'He used to buy flowers for his wife.'

(5) *p**h**óg-fa-dh* *sé* *í*
L.kiss-FUT-PAST 3.M.NOM.SG 3.F.ACC.SG
'He would kiss her.'

In Munster Irish, past tense forms are often accompanied by an optional preverbal particle *do* (6).

(6) *do* *b**h**uail-eas* *leis* *an* *múinteoir*
PAST L.meet-PAST.COMPL.1.SG with DEF teacher
'I met with the teacher.'

While this particle surfaces consistently in Munster, it appears only in a restricted set of environments in other varieties, typically in a reduced form *d'* before vowel-initial (7) and /f/-initial (8) verbs. In these contexts, for all dialects, the particle is obligatory (at least in matrix clauses).

(7) a. *d'-ól* *mé*
PAST-drink.PAST.COMPL 1.SG
'I drank.'
b. *d'-ól-ainn*
PAST-drink-PAST.1.SG
'I used to drink.'
c. *d'-ól-f-ainn*
PAST-drink-FUT-PAST.1.SG
'I would drink.'

(8) a. *d'-f**h**an* *mé*
PAST-L.stay.PAST.COMPL 1.SG
'I stayed.'
b. *d'-f**h**an-ainn* *anseo*
PAST-L.stay-PAST.1.SG here
'I used to stay here.'
c. *d'-f**h**an-f-ainn* *ansin*
PAST-L.stay-FUT-PAST.1.SG there
'I would stay there.'

Except with sonorant-initial verb roots, *do* is consistently accompanied by Lenition. This suggests that past tenses in Irish are realized through multiple exponents, including the particle *do*, Lenition, and ϕ-agreement.

non-completive and conditional share the same agreement morphology, I choose Acquaviva's distinction because it more straightforwardly singles out the past completive as unique. Nothing in the proposal hinges on this assumption.

3.1. **TRIGGER-WORD ANALYSIS OF TENSE-SENSITIVE LENITION**. Because *do* and Lenition frequently co-occur, proponents of the TWH analyze *do* as an ICM trigger (9).

(9) [PAST] $\longleftrightarrow$ *do*$^{\text{L}}$

On this view, Lenition is predicted to occur when *do* is present and to be absent otherwise. However, as shown in (1f) and (3)-(5), Lenition can surface without *do*. This mismatch requires additional explanation under the TWH.

The data are further complicated by cases in which Lenition occurs in past tense environments where *do* cannot surface (10).

(10) a. *dúirt* *Máire gu-r* ***th****óg-adar* *teach*
say.PAST.COMPL Máire that-PAST.COMPL $^{\text{L}}$.build-PAST.COMPL.3.PL house
'Máire said that they built a house.'

b. *dúirt* *Máire gu-r* **(d')-ól-adar* *beoir*
say.PAST.COMPL Máire that-PAST.COMPL *PAST-drink-PAST.COMPL.3.PL beer
'(Int.) Máire said that they drank beer.'

In these examples, Lenition appears following the past completive morpheme *-r*, despite the absence of *do*. Under the TWH, this pattern must be analyzed in one of two ways: either *do* is underlyingly present but deleted in the context of *-r*, or *-r* must itself serve as the trigger for Lenition.

The second option, in which *-r* functions as a Lenition trigger, is the predominant view adopted in the literature (Ní Chiosáin 1991; Laoide-Kemp 2024). On this approach, TSL involves an additional trigger beyond *do*, as in (11).

(11) [PAST, COMPLETIVE] $\longleftrightarrow$ *-r*$^{\text{L}}$ / C^0

Although this approach accounts for the data presented above (notably, when *-r* is absent, Lenition does not occur; ex. 12 below), it does not extend to the full range of TSL data.

(12) *dúirt* *Máire go* ***d****tóg-aidís(t)* *teach*
say.PAST.COMPL Máire that $^{\text{N}}$.build-PAST.3.PL house
'Máire said that they were building a house.'

So, at first glance, the TWH provides a straightforward account of TSL by treating both *do* and *-r* as Lenition triggers. Under this trigger-word analysis, Lenition is predicted to occur whenever these morphemes are present and to be absent otherwise. However, upon further consideration of additional data, it can be observed that Lenition can surface without these triggers, as shown in (3)-(5). Thus, certain Irish verbal morphological data appear to contradict a part of the trigger-word analysis' core prediction. In what follows, I reinforce this contradiction by further showing that *do* and *-r* can also occur without Lenition.

3.2. **TENSE-SENSITIVE LENITION TRIGGERS WITHOUT LENITION**. In the impersonal voice, Irish verbs generally do not undergo TSL (Ó Siadhail 1989; Ó Sé 2000). In Connacht and Ulster varieties, this restriction is typically limited to the past completive alone, whereas in Munster it often extends across the entire past tense system (13).

(13) *déar-fa-í* *gu-r-b* *anso a* *dh'-fhoghlamaigh*
say-FUT-PAST.IMPERS that-PAST.COMPL-COP.IRR here REL PAST-learn.PAST.COMPL
sé *é*
3.M.NOM.SG 3.M.ACC.SG

'It would be said that here is where he learned it.' (Ó Sé 2000: pg. 309)[4]

Interestingly, even in the absence of Lenition, *do* (14) and *-r* (15) can still surface in the impersonal voice.

(14) *do* *marcál-adh* *cúig-ear* *nó séis-ear* *le* *breasal na*
PAST mark-PAST.COMPL.IMPERS five-HUM or six-HUM with blood DEF.PL
gcaeireach
sheep.GEN.PL

'Five or six people were marked with the blood of the sheep.' (Ó Sé 2000: pg. 324)

(15) *is* *dóigh* *li-om* *gu-r* *cuir-eadh* *deireadh leis*
COP expectation with-1.SG that-PAST.COMPL put-PAST.COMPL.IMPERS end with
an *mbád*
DEF boat.DAT.SG

'I expect that the boat was finished.' (Ó Sé 2000: pg. 332)

These data show that the distribution of TSL is sensitive not only to tense features, but to voice features as well. In particular, the presence or absence of Lenition cannot be reduced to the distribution of trigger morphemes: as (13)-(15) demonstrate, the purported triggers *do* and *-r* may appear without a following Mutation. This suggests that Mutation and its putative triggers are not in a simple dependency relation, but instead reflect distinct morphosyntactic feature bundles. TSL is conditioned by both tense and voice features, whereas *do* and *-r* are sensitive only to tense.

3.3. **INTERIM SUMMARY**. This section has shown that TSL is conditioned not only by tense features, but by voice features as well. TSL surfaces in the past tenses of the active voice, but not in the impersonal voice. At the same time, the morphemes *do* and *-r*, while also associated with the past tenses, have distinct distributions from each other and from TSL. The particle *do* appears in matrix clauses across all past tenses, whereas *-r* is restricted to non-matrix contexts and only in the past completive. Taken together, these facts suggest past tense features in the Irish verbal complex are realized through multiple morphemes, each having its own unique distribution and each sensitive to different morphosyntactic features.

These data also pose a challenge for the traditional TWH for Celtic ICM. Under that approach, ICM is predicted to occur only in the presence of a trigger morpheme and to occur whenever that trigger is present. However, the data presented in this section show that TSL can arise without an overt trigger, and that supposed triggers for TSL can surface without it. This mismatch indicates that the distribution of ICM cannot be reduced to the distribution of trigger morphemes, and instead points toward an analysis in which ICM is more directly tied to the morphosyntactic structure of Irish. In the following section, I turn to the second major Initial Mutation of Irish (Eclipsis) and show that it too poses similar challenges.

[4] Glossing and translations of examples from Ó Sé (2000) are my own.

4. VERBAL ECLIPSIS. There is a second major ICM in Irish called Eclipsis. Like TSL, it occurs with verbs in specific morphosyntactic environments. However, unlike TSL, it is less clear which morphosyntactic features Eclipsis is sensitive to. For example, Eclipsis (^{N}) appears with verbs across most tenses following almost all complementizers (16)-(19).

(16) *an* ***g****ceann-óir* *bláth-anna dho do* *bhean chéile*
Q ^{N}.buy-FUT.2.SG flower-PL for 2.SG.POSS wife
'Will you buy flowers for your wife?'

(17) *dúirt* *sé* *go* ***g****ceannaí-odh* *sé* *beoir gach oíche*
say.PAST.COMPL 3.M.NOM.SG that ^{N}.buy-PAST.3.SG 3.M.NOM.SG beer each night
'He said that he used to buy beer every night.'

(18) *bhí* *súil ag-am nach* ***d****tiocf-adh* *sé*
be.PAST.COMPL hope at-1.SG that.NEG ^{N}.come.FUT-PAST.3.SG 3.M.NOM.SG
'I hoped that he would not come.'

(19) *muna* ***g****ceann-aím* *bia dhu-it*, *cad a* *íosfa-ir*?
if.NEG ^{N}.buy-PRES.1.SG food for-2.SG what REL eat.FUT-2.SG
'If I do not buy you food, what will you eat?'

The one exception is the past completive where *-r* and TSL replace Eclipsis after the complementizer (20).

(20) *a-r* ***th****áinig* *sí*?
Q-PAST.COMPL ^{L}.come.PAST.COMPL 3.F.NOM.SG
'Did she arrive?'

Finally, it should be noted that Eclipsis of verbs only occurs following a complementizer and does not surface independently. This highlights an important contrast between Eclipsis and TSL, which can occur without preceding morpheme.

4.1. **TRIGGER-WORD ANALYSIS OF ECLIPSIS**. Because of the close relationship between the presence complementizers and verbal Eclipsis, this Mutation pattern has often been taken as some of the strongest evidence for the TWH. The reason for this is that, unlike TSL, Eclipsis appears to conform to the prediction that Mutation should only occur in the presence of a trigger. On this view, Irish complementizers are analyzed as triggers for Eclipsis and bear an Eclipsis-triggering feature at their right edge (21).

(21) a. [COMP, Q] $\longleftrightarrow$ *an*^{N}
b. [COMP] $\longleftrightarrow$ *go*^{N}
c. [COMP, NEG] $\longleftrightarrow$ *nach*^{N}
d. [COMP, COND, NEG] $\longleftrightarrow$ *muna*^{N}

To account for the absence of Eclipsis in the past completive (20), one could postulate that the Eclipsis-triggering feature is underlyingly present but that the *-r* morpheme following the complementizer does not undergo Eclipsis. This analysis is quite plausible, given that /r/ does not participate in Eclipsis elsewhere in the language. On this view, Eclipsis can be treated as consistently following complementizers, making it appear to align closely with the predictions of the TWH. However, examining a broader range of data shows that this pattern does not generalize.

4.2. **ECLIPSIS TRIGGERS WITHOUT ECLIPSIS**. While Eclipsis does not surface independently of a complementizer with Irish verbs, the opposite does not hold. For example, in copular constructions, where no finite verb is present, the same complementizers that trigger Eclipsis on verbs can appear before nouns (and adjectives) without inducing Eclipsis (22)-(23).

(22) *an feirmeoir é* (****bh****feirmeoir*)?
Q farmer 3.M.ACC.SG (*[N].farmer)
'Is he a farmer?'

(23) *dúirt tú go feirmeoir é* (****bh****feirmeoir*)
say.PAST.COMPL 2.NOM.SG that farmer 3.M.ACC.SG (*[N].farmer)
'You said that he is a farmer.'

These data suggest that Eclipsis is sensitive to the category of the following word. It occurs with verbs but not with other lexical categories. Such category-sensitivity is a widely attested property of morphemes but not of phonological autosegments (Inkelas 2014; Gouskova 2018). Thus, while Eclipsis appears to satisfy the TWH's prediction that Mutation should not occur without a trigger morpheme, it fails to satisfy the converse prediction that putative triggers should not surface without Mutation. This asymmetry, together with its category-sensitivity, indicates that Eclipsis is morphemic rather than a morphologically conditioned phonological process.

4.3. **INTERIM SUMMARY**. This section has shown that Eclipsis, like TSL, poses significant challenges for the TWH. While Eclipsis appears to be dependent on the presence of a complementizer, the data show that these "triggers" can surface without an accompanying Mutation. Furthermore, the data show that Eclipsis is sensitive to the morphosyntactic category of the following word. These patterns indicate that Eclipsis, like TSL, is sensitive to the distribution of specific morphosyntactic features and not the presence of a trigger morpheme. This further confirms the central argument of this paper that ICM in Irish are, in fact, the realizations of their own independent morphemes and not a morphophonological process caused by certain triggers. Given the challenges that the TWH faces, in the next section, I propose a novel analysis of Irish verbal ICM that reduces the distribution of Mutation to Vocabulary Insertion, which in turn provides reasonable solutions to the issues that arise from the TWH.

5. ANALYSIS. The preceding sections have shown that the distribution of Irish ICM cannot be reduced to the presence of trigger morphemes. Instead, ICM pattern independently in their distribution of the other morphemes in the verbal complex, indicating that they realize their own set of morphosyntactic features. A consquence of this finding is that the TWH for Celtic ICM does not sufficiently capture the Irish data.

The identification of these challenges to the TWH is not entirely new. Previous work has noted similar issues in Irish (e.g., Green 2006). For instance, when a coordinated AP modifies a feminine noun, both adjectives are lenited, even though the noun would have to serve as the trigger (24). This long-distance application of Mutation across a conjunction is not straightforwardly accounted for under a TWH analysis.

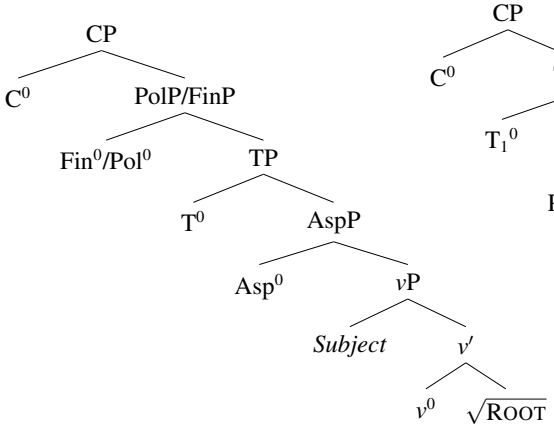
(24) *bean c**h**liste agus d**h**eas*
woman [L].clever and [L].nice
'a clever and nice woman'

Although these issues with the TWH are not a new discovery, this paper extends their empirical domain to Irish verbal morphology. Previous work has focused primarily on instances of ICM that apply across words, whereas the present analysis shows that similar issues arise within a single word. The TWH, therefore, faces challenges at both the phrase and word level.

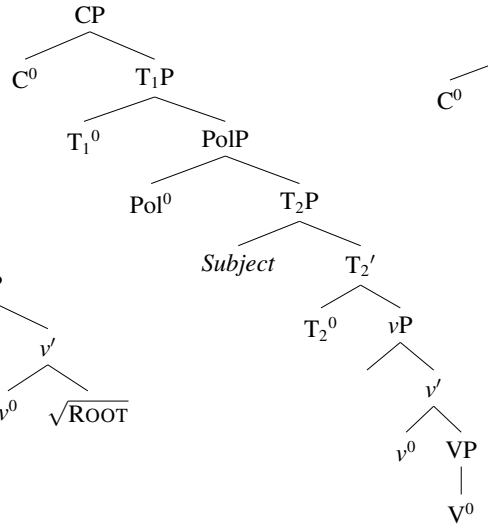
On the basis of these challenges, I propose that Irish ICM should be treated as the exponent of an independent morpheme, influenced by but not dependent on any preceding "trigger". More specifically, I propose that the phonological autosegment which is responsible for the phonological effects of ICM (Lieber 1983; Gussmann 1986; Ní Chiosáin 1991; Pruett 2023) is the sole exponent of a specific morphosyntactic functional head with a precise set of morphosyntactic features. Under this proposal, ICM are not triggered but are analyzed as being entirely morphemic on their own. This contrasts with the TWH which treats ICM as a morphologically conditioned phonological alternation (Pyatt 1997; Iosad 2012). The task that remains is to determine which features are realized by ICM and how they correspond to functional heads in the morphosyntactic structure of the Irish clause.

5.1. **PREVIOUS ANALYSES OF IRISH CLAUSAL SYNTAX**. To address these questions, the structure of the Modern Irish clause and the composition of the verbal complex must first be considered. Three main proposals have been put forward in the recent literature. The first (25), due to Acquaviva (2014), derives VSO order through head movement of the verb to Fin^0/Pol^0, with the subject remaining in Spec-*v*P. The second (26), proposed by McCloskey (2017), instead raises the subject to Spec-T_2P while the verb moves to Pol^0. Finally, the third proposal (27), developed by Ostrove (2018), also maintains the subject in Spec-*v*P, but derives VSO order via verb movement to T^0 as opposed to a higher position in the left periphery. While these approaches differ in the position of the subject and the final landing site of the verb, they all converge on a richly articulated functional structure for the Modern Irish clause.

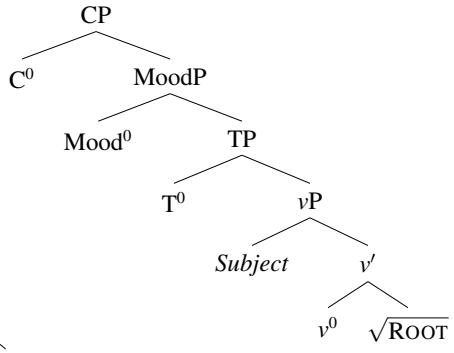
(25) Acquaviva (2014)



(26) McCloskey (2017)



(27) Ostrove (2018)



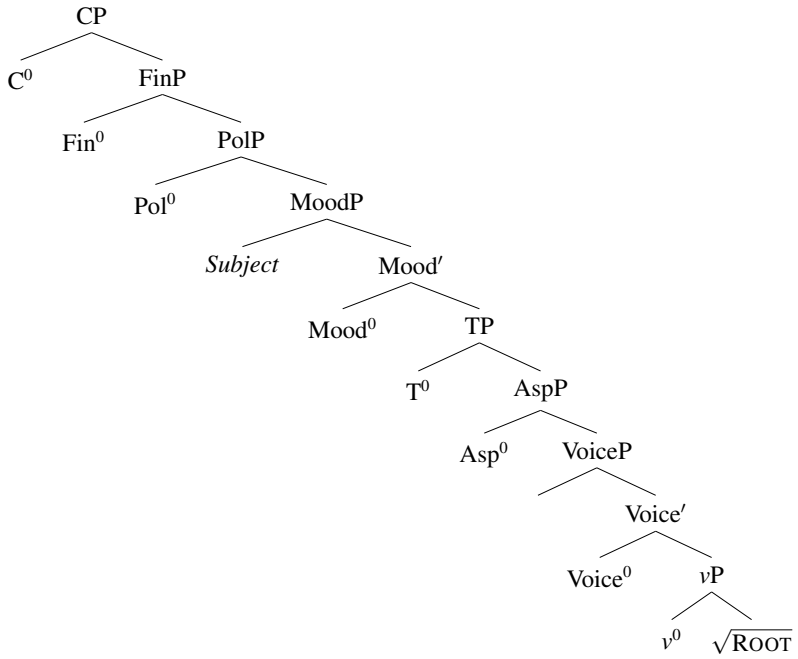
Setting aside the differences among these proposals, several shared assumptions are relevant here. First, all accounts posit at least one projection between TP and CP. Second, they agree that the verb raises to a position higher than the subject's final landing site. I adopt these points of

consensus in the present analysis. With respect to subject position, I follow McCloskey in assuming that the subject raises out of Spec-*v*P, but place it in Spec-MoodP rather than Spec-TP.[5]

A limitation shared by all three of these proposals is that they, either implicitly or explicitly, assume the TWH. For example, in each previous account, morphemes such as *do* and *-r* are taken to occupy the head of a projection between the verbs final landing site and CP. This choice implicitly suggests that TSL is not an independent morpheme, rather that it is triggered by either *do* or *-r*. Therefore, under current analyses, there is no independent functional projection in the syntactic structure that can be realized as ICM. However, as shown in the previous sections, both TSL and Eclipsis have distributions that are entirely independent of morphemes such as *do*, *-r*, and C^0. This suggests that existing proposals do not provide sufficient functional structure to host all morphemes of the Irish verbal complex, including all morphemes that are realized as ICM.

To address these issues, I propose that the previous analyses are each partially correct. However, rather than representing competing structures, I argue that the projections they identify should all be present in the Irish verbal complex. This allows each morpheme to be mapped directly onto a functional head in the syntax. I therefore propose the structure in (28).

(28) Proposed Irish Clause Structure

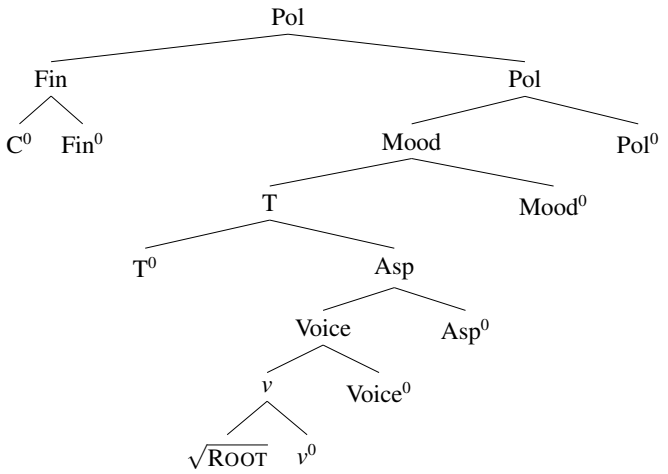


In this structure, $Mood^0$ bears a ϕ-probe that licenses the subject and attracts it to its specifier, satisfying the EPP, and serves as the locus of verbal ϕ-agreement. Following McCloskey and Acquaviva, I assume that the verb root raises to Pol^0. I further assume, following Acquaviva, that $Voice^0$ and v^0 host stem-internal alternations that are not relevant here, and that Asp^0 is null in non-paraphrastic tenses. Following McCloskey (1996), I assume that C^0 undergoes post-syntactic lowering to Pol^0, yielding the verbal complex in (29).[6]

[5] For space reasons, this choice is not further justified here.

[6] Heads are projected as if they have already been linearized.

(29) Proposed Irish Verbal Complex



With this structure in place, the distribution of TSL and Eclipsis can be straightforwardly derived through standard Distributed Morphology-style Vocabulary Insertion.

5.2. **A DISTRIBUTED MORPHOLOGY ANALYSIS OF TENSE-SENSITIVE LENITION**. I propose that TSL is the realization of T^0 bearing a [+PAST] feature. Given the background assumptions about the distribution of other verbal morphemes in Irish, only a small set of functional heads are plausible candidates for hosting TSL—namely T^0, Pol^0, Fin^0, and C^0. C^0 can be excluded, since TSL occurs after a range of complementizers rather than being tied to a specific C^0. Fin^0 can likewise be ruled out, given that morphemes such as *do* and *-r* occupy the position between where the verb moves to (PolP) and CP. This leaves T^0 and Pol^0 as the remaining candidates. Since TSL can occur in both declarative clauses (e.g., ex. 3) and polar questions (20), it cannot be conditioned by polarity features. Therefore, TSL is best analyzed not as the realization of Pol^0, but instead as the exponent of $T^0_{[+\text{PAST}]}$ (30).

(30) $T^0_{[+\text{PAST}]} \longleftrightarrow {}^{\text{L}}$

However, this single Vocabulary Item overgenerates, predicting that TSL should surface in environments where it is not attested. As discussed in section 3.2, TSL does not occur in the impersonal voice in Munster Irish. To account for this, a second contextual allomorph must be introduced (31).[7]

(31) $T^0_{[+\text{PAST}]} \longleftrightarrow \emptyset$ / $\text{Voice}^0_{[\text{IMPERSONAL}]}$

Together, these two allomorphs of $T^0_{[+\text{PAST}]}$ capture the voice-conditioned distribution of TSL.

To account for TSL's distribution in embedded contexts—specifically, its appearance after complementizers ending in *-r* but not elsewhere—I propose that the exponent of TSL ($^{\text{L}}$) is present in all past tense clauses. In embedded environments, TSL fails to surface except after *-r* because, in all other contexts, both Eclipsis and TSL would be present in the same derivation. In these contexts, I stipulate that when both Lenition and Eclipsis are present, the phonology realizes Eclipsis rather than Lenition for sonority reasons.

[7] In other varieties of Irish, where only the past completive impersonal lacks TSL, the contextual restriction would need to include $\text{Asp}^0_{[+\text{COMPL}]}$ as well.

Under this analysis, TSL is treated as the realization of T^0, allowing its distribution to follow directly from the conditions governing Vocabulary Insertion. Because *do*, *-r*, and TSL correspond to distinct morphosyntactic heads, they are predicted to co-occur whenever their respective insertion conditions are satisfied. Conversely, when only one of these morphemes is licensed, only that morpheme will surface. This correctly predicts that *do* and *-r* may appear without TSL, thereby resolving the asymmetry problem faced by the TWH.

More generally, the distribution of TSL follows from standard assumptions about Vocabulary Insertion, including contextual allomorphy, rather than from a phonological triggering mechanism. As a result, TSL's distribution is determined by morphosyntactic features and contextual allomorphy instead of depending on phonological interactions with other morphemes in the Irish verbal complex.

5.3. **A DISTRIBUTED MORPHOLOGY ANALYSIS OF ECLIPSIS**. Turning now to Eclipsis, it has already been established that Eclipsis occurs only after complementizers and is absent in matrix clauses. To capture this asymmetry, one must first identify the morphemes involved in the alternation. One relevant factor is the distribution of C^0, which is overt in non-matrix clauses but null in matrix clauses. Given this pattern, I propose that Eclipsis is the realization of a functional head X^0 in non-matrix environments. In matrix clauses, since Eclipsis does not occur, I propose a null allomorph for the X^0 morpheme. The Vocabulary Items in (32) capture this contrast in the realization of X^0 between matrix and non-matrix clauses.

(32) a. $X^0 \longleftrightarrow {}^{N} / C^0_{[\text{-MATRIX}]}$ b. $X^0 \longleftrightarrow \emptyset / C^0_{[\text{+MATRIX}]}$

In the past completive tense, Eclipsis alternates with *-r*, which can be captured by introducing a third allomorph (33). Note that [±COMPLETIVE] is an aspectual feature and not a tense feature. For this reason, the conditioning environment for *-r* must reference $Asp^0_{[\text{+COMPL}]}$.

(33) $X^0 \longleftrightarrow$ *-r* $/ C^0_{[\text{-MATRIX}]}$ & $Asp^0_{[\text{+COMPL}]}$

Finally, in matrix clauses, both Eclipsis and *-r* alternate with *do* in the past tenses. This pattern can be captured with a fourth and final allomorph of X^0 (34).

(34) $X^0 \longleftrightarrow$ *do* $/ C^0_{[\text{+MATRIX}]}$ & $T^0_{[\text{+PAST}]}$

The remaining question is how to identify X^0. Following previous work in which *do* and *-r* occupy the head of the projection immediately below CP (McCloskey 2017), I take X^0 to be Fin^0 based on the structure in (28). This choice is further supported by data such as (22) and (23), where the absence of a finite verb correlates with the absence of Eclipsis. Since finiteness is a feature associated with verbs, Eclipsis only surfaces in the presence of a verbal categorizer. Based on these facts, with minor revisions, the distribution of Eclipsis can be captured through Vocabulary Insertion of the following allomorphs of Fin^0 (35).

(35) a. $Fin^0 \longleftrightarrow {}^{N} / C^0_{[\text{-MATRIX}]}$ & v^0
b. $Fin^0 \longleftrightarrow$ *-r* $/ C^0_{[\text{-MATRIX}]}$ & $Asp^0_{[\text{+COMPL}]}$
c. $Fin^0 \longleftrightarrow$ *do* $/ C^0_{[\text{+MATRIX}]}$ & $T^0_{[\text{+PAST}]}$
d. $Fin^0 \longleftrightarrow \emptyset$ (*elsewhere*)

As with TSL, the distribution of Eclipsis follows directly from Vocabulary Insertion over the contextual allomorphs in (35). As a result, Eclipsis is distributed on the basis of allomorphy and morphosyntactic features rather than the mere presence of a preceding complementizer. Crucially, this analysis also provides a principled account of the role that Eclipsis has in the Irish verbal complex. Rather than treating it as an accidental morphophonological alternation, I argue that Eclipsis realizes a finiteness feature.

This result explains the observed category asymmetry: Eclipsis occurs with verbs but not with nouns in the same environments because finiteness is a property of clauses and verbal projections, not of nominal ones. By contrast, the TWH does not predict this asymmetry, even if the distributional facts can be accommodated. The reason for this is that trigger morpheme approaches have to stipulate the category asymmetry without providing a principled reason why. Therefore, the present analysis offers both improved empirical coverage and a more explanatory account of the distribution and function of Eclipsis in the Irish verbal complex.

6. DISCUSSION AND CONCLUSION. This paper has argued that the traditional Trigger-Word Hypothesis for Celtic Initial Consonant Mutation does not adequately account for the full range of empirical data in Irish verbal morphology. The data show that mutation can occur independently of a "trigger" and that putative triggers can surface without mutation, a pattern not predicted by the Trigger-Word Hypothesis. I therefore proposed a Distributed Morphology analysis in which Mutation is introduced through Vocabulary Insertion and reflects the morphosyntactic features present in a given derivation. Within this system, Tense-Sensitive Lenition is analyzed as the exponent of $T^0_{[+PAST]}$, and Eclipsis as the realization of finiteness (Fin^0). Because these morphemes correspond to independent functional heads, their distribution follows from their respective insertion conditions, correctly predicting the dissociation between Mutation and "triggers".

The proposed analysis also provides further insight into the morphosyntactic structure of Irish clauses and the Irish verbal complex. While previous proposals for the structure of the Irish clause include between four and six projections, the interaction between Mutation and other verbal morphemes indicates that the Irish clause is much more richly articulated than previously assumed. In this way, Initial Consonant Mutation can be used as a tool to diagnose Irish phrase structure and should not be viewed as a purely morphophonological process that is unrelated to the distribution of morphosyntactic features.

The present proposal has additional implications for theories of allomorphy. The Vocabulary Items for Fin^0 involve contextual conditioning that cannot be reduced to linear or structural adjacency (Embick 2010). Instead, these patterns of allomorphy suggest that the computation of contextual allomorphs must operate over the complex head (Choi & Harley 2019) that forms the Irish verbal complex. In this way, Irish Initial Consonant Mutation and verbal morphology provide evidence for theories of allomorph selection that extend the conditioning domain to the enitre complex morphosyntactic head as opposed to strict adjacency.

An added benefit of adopting this domain for allomorph selection is that it also accounts for the verb root suppletion that is seen with some verbs in the past completive and/or future tense and after complementizers. For example, in his account of Irish verbal morphology, Acquaviva (2014) proposes a number of morphosyntactic feature lowering operations in order to achieve adjacency between the verb root and the suppletion-triggering tense feature. Similarly, Ostrove (2018) uses Spanning in order to explain why some verbs undergo suppletion after complementizers. In both accounts, additional morphosyntactic machinery is needed to derive the correct

environments for Vocabulary Insertion and morphologically-conditioned suppletion. The analysis proposed in this paper can account for the exact same empirical facts without appealing to feature lowering or Spanning. Since it is clear that the domain of allomorph selection for non-suppletive allomorphs in Irish is the complex head, it would follow naturally that suppletive allomorphs should be sensitive to this domain as well. Given that Asp^0, T^0, and C^0 are all in the same complex head as the verb root, it is predicted that these morphemes should be able to trigger suppletive allomorphy. Thus, the present analysis not only captures the allomorphy patterns and distribution of Mutation, but can also account for verb root suppletion that has required more complex analyses in previous accounts.

To conclude, I shall provide a number of directions for further exploration of this topic. Given the limited scope of this paper, future work should continue investigating Initial Mutation in the Irish verbal complex, especially focusing on Tense-Insensitive Lenition. Additionally, future research should explore whether the present analysis extends to the nominal domain in Irish as well. Finally, on broader level, I suggest that applying this approach to other Celtic languages may provide additional insight into the role of Initial Mutation in Celtic morphosyntax.

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