DERIVING THE OLD IRISH CLAUSE*

D A N N Y   L .   B A T E
*U*NIVERSITY *of* *E*DINBURGH

ABSTRACT Old Irish, a historical Celtic and Indo-European language, displays many distinct features in the composition of its clauses. These include a typical Verb-Subject-Object word order, shifting stress placement in compound verbs, relativity marked by verbal endings and mutations, and object pronouns rigidly infixed within the clause-initial 'verbal complex'. The goal of this paper is to propose a common underlying syntactic structure, in the framework of generative grammar, which can generate the attested data across different types of clause, namely: declarative, interrogative, imperative, relative and other subordinate finite clauses. The paper begins by introducing relevant features of Old Irish grammar, before moving on to a fresh 'syntacto-prosodic' analysis of declarative main clauses. This it then applies to the other clause types, before concluding with a final synchronic structure common to all the clauses considered. Through a combination of syntactic theory and philological scholarship, the functional category of 'C' and its different lexical expressions are identified as the main source of the various distinctive features of the Old Irish clause.

1   INTRODUCTION

Old Irish, the stage of the Irish language dating to between *c.*600 and *c.*900 AD, is a language with many remarkable features. Its verbs are infamous for both their word-order behaviour and their morphophonological appearance. Old Irish is a canonical example of a VSO language, displaying a clear preference for clauses in which the verb precedes both its subject and its object, regardless of the type of clause. Moreover, word order, verbal inflection and the variable placement of stress interact to produce forms of the same verb that appear drastically different. Compound verbs systematically appear either united or divided into two parts, with word stress consequently allocated

to their first or second component, while simple verbs bear sets of inflectional endings dependent on where in the clause they stand. Old Irish also forms relative clauses through various techniques, including dedicated verbal endings, the mutation of initial consonants and an indeclinable relative particle. The clause furthermore includes object pronouns rigidly infixed within compound verbs. All in all, from the perspective of the wider Indo-European language family to which Old Irish belongs, the Old Irish clause is in many ways very strange.

The aim of this paper is to propose a single underlying syntax, in the framework of generative grammar, from which this behaviour arises. It seeks to derive the observable features of five broad types of finite clause in Old Irish: declarative main clauses, interrogative main clauses, imperative clauses, relative clauses, and other subordinate clauses. To that end, it builds on and synthesises previous accounts, from not only generativist but also philological scholarship, to propose one synchronic abstract structure from which these clause types and their distinctive features are produced. The concepts of the two traditions work together to corroborate the claims of this account.

Its first task, in §2, is to introduce the basics of the attested behaviour of the Old Irish clause, focusing primarily on declarative main clauses. §3 sets out previous accounts of Old Irish syntax in the tradition of generative grammar, then moves on to the new account that is the novel contribution of this paper. §4 then returns to the data of other types of clause, integrating each of them into the new account. The syntactic structure common to all five types of finite clause is finally presented in §5, which also summarises the arguments and concludes.

2   The Verbal Complex and Declarative Main Clauses

2.1   Preliminaries

Old Irish is documented in a small set of early medieval sources, in both prose and poetry. Notable among these are the glosses, a large body of Old Irish annotations to Latin works, chiefly found in three manuscripts from the eighth and ninth centuries (Lash 2017: 147-9).

- The Würzburg glosses on the Pauline Epistles (Wb.), second half of the eighth century

- The Milan glosses on a commentary on the Psalms (Ml.), late eighth or early ninth century

- The St. Gall glosses on Priscian's *Institutiones* (Sg.), mid-ninth century

Previous descriptive grammars and theoretical analyses have drawn primarily from these three sources; since they are prose in genre, they are taken to reflect something close to the everyday language of the glossators, albeit in a scholarly register, with influences from Latin. This paper likewise draws primarily from the same three sources.[1]

In terms of theoretical assumptions, the analysis stands within the tradition of generative grammar, particularly the approach of the Minimalist program (Chomsky 1995). It understands observable behaviours like word order and morphology as generated from a stable abstract or 'underlying' structure. This structure is made up of multiple '**heads**' (e.g. X and Y in 1), of which the vocabulary of a language, namely its words and affixes, are lexical exponents. Each head has its own **projection**, containing positions for a specifier and a complement; by one projection taking another as its complement, they build a hierarchical structure.

(1)

$$
\begin{array}{c}
\text{XP} \\
\diagup \diagdown \\
\text{SpecXP} \quad \text{X}' \\
\diagup \diagdown \\
\text{X} \quad \text{YP} \\
\diagup \diagdown \\
\text{SpecYP} \quad \text{Y}' \\
\diagup \diagdown \\
\text{Y} \quad \text{ZP} \\
\triangle \\
etc.
\end{array}
$$
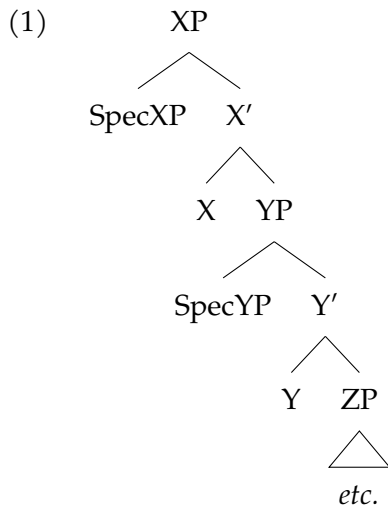
This may be additionally modified by the operation of **movement**, another part of the syntactic stage of derivation, in which elements are moved from their basic position to somewhere else in the structure. What the syntax constructs is then passed on to further stages in the derivation of a clause, turning the hierarchical syntactic structure into a 'linear' post-syntactic arrangement.

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1 The translations given are the author's own. The glossing is done according to the Leipzig conventions, with the additions of "PV" for a preverb and "VN" for a verbal noun. The use of the interpunct ⟨·⟩ to denote the tonic syllable within the verbal complex is a modern editorial practice, following Thurneysen (1946). Similarly, ⟨=⟩ indicates clisis, specifically where a proclitic or enclitic element has been separated from its host for the sake of clarity, while a hyphen ⟨-⟩ is added to the examples to separate out an added nasal mutation from a following vowel.

The next necessary step is to qualify what it means for the Old Irish clause to have VSO word order. For one thing, this does not apply to its non-finite verbal constructions, which have been suggested to have clausal syntax (Adger 2006: 607-9). These are not further addressed here. Second, clauses in which the verb stands later or even last are certainly attested; Lash (2020: 134) states "it is no longer possible to merely say that the language is VSO without qualifying that statement with a number of caveats". Exceptions to VSO include cases of tmesis, Bergin's construction and topic-initial clauses, which are each addressed in §4.4. Nonetheless, VSO is clearly the default and most productive ordering, and is the primary concern of this paper.

More crucial is the qualification that the usual initial component of the Old Irish clause is not the verb *per se*, but rather the **verbal complex**. This unit naturally includes the verb itself, which inflects for tense, mood, person and number. However, the verbal complex also includes **preverbs**, such as *do·* 'to' and *as·* 'out' (among other meanings). These particles, like bound prefixes in other languages, modify and contribute to the meaning of the verbal root, yet they seemingly have a certain degree of morphological freedom, able to appear separated from the rest of their verb. Verbs that include preverbs are **compound** verbs; those that do not are **simple**. The complex furthermore includes **conjunct particles**, a traditional term that covers clausal negators (e.g. *ní* 'not'), some markers of subordination (henceforth 'subordinators', e.g. *co* 'so that, that'), some *wh*-words and the interrogative particle *in*.

2.2 The Behaviour of the Verbal Complex

Conjunct particles, preverbs and the finite verb – these components of the verbal complex interact with each other to meet strict requirements for the position of stress and the hosting of object pronouns. Adger (2006: 610) sets out the surface structure of the whole initial complex as follows:

(2) [X]·[Y Z W] ...

Into these different slots, the components are placed, but with restrictions. First, [X] must be filled. If a conjunct particle (C) is present, it takes precedence and occupies [X]. If not, the first preverb (PV) present stands in [X]. In the absence of both conjunct particles and preverbs, the core verb (V) itself stands initially. This chain of precedence results in the following orders:

(3) a. [C]·[PV (PV) V]
     b. [C]·[V]
     c. [PV]·[PV V]

> d. [PV]·[V]
>
> e. [V]

"(PV)" in 3 a stands for an optional preverb; compound verbs may have more than one.

The real examples in 4 illustrate the abstract structures in 3. In 4, the verbal complex is demarcated by square brackets, and the division within the overall complex between [X] and [Y Z W] and the position of stress are signalled by the interpunct.

(4) a. [*ní·derscigem*]   *nech*   *di*
not·surpass.PRS.IND.ACT.3PL someone.ACC.SG from
alailiu
other.DAT.SG
'We do not surpass each other'   (Wb. 2a14)

b. [*con·festa*]   *a*   *ndechur*
so-that·find-out.PST.SBJ.ACT their difference.NOM.SG
'So that their different may be known'   (Sg. 26b8)

c. [*do·rigénsat*]   *in*   *descipuil*
pv·make.PRF.ACT.3PL the.NOM.PL disciple.NOM.PL
dechor
distinction.ACC.SG
'The disciples have made a distinction'   (Wb. 7d10)

d. [*do·beir=som*]   *ainm*   *bráthre*
pv·give.PRS.IND.ACT.3SG=he name.ACC.SG brother.GEN.PL
'He gives the name of brothers'   (Wb. 7d8)

e. [*caraid*]   *cesin*   *a*   *maccdán*
love.PRS.IND.ACT.3SG himself his childlike-art.ACC.SG
'He loves his childlike art'   (*Pangur Bán*)

The separation of [X] from [Y Z W] captures the domain of certain phonological processes. No matter what constitutes it, [Y Z W] acts like a typical phonological word in Old Irish in terms of stress placement, i.e. stress is always allocated to the initial syllable in the Y position. The syllable in Z, the immediately post-tonic position, may be a preverb, the verbal root or the verbal inflection. Considered altogether, it is therefore the second component of the whole [X]·[Y Z W] divided complex that bears the stress, as indicated by the preceding interpunct. Syncope and lenition consequently act within [Y Z W], and can together produce seemingly very different variants of the same

verb, depending on which part of it stands in Y. Meanwhile, whatever stands in the *pre*tonic [X] position is cut off from and unaffected by these phonological processes by an apparent "juncture" or break in the prosody of the overall complex (McCone 1997: 4).

The orders in 3 a, 3 c and 3 d include **compound verbs**, consisting of both the verb and at least one preverb. In 4 c and 4 d, it is the first preverb *do* that satisfies the requirement to fill [X]. This arrangement leaves stress to be borne by the second element of the compound verb, which may be the verbal root or another preverb. This arrangement produces the **deuterotonic** forms of the compound verb (from Ancient Greek *deúteros* 'second' and *tónos* 'accent'). Examples 4 c and 4 d include deuterotonic forms; the first preverb of the compound verb, *do*, stands in [X] and the second element after the prosodic break bears the stress. However, if a conjunct particle in [X] confines all the parts of a compound verb to the [Y Z W] domain, the first preverb instead bears the stress in the Y position; the verb thus appears in its **prototonic** forms (from Ancient Greek *prôtos* 'first'), as in 4 a. Deuterotonic and prototonic forms of the same compound verb may look very different.

(5) a. *ní·derscaigi*
         not·surpass.PRS.IND.ACT.3SG
         'She does not surpass'   [Prototonic; Sg. 40a6]

     b. *do·róscai*
         PV·surpass.PRS.IND.ACT.3SG
         'She does not surpass'   [Deuterotonic; Ml. 138c12]

The verbs *·derscaigi* and *do·roscai* in 5 are exactly the same in terms of meaning, grammatical features and etymological composition. It is simply the presence of the negator and conjunct particle *ní* that is responsible for their different appearances.

As for 3 e, if it is a **simple verb** that stands initially, there is no division into [X] and [Y Z W], and no alternation between deuterotonic and prototonic; its first syllable bears the stress. Furthermore, it will appear with **absolute** inflection. If placed in any other position within the complex, or indeed the clause, the simple verb uses the more usual **conjunct** inflection. The artificial examples in 6 illustrate this with *caraid* (absolute) and *·cara* (conjunct). These two have the same meaning and features of tense, mood and person, but differ in position and therefore in form.

(6) a. *cara**id***   *in*   *fer*
         love.PRS.IND.ACT.3SG the.ACC.SG man.ACC.SG
         'She loves the man'   [Absolute; Artificial ex.]

	No Conjunct Particle	**With Conjunct Particle**
Simple verb	absolute inflection	conjunct inflection
Compound verb	deuterotonic form	prototonic form

Table 1   A table showing the combinations of simple/compound verbs with the absence/presence of a conjunct particle.

b.   *ní·cara*   *in*   *fer*
      not·love.PRS.IND.ACT.3SG   the.ACC.SG   man.ACC.SG

      'She does not love the man'   [CONJUNCT; Artificial ex.]

Unlike the phonological deuterotonic/prototonic alternations, absolute and conjunct inflection do differ in their etymological composition in one respect; both continue the inherited primary verbal endings of Indo-European, yet their difference is a result of the addition of a particle that in time fused with the verb. This fusion produced the absolute set of inflectional endings (Cowgill 1975, Eska 2012).

The combination of the simple/compound distinction with the absence or presence of an initial conjunct particle altogether creates four options for the Old Irish finite verb in declarative main clauses, given in Table 1 above. Because they follow conjunct particles, simple verbs with conjunct inflection and prototonic compound verbs are together known as the **dependent** forms of a verb. In the absence of a conjunct particle, the verb is **independent**.

Furthermore, the [X] slot of the verbal complex is the target of object pronouns. These consistently appear after the occupant of [X]. Because of their internal location between [X] and [Y Z W], they are referred to as infixed. While they are strict in their word-order position, they are morphophonologically diverse and sensitive to clause type. It should be noted that Old Irish has other pronominal elements, such as its emphasising pronouns, the *notae augentes* (e.g. *som* 'he' in 4 d), yet these behave differently; they are enclitic on the whole verbal complex and other stressed elements, while infixed pronouns must immediately follow the unstressed [X] position. This is perhaps because the *notae augentes* are 'true' prosodic clitics and are a later development. Meanwhile, the Wackernagelian (1892) second position of object pronouns is the older pattern, and, as will be proposed, there is a syntactic component to their derivation, as well as a prosodic one.

Because they uniformly target the [X] position, object pronouns are usu-

ally found immediately after either a conjunct particle (7 a-7 b) or the first preverb of compound verbs (7 c-7 d).

(7) a. [*ní=**b**·scara*]   *fri*   *bar*
         not=you(PL)·separate.PRS.IND.ACT.3SG towards your
         pecthu
         sin.ACC.PL
         'It does not separate you from your sins'   (Wb. 13b19)

     b. [*in=**da**·hierr*]?
         Q=them·slay.FUT.ACT.2SG
         'Will you slay them?'   (Ml. 77a16)

     c. [*imm=**a**·n-imcab*]
         PV=him·avoid.IPRF.ACT.2SG
         'Avoid him'   (Wb. 30d20)

     d. [*ro=**t**·bia*]   *adbar*   *fáilte*
         PV=you(SG)·be.FUT.3SG reason.NOM.SG joy.GEN.SG
         'You will have a reason for joy'   (Wb. 20a9)

It must be noted that occasional examples exist in which the object pronoun follows a conjunct particle and a preverb, or two preverbs.[2] These include *conrom·íccad* 'so that it has healed me' (Wb. 28a10) and *nírus·comallas*[*atar*] 'they had not fulfilled them' (Ml. 105a6), in which the pronouns *m* and *s* follow a conjunct particle (*co* and *ní*) and also the perfective preverb *ro*. Given that *ro* is present in both, the orders may therefore result from idiosyncratic syntactic or prosodic features of this specific element (cf. Thurneysen 1946: 339-41). Derivations for these unusual orders that are in keeping with the overall syntacto-prosodic approach are suggested in §3.2.6.

    Lastly, in 3 e orders when verbal root is initial, Old Irish displays two patterns: either the pronoun is enclitic on the verb and appears after it (8 a), or the 'dummy' preverb *no* is brought in to occupy [X] (8 b). *No is called 'dummy'* because it apparently contributes nothing to the meaning of the verb (Thurneysen 1946: 348).

(8) a. [*berth=**i***]   *leiss*   *co cenn*
         carry.FUT.IND.ACT.3SG=it with.3SG.M to head.ACC.SG
         'He will carry it with him to the end'   (Wb. 23a19)

     b. [*no=**b**·carad*]
         PV=you(PL)·love.IPRF.IND.ACT.3SG
         'He used to love you all'   (Wb. 23d10)

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2 Thanks go to two anonymous reviewers for their comments on this issue and examples.

Cowgill (1987) notes that these two patterns are not equal in their occurrence; while the use of dummy *no* seems productive, the suffixed pronouns of clauses like 8 a are highly restricted. The latter occur mostly with third-person singular pronouns, enclitic on similarly third-person singular indicative verbs. The insertion of *no* is a last-resort tactic, when other hosts for object pronouns are unavailable.

All in all, a syntactic account has a lot to include; the early position of the verb, the fixed position of conjunct particles and object pronouns, the prosodic break within the complex and the resulting absolute/conjunct and deuterotonic/prototonic alternations all require an explanation.

3 Theoretical Analysis

3.1 Previous Scholarship

This paper is not unique in the daunting task of attempting to consolidate and derive all of this Old Irish behaviour from a stable underlying syntactic structure. Yet none, to the author's knowledge, have integrated a broad range of different kinds of clauses into their analysis and proposed structures, nor linked the syntactic elements involved to specific lexical items identified within the philological tradition of Old Irish.

The first previous account to mention is that of Carnie, Pyatt & Harley (1994) and Carnie, Harley & Pyatt (2000). Theirs is a primarily syntactic explanation, since it derives the orders in 3 through a set of movement operations within the syntax. Following proposals for Modern Irish, it firstly assumes that the verb and its preverbs are generated within the layers of a low Verb Phrase (VP), and in general they move up together at least as far as a hierarchically higher Inflectional Phrase (IP). It is through this V-to-I movement that the verb passes the positions of the subject and object, and the usual VSO order of both main (as in 4 c) and subordinate finite clauses (4 b) is derived.

Additionally, they propose that Old Irish has a "filled C requirement" (Carnie et al. 1994: 5), in which an even higher structural component, labelled C(omplementizer), requires a lexical exponent. C corresponds to Adger's [X] position in the linear surface order and it is this requirement of C that motivates the chain of precedence in 3. The traditional conjunct particles (i.e. some subordinators, negators and the interrogative particle *in*) are straightforwardly first merged in C. In their absence, the first and structurally highest preverb moves instead. Failing that, the verb itself moves from somewhere in the IP to fill C. This V-to-C movement is something of a last resort, and it is through this movement that absolute inflection appears on the verb. When

the 'Fill C' feature is otherwise satisfied and V-to-C does not occur, the verb bears the more basic conjunct inflection.

Carnie et al. (1994: 11) also deal with the behaviour of Old Irish object pronouns. This is likewise syntactic for them, the pronouns being enclitics that adjoin to the high C position, regardless of what element is chosen to realise C lexically. For this reason, they may be enclitic on conjunct particles, preverbs or the simple verb itself.

While agreeing on much, Adger (2006) and Newton (2008) nonetheless take issue with elements of the analysis of Carnie et al. Newton (2008) for example emphasises the limited distribution of suffixal object pronouns enclitic on the verb, something that Carnie et al. take as evidence for V-to-C movement. Such movement seems "marginal and irregular in the Old Irish period" (Newton 2008: 7) and is likely an archaism, with the verb usually moving no higher than IP. The requirements that the verb fulfills through V-to-C movement are met instead by the insertion of *no*.

Both Adger and Newton furthermore disagree with aspects of their syntactic derivation. Adger (2006: 621-3) argues for instance that the movement separately of the verb to IP and a preverb to C may violate the Head Movement Constraint, something that Carnie et al. (2000: 49-50) do acknowledge. If they move up separately, the two skip over closer available landing sites. If instead the preverb and the verb merge into one unit first and move up together into the IP, this in turn raises the question of how the preverb may then 'excorporate' itself from the complex [PV V] unit of the compound verb to move up to satisfy Fill C, or why the unit cannot itself move as one to achieve the same end.

Adger (2006) and Newton (2008) therefore bring in "post-syntactic" stages in the derivation of Old Irish VSO word order, utilising the concepts and insights of the Distributed Morphology framework (Halle & Marantz 1993). These intermediary stages occur between the workings of syntax and phonology, that is, after the syntactic computation is complete, but before the derived structure is passed on for the subsequent operations of prosody. For Adger (2006: 628-9), the process of derivation includes, in order: syntax, morphological labelling, morphological merger, vocabulary insertion, prosodic labelling and prosodic inversion. Most important for his account of Old Irish is Local Dislocation (cf. Embick & Noyer 2001). This type of morphological merger and movement operation adjoins one head to another head to which it is adjacent in the post-syntactic linear order. In other words, Local Dislocation takes a head that is structurally higher in the underlying syntax, and shifts it, so that it appears after the next morpheme down in the resultant surface order.

Adger proposes that the syntax of the Old Irish clause has a Rizzian Split CP (Rizzi 1997) with the components Force, Topic, Focus and Fin. Force, while syntactically highest, is "subcategorised to be enclitic to [a head]" (Adger 2006: 632), and so it is moved through Local Dislocation to be enclitic on whatever element is next highest in the syntax. This may be a conjunct particle, a preverb or the verb. It is this enclisis of the lexically null Force head that causes the break between the [X] and [Y Z W] positions. Adger identifies this as a specifically morphological operation (as opposed to a purely phonological one), because Force affects the inflectional ending of the verb. If enclitic on the verb, it triggers absolute inflection. If enclitic on a preverb, however, it has no morphological effect.

3.2   A New Account

3.2.1   Preliminaries: C, Verbal Movement and Pronominal Movement

The proposal here builds on Adger's account, yet also reduces its process of derivation and brings in other types of clause. It likewise acknowledges that syntax alone struggles to account for the observed word-order patterns. However, it does not turn to additional morphological operations to explain them, but rather makes do with a minimal derivational process of only syntax then phonology. Like Carnie et al. (1994), it also makes do with a unified C head, rather than the many components of the Rizzian Split CP, for which there is little evidence or theoretical need. The different types of C head have varied realisations in the surface morphophonology, and it is this variety that is responsible for their effects on the finite verb. The key ingredients of this account are:

- A hierarchical underlying syntactic structure that includes at least CP, IP and VP layers

- The post-syntactic satisfaction of phonological requirements through the process of prosodic inversion

The account furthermore brings in ideas from the well-established philological tradition of Old Irish to corroborate and substantiate the syntactic analysis.

The first step is to agree with previous scholars that, in finite clauses, the verb and its preverbs generally raise into a position somewhere within the IP. This produces their usual pre-subject and pre-object position. The specifics of the pre-movement status of compound verbs can remain unaddressed for now; determining whether they are first merged as one lexical item or result from multiple heads within the 'shells' of an extended VP is outside the scope

of this paper. All that matters here is that all the components of the compound verb end up together in a hierarchically high position within the IP, higher than subjects, objects and adjunct constituents like prepositional phrases.

Secondly, this account agrees with Carnie et al. (1994) and others that some of the traditional conjunct particles are lexical exponents of an underlying unified C head. These include the subordinator *co* and the interrogative particle *in*. Their location in C explains both their complementary distribution and their precedence in the initial position of the verbal complex, as outlined in 3. The negator *ní* may also be included among the exponents of C, or may be located within its own dedicated place in the IP, lower than C but higher at least than the moved verb and its preverbs.

Thirdly, the positions of object pronouns is understood to be partly a syntactic phenomenon, with these enclitic elements targeting and moving up to adjoin to the C head. This approach for Old Irish is inspired by the analysis of Hale (1985, 2018) and Lowe (2014) of second-position enclitics in Vedic Sanskrit. From this uniform movement to C derives their stable position within the surface order, standing in the 'second' position observed by Wackernagel (1892) across early Indo-European languages. For a dedicated account of the syntactic derivation of clisis and the motivations for the movement of object pronouns within the syntax (namely "their intrinsic defectiveness"), see Uriagereka (1995). Yet their position is also phonological in nature; Old Irish object pronouns have the prosodic weakness of clitics and need another element to their immediate left to act as host. If C is lexically realised by a conjunct particle, a host is provided and the pronoun appears as enclitic on that conjunct particle. In such cases, a compound verb will be stressed on its first syllable (i.e. prototonic), as befits a typical Old Irish word (Thurneysen 1946: 27). If C is not lexically realised, enclitic pronouns target the position as usual, yet need an alternative prosodic host.

3.2.2 *Prosodic Inversion and Infixed Pronouns*

The requirement of enclitic pronouns triggers **prosodic inversion**, a concept adopted from Halpern (1992, 1995), and used to great effect by Hale (1996, 2017), Lowe (2014) and Ram-Prasad (2022, 2023) for pronouns and conjunctions in Vedic Sanskrit. Through this, object pronouns will surface after the first available host in the linear order that the syntax produces. This will be the highest valid lexical element in the syntax. Being a phonological process, the availability of a host is phonologically determined. In its application to Sanskrit, the determining factor is the presence of an accent; words with an accent are full prosodic words and viable hosts for the enclitic conjunctions and pronouns without one. However, applying this analysis wholesale to Old

Irish immediately faces the issue of the prosodic status of pretonic preverbs, those that occupy [X] in deuterotonic verbs. It is uncontroversial that they do not bear the (primary) stress of the verb, which instead is allocated to the next syllable in the Y position. Furthermore, the view of Thurneysen (1946: 30) and McCone (1997: 4-5) is that pretonic preverbs are proclitic, i.e. without stress. For one reason, the orthographic evidence exhibits voicing differences in the same preverb, such as between pretonic *do* and tonic *to*. Unless we claim that the enclisis of object pronouns and other elements somehow triggers a loss of stress in these initial preverbs, prosodic inversion must be redefined to work with another prosodic unit.

To address this issue, a key claim here is that prosodic inversion operations around **syllables** in Old Irish, and that object pronouns are instead hosted by the first available syllable in the post-syntactic order. This is a departure from the stress- or accent-based understanding of prosodic inversion of Halpern (1995), but syllables do nonetheless constitute another unit of the prosodic hierarchy. A similar stress-based operation may have functioned at a pre-Old Irish stage, but by the time of Old Irish, prosodic inversion operates by shifting enclitics to follow the next syllable in the 'left-to-right' linear order. To speculate from a diachronic point of view, this redefinition may have occurred in tandem with the move to verb-initial orders, which united verbs with their once-separate preverbs at the start of the clause; to avoid two stressed elements in the new verbal complex, the initial preverbs lost their stress, and prosodic inversion changed accordingly to maintain the inherited order of preverbs, verbs and object pronouns.

Since the majority of Old Irish preverbs are monosyllabic,[3] this redefined prosodic inversion will target the first preverb of a compound verb and produce the majority of the attested orders. The underlying relative position of object pronouns and first preverbs is therefore inverted through the prosodic feature of enclitics, not through syntactic operations. This therefore circumvents the theoretical problems in the account of Carnie et al. (2000) noted by Adger (2006): namely that they must allow preverbs to excorporate from the compound verb in IP and move to C independently.

However, this redefinition immediately runs up against the existence of non-monosyllabic preverbs. The three identified to date are *etar* 'between', *remi* 'beforehand' and *ceta* 'first'.[4] These are certainly a challenge to the definition of prosodic inversion as operating with syllables. However, defining it

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3 For example, the pretonic preverbs *ad·*, *as·*, *ar·*, *con·*, *do·*, *fo·*, *for·*, *fris·*, *imm·*, *in·* and *ro·* (Stifter 2009: 79).

4 Examples of 'PV=objp·(PV) V' orders, in which the initial preverb is either *etar* or *remi*, include *itir=nda·dibed* 'that he should destroy them' (Ml. 45c6), *etar=dan·roscar-ni* 'he has separated us' (Ml. 120a3) and *remi=ta·tét* 'that precedes them' (Sg. 197b5).

so is maintained for this paper, because of its explanatory successes with the majority of word-order patterns, which involve monosyllabic preverbs.

Furthermore, only nine examples of 'PV=objp·(PV) V' orders with initial pretonic *etar* and *remi* have been identified by the author so far (and none with *ceta*), a rarity that the redefinition does anticipate, since a syllable-based prosodic inversion would exclude them as viable hosts for object pronouns. Instead, the dummy preverb *no* is sometimes brought in to host object pronouns instead of *etar* and *remi*,[5] and the position of the perfective preverb *ro* appears to fluctuate between following and preceding *etar* and *remi*.[6] It seems that Old Irish speakers were uncertain about how they slotted into the verbal complex, and tended to reanalyse verbs that included *etar* as simple verbs instead; the two preverbs were "perhaps treated differently by speakers of Old Irish than were the monosyllabic preverbs".[7] This treatment may be a result of their incompatibility with a syllable-based prosodic operation. The current lack of a clear resolution for the definition of prosodic inversion is unfortunate, but it is not too damning to invalidate the argument and overall syntacto-prosodic approach of this paper, and there is tentative evidence that *etar* and *remi* did not easily fit in with the behaviour of monosyllabic pretonic preverbs, which this syllable-based analysis predicts.

This analysis so far can derive the word order seen in finite clauses with infixed pronouns between the [X] and [Y Z W] parts of the verbal complex. [X] is either a conjunct particle that arises from a C head in the syntax, or is a syntactically lower preverb that hosts the object pronoun. In the latter case, it is the pronoun itself that helps to create the divide between [X] and [Y Z W]. These produce the following abstract orders for the verbal complex, in which "=objp" stands for an enclitic object pronoun and "(PV)" for an optional preverb:

(9) a.   C=objp·(PV) V   [WITHOUT PROSODIC INVERSION]

     b.   PV=objp·(PV) V   [WITH PROSODIC INVERSION]

In 9 a, the object pronoun is enclitic on the exponent of C. In 9 b, it hosted by a preverb, separating that preverb from the rest of the compound verb.[8]

---

5 For example, *ní **no**=**m**·eterscara=sa* 'nothing can separate me' (PH l.1930–2).

6 Compare *ma eter·**ró**scra fri a fer* 'if she should separate from her husband' (Wb. 9d31) and *na **ru**·etarscara* 'lest their fault separate from them' (Ml. 54d5), in which *ro* appears before and after *etar* in forms of the same verb, *etar·scara* 'to separate'.

7 Mark Darling, personal communication.

8 In cases of '*no*=objp' orders with the dummy preverb *no*, its basic syntactic position is unclear; it makes no obvious semantic contribution, so it does not seem appropriate to locate *no* originally in the VP as another preverb that moves with its verb into the IP. Perhaps it is first generated somewhere in the IP, or is in fact another lexical exponent of C.

3.2.3   Deriving V=obj Orders

This account cannot yet derive two patterns: (1) object pronouns that follow the simple verb in a 'V=objp' order, and (2) the prosodic break in the verbal complex between [X] and [Y Z W] that is present in compound verbs even in the absence of infixed object pronouns. This break and the deuterotonic/prototonic distinction require either a syntactic or a phonological explanation.

First, clauses that have a simple verb with a suffixed pronoun could be derived through prosodic inversion, or alternatively through with the syntactic movement of the verb up to C. These two theoretical options both produce the same order. However, adopting V-to-C movement seems to be the more explanatorily successful. For one reason, it does not require a modification to the idea of prosodic inversion. It has been proposed that prosodic inversion targets the first syllable of the verb, yet object pronouns do not appear within polysyllabic simple verbs, but rather after them, as in 8 a. V-to-C movement allows the simple verb to stand in C and bear the object pronoun, while prosodic inversion continues to affect the first syllable of a compound verb in the IP post-syntax. Furthermore, it accounts for the morphological variation of simple verbs. Adger (2006: 632) brings in the post-syntactic morphological operation of Local Dislocation to account for their absolute/conjunct alternation. By positing V-to-C movement for simple verbs instead, we can explain absolute inflection as the lexical expression of a clause-typing feature of the C head, one that communicates the declarative function of the clause. This removes the need for an additional intermediate stage of derivation between syntax and phonology. Moreover, the diachronic evidence supports an earlier stage of general V-to-C with simple verbs (cf. Eska 2012).
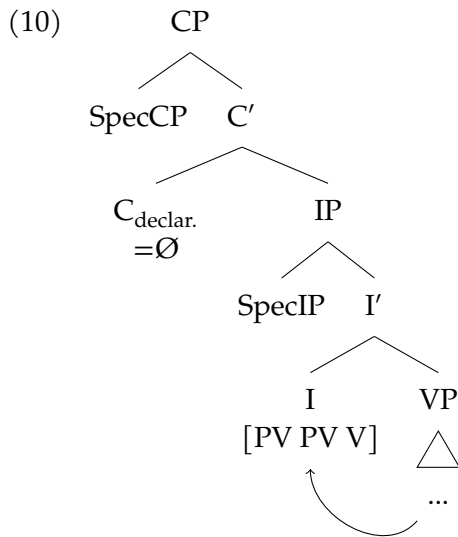
It is worth noting lastly that the movement of the simple verb is also not affected by Adger's objections to the account of Carnie et al. (2000). We can both agree with Adger's objections and keep the V-to-C movement of simple verbs, because his objections concern compound verbs and the multiple movement operations of their separate parts. Simple verbs are free to move in the syntax without issue; post-syntactic operations are not necessary to account for their morphology.

3.2.4   Deriving Deuterotonic Verbs Without Infixed Pronouns: Null =Ø

The important task now at hand is the second issue of accounting for the prosodic break between [X] and [Y Z W] *without* infixed object pronouns. This is the common 'PV·(PV) V' order, as in 4 c and 4 d, in which *do* stands apart from the rest of the compound verb. It is not immediately obvious why

the verbal complex should be so consistently divided in two, with only the second part of the compound verb acting like a normal prosodic word. At an earlier, pre-Old Irish stage, this separation of the first preverb from the rest of its verb may have been derived syntactically, involving the syntactic movement of the preverb away from the rest of the verb, which remained low. Yet, if we adopt this for a synchronic analysis of Old Irish, it runs into Adger's criticisms of movement.

Taking inspiration both from object pronouns and Adger's (2006: 632) idea of an enclitic Force head, this account proposes that there is a C head in all declarative main clauses, which is lexically null yet still enclitic or suffixed. Although it lacks its own visible lexical form, it still makes its presence felt phonologically through absolute inflection, the prosodic break within deuterotonic verbs, and perhaps also in the shape of of object pronouns (Kortlandt 2007: 2). Verbal complexes with a 'PV·(PV) V' order therefore in fact have the post-prosodic linear order 'PV=Ø·(PV) V'. The structure in 10 below illustrates their syntactic (i.e. pre-prosodic) derivation.

(10)

```
            CP
           /  \
      SpecCP   C′
              /  \
       C_declar.  IP
          =Ø     /  \
             SpecIP   I′
                     /  \
                    I    VP
                [PV PV V]  △
                          ...
```

Here a compound verb is shown to have moved to a head position within the IP, which is simply referred to as "I". It stands below the C head, which itself is lexically null. Once the syntactic structure in 10 is passed on to the phonological component of derivation, the prosodic requirement of this null C, represented by "=Ø", must be satisfied. This triggers prosodic inversion with the first preverb. Like object pronouns, it therefore splits the first preverb from the remainder of the compound verb. This manifests itself in the phonology as a brief pause, the aforementioned prosodic break identified within some

compound verbs, which separates the first preverb from the overall prosodic word. Being thus outside the domain of stress allocation, that preverb will not bear the word-initial stress; this is instead allocated to its second syllable, be it another preverb or the start of the verbal root. The compound verb will therefore be deuterotonic. Examples 4 c and 4 d have the preverb *do* in the pretonic [X] position and bear stress on *ri* and *beir*, because *do* is separated from the overall prosodic word of the verb by the enclitic C.

(11) a.   *do=Ø·**rig**énsat*   *in*   *descipuil*
        PV=C·make.PRF.ACT.3PL   the.NOM.PL   disciple.NOM.PL
        dechor
        distinction.ACC.SG
        'The disciples have made a distinction'
                             (Wb. 7d10. Repeated from 4 c.)

     b.   *do=Ø·**beir**=som*   *ainm*   *bráthre*
        PV=C·give.PRS.IND.ACT.3SG=he   name.ACC.SG   brother.GEN.PL
        doib
        to.3PL
        'He gives the name of brothers to them'
                             (Wb. 7d8. Repeated from 4 d.)

As with object pronouns, this inversion is a purely phonological phenomenon. Adger's Local Dislocation of Force is similar, but it is specifically a morphological operation, and the enclisis of a null element to the first preverb, be it C or Force, does not show any morphological conditioning; no additional morphological material appears on the preverb. Adger's main motivation for postulating morphological movement is the allomorphy of simple verbs, yet their absolute/conjunct alternation can equally be kept within the syntax and derived through V-to-C movement. This account therefore partitions the work of Adger's Local Dislocation between syntax and phonology, negating the need for a separate morphological stage in the derivation.

     We may further claim that null C is also present and enclitic in 'PV=objp·(PV) V' orders that also include object pronouns, such as in 7 d.

(12)   *ro=Ø=**t**·bia*   *adbar*   *fáilte*
       PV=C=you(SG)·be.FUT.3SG   reason.NOM.SG   joy.GEN.SG
       'You will have a reason for joy'   (Wb. 20a9. Repeated from 7 d.)

The order in 12 above shows the enclitic elements stacking up after the first preverb. 13 illustrates its syntactic derivation, with "=Ø=*t*" representing the two enclitics pre-phonology.

(13)

```
                    CP
                   /  \
              SpecCP   C'
                      /  \
               C_declar.  IP
                =Ø=t      /  \
                     SpecIP   I'
                             /  \
                            I    VP
                         [ro-bia]  △
                                  ...
```
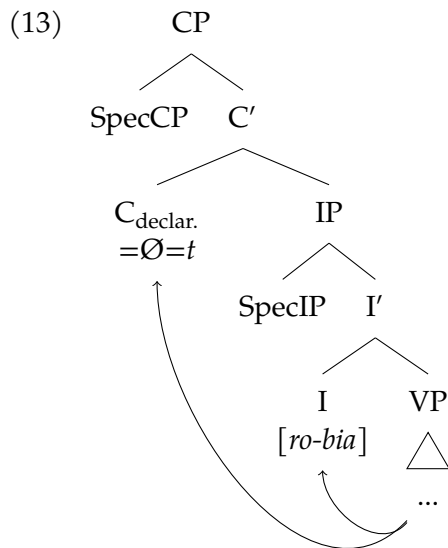
The element =Ø is a C head in its syntactic category, whereas the pronoun =t adjoins to it via movement. Granted, this is movement of a phrasal unit to a head position, which is theoretically irregular. Such movement may be permissible considering the unusual nature of clitics (cf. Uriagereka 1995, Roberts 2010); the view of Roberts is that clitic pronouns have phrasal and non-phrasal properties, being "simultaneously maximal and minimal elements ... able to move both as XPs and as heads" in the syntax (2010: 41). A '=Ø=objp' chain requires a prosodic host, so it will surface as enclitic on the first preverb. In 12, this host is the preverb *ro*.

3.2.5 *Philological Support and Intermediate Summary*

The postulation of such a null C in fact draws on strong philological support, specifically from the established Cowgill particle. This is the pre-Old Irish enclitic element *eti*. Cowgill's thesis (1975) is that the enclisis of *eti* on simple verbs is responsible for absolute inflection, although it is no longer visible in the morphophonology. While this 'particle theory' has been widely accepted in philological scholarship, the exact shape of *eti* and its origins have been more contested. Cowgill himself proposes *es* (*s* after vowels) as its form, yet Schrijver (1994) and Schumacher, Schulze-Thulin & aan de Wiel (2004) have more recently reconstructed it as *eti*, the shape adopted here. Thurneysen (1946) and Kim (2000) derive the particle from the copula verb *esti* 'it is'. Schrijver (1994) and Eska (2012) instead trace it back to a connective par-

ticle *eti, which would introduce and conjoin whole clauses. For a detailed discussion of the shape of the particle and its effect on the shape of the object pronouns that it preceded, see Kim (2000). However it originated, it is the Cowgill particle that is the key to deriving the independent-form verbs seen in declarative clauses. It can account for both simple verbs with absolute inflection and deuterotonic compound verbs with their prosodic break.

Eska's view (2012: 53-5) is that at a pre-Old Irish stage, VSO was not the basic order, but was rather derived through the fronting of the verb to a dedicated Topic position. In addition, the connective particle *eti over time diminished in its strength and shape, becoming an enclitic. As such, it required a host. This could be either a verb or a preverb fronted to the left periphery, thereby producing its clause-second position, in keeping with Wackernagel's law (1892). The key step for the purposes of this account is that *eti was reanalysed as an exponent of C. It thus served as an "affirmative particle" and was generalised, marking any clause as a declarative, non-subordinate one. It motivated the movement of the simple verb to C to bear it as a suffix. In time, its fusion with the simple verb produced absolute inflection. More precisely, its effect was "protecting the ending from atrophy" (Russell 2014: 53). This atrophy therefore only affected verbs in non-initial position, thereby producing the forms and distribution of conjunct inflection.

In the case of preverbs, these too once used to bear enclitic *eti (Kortlandt 2007: 2), with one preverb moving up into the CP structure to do so. The particle *eti meanwhile continued its decay. It became a lexically null item, though one still reflected phonologically in the prosodic break in deuterotonic compound verbs. This "zero infix" has been recognised in the philological traditional by Watkins (1963). In time, the reanalysis of preverbs as bound verbal prefixes, in tandem with a shift toward a VSO order, meant that the syntactic movement of preverbs to C gave way to a non-syntactic derivation through prosodic inversion. Both C and object pronouns, in need of a host, can trigger the operation. Compound verbs now move in their entirety into the IP and no higher. The continuing V-to-C movement of simple verbs in declarative clauses has become a syntactic outlier, which may offer a reason for its loss in Irish since.

To summarise: in declarative main clauses, the behaviour of the verbal complex results from the interaction between the verb and the C head. At this stage of Irish, this declarative type of C is now lexically null, but continues the enclitic behaviour of the old affirmative particle *eti. Object pronouns move syntactically to C, yet likewise trigger prosodic inversion. Pronouns appear as enclitic on the simple verb, the first preverb or *ní*. Simple verbs may move syntactically to the C head, which is realised in the morphophonology as a

suffix, producing the forms of absolute inflection. Compound verbs do not move to C, but rather in their deuterotonic forms, they show the effects of the enclisis of null C and object pronouns on their first preverb.[9]

### 3.2.6 *Deriving Exceptional Conjunct Particle and Preverb Orders*

Before applying this analysis to other types of clause, this section concludes by addressing the "irregular" orders mentioned in §2.2, in which the infixed object pronoun follows one conjunct particle and one preverb (Meyer & Stern 1903: 66), including *ní-ru-s·comallas*[*atar*] 'they had not fulfilled them' (Ml. 105a6) and *con-ro-m·íccad* 'so that it has healed me' (Wb. 28a10). For these examples at least, we can explain this irregularity as a product of the perfective preverb *ro*. The capricious nature of this element is recognised by Thurneysen (1946: 339-41), who distinguishes between "fixed" and "movable" *ro*. Movable *ro* does not bear stress and "always stands in second place" within the verbal complex, either after a conjunct particle or after another preverb. Its variable position relative to the rest of its verb gives an appearance of movement. It is, according to Thurneysen, an innovation, compared with fixed *ro*.

If we dismiss non-linguistic explanations, such as scribal error, for orders like *nírus·comallas*[*atar*] 'they had not fulfilled them' and *conrom·íccad* 'so that it has healed me', then two options present themselves. One is to posit that the conjunct particle and *ro* have fused into a single lexical item, which realises the C head of the clause. The object pronouns *s* and *m* then move in the syntax to C, producing the complex units *nírus* and *conrom*. The rest of the verb remains in the IP and is prototonic. This seems the inevitable analysis for *conrom·íccad*, since *co* has hitherto been considered an uncontroversial exponent of C and target for moved object pronouns. Yet this analysis for *nírus·comallas*[*atar*] may be unpalatable to those who would prefer to locate the negator *ní* and *ro* elsewhere and separately in the syntax.

Alternatively, we might keep all three components of *nírus* apart syntactically, deriving their surface order through a cyclic operation of prosodic inversion. We may identify *ro* as a head within the IP layer, one responsible for perfectivity. This head is lower than the lexically null C (to which the pronoun still *s* moves), but crucially higher than the IP location of the negator *ní*

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9 A shortcoming of this account to be acknowledged is that it cannot at present explain why only simple verbs are allowed to participate in V-to-C, yet compound verbs cannot, at least in terms of the synchronic syntax. From a diachronic perspective, it is not surprising; at an earlier stage, out of the verb and its first preverb, only one was needed to move to C to bear **eti*. Yet what in the syntax of Old Irish might prevent the movement of compound verbs from IP to C is not clear; perhaps their greater structural complexity prevents compound verbs from moving from out of the IP and to the head position of C. This disparity must remain unsolved for now.

and the rest of the verb. These two IP positions are labelled "Ia" and "Ib" in 14.

(14)
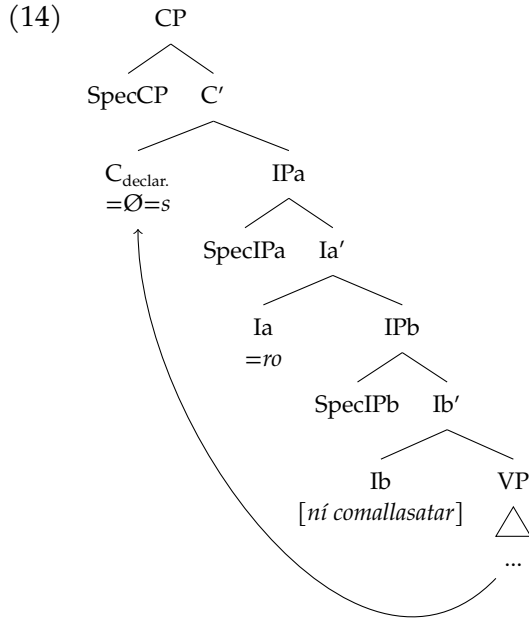
The key detail here is that *ro* has developed prosodic weakness, as part of its continuing grammaticalisation. Whereas the older 'fixed' *ro* could host the sequence =Ø=s, the newer and weaker movable =*ro* cannot. Like =Ø and =s, it needs a host, which all three find in the syntactically lower negator *ní*. The syntax in 14 will spell out the sequence:

(15) =Ø=s   =ro ní   comallasatar
     c=them pv   not   fulfil.PRF.ACT.3PL.
     'They had not fulfilled them'

This needs post-syntactic satisfaction. Working from left to right, prosodic inversion inverts =Ø and =s around the first available syllable, in accordance with the definition of prosodic inversion adopted here. In this case, the next syllable is =*ro*, producing =*ro* =Ø=s. Yet the requirement of =*ro* in turn inverts the string around the next syllable, *ní*.

(16) a.   Stage 0 of PI: =Ø=s =ro ní comallasatar
     b.   Stage 1 of PI: =ro=Ø=s ní comallasatar

  c. Stage 2 of PI: *ní=ro=Ø=s comallasatar*

Assuming that *ní* has no prosodic features to satisfy, the operation stops here. Through a cyclic operation of prosodic inversion, *s*, *ro* and *ní* therefore find their underlying order reversed in order to satisfy their post-syntactic requirements. Hence, from the syntax in 14, we may derive the observed arrangement in *nírus·comallas[atar]*. This analysis is highly speculative, but it should at least demonstrate the potential of this paper's syntacto-prosodic approach to deal with alternative orders in Old Irish.

4 Integrating Different Types of Clause

Everything discussed so far holds not only for declarative main clauses, but also mostly for subordinate, interrogative and imperative clauses. Yet there are significant differences between these clause types, to which this paper now turns. For a thorough survey of these clause types and more in Old Irish, see García-Castillero (2020). This section lastly covers some notable exceptions to the usual VSO word order, to demonstrate what they too can contribute to the account.

4.1 Subordinate Clauses (*Relative, Adverbial, Complement*)

4.1.1 The Data

Old Irish's Indo-European sister languages in general create relative clauses by means of clause-initial words, phrases and indeclinable particles that convey the relationship between the clause and its antecedent. Old Irish however has only one such relativising particle, (*s*)*a*, which is limited in its use. Old Irish instead displays a large array of relativising techniques that affect the shape of the clause-initial verbal complex.

  The first technique is dedicated relative verbal endings. These are available only to simple verbs and for only some grammatical persons: third-person singular, first-person plural and third-person plural. For active verbs, the endings for these are *-as/-es*, *-mae/-me* and *-tae/-te*. Relative endings exist for passive and deponent verbs too.

(17) a. *in*   *fualascach* *bec*
     the.NOM.SG bush.NOM.SG small.NOM.SG
     [*ásas*   *as=in*   *chrunn*]
     grow.PRS.IND.ACT.3SG.REL from-the.DAT.SG tree.DAT.SG
     'The group of small branches that grows from the tree'

                         (Sg. 65a7)

b. *iss*   *ed*   *a*   *folad*
be.PRS.IND.ACT.3SG   it   the.NOM.SG   substance.NOM.SG
cétnae   [***sluinditae***]
same.NOM.SG   signify.PRS.IND.ACT.3PL.REL
'This is the same substance that they signify'   (Sg. 9b5)

For verbs that do not meet the restrictions, such as compound verbs and simple verbs with a different person, Old Irish utilises its second technique: leniting and nasalising relative clauses. This involves the mutation of whatever follows the initial preverb or dummy *no*. This is often the initial segment of the stressed syllable in the Y slot of the verbal complex, be it part of the verbal root or a second preverb. However, if it is an object pronoun that follows the first preverb, the pronoun instead shows the mutation, as in 18 d and 18 e. Lenition 'softens' an initial consonant, turning plosives into fricatives. Nasalisation originally added a nasal consonant or quality to the start of the word, although later developments obscured this effect. Neither is consistently indicated in the written record.

(18) a. *ní*   *ail*   *aicsu*   *for=sa*
be-not.PRS.IND.ACT.3SG   wish.NOM.SG   wish.VN   on=the.ACC.SG
n-i   [*no·**thechti***]
PRT   PV·possess.PRS.IND.ACT.2SG.REL
'It is not a wish to wish for that what one has'   (Sg. 148a9)

b. *amal*   *nahí*   [*nád·**ch**iat*]   ...
like   that-which.NOM.PL   not·weep.PRS.IND.ACT.3PL.REL
amal   *nahí*   [*nad·**ch**renat*]
like   that-which.NOM.PL   not·buy.PRS.IND.ACT.3PL.REL
'Like those who do not weep ... like those who do not buy'
(Wb. 10b6-7)

c. *ethemlagas*   [*do·**n**-adbat*   *híc*
etymology.NOM.SG   PV·show.PRS.IND.ACT.3SG.REL   here
o=nd   *sun*   *grecdu*]
from=the.DAT.SG   word.DAT.SG   Greek.DAT.SG
'An etymology which he shows here from the Greek word'
(Sg. 27b15)

d. *sechi*   *chruth*   [*do=**nd**·rón*]
whatever.3SG   manner.NOM.SG   PV=it·do.PRS.SBJ.ACT.1SG
'In whatever manner that I may do it'   (Wb. 5b18)

e. *a*   *forcital*   [*for=**nd**ob·canar*]
the.NOM.SG   teaching.VN   PV=you(PL)·teach.PRS.IND.PASS.3SG.REL

    'The teaching by which you are taught'   (Wb. 3b23)

The relative clauses in 18 show the two processes. In 18 a and 18 b, the root of the verb occupies the Y position, following the dummy preverb *no* and the relative negator *nád* in [X], and its first consonant is lenited. In 18 c, a nasal *n-* is added to the second preverb of *do·adbat*. While the distribution of the two relativising techniques has become complex and variable by the time of our Old Irish sources, lenition and nasalisation originally served separate grammatical purposes. A leniting relative clause was used for when the antecedent of the clause was its subject (i.e. English '*the man* [*who sees…*]'); a nasalising clause was for object antecedents (i.e. '*the man* [*whom the woman sees…*]'). In the language of our sources, this distinction was breaking down, as leniting relative clauses take over the object-antecedent functions of the nasalising construction (Stifter 2009: 107). Moreover, neuter nouns were always modified by a leniting relative clause, regardless of the grammatical role of the neuter antecedent (McCone 1980: 17). The use of the nasalising relative in 18 e, in which the relative verb modifies its own verbal noun, is the regular *figura etymologica* construction (McCone 1980: 23).

    A third method for creating relative clauses involves the aforementioned indeclinable particle (*s*)*a*. This is used with prepositional relative clauses. Old Irish forms these through the fusion of the relevant preposition with the particle (such as *úa* 'from which…', *ara* 'for which…', *forsa* 'on which…'). This element stands initially.

(19) a.   *di=nd*   *riuth*   [***forsa·robith***]
        from=the.DAT.SG course.DAT.SG on-which·be.PRS.SBJ.2SG
        'From the course on which you may be'   (Wb. 20b1)

     b.   *a*   *folad*
        the.NOM.SG substance.NOM.SG
        [***dia·n-immolṅgaithær***   *vox*]
        from-which·produce.PRS.IND.PASS.3SG VOX.NOM.SG
        'The substance from which *vox* is produced'   (Sg. 3a2)

As 19 shows, these prepositional relative particles act like conjunct particles and precede dependent forms of the verb.

    A fourth relativising technique is to use the negator *ná*/*nád* (*nach* before object pronouns), which contrasts with the declarative main-clause negator *ní*.

(20) *ind*   *sillab*   *diuit*
    the.NOM.SG syllable.NOM.SG simple.NOM.SG

[*nád·ṡluindi*   *folad*]
not·signify.PRS.IND.ACT.3SG.REL   substance.ACC.SG
'The simple syllable which does not signify a substance'   (Sg. 26a4)

Furthermore, the distinct shape of Class C infixed pronouns may mark their clause as a relative one. For example, the Class C first-person singular pronoun *dom* contrasts with its counterpart *m* that would appear in a declarative main clause.

Other types of subordinate clause can now be reviewed, since many developed out of relative clauses. Prepositional relative clauses in particular gained new uses as adverbial and complement clauses. *Ara* 'for which' for instance also has functions of purposive 'so that…' and simply 'that…', while *dia* has a conditional function of 'if…'.

(21) a.   *gigeste=si*   *Dia*   *linn*
            pray.FUT.ACT.2PL=you(PL)   God.ACC.SG with.1PL
            [***ara****·fulsam*   *ar*   *fochidi*]
            that·bear.PRS.SBJ.ACT.1PL our trial.ACC.PL
            'You will ask God that we may bear our trials'   (Wb. 14c2a)

     b.   *ni·epeir=som*   [***ara****·ndíltad*   *lasuidib*]
            not·say.PRS.IND.ACT.3SG=he that-deny.PST.SBJ.ACT.3SG with.3PL
            'He does not say that he should deny with them'   (Wb. 17d11)

     c.   [***dia****·techtat*   *briathra*   *in* *go* *ar* *a*
            if·have.PRS.IND.ACT.3PL verb.ACC.PL in *go* for their
            cúl]
            back.DAT.SG
            'If they have verbs in *go* behind them'   (Sg. 112b3)

Likewise, the subordinator *co* 'so that, that, until' appears to derive from the preposition *co* 'to', although *co* does not visibly include the particle (*s*)*a*. It does share its nasalising mutation effect, but this is better derived as an effect of the final nasal consonant of its Proto-Celtic etymon *kom, rather than as of the former presence of (*s*)*a*.

A further means of marking complement clauses is the simple nasal mutation of the verb, without an overt subordinating lexical element (Ó hUiginn 1998).

(22) *conn·ic*   [*do·**m**berthar*   *forcell*]
      can.PRS.IND.3SG PV·give.PRS.SBJ.PASS.3SG.REL testimony.NOM.SG
      'It can be that a testimony may be given'
                                    (Ml. 24d14, from Ó hUiginn 1998: 3)

It must lastly be acknowledged that there is a noticeable divide within Old Irish subordinators: namely, what form of the verb their clause contains. Those mentioned so far act as conjunct particles and precede dependent forms of the verb. Yet some subordinators behave otherwise, instead preceding deuterotonic compound verbs and simple verbs with absolute inflection (Stifter 2009: 108-9). These include *má*/*ma* 'if', *(h)óre*/*húare* 'because' and *cía*/*cia* 'although'.

(23) a. *ma* **nu=dub·feil**   *i*   *n-ellug*   *coirp*
     if   PV=you(PL)·be.PRS.IND.3SG in union.DAT.SG body.GEN.SG
     Crist
     Christ.GEN.SG
     'If you are in the union of Christ's body'   (Wb. 19c20)

     b. *ma* **ru=d·predchisem**
       if   PV=it·preach.PRF.ACT.1PL
       'If we have preached it'   (Wb. 10d9)

     c. *hóre*   **at·tá**   *in* *n-ar* *leid*
       because PV·be.PRS.IND.3SG in   our side.DAT.SG
       'Because he is on our side'   (Wb. 4b11)

     d. *is*   *Dia=som*   *dom=sa*   [*hóre*
       be.PRS.IND.3SG God.NOM.SG=he to.1SG=me because
       no·cretim   *Ísu*]
       PV·believe.PRS.IND.ACT.3SG Jesus.ACC.SG
       'He is God to me, because I believe in Jesus'   (Wb. 1a2)

Others precede a relative clause, as *amal* 'as, as if' and *in tain* 'when, since' tend to, and *(h)óre*/*húare* may do also.

(24) a. *amal* **ro·mbói**   *fáilte*   *dúib* *re*   *n-a*
     as   PV·be.PRF.3SG.REL joy.NOM.SG to.3PL before his
     galar=som
     illness.DAT.SG=he
     'As joy has been yours before his sickness'   (Wb. 23d5)

     b. *amal* **ro=ndob·carsam**=*ni*
       as   PV=you(PL)·love.PRF.ACT.1PL.REL=we
       'As we have loved you'   (Wb. 25a35)

     c. *in-tain* **bes**   *mithich*
       when   be.PRS.SBJ.3SG.REL time.NOM.SG
       'When it may be time'   (Wb. 20c15)

Which type of verb (absolute or conjunct inflection, relative or non-relative, etc.) a given subordinator requires seems determined by its specific features as a lexical item.

4.1.2   Deriving Subordinate Clauses

Subject and object relative clauses somewhat resemble declarative main clauses, in as much as simple verbs may bear distinct inflectional endings (as in 17) and compound verbs have a prosodic break (18). Yet it would be inappropriate to propose that they too once included the enclitic affirmative particle *eti*, given their different function as clauses.

However, relativised simple and compound verbs can both be derived through the idea of another lost particle: the relative element *yo(m)* (Watkins 1963). The addition of *yo(m)* to the end of the simple verb created a set of relative endings, and is thus responsible for the relative inflections -*mae* and -*tae*.[10] Meanwhile, the enclisis of *yo(m)* on the first preverb of a compound verb created the necessary phonological context in which lenition or nasalisation of the following segment would then occur through sandhi. Independent evidence from Gaulish[11] and Welsh, related Celtic languages, supports the existence of such a particle in a earlier stage of Irish (McCone 1980: 20). It is furthermore considered a cognate of the Sanskrit and Ancient Greek relative pronouns *yáḥ* and *hós* (Matasovic 2008: 436).

yo was the nominative case form. Its final vowel was responsible for the intervocalic environment in which lenition of a following consonant could occur; from this lenition effect of *yo* comes the leniting technique of Old Irish subject relative clauses. The particle must have remained capable of minimal inflection at a pre-Old Irish stage, since nasalising relative clauses look to be a product of its (masculine and feminine) accusative counterpart, *yom* (Breatnach 1980, Ahlqvist 1983). The final nasal consonant of accusative *yom*, being enclitic on the first preverb, nasalised the beginning of the rest of the verb. It was through this sandhi effect that nasalising relative clauses like 18 c could develop. This understanding of mutation as the result of lost morphophonology is accepted for Old Irish in general, understood also for nouns' expression of case and number.

Eska's analysis (2012: 54) is that the development of relative *yo(m)* ran parallel to the formation of the affirmative particle *eti* in declarative main clauses. Both became exponents of the C head, and both were either enclitic

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10 The 3sg. relative ending -*as* is harder to derive, and has been explained as the result of analogy or fusion with the relative copula (cf. Ahlqvist 1985).

11 The notable Gaulish evidence is the verb *dugiiontio* 'who serve', with enclitic relative -*io* (cf. Watkins 1969).

on or suffixed to another element, namely the verb or a preverb. This development is a case of the 'Spec to Head' analysis of van Gelderen (2004), in which the relative element, once in SpecCP, becomes the C head of its relative clause. *yo(m) lost most of its inflectional variation and continued to decay phonologically, though not without leaving a mark. Relative inflection, leniting and nasalising relative clauses, the relativising use of certain negators and the familiar prosodic break between [X] and [Y Z W] in the relative-clause verbal complex all find an origin in the former presence of *yo(m).

The syntactic head that *yo(m) realised, of category C, continues its impact on the surrounding phonology in Old Irish, but has become another lexically null element, which is an enclitic on preverbs and a verbal affix for simple verbs. 25 illustrates this with an abstract derivation for a relativised compound verb. The null enclitic "=$\emptyset^{L/N}$" could be set to either nominative (leniting) or accusative (nasalising) to build either subject or object relative clauses, although, as noted, this feature alternation is breaking down in Old Irish, developing into an all-purpose leniting relative =$\emptyset^{L}$. This enclitic element will not only create a prosodic break, but also mutate the segments of what immediately follows, as seen in the examples in 18.

(25)

CP

SpecCP   C′

C_{rel}
=$\emptyset^{L/N}$ IP

SpecIP   I′

I   VP
[PV PV V]

...
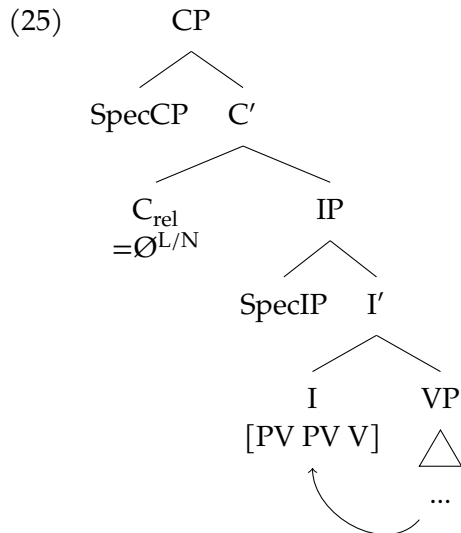
As in declarative main clauses, the enclitic relative C precedes any object pronouns in a clitic chain that stacks up on the host. It can be said that C precedes the object pronoun in the chain, since examples like 18 e show the nasalising of the pronoun *dob* 'you', not the root of the verb in the Y position. The complex *forndob·canar* 'by which you are taught' therefore has the linear structure *for*=$\emptyset^{N}$=*dob·canar*. 26 shows its syntactic derivation, including the C head

complex $=\emptyset^{N}=dob$ that will trigger prosodic inversion with the preverb *for*.

(26)
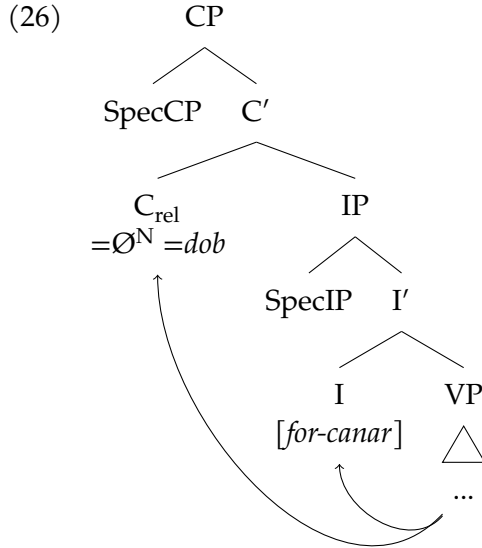
However, prepositional relative clauses with $(s)a$ do not fit into this account. The particle $(s)a$ bears no relation to **yo(m)*, but rather resembles the nominative/accusative neuter singular form of the definite article. Their common etymology is plausible. Perhaps the role of Pre-Old-Irish **yo(m)* was limited to subject and object relative clauses, so prepositional relative clauses needed to co-opt the determiner into performing a relative function. In other words, relative elements like *forsa* and *dia* developed out of prepositional phrases that included a definite determiner. The determiner has since levelled its case inflections and fossilised as an indeclinable relative particle. The respective syntactic positions of $(s)a$ and the preposition are not immediately clear. If we wish to include the movement of the preposition from elsewhere in the clause, they may remain separate, with $(s)a$ being a C head and the preposition moving up to join it in the CP. Alternatively, they may have fused to form a new class of relativising elements and simplex exponents of C; this is to say, elements like *dia*, *úa* and *forsa* may be syntactically simple C heads. Either way, these relative markers occupy CP, and the verb that follows appears in its dependent form, as in 19 b. Likewise, the various subordinators that derive from $(s)a$ and behave as conjunct particles, such as *dia* and *ara*, stand in the CP.

Complement clauses marked by only the nasal mutation, such as *do·mberthar forcell* 'that a testimony may be given' in 22, are most likely another relic of the

old accusative relative particle *yom, surviving in this complementation use through the resultant nasal mutation.

The second grouping of subordinate clauses in §4.1.1, those for which the subordinate verb is independent, are a greater challenge to derive. Given that absolute and relative inflection and deuterotonic verbs are the result of the interactions between the verb and null C, subordinators like *má*, *(h)óre* and *amal* cannot be C heads. If they were, the verb would appear in its dependent form. Any object pronouns (e.g. *dub* in 23 a) would also be enclitic on *ma*. Such subordinators must therefore be somewhere higher in the syntactic structure.

(27)   a.   *hóre*   **at·tá**   *in   n-ar   leid*
            because   pv·be.prs.ind.3sg   in   our   side.dat.sg
            'Because he is on our side'   (Wb. 4b11. Repeated from 23 c.)

       b.   *in-tain*   **bes**   *mithich*
            when   be.prs.sbj.3sg.rel   time.nom.sg
            'When it may be time'   (Wb. 20c15. Repeated from 24 c.)

The relativity of subordinate verbs like those in 27 b permits us to understand these as cleft-like constructions, formed through two clauses and a silent copula. The subordinator stands somewhere in the higher clause, while the lower has the syntax of a typical (subject/object) relative clause, in which the verb moves either to the relative C head or to its usual position in the IP.

Subordinate clauses like 27 a pose a greater challenge. The verb is not relative, so we have no grounds to posit that they comprise more than one clause. Subordinators like *má* 'if', *(h)óre* 'because' and *cía* 'although' must therefore stand somewhere within its left periphery and in a higher position than the CP, such as the TopicP proposed in §4.4.2. This at least accords with the etymology of *(h)óre*, which is sometimes used with a non-relative independent verb, and which derives from the Latin noun *hōra* 'hour, time'. At an earlier stage of Irish, the word may have once been a topical noun phrase, conveying the time context of its clause, prior to its reanalysis into a temporal and then causal subordinator.

It is interesting to note that the remainder of such clauses are almost identical to ordinary declarative main clauses (García-Castillero 2020: 168-170). All three verbs in 23 for example are deuterotonic and non-relative, and the object pronoun is enclitic on the [X] position. However, a difference is that they include a different class of infixed pronouns; 23 a contains the Class C pronoun *dub* 'you' (plural). Class C pronouns are typical of non-declarative clauses. It may therefore be that these subordinate clauses are a new kind that have developed more recently out of declarative main clauses, acquiring Class

C pronouns through analogy with established subordinate patterns. Future work on the Old Irish clause will seek to integrate the distribution of the different classes of pronouns into the account, as well as the variation between different forms of the clausal negator (*ní*, *ná*, *nád* and *nach*[12]).

4.2   Interrogative Clauses

4.2.1   The Data

In terms of interrogative clauses, Old Irish has both polar *yes/no* questions and questions that include a *wh*-word. The particle for forming positive interrogative clauses, *in*, has already been mentioned, but it also has the negative counterparts *in-nád* and *ca-ni*. These are conjunct particles, meaning that they occupy the [X] slot of the verbal complex and precede the dependent form of the verb.

(28) a. ***in·bértar***   *epistli*   *uaín...?*
Q·carry.PRS.IND.PASS.3PL epistle.NOM.PL from.1PL
'Will epistles be brought from us?'   (Wb. 15a3)

b. ***innád·cualaid=si***   *a geinti?*
QNEG·hear.PRF-ACT.2PL=you(PL) oh gentile.VOC.PL
'Have you not heard, O gentiles?'   (Wb. 5a21)

c. ***cani·epir?***
QNEG·say.PRS.IND.ACT.3SG
'Does it not say?'   (Wb. 10d5)

Wh-elements in Old Irish are less simple. They seemingly form two groups, referred to as *stressed* and *unstressed*. The unstressed *wh*-elements include *ce*, *ci* and *cía*, which are pronominal. There is also *co*, an *wh*-adverb meaning 'how?', although it is not used in the language of the glosses. These elements all behave like conjunct particles in the [X] position.

(29) a. ***ce·rricc?***
what·reach.PRS.IND.ACT.3SG
'Why?', literally 'what does it reach?'   (Sg. 199b28)

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12 As one reviewer notes, the shape of *nach*, standing before object pronouns, is especially interesting, since it is derived from **ne* and the enclitic coordinator **-kʷe* (Binchy 1960). The latter also appears in *bach* 'and it was' and *sech* 'moreover', and as enclitic on *no* and *ro*. This clause-second position of *-ch*, immediately preceding object pronouns, is reminiscent of the behaviour of the Ancient Greek and Sanskrit coordinators *dé* and *ca*, and deserves further attention.

b. *a Ḟeidelm banḟáith, co·acci*
   oh Fedelm.VOC.SG prophetess.VOC.SG how·see.PRS.IND.ACT.2SG
   in slúag?
   the.ACC.SG host.ACC.SG
   'Oh prophetess Fedelm, how do you see the army?'
   (*Táin Bó Cúailnge* (I) 48)

Meanwhile, the elements of the stressed group show distinctions for number and gender, with masculine *cía*, feminine *cisí/cessi*, neuter *cid/ced* and plural *citné*. This group not only behaves differently in terms of morphology; they are also not conjunct particles and they precede another kind of clausal construction. Although the morphology may not be obvious, the verb that they appear with must be relative, meaning that it forms its own separate relative clause. Stressed *wh*-material therefore appears in bi-clausal cleft constructions (García-Castillero 2020: 192-5), albeit with the copula incorporated phonologically into the *wh*-word. This is to say, an Old Irish question equivalent to '*who do you see?*' that uses a stressed *wh*-pronoun really has the structure '*who* [*is it*] *that you see?*'.

(30) **cid** *a=tob·aig dó?*
     what PV=you(PL)·impel.PRS.IND.ACT.3SG.REL to.3SG.N
     'What [is it that] impels you to it?' (Wb. 19d10)

Both stressed and unstressed interrogative pronouns form the basis for complex *wh*-phrases. These may serve adverbial functions, such as *cia-indas* 'how?' and *cia-eret* 'how long?', literally 'what [is the] manner?' and 'what [is the] length?' (García-Castillero 2020: 199-203). These complex elements similarly form questions with relative verbs.
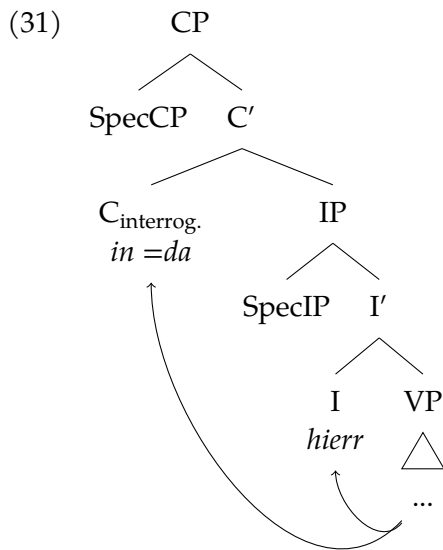
In brief, there is a distinction among Old Irish *wh*-words and phrases between short unstressed *wh*-elements that occupy [X] in the verbal complex, and longer stressed ones that do not and form cleft constructions instead.

4.2.2 Deriving Interrogative Clauses

The interrogative elements that act as conjunct particles (namely the particles *in*, *in-nád* and *ca-ni* and the unstressed *wh*-words *ce*, *ced*, *co*, etc.) fit well into the syntactic account. They stand within the CP; the particles are C-heads, while the *wh*-words, if we want to derive these through *wh*-movement, may occupy SpecCP. They thereby give lexical expression to the CP, and can therefore host object pronouns, as in 7 b *in=da·hierr?*. Consequently, there is therefore no interaction between the CP and the verb in IP in interrogative clauses;

the C head has no syntactic or prosodic features that the verb must help to satisfy. Because the C element is not the null =Ø of declarative main clauses, simple verbs do not move up to C. They therefore appear with conjunct inflection (as in 28). Furthermore, interrogative C has no prosodic effect on compound verbs, which are therefore free to remain prototonic.

31 illustrates the pre-prosodic syntax of polar questions like 7 b. C, specified for interrogativity, is lexically realised by the particle *in*. This will provide the necessary host for the object pronoun that moves to C. It therefore leaves the verb (or first preverb) in the IP unaffected by any requirements of enclisis.

(31)

CP
├── SpecCP
└── C′
    ├── C$_{interrog.}$ *in =da*
    └── IP
        ├── SpecIP
        └── I′
            ├── I *hierr*
            └── VP
                ...

As mentioned, stressed *wh*-elements differ. They form questions with subordinate relative clauses. We may derive these through the syntactic ingredients given already, positing an underlying structure that comprises two clauses, one embedded under the other. The *wh*-material occupies the higher clause, perhaps standing in the CP of that clause, although the limited word-order evidence does not allow us to be definite about its position. Meanwhile, the CP of the lower clause contains the relative C head =Ø$^{L/N}$. This produces the relative verbs in such questions.

4.3 Imperative Clauses

4.3.1 The Data

Imperative clauses show one significant difference from the behaviour of the verbal complex reviewed so far. They are used in Old Irish, as in other languages, to express commands. Other contemporary Indo-European languages made use of a verb-initial order to distinguish imperative from indicative clauses, but for Old Irish, this order offers no such distinction. The imperative verb does display some distinct morphological features. The second-person singular active has a 'zero' ending, and the third-person singular active has the ending *-ad/-ed* (Stifter 2009: 95).

Yet most notable is that the verb nearly always appears in its dependent form, with conjunct inflection for simple verbs and with prototonic compound verbs. It does so even in the absence of a preceding conjunct particle. The division of the verbal complex into [X] and [Y Z W] does not seem to apply to imperative clauses.

(32) a. **gaib**   *do*   *chuil*   *i=sin*
take.IMP.ACT.2SG your corner.ACC.SG in=the.DAT.SG
charcair
prison.DAT.SG
'Take your corner in the prison'   (Sg. 229a)

b. **léic**   *uáit*   *inna*   *biada*
leave.IMP.ACT.2SG from.2SG the.ACC.PL food.ACC.PL
mílsi   *et*   **tomil**   *inna*   *hí*   *siu*
sweet.ACC.PL and consume.IMP.ACT.2SG the.ACC.PL PRT this
do·mmeil   *do*   *chenél*
PV·consume.PRS.IND.ACT.3SG.REL your people.NOM.SG
'Cast away the sweet foods and consume this that your people consume'   (Wb. 6c7)

c. **taibred**   *cách*   *airmitin*   *di*
give.IMP.ACT.3SG everyone.NOM.SG honour.ACC.SG from
alailiu   *et*   **nách·taibred**   *do feisin*
other.DAT.SG and not=it·give.IMP.ACT.3SG to himself
'May everyone give honour to one another and not give it to himself'   (Wb. 5d16)

The compound verb *tomil* in 32 b is prototonic, despite the lack of a preceding conjunct particle. The imperative verb *taibred* in 32 c appears in this prototonic form both with and without the negator *nách*.

Imperative clauses display the deuterotonic forms of declarative main clauses only when the clause contains an object pronoun. This must be enclitic on the initial imperative negator *ná* or the first preverb, in which case an imperative compound verb will be deuterotonic. Suffixed pronouns are not an option for imperative simple verbs (García-Castillero 2020: 217).

(33) a. *imm=**a**·n-imcab*
          pv=him·avoid.imp.act.2sg
          'Avoid him'   (Wb. 30d20)

      b. *nach=**a**·telcid*   *fuirib*
          not=them·pass.imp.act.2pl   over.2pl
          'Do not let them pass you'   (Wb. 15d4)

Only in the presence of object pronouns then do imperative clauses resemble their declarative counterparts, with the prosodic break and the division between [X] and [Y Z W]. In their absence, these features do not occur, and the imperative simple verb bears imperative inflection, while the imperative compound verb is prototonic.

4.3.2 Deriving Imperative Clauses

Given the analysis so far, imperative clauses can be straightforwardly accounted for. The behaviour of imperative verbs is exactly what we expect if we assume the former presence of the affirmative particle in their declarative main counterparts. Imperative clauses do not serve declarative functions, being used for giving commands, not stating facts. They have therefore never included the particle and its specific type of C head, and so do not show its effects. Indeed, the imperative-type C has never had any lexical form [13]; the philological tradition has not reconstructed an equivalent imperative particle that, like **eti* and **yo(m)*, has gone through phonological decay. Imperative C has always been null, and it is not enclitic. Naturally, we may wonder whether C is even present in the syntax behind imperative clauses; yet it must be, because it is responsible for the movement of object pronouns. Being enclitics, it is therefore only object pronouns that trigger prosodic inversion and produce a prosodic break within a compound imperative verb.

34 illustrates the syntax of the imperative clause with the imperative (and prototonic) compound verb *tomil* in 32 b. As in other types of finite clause, the verb (simple or compound) moves up to the IP. If morphologically available,

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13 Except, perhaps, the imperative negator *ná*. This paper remains deliberately ambivalent about the syntactic status and location of Old Irish negators.

there it acquires its dedicated imperative inflection, and there in the IP it stays. The null yet **non**-enclitic C will have no effect on *tomil* when 34 is passed on to the phonology.

(34)

```
            CP
          /    \
     SpecCP     C′
              /    \
        C_imper.    IP
           Ø       /  \
              SpecIP    I′
                      /    \
                     I      VP
                  [to-mil]   △
                              ...
```
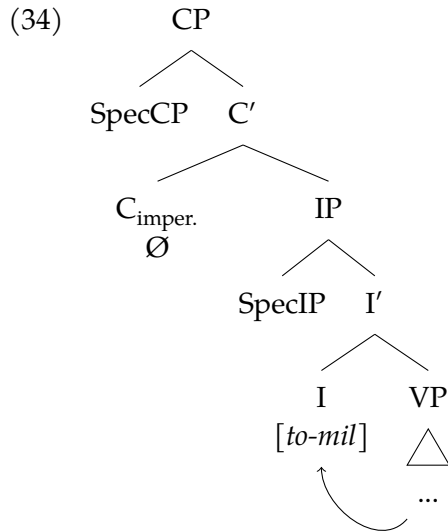
The verb in 34 will surface with basic conjunct inflection and stressed on its first syllable. It is only through the additional presence of object pronouns that prosodic inversion will sever the first preverb from the rest of an imperative compound verb.

4.4 Notable Exceptions to VSO

4.4.1 The Data

Lastly, this section turns to some exceptions to the general VSO order of Old Irish. These are, in order: subject-late clauses, Bergin's construction, tmesis, and pre-verbal topics and foci. Lash (2020) discusses clauses with the rightward dislocation of the subject, in which it appears last or later than usual.

(35) a. *ro·siacht   corrici nem   a*
        PV·reach.PST.IND.ACT.3SG up-to heaven.ACC.SG his
        trocaire
        mercy.NOM.SG
        'His mercy reached up to heaven'

                                          (Ml. 55d2, from Lash 2020: 122)

b. *fo·sissetar*   *a*   *pectu*   **ind**
    PV·confess.PRS.IND.ACT.3PL their sin.ACC.PL the.NOM.PL
    ḟirien
    righteous.NOM.PL
    'The righteous confess their sins'
                                            (Ml. 132a1, from Lash 2020: 127)

As well as subjects, the finite verb can also appear unusually late within the clause. For instance, the verb can be late or even last, in such cases appearing with conjunct inflection and in its prototonic form (if compound). This arrangement is widely known as Bergin's law, after Bergin (1938).

(36) *is*   *tre*   *fír*   *flathemon*
      be.PRS.IND.3SG through justice.ACC.SG prince.GEN.SG
      [*mortlaidi*   *móra*   *di*   *dóenib*
      mortality.NOM.PL great.NOM.PL from person.DAT.PL
      dingbatar]
      avert.PRS.IND.PASS.3PL

      'It is through the justice of a prince that great plagues are averted
      from people'   (*Audacht Morainn*, from Doherty 2000: 17)

A related pattern to Bergin's construction is the appearance of tmesis in the Old Irish declarative main clause. This involves compound verbs that are clearly separated into preverb and verb. While the verb appears late, its associated preverb stands initially in the clause, with intervening material between the two (Thurneysen 1946: 327). The verb retains conjunct inflection.

(37) a. **ad** *cruth*   *caín*   **cichither**
          PV form.NOM.SG fine.NOM.SG see.FUT.PASS.3SG
          'Fair form will be seen'   (*Serglige Con Culainn* 694, from Russell
          2014: 288)

      b. **for**=*don* *itge*   *Brigte*   **bet**
          PV=us prayers.NOM.PL Brigid.GEN.SG be.PRS.SBJ.3PL
          'May Brigid's prayers be upon us'
                                            (Thes. II.348.4, from Thurneysen 1946: 257)

If object pronouns are present, they continue to be enclitic on the preverb as the first element of the clause, as *don* 'us' is in 37 b.

Bergin's construction and tmesis have a limited distribution in our Old Irish sources; they do not appear in the prose language of the glosses, but

rather in poetry and the alliterative *rosc* style. They have therefore been presumed by some to be archaic, surviving in these genres from an earlier grammar without generalised VSO. Yet other scholars reject an archaic status, arguing instead that they belong to an innovative register, and that some are influences of the Latin of which their texts are translations (Breatnach 1984, Corthals 1996). A firm response to this philological debate is far outside the remit of this paper.

DiGirolamo (2018) investigates Old Irish clauses with one pre-verbal constituent. These appear not only in poetry, but also as a notable minority (7%) of applicable clauses in the prose of the Würzburg and Milan glosses. The fronted constituent may be a prepositional phrase or a nominative or accusative noun (phrase). Such a constituent may be resumed in the remainder of the clause with a pronoun.

(38) a. [*ind*　　*foisitiu*　　　　*i*　*ngiun*]
　　　　the.NOM.SG confession.NOM.SG in mouth.DAT.SG
　　　　im·folngi　　　　　　*in*　　*duine*
　　　　PV·produce.PRS.IND.ACT.3SG the.ACC.SG man.ACC.SG
　　　　slán
　　　　whole.ACC.SG
　　　　'The confession in the mouth makes the person whole'
　　　　　　　　　　　　　　(Wb. 4d33, from DiGirolamo 2018: 146)

　　 b. [*i*　*n-aimsir*　　*Mordochei*]　　*ro·comallad*　　*techt*
　　　　in time.DAT.SG Mordechai.GEN.SG PV·fulfil.PRF.ACT.3SG go.VN
　　　　doib　*huili*　　*fo*　　*recht*　　*n-indibi*
　　　　to.3PL all.NOM.PL under law.ACC.SG circumcision.GEN.SG
　　　　'In the time of Mordechai it was fulfilled that all went under the
　　　　law of circumcision'　　(Ml. 81d5, from DiGirolamo 2018: 144)

DiGirolamo considers these constituents to be fronted topics. Despite preceding the verb, the fronted phrase does not affect its form, triggering neither conjunct inflection nor prototonic compound verbs.

DiGirolamo and others (Stifter 2009: 105-6) have also noted that Old Irish also has a distinct construction for the purpose of focusing and emphasising a constituent: clefting. This is especially common in the Old Irish glosses; this is not surprising, considering "the nature of the activity of glossing, which tends to focus on a particular word or phrase" (Russell 2014: 287).

(39) *is*　　　　　*tri*　　*Ísu*　　*predchim=se*
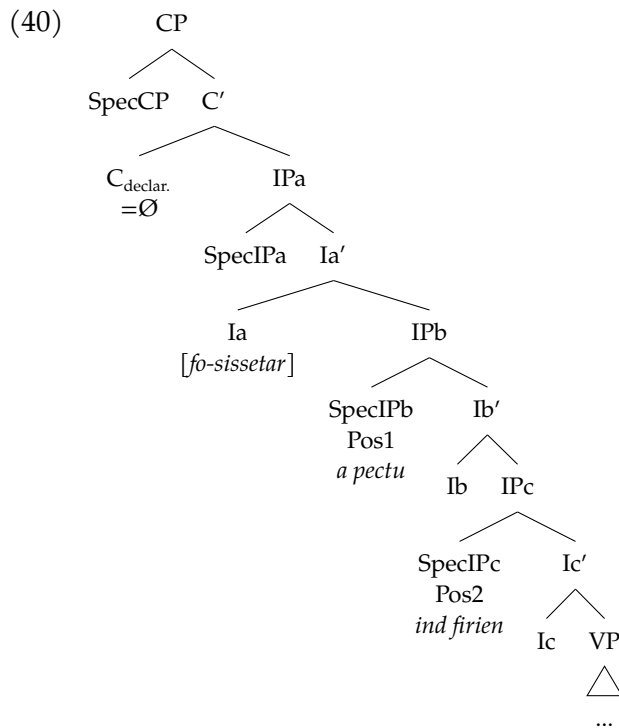　　　be.PRS.IND.3SG through Jesus.ACC.SG preach.PRS.ACT.IND.1SG.REL=I

> *...   is   macc   míastar*
> be.PRS.IND.3SG   son.NOM.SG   judge.FUT.ACT.3SG.REL
>
> 'It is through Jesus that I preach ... it is the Son who will judge'
>
> (Wb. 1d9)

As 39 illustrates, cleft constructions comprise the copula verb, the focused element and then a relative clause. Cleft constructions therefore really include two clauses, one main and declarative, the other subordinate and relative.

4.4.2   *Deriving the Exceptions to VSO*

The first kind, the clause-late subjects that do not appear immediately after the verb, Lash (2020) derives "by appealing to information structure". Lash posits two syntactic positions, Pos1 and Pos2, that arguments and adverbial adjuncts may occupy. Pos1, the hierarchically higher of the two, is used for old information. This is usually the subject, but not always. Pos2, the lower, is for new information. If the subject is not given or is focused, it moves to Pos2, while something else may stand in Pos1. If so, given the separate raising of the verb, the subject will surface last in the clause or at least later than in the typical VSO order. Lash (2020: 97, 122) grounds both of these positions within a generative model structure of the clause. Most notably for this purposes of this paper, he locates them within the IP 'zone' of the clausal structure. A clause like 35 b *fo·sissetar a pectu ind ḟirien* can therefore be modelled by expanding the IP into multiple projections, containing the targets for the movement of the finite verb (IPa in 40), old information (IPb) and new information (IPc).

(40)

```
                        CP
                       /  \
                  SpecCP    C′
                          /    \
                    C_declar.    IPa
                      =Ø         / \
                            SpecIPa  Ia′
                                    /   \
                                  Ia      IPb
                            [fo-sissetar]  / \
                                    SpecIPb   Ib′
                                     Pos1    /  \
                                   a pectu  Ib   IPc
                                              /   \
                                         SpecIPc   Ic′
                                          Pos2    /  \
                                       ind firien Ic  VP
                                                     /\
                                                     ‒‒
                                                     ...
```

Lash's analysis therefore poses no problems for the account in this paper; rather it contributes to the finer details of the lower IP zone.

If Bergin's law and tmesis are indeed archaic features of Old Irish grammar, then their verbal morphology and word order can be derived by positing that they involve no movement of the verb, or at least less movement than in VSO. To derive them, the verb remains low and does not raise to IP. Its surface position will thus be after the subject and other constituents; being far down below the CP layer, it will also bear conjunct inflection. If archaic, then they therefore attest to an older grammar, prior to the generalised VSO order found in our prose sources. In this grammar, the inflection of the verb instead arose from a downward operation of agreement between the inflectional head I and the low verb in the VP, rather than from the movement of the verb upwards. This older stage fits with the wider Indo-European context to which Old Irish belongs.

Tmesis, along with absolute inflection, might have begun with the fronting of one preverb or the simple verb from a low structural position, so that they could be emphasised or offer a host for the enclitic pronouns that target C (Kim 2000: 181-2). This was later syntacticised and reanalysed as obligatory movement of one or the other to C. Then by the time of our Old Irish sources, this secondary grammar has become unproductive; the productive grammar

is instead the general movement of preverbs and the verb together only as far as the IP. Other early Indo-European languages support this diachronic view of Old Irish tmesis; Vedic Sanskrit, Avestan and Ancient Greek also display tmesis with their preverbs, placing them initially and at a distance from the verb (with relics of such an order in Latin and Gothic too); these preverbs are understood to have been fronted and moved in the syntax from a lower position (Hale 1993, Lowe 2014). Bergin's law and tmesis may therefore enhance our understanding of the diachrony of the Old Irish clause and its development prior to the stage to which our sources attest. However, if they are not archaic, and are instead Latin-influenced innovative orders, then all this speculation is moot. Regardless, the two constructions do not challenge the working syntactic structure of this paper.

However, the pre-verbal topics identified by DiGirolamo (2018) do require modifications to be made. She states that the fronting of 'aboutness' and contrastive topics were a productive construction in Old Irish, and suggests that these two types of topic are hosted in dedicated projections of a layered left periphery. This is something that Adger's analysis (2006: 632) of the left periphery does include, with two positions for topics, following the Rizzian (1997) model.

(41) [$_{\text{ForceP}}$ Force [$_{\text{TopicP}}$ Topic [$_{\text{FocusP}}$ Focus ...]]]

(Adger 2006: 632)

However, this Rizzian structure and approach make the wrong prediction for the data. Its Topic positions are lower down than the enclitic Force head that is responsible for the prosodic break in deuterotonic verbs, and so any topics present should provide a host for Force. Consequently, Force will have no effect on compound verbs, which will remain prototonic. As the examples in 38 show, this is not the case.

(42) [$_{Topic}$ *ind* *foisitiu* *i* *ngiun*]
the.NOM.SG confession.NOM.SG in mouth.DAT.SG
im·folngi *in* *duine* *slán*
PV·produce.PRS.IND.ACT.3SG the.ACC.SG man.ACC.SG whole.ACC.SG
'The confession in the mouth makes the person whole'
(Wb. 4d33. Repeated from 38 a.)

Despite preceding the verb, the initial topical phrase in 42 does not affect its form. If the Topical phrase were syntactically lower than the enclitic C head (Adger's Force), it, not the verb, would provide the necessary prosodic host for the enclitic element. If C/Force were syntactically higher, the compound

verbs in topic-initial clauses like *im·folngi* in 42 should be prototonic. Topics should therefore be located instead in a syntactic position even higher than C, away from the interactions between C and the verb below it.

DiGirolamo herself adopts the multi-layered left periphery of Frascarelli & Hinterhölzl (2007), yet it is not clear whether another such complex structure is necessary; while DiGirolamo does demonstrate that initial topics are of different types and functions, she does not provide evidence of multi-topic strings that would necessitate several projections in the syntax. To avoid the unnecessary multiplication of entities, one all-purpose TopicP suffices instead. Regardless, DiGirolamo's proposal of specific discourse-functional projections is a helpful addition to the working account of Old Irish syntax, expanding its left periphery beyond a CP alone. It should include a TopicP at the top of the hierarchical structure.

5   Summary and Conclusions

The preceding review and analysis of the Old Irish finite clause is intended to demonstrate that its complicated behaviour arose from the following fairly simple common clausal syntax:

(43)   TopicP
       /\
   Topic   CP
          /\
         C   IP
             /\
            I   VP
                 /\
                 ...
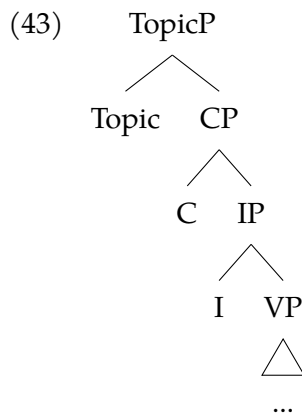
The C head in 43 is the locus of clause type, with the possible types being declarative, interrogative, imperative, relative and others kinds of subordinate clause.[14] The famous intricacies of the Old Irish verbal complex are simply products of the interaction between the specific features of the C head and the verb in the IP. The key observation of this paper is that the intricacies differ across four types of clause; its key explanation is that this is due

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14 With some terminological sleight of hand, we can understand 'C' to stand not for 'C(omplementizer)' but rather 'C(lause)'.

to the various lexical realisations of C-elements and the satisfaction of their prosodic requirements.

More lexical items once realised these different C heads. The Old Irish philological tradition provides the evidence that, at a pre-Old Irish stage, declarative main clauses and relative clauses were once marked by specific particles (*eti* and *yo(m)*) that had decayed phonologically into enclitics. These then lost lexical form altogether. It is these two lexically null types of C and their prosodic status that are consequently responsible for the behaviour of the verbal complex in their respective clause types. This behaviour is namely the absolute and relative inflection of simple verbs (still produced via syntactic movement), and the prosodic break and relative mutations in compound verbs.

Interrogative and imperative have meanwhile never contained these particles and types of C, since these clause types serve alternative functions. Consequently, the verbal complex behaves differently in them. In many interrogative clauses, C is given lexical expression either by the particle *in* or an unstressed *wh*-word. In imperative clauses, it has no lexical expression, but also no prosodic requirements to satisfy. Consequently, in both types of clause the verb remains in its most basic form: bearing conjunct inflection and stress on its initial syllable, like an ordinary Old Irish word. An exception is when the imperative clause contains object pronouns; these can produce deuterotonic compound verbs through prosodic inversion with the first preverb. Furthermore, many types of subordinate clause have a lexically overt subordinator that realises C, and so similarly include a dependent-form verb.

Altogether, this produces the five options for the C head and the Old Irish clause given in Table 2 below. It excludes interrogative clauses that have stressed *wh*-elements and relative verbs, or subordinate clauses in which the subordinator, such as *amal*, precedes an absolute, relative or deuterotonic verb; these are considered to be built on one of the five types of clause and with one of the first two exponents of C below.

By the stage of Irish to which the glosses attest, the language was in the process of generalising V-to-I movement, but movement of the verb or its preverb even higher to C can still be identified in the behaviour of simple verbs and possible cases of tmesis. This may reflect an earlier stage in which the C head had a syntactic requirement for lexical realisation that either the finite verb or a preverb could satisfy (Kim 2000: 184). In the Irish of the glosses, this has given way to the new grammar of V-to-I.

Beyond CP, it is empirically requisite to posit a TopicP. This may host various kinds of topical constituent, whole subordinate clauses and perhaps also some subordinating elements. Their syntactic position produced a distinct in-

Clause type	Lexical Exponent
Declarative main clause	null $=\varnothing$
Relative (subject and object) clause	null $=\varnothing^{\text{L/N}}$
Other relative and subordinate clauses	various subordinators
Interrogative main clause	*in* or unstressed *wh*-words
Imperative main clause	null $\varnothing$

Needs a host?	Effects on the verb
yes	deuterotonic compound verbs, absolute inflection
yes	deuterotonic compound verbs, mutation, relative inflection
no	no effect, conjunct inflection, prototonic forms
no	no effect, conjunct inflection, prototonic forms
no	no effect, conjunct inflection, prototonic forms

Table 2 The different clause types reviewed, the C-elements specific to each, and the resulting syntactic and morphophonological behaviour.

tonational phrase, prosodically separated from what followed. Being above the CP means that whatever occupies TopicP has no effect on the interactions between C and the verb. They do not offer a phonological host for either enclitic null C or object pronouns. Topical elements may therefore precede the deuterotonic verbs and verbs with absolute inflection that null C produces. At present, it does not seem necessary to propose any further components of the left periphery. The Rizzian Split CP includes FocusP, yet the fact that Old Irish resorts to cleft constructions for foci and stressed *wh*-elements indicates that fronting for focus within one clause was not yet an option.

As with many phenomena in Old Irish grammar, this great variety of clausal behaviour largely finds its origins in phonological decay, as the lexical exponents of syntactic heads (**eti* and **yo(m)* in this case) gradually disappear, and the phonological impressions that they leave behind must in turn pick up the slack. Further work should seek to account for the varying shape of Old Irish object pronouns and negators, and their distribution across the types of clause with respect to the different lexical expressions of C. The relative positions of negators, the moved finite verb and arguments expressing new and old information moreover suggest an articulated IP zone in the Old Irish clausal syntax, which it may be worthwhile exploring further. More generally, the proposed synchronic syntax should be reviewed within the

diachronic context of the long-term development of Irish clausal grammar, linking its features both to Irish syntax since and back to its Celtic and Indo-European origins. A comparison with the same clause types in Welsh, which inherited the same lexical elements, could prove fruitful, as could a comparison with Sanskrit, another early Indo-European language, which displays a strikingly similar arrangement of verbs, preverbs, enclitic pronouns and the cognate relative element *yáḥ*.

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Danny L. Bate
School of Philosophy, Psychology & Language
Sciences
University of Edinburgh
Edinburgh
United Kingdom
....
d.l.bate@sms.ed.ac.uk
dannybate.com