

# On Non-Verbal Argument Domains – the Irish Landscape and Beyond

Jim McCloskey

Santa Cruz, May 2025

## ACKNOWLEDGEMENTS

This paper would not exist without the help and advice of my language consultants and advisors: Caitlín Nic Niallais, Dónall Ó Baoill, Lillis Ó Laoire, Pádraig Ó Ciardha, Róise Ní Bhaoill, Seosaimhín Ní Bheaglaoich.

It has also benefited from presentations at The University of Arizona Tucson (February 2021), at Stanford University (November 2022) and at the University of California Santa Cruz (November 2024).

I am especially grateful for comments, questions and advice from Heidi Harley, Andrew Carney, Vera Griбанова, Cleo Condoravdi, Boris Harizanov, Pranav Anand, Roumi Pancheva, Sandy Chung and Aidan Doyle.

## 1 CONTEXT AND PURPOSES

Irish is an Indo-European language and a European language, but is not usually included in the core ‘standard average European’ grouping (Haspelmath (2001)). Substantial reasons have been given for that exclusion, but what is, I think, the most substantial reason has not been discussed. I have in mind the fact that, unlike the SAE languages, Irish possesses a distinct syntactic subsystem for building finite clauses whose argument domain is nonverbal. This paper is the first part of an investigation of those clauses and the subsystem that subserves them.

The clauses we care about are usually called ‘copula(r) clauses’. I resist using that term here, though, because it implicitly privileges just one subgroup of what is in fact a larger and more heterogeneous class than this term would suggest and implicitly hides from view some of the most theoretically challenging and interesting cases. My goal, then, is to redress the investigative imbalance by putting other predication-types at the center of attention. Since this has not been done in previous work (as far as I am aware) descriptive concerns will be very much to the fore in what follows. My first goal will be to provide a map of the territory as a basis for further investigation. My second goal will be to gradually clarify what is meant by ‘a distinct syntactic subsystem’ and to consider the theoretical issues that arise when we try to integrate such a notion into contemporary theories of clausehood.

Central to the discussion throughout will be the descriptive technologies made available by current and recent work in Minimalist Syntax and two guiding methodological principles that have helped shape the development of those technologies – namely that they should contribute to the solution of both the ‘evolvability problem’ and the ‘learnability problem’ (Chomsky (2020), Chomsky et al. (2023):

*learnability and evolvability provide the conditions for genuine explanation ... what we expect to find is a very simple faculty of language, and the actual acquisition of language should be based on some kind of capacity to pick out what’s significant and important from quite impoverished data.*  
Chomsky (2020)

Given what we now understand of the power of statistical learning and the length of the acquisition period (Yang (2016), Pearl (2022), Hartshorne et al. (2018), Chen & Hartshorne (2021), Legate (2021)) such guiding assumptions seem timely and appropriate.

Despite these descriptive and theoretical ambitions, many questions will remain unsettled or uninvestigated in the end (I will say little or nothing, for instance, about copula clauses in the strict sense), but certain theoretical conclusions will emerge with some clarity, having to do especially with the nature of roots, and the role that they play in driving syntactic and semantic composition. The theoretical concept most at stake in that discussion is a central one – that of the ‘extended clausal projection’ (to use Jane Grimshaw’s term). What is the nature of such projections and what range of variation do they tolerate? We will be particularly concerned with the syntactic expression of argument structure. I will begin, then, by laying out my (conventional) starting assumptions with respect to these questions.<sup>1</sup>

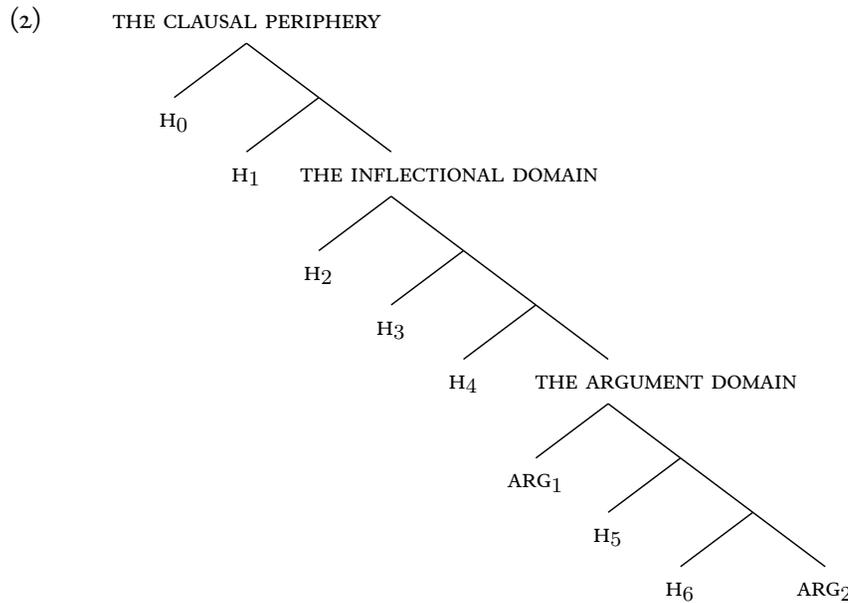
<sup>1</sup>Virtually all of the well-formed examples cited in what follows are naturally attested. Sources however are only sporadically given. This will be fixed in a later version. In addition, in an effort to reduce barriers to understanding irrelevant complexities are sometimes removed from the examples cited. Details are available on request.

2 THE EXTENDED CLAUSAL PROJECTION

A sequence of elements like that in (1):

$$(1) \quad H_0 \frown H_1 \frown \dots \frown H_n$$

where each of  $H_i$  is a closed-class lexical category, will determine a structure like that in (2), where each  $H_i$  has as its complement the maximal projection of  $H_{i+1}$ . A set of such sequences is part of the grammar of a given language and fundamental properties of the phrases so described emerge from the combinatorial properties of members of the functional sequence along with their hierarchical ordering. In the case of clauses, for instance, the clausal sequence in (1) can be viewed as defining three regions, or domains, as laid out in (2).



- The functional elements which define the argument domain ( $H_6$ – $H_5$ ) introduce arguments, internal and external, and steer the semantic composition towards an outcome on which  $H_5P$  has as its semantic value a predicate of eventualities.
- The functional elements which define the inflectional domain ( $H_4$ – $H_2$ ) are concerned with temporal structure and polarity and steer a compositional process concerned with propositions and properties of propositions.
- $H_1$ – $H_0$  are concerned, at least, with sentence force and discourse function.

Though it would be wrong to call this overall conception uncontroversial, something like it is widely assumed and has informed some very productive research in the area of clause structure since the early 1990's, when it first emerged. It is grounded in the concerns of semantic compositionality, in ways that are arguably grounded in turn in basic aspects of human cognition (Moltmann 2022). It leaves open the possibility that there could be crosslinguistic variation in the ordering of elements WITHIN a given region of the clausal space but no variation in the organizational pattern. For important general discussion and the many issues that this sketch passes by, see Grimshaw (1991), Rizzi (2004), Williams (2009).

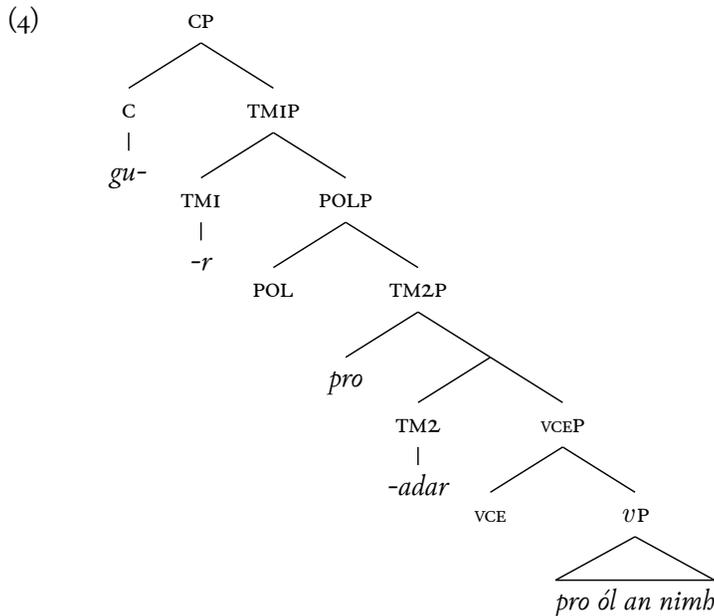
In addition, this bare-bones account in no way requires that the argument domain be verbal in its syntax – many different phrase-types denote predicates of eventualities. We could add a stipulation that only verbal phrases may serve as the argument-domain in (2) (as Grimshaw (1991) in effect does), but this would be at odds with the guideline that such elaborations are to be avoided if possible; it would also be at odds with the facts, as I hope to show. Such questions have of course been raised before (Baker (2003: 3.8), Benmamoun (2008), Coon (2014), Coon & Martinović (2023) among others) but always with the assumption that the only nonverbal clause-types are copular (predicational or specificational). This, though I will contend, is not the case. The question then arises – what is the range of predication-types that may be expressed in the nonverbal mode? In pursuing that question we need to have in place – as a point of contrast – an understanding of how verbal argument-domains are constructed in Irish. The section which follows lays out the framework I assume here.

### 3 BACKGROUND: FINITE VERBAL CLAUSES IN IRISH

The form of basic finite clauses is illustrated in (3):

- (3) Creideann na póilíní [CP gu -r óladar an nimh sa teach].  
 believe.PRES the police C PAST drink.PAST.P3 the poison in.the house  
 ‘The police believe that they drank the poison in the house.’

Such clauses are distinguished by the following properties – (i) they are always CP; (ii) they are always verb-initial (in fact vso); (iii) negation is marked on c; (iv) finiteness is marked on c, on the tense marking particles which precede the verb, and also on the verbal endings which express tense, aspect, mood and subject-verb agreement. The analysis of such clauses I will assume is that presented schematically in (4) – for the embedded clause of (3):



In this view, tense and modality emerge from the interplay between two heads:

**TM1**

- o which appears just below c
- o and which is realized by the preverbal markers of tense.

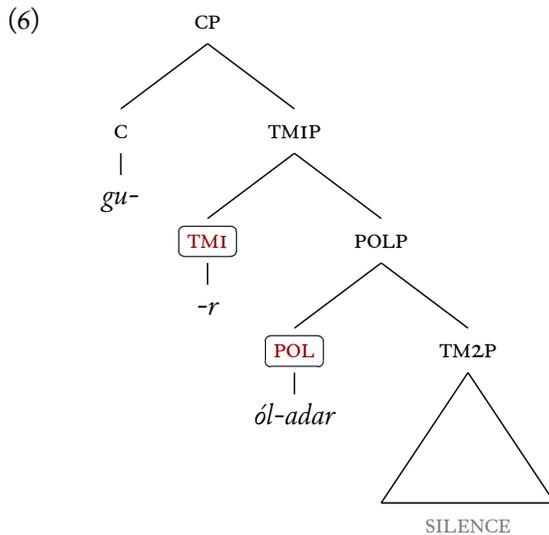
**TM2**

- o which appears just above the argument-domain,
- o and is realized by the various verbal endings
- o and which agrees with the subject, renders it nominative and attracts it into its specifier

**POL**

The POLARITY head attracts the verb to itself, yielding verb-initial order (since the subject raises to the specifier position immediately below it). It may also license ellipsis of its complement, yielding ‘Responsive Ellipsis’ as in (5). This is why ‘Responsive Ellipsis’ so resembles Polarity Ellipsis in other languages, and is used frequently (but not exclusively) in answers to polar questions. Polarity ellipsis (as I will call it from now on) is exemplified in (5) and the analysis assumed here is illustrated by the structure in (6).

- (5) ... agus creidim fosta [CP gu -r ól-adar [ ]].  
 and believe.PRES.SI also C PAST drink.PASTP3  
 ‘...and I also believe that they did.’



The ellipsis possibility illustrated here will play an important role in our consideration of non-verbal finite clauses.

The category that I call here **TM1** appears immediately below **c**, at the top of the inflectional domain; it is also inherently finite (it appears only in finite clauses). This makes it a good candidate for identification with the element that Luigi Rizzi (1997) has called **FIN**. Since I will be concerned here entirely with its language-internal properties, though, I will persist for now in using the name **TM1**.

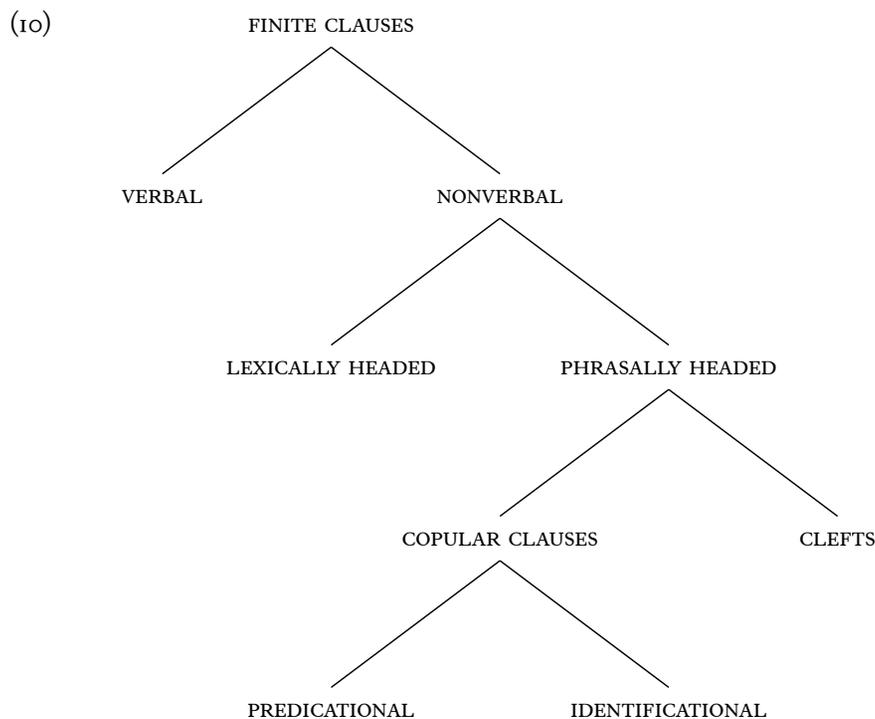
For detailed discussion and argumentation, see, for instance, McCloskey 2011, 2017, Bennett et al. 2019, and especially McCloskey 2022.

4 FOREGROUND: FINITE CLAUSES WITHOUT VERBS

There is a large body of work on nonverbal clauses in Irish: Ahlqvist (1972), Stenson (1981), Duffield (1995), Carnie (1995, 1997, 2000), Doherty (1996, 1997a,b), Legate (1997, 1998), DeGraff (1997), McCloskey (2005/21), Lash (2011), Dalmi (2012), and in Scots Gaelic: Ramchand (1996), Adger & Ramchand (2003). All focus almost exclusively on what Haspelmath 2025 calls ‘duonominal’ clauses – what I will (mostly) call ‘copula(r)’ clauses:

- (7) Is saor cloiche cliste m’ athair.  
COP.PRES craftsman stone.GEN clever my father  
 ‘My father is a skilled stonemason.’ PREDICATIONAL
- (8) Is mise úinéir an tí seo.  
COP.PRES me owner the.GEN house.GEN DEMON  
 ‘I am the owner of this house’ IDENTIFICATIONAL
- (9) a. PREDICATIONAL: [ COP NP DP ] (as in (7))  
 b. IDENTIFICATIONAL: [ COP DP DP ] (as in (8))

The copular clauses of (7) and (8), however, represent just one of a range of kinds of predication expressible in the nonverbal mode. The rough typological tree of (10) is intended to organize, in an initial way, the range of variation observed.



The distinction made in (10) between the lexically headed and the phrasally headed class may not ultimately survive close theoretical scrutiny, but it will be useful for now in organizing the analytic tasks.

## 5 LEXICALLY HEADED VERBLESS CLAUSES

Typical examples of the lexical type are given in (11), the general form in (12).

- (11) a. b' eol di gu- -rbh fhurast titim  
COP.PAST knowledge to.her C COP.COND easy fall.NON-FIN  
 'She knew that it would be easy to fall.' FF 17
- b. Is oth liom go ndúirt mé an méid sin léi.  
COP.PRES regret with.me C say.PAST I the amount that with.her  
 'I regret that I said that much to her.' ATDS 160
- (12) [CP C COP X ARG 1 ARG 2 ]

In (11) the simple items *eol*, *fhurast* and *oth* (x of (12)) are the principal drivers of syntactic and semantic composition – they are the main predicates of the clauses that form around them. No such item appears in the 'copular' clause-types. This fundamental difference correlates with a number of other syntactic contrasts which will be considered in a future installment. Our principal focus for now will be on the lexically headed subclass. That close focus is justified first because this type is much more frequent in usage than any other type of nonverbal clause and therefore plays a much larger role than the others in providing the input for acquisition. The evidence for this claim is in the Appendix. Despite that fact, the territory is almost entirely unexplored, especially in any analytic, typological, or theoretical light. But as it turns out, the problems exposed in that investigation are challenging and topical.

The remainder of this section is devoted to a survey of syntactic properties of the lexically headed class, focusing especially on the range of kinds of predicates that may act as head. Section 6 develops an initial syntactic analysis, which in sections 7 and 8 frames an investigation of the semantic possibilities.

## CASES IN WHICH AN APPARENT ADJECTIVE IS THE MAIN PREDICATE

- (13) a. b' fhollasach nach raibh fonn ar bith troda ar Topsy  
COP.PAST clear C.NEG be.PAST mood any fight.GEN on  
 'It was clear that Topsy was in no mood for fighting.'
- b. ba ghearr gu -r dhein leannáin dinn.  
COP.PAST short C PAST make.PAST lovers of.us  
 'We soon became lovers.'

## CASES IN WHICH AN APPARENT NOUN IS THE MAIN PREDICATE

- (14) a. má -s acmhainn duit san a dhéanamh  
C.COND COP.PRES ability to.you that vce do.NON-FIN  
 'if you can do that'
- b. Ba scorn leis a leithéid a dhéanamh.  
COP.PAST scorn with.him its like VCE do.VN.  
 'He disdained to do such a thing.'
- c. Ba ghráin léi geimhreadh na hÉireann.  
COP.PAST hatred with.her winter the.GEN Ireland.GEN  
 'She hated the Irish winter.'

## CASES IN WHICH A PREPOSITION IS THE MAIN PREDICATE

- (15) má -s leat í a phósadh  
 C.COND COP.PRES with.you her VCE marry.NON-FIN  
 ‘if you mean/intend/hope to marry her’

## CASES IN WHICH IT IS NOT KNOWABLE WHAT CATEGORY THE HEAD BELONGS TO: ONE

There is a class of lexical items which are morphologically simple and which further appear ONLY as x in the syntactic context described by (12). Since that context does not distinguish among predicates that are nominal, adjectival or prepositional, there is no basis on which they might be assigned to one lexical category or another. A sample of such items is given below.

- (16) a. Is cuma liom fá rud ar bith.  
 COP.PRES MATTERLESS with.me about thing any  
 ‘I don’t care about anything.’  
 b. cha- rbh fhéidir go ndéarfadh sé a leithéid.  
 C.NEG COP.PAST POSSIBLE C say.COND he its like  
 ‘It was not possible that he would say such a thing.’  
 c. Is oth liom a rá leat go ... .  
 COP.PRES REGRET with.me say.NON-FIN with-you that  
 ‘I regret to have to tell you that ... ’  
 d. An miste leat mé bheith tinn?  
 C.Q MIND/MATTER with-you me be.NON-FIN sick  
 ‘Do you mind that I’m sick?’ / ‘Does it matter to you that I’m sick?’
- (17) a. B’ fhiú duit cur isteach ar an phost sin.  
 COP.COND WORTHWHILE to.you put.NON-FIN ON the job DEMON  
 ‘It would be worth your while to apply for that job.’  
 b. B’ áin liom é a phósadh.  
 COP.COND DESIRE to.me him VCE marry.NON-FIN  
 ‘I would love to marry him.’  
 c. gu -r méanair don fhear a gheobhas thusa  
 C COP.PRES FORTUNATE to.the man C get.FUT you  
 ‘that the man who will get you is a fortunate one’  
 d. Is dóigh liom gu -r fíor é.  
 COP.PRES PROBABLE with.me C COP.PRES true it  
 ‘I think it’s true.’
- (18) a. ní ∅ dual dúinn géilleadh  
 C.NEG COP.PRES NATURE to.us yield.NON-FIN  
 ‘It’s not in our nature to give in.’  
 b. is mithid dúinn bheith ag déanamh gníomhartha  
 COP.PRES TIMELY to.us be.NON-FIN PROG DO.VN deeds  
 ‘It’s time for us/we ought to act.’

## CASES IN WHICH IT IS NOT KNOWABLE WHAT CATEGORY THE HEAD BELONGS TO: TWO

There is also a set of cases in which  $x$  of (12) is clearly related to an item of known lexical category, but is shorter than that form by one syllable.

- (19) a. Ba náir liom a leithéid a rá léi.  
 COP.COND SHAME with.me its like say.NON-FIN with-her  
 ‘I’d be ashamed to say such a thing to her.’
- b. Is eol dúinn go raibh sí ann.  
 COP.PRES KNOW to-US C be.PAST she there  
 ‘We know that she was there.’
- c. Is eagal liom nach rabhamar ró-bhuíoch dá chéile.  
 COP.PRES FEAR with.me C.NEG be.PAST.PI too-grateful to each other  
 ‘I’m afraid that we were not too grateful to one another.’
- d. Is cuimhin liom Muiris a theacht go dtí an teach.  
 COP.PRES MEMORY with.me VCE COME.VN to the house  
 ‘I remember Muiris coming to the house.’

In (19a) the element *náir* ( $x$  of (12)) resembles the noun *náire* (‘shame’) and also the adjective *náireach* (‘shameful’) but is shorter than each by one syllable. In (19b) the element *eol* ( $x$  of (12)) resembles the noun *eolas* (‘knowledge, information’) and also the adjective *eolach* (‘knowledgeable’) but is shorter than each by one syllable. In (19c) the element *eagal* ( $x$  of (12)) resembles the noun *eagla* (‘fear’) and also the adjective *eaglach* (‘fearful’) but is shorter than each by one syllable.

In all cases, the missing syllable corresponds to a category-forming suffix (*-as* is an abstract noun forming suffix; *-e* and *-a* are allomorphs of another abstract noun forming suffix, one which induces syncope to delete the second syllable of the element it attaches to; *-each* is a productive adjective-forming suffix). The elements *náir*, *eagal*, *eol* and *cuimhin*, therefore, seem to be formed from corresponding nouns or adjectives by stripping away a monosyllabic categorizing suffix. That is, these (and a handful of similar items) are bare roots (and therefore acategorical).

## INTERIM SUMMARY

The lexical items which act as heads in the frame of (12) do not project the kind of nominal or adjectival structures familiar from other syntactic contexts. The apparent nouns in (14) cannot, for example, project phrases which include possessors, quantifiers, or determiners. Nor do they project phrases which look anything like verb-phrases.

In addition, in some cases, it is impossible to assign these heads to any familiar lexical category. Rather their syntax is *sui generis* – constituting a distinct syntactic sub-system.

## 6 SYNTACTIC INTEGRATION

The extended projection of a finite verbal clause is as in (20a); (20b) shows the schema for a (lexically-headed) verbless clause as we now understand it:

- (20) a. C  $\curvearrowright$  TMI  $\curvearrowright$  POL  $\curvearrowright$  TM2  $\curvearrowright$  ASP  $\curvearrowright$  VCE  $\curvearrowright$   $v$   $\curvearrowright$  V
- b. C  $\curvearrowright$  COP  $\curvearrowright$  X  $\curvearrowright$  ARG1  $\curvearrowright$  ARG2

How are the two finite clause-types in (20) related and how are they distinct?

The first step in answering that question is to ask what category the ‘copula’ belongs to. The extensive descriptive and dialectological literature on Irish is unequivocal in the view that the ‘copula’ is not a verb but is rather a functional ‘particle’ (see Ahlqvist 1972 for example). Much of that literature also stresses the kinsip between forms of the copula and forms of the preverbal particles that we have analyzed as members of TMI. Diarmuid Ó Sé in particular (1987, 1990, 2000) has tracked a set of diachronic shifts in southwestern dialects in which forms of the copula and forms of the preverbal particles (in our terms, members of TMI) are treated identically.<sup>2</sup>

Perhaps most tellingly, despite enormous idiolectal, dialectal and register-sensitive variation in its form, the ‘copula’ draws exactly two tense-mood distinctions:

- TYPE ONE: a set of forms which is ambiguous or vague between present and future interpretations (see (21)).
- TYPE TWO: a set of forms which is ambiguous or vague between past tense and irrealis mood (see (22)).

- (21) a. Is deacair fanacht taobh amuigh.  
COP.PRES difficult remain.VN outside  
 ‘It’s hard to remain outside.’
- b. Is deacair fanacht taobh amuigh an chéad tseachtain eile.  
COP.PRES difficult remain.VN outside the first week other  
 ‘It will be hard to remain outside next week.’ (de Bhaldraithe, 1953: p. 96)
- (22) Ba dheas liom cois locha sinn.  
COP.PAST nice with.me side lake.GEN US  
 ‘I liked it when we were by the lakeside.’  
 ‘I would like it if we were by the lakeside.’

These are exactly the distinctions made among the preverbal tense-mood markers that we analyze here as members of the category TMI.

For these reasons and others that will become apparent as the discussion proceeds, I will follow McCloskey (2017, 2022) in treating the ‘copula’ in its various forms as a member of the closed-class category TMI— the class which also includes the preverbal markers of tense and modality. (20b) then becomes (23):

- (23)  $C \frown TMI \frown X \frown ARG1 \frown ARG2$

and from this point on, I will gloss occurrences of the copula in cited examples as TMI.

The third element in the series (20a) is the expression of polarity (linked by agreement with c). There is no difference between full clauses and copular clauses in the expression of polarity or in the various effects associated with that expression. Therefore (23) should be understood as in (24):

- (24)  $C \frown TMI \frown POL \frown ARG1 \frown X \frown ARG2$   
 (with raising of X to POL as in verbal clauses)

In sum:

---

<sup>2</sup>And see Ó Giollagáin (1999: 320–322) on the same phenomenon in the transplanted western dialect of Ráth Chairn, County Meath.

- The extended projection of a nonverbal clause and that of a verbal clause are identical for the first three positions (counting from the top) in the sequence.
- The extended projection of the verbal clause includes TM<sub>2</sub>, and the further sequence of heads that it in turn licenses – the ‘verbal’ stretch.
- The extended projection of the verbless clause does not include TM<sub>2</sub>, and therefore does not include the further sequence of heads that it licenses.
- Absent TM<sub>2</sub> it is therefore impossible to build a verbal argument domain.
- A different kind of argument domain must therefore be built.

## ANALYTIC GAINS

The analysis just sketched reflects a kind of ‘anti-restructuring’ – the extended projection of vso-clauses is truncated at the bottom rather than at the top – and is, in that sense, unconventional. However it is well-supported empirically. Most important, it resolves what I take to be the fundamental challenge posed by nonverbal clauses in their relation with finite verbal clauses – namely that despite enormous differences in their internal structures, these two clause-types are indistinguishable in their external distribution. (25), I believe, expresses an exceptionless generalization:

- (25) a. There is no syntactic position in which a vso-clause may appear in which a finite nonverbal clause may not.
- b. There is no syntactic position in which a finite nonverbal clause may appear in which a vso-clause may not.

On the view under development here, the point at which verbal and nonverbal clauses diverge in their internal structure comes relatively low – in the fourth position of the sequence in (20a). The two clause-types are indistinguishable at the top, the level accessible to external selectors. It is an immediate consequence that the distribution of verbal and nonverbal finite clauses should be indistinguishable.<sup>3</sup> And we understand, in addition, why nonverbal clauses are intrinsically finite – TM<sub>1</sub> appears only in finite clauses.

It is also crucial that nonverbal clauses lack all elements in the sequence (20a) below TM<sub>2</sub>. Nonverbal clauses are as a consequence limited in the range of distinctions (syntactic and semantic) that they can express. Since TM<sub>2</sub> is absent, none of the tense-distinctions it expresses (realized as verbal affixes) can be expressed – only those distinctions are expressible which are encoded on TM<sub>1</sub>.

Given the truncation in nonverbal clauses of the region lower than TM<sub>2</sub>, we also expect (correctly) that no voice alternations should be possible in nonverbal clauses. Further, we expect that no aspectual distinctions should be possible. This is also correct. Finite verbal clauses distinguish active and passive voice (in progressive and perfective aspects), but in finite nonverbal clauses neither aspectual distinctions nor voice distinctions can be expressed.

The absence of TM<sub>2</sub> itself in nonverbal clauses also entails a range of syntactic consequences for nonverbal clauses.

The structure in (4) attributes all subject properties in vso clauses to the presence and properties of TM<sub>2</sub>. But since under the current hypothesis TM<sub>2</sub> is absent from verbless clauses,

<sup>3</sup>It follows, of course, that we must not assume, as Grimshaw does, that a categorial feature is shared by each member of an extended projection.

all properties attributable to TM2 should be ‘missing’ from nonverbal clauses. They are:

- CASE: ‘subjects’ are nominative in verbal clauses, accusative in verbless clauses
- AGREEMENT: there is no subject-predicate agreement in nonverbal clauses
- MOVEMENT OUT: patterns of subject-extraction in verbless and verbal clauses are reversed (see (26) and (27))

SUBJECT EXTRACTION: When the subject of a finite verbal clause is  $\bar{A}$ -bound, there is an overwhelming preference for use of a gap to mark the variable-site; resumptive pronouns in subject position are barely tolerated (if at all) – because of the so-called *Highest Subject Restriction*.

- (26) a. an bhean a chuir comhairle orainn  
 the woman C put.PAST advice on-us  
 ‘the woman who advised us’
- b. \*an bhean a -r chuir sí comhairle orainn  
 the woman C PAST put.PAST she advice on-us  
 ‘the woman who she advised us’

In nonverbal clauses, the reverse pattern holds. Resumptive pronouns appear freely in the highest argument position:

- (27) a. scaireanna a -rbh fhiú sé chéad míle punt iad i 1988  
 shares C TM1 worth six hundred thousand pound them in  
 ‘shares that were worth six hundred thousand pounds in 1988’
- b. obair gu- rbh aoibhinn le páistí í  
 work C TM1 delightful with children it  
 ‘work that children really love’
- c. Mícheál, a -r chosúil le craplachán é  
 C TM1 like with cripple him  
 ‘Mícheál, who was like a cripple’

We will see shortly that all of the resumptive pronouns in (27) are at least one step (one maximal projection) more deeply embedded than those in (26), clearly the factor which allows them to escape the effects of the Highest Subject Restriction.

We have so far been concerned with contrasts. However there are also important commonalities between the two clause-types, in addition to the crucial commonality of their shared external distribution. These commonalities concern internal structure and are attributable to another aspect of the proposal in (24). Although TM2 does not appear in nonverbal clauses, the element POL (which expresses polarity in the finite context) is common to both. Its properties should therefore be similarly observable in both verbal and nonverbal clauses. Recall from our earlier discussion what we take the properties of the finite polarity expression to be as in (28):

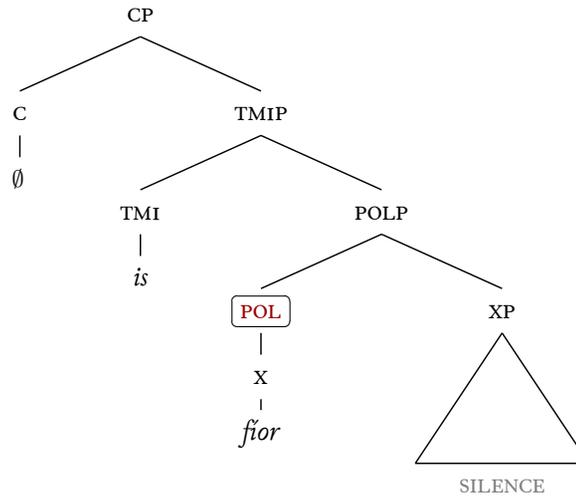
- (28) a. It attracts the most locally accessible head to itself,  
 b. It licenses ellipsis of its complement,  
 c. thereby giving rise to (head-stranding) Polarity Ellipsis (McCloskey 1991, 2005/21, 2017, 2022, Bennett et al. 2019).

Therefore we expect parallel possibilities in verbal and nonverbal clauses. For the verbal type, we have the example in (29b) and the structure in (6) above.

- (29)a. gu -r óladar an nimh sa teach].  
 C PAST drink.PAST.P3 the poison in-the house  
 ‘that they drank the poison in the house.’
- b. ... agus creidim fosta [CP gu -r ól-adar [ ]].  
 and believe.PRES.SI also C PAST drink.PASTP3  
 ‘...and I also believe that they did.’

Exactly parallel effects hold for nonverbal clauses of the type in (12). The structure is as in (30) and the relevant examples are in (33)–(31).<sup>4</sup>

(30) STRUCTURE FOR (31a):



(31) ACATEGORIAL HEADS

- a. ní ∅ fiú pioc do chuidse rún. Ní fiú, mhaise.  
 C.NEG TMI worth mite your share secrets C.NEG worth indeed  
 ‘Your secrets are not worth anything at all.’ ‘They certainly aren’t.’
- b. ‘An ∅ cuma leat é a bheith linn?’ ‘Ní ∅ cuma.’  
 C.Q TMI MATTERLESS with.you him be.VN with.us C.NEG TMI MATTERLESS  
 ‘Do you mind if he comes with us?’ ‘I certainly do.’
- c. b’ éigean dó a bheith cliste, ná -rbh éigean?  
 TMI necessity to.him be.VN clever C.NEG TMI necessity  
 ‘He must have been clever, mustn’t he?’

(32) NOMINAL HEADS

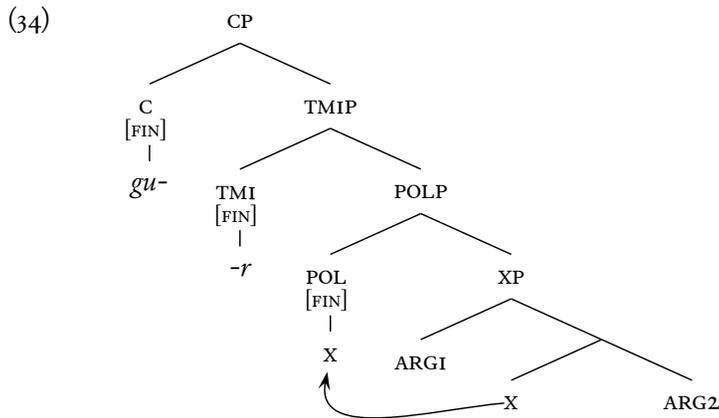
- a. An ∅ mian leat mé a phósadh? Is mian.  
 C.Q TMI desire with.you me VCE marry.VN TMI desire  
 ‘Do you want to marry me?’ ‘I do.’
- b. Ní ∅ gá bheith feargach leo. Ní ∅ gá.  
 C.NEG TMI need be.VN angry with.them C.NEG TMI need  
 ‘It’s not necessary to be angry with them.’ ‘No, it isn’t.’

<sup>4</sup>In McCloskey (2005/21) it is claimed that the raising in question affects only adjectival and not nominal heads, but that is clearly wrong, as shown in the examples of (32). The case of prepositional heads is more complicated. The pattern documented in (33)–(31) is possible, but there are complications having to do with the prosodic lightness of most prepositions. I must set this issue aside for now.

(33) ADJECTIVAL HEADS

- a. ‘An  $\emptyset$  fíor gu- -r crochadh do shean-athair-se?’ ‘Is fíor!’  
C.Q TMI true C TMI hang.PAST.IMPERS your grandfather TMI true  
 ‘Is it true that your grandfather was hung?’ ‘It is!’
- b. Síleann tú anois gu -r fada uait é. Ach ní  $\emptyset$  fada.  
think.PRES you now C TMI far from.you it but C.NEG TMI far  
 ‘You think now that it’s far away from you. But it isn’t.’
- c. ‘Nach  $\emptyset$  saoihiúil sin?’ ar seisean. ‘Is saoihiúil,’ ar síse.  
C.NEG TMI mysterious that QUOT he TMI mysterious QUOT she  
 ‘Isn’t that mysterious?’ said he. ‘It is,’ she said.

In order to capture both the commonalities and the divergences between verbal and nonverbal clauses, then, I take the structure of lexically-headed verbless clauses to be as in (34).



Irish now emerges as a predicate-initial language because of the properties and activity of the polarity head – relatively high and indiscriminately attracting to itself whatever head is locally accessible – TM2 in finite vso clauses, x in nonverbal clauses. The urgent task is now that of identifying x of (34). and determining what its role in syntactic and semantic composition is.

First, though, note that the structure in (34) yields the right prominence relations: ARG1 commands ARG2, as shown in (35) for reciprocal binding and in (36) for bound pronoun anaphora.

- (35) a. Is dóighiúil leo féin a cheile  
TMI beautiful with.them REFL.LOG each-other  
 ‘They find each other beautiful.’
- b. is breá linn araon cuideachta a chéile  
TMI fine with.us both company each other  
 ‘We both really like each other’s company.’ RECIPROCAL BINDING

- (36) a. ba te le gach aicme acu a chuid fola féin  
COP.PAST warm with each faction of.them his share blood.GEN REFL.LOG  
 ‘Each faction of them held dear their own blood-kin.’
- b. gu- -r geal le gach éan a ghearrcach féin  
C TMI bright with every bird its chick REFL.LOG  
 ‘that every bird favours its own chick’ BOUND PRONOUN ANAPHORA

## 7 A TYPOLOGY OF PREDICATE-TYPES

Many questions of course remain open concerning the proposals just sketched. At this point, though, I will turn to an apparently different task – that of developing a typology of the predication-types expressible in the lexically headed class of nonverbal clauses – those we now take to reflect the syntactic form in (34). Though difficult, this is worth attempting because that typology should be revealing about the nature of *x* in (34) and the structures it projects, and because a central descriptive goal of the project is to determine how large and how systematic this set of possibilities is.

## TYPE ONE: PREDICATIVE ADJECTIVE CONSTRUCTIONS

A great many adjectives appear in the simple predicative constructions illustrated in (37):

- (37) a. *chonacthas domh gu- -r mhaith comhairle an tsagairt*  
see.PAST.IMPERS to.me C TMI good advice the.GEN priest.GEN  
 ‘It seemed to me that the advice of the priest was good.’
- b. *Ba nimhneach scréachach na bhfaoileann fionn*  
COP.PAST painful screeching the.GEN gulls.GEN white  
 ‘The screech of the white gulls was painful.’
- c. *b’ aigeantach a coiscéim ag siúl suas an cabhsa*  
TMI joyful her step PROG walk up the path  
 ‘Her step was joyful as she walked up the path.’
- (38) a. *Is báiuil sibh i gcónaí le daoine.*  
TMI empathetic you-PL always with people  
 ‘You are always empathetic with people.’
- b. *Ní ∅ buan cuimhne gasúir ar mhaith ná ar olc*  
C.NEG TMI lasting memory child.GEN on good or on bad  
 ‘A child’s memory of good or bad is not permanent.’
- c. *Má ba bhocht iad go hábharthaba ba shaibhir a gcomhrá.*  
if TMI poor them materially TMI rich their conversation  
 ‘Even if they were poor in material terms, their conversation was rich.’ TAGH 19

Not all adjectives allow this option, and it is unclear for now whether the available possibilities reflect a systematic pattern or lexical happenstance.

## TYPE TWO: MODALS

Irish has two or three modal verbs (depending on dialect), but the work done in English by modal auxiliaries is almost entirely done in Irish by various instantiations of the syntactic frame in (34). A relatively small sample of the available possibilities is given in (39) and (40).

- (39) a. *ba cheart an loch a bheith i seilbh an phobail*  
TMI right the lake be.NON-FIN in possession the.GEN community.GEN  
 ‘The lake should be owned by the community.’ DEONTIC
- b. *ba cheart go mbuafadh Ard Mhacha.*  
TMI right C win.COND Armagh  
 ‘Armagh should win.’ EPISTEMIC

- c. An raibh sí dóighiúil? B' éigean dó go raibh.  
 C.Q be.PAST she beautiful TMI necessity to.it C be.PAST  
 'Was she beautiful? She must have been.'
- d. mallacht ná- -rbh fhéidir a thógáil  
 curse C.NEG TMI possible VCE lift.NON-FIN  
 'a curse that couldn't be lifted'
- (40) a. Is leor sin ... Ba chóir gu- -r leor  
 TMI enough that TMI proper C TMI enough.'  
 'That's enough ... It should be.'
- b. b' éadóigh é iontas a chur orm  
 TMI unlikely him surprise VCE put.NON-FIN on.me  
 'He was unlikely to cause me surprise.'

## TYPE THREE: SUBJECTIVE ATTITUDE ASCRIPTIONS

Among the most productive of the predication-types which use the syntactic frame in (34) are those which express subjective attitude ascriptions. Such ascriptions have been of central concern to philosophers of language and to formal semanticists concerned with the issue of how to understand truth conditions which are relative to perspective (for overviews of the general issue, see MacFarlane (2014) and Stalnaker (2014: Chap. 8); for semantic treatments, see Stephenson (2007), Saebø (2009), Bouchard (2012), Kennedy (2013), Coppock (2018), Anand & Korotkova (2022), Kennedy & Willer (2022)). The class of vague evaluative predicates in Irish which may appear in this use in (34) seems to parallel exactly the class of adjectives which may head the small-clause complements of English *find* and its kin in other European languages.

- (41) a. B' ait liom i gcónaí an meon aigne sin  
 TMI peculiar with.me always the shape mind.GEN DEMON  
 'I always found that mind-set peculiar.'
- b. ba náireach liom é  
 TMI shameful with.me it  
 'I found it shameful.'
- c. cé gu- -r doiligh leis a thuras  
 although C TMI difficult with.him his journey  
 'although he found his journey difficult'
- (42) a. ba leor liom aon seachtain amháin ann  
 TMI enough with.me one week one there  
 'I found it sufficient (to spend) one week there.'
- b. Is greannmhar leis an Sasanach gnéas.  
 TMI funny with the Englishman sex  
 'The Englishman finds sex funny.'
- c. Is bocht liom do scéal  
 TMI poor with.me your story  
 'I find your news distressing.'

As shown in (42), the Irish forms are monoclausal; the 'judge' or 'evaluator' argument is in the ARG<sub>1</sub>-position of (34) and is marked by the dative preposition *le*; the position x is occupied a

vague evaluative predicate. There is more to be said about how these structures interact with others, but that discussion must come later.

TYPE FOUR: PSYCHOLOGICAL STATE ASCRIPTIONS

It is hardly clear that the subtype discussed here should be distinguished from the previous one, but many cognitive attitudes are also expressed by way of the syntax in (34), as shown in (43):

- (43) a. ba fuath liom feall a imirt ar aonduine ariamh  
T<sub>MI</sub> hatred with.me treachery VCE play.NON-FIN on anyone ever  
 ‘I would hate to betray anyone ever.’
- b. tada a- -r spéis liom é  
anything C T<sub>MI</sub> interest with.me it  
 ‘anything that I was interested in (it)’
- c. Ní ∅ áil liom an éagóir  
C.NEG T<sub>MI</sub> DELIGHT with.me the wrong  
 ‘I don’t like what’s wrong.’
- (44) a. Is eagal liom go mbeidh cathú ar ball oraibh  
T<sub>MI</sub> FEAR with.me C be.FUT regret presently on.you  
 ‘I’m afraid/have a foreboding that you’ll regret it soon enough.’
- b. is aoibhinn liom an mhaith  
T<sub>MI</sub> delightful with.me the good  
 ‘I love what’s good.’
- c. Is trua liom do chás.  
T<sub>MI</sub> pity with.me your situation  
 ‘I feel sorry for you.’

(44a) illustrates (in its matrix environment) the syntax of a psych-predicate in the verbless mode, and also (in its embedded environment) the syntax of a psych-predicate in the nominal mode. In the embedded clause, the psych-noun appears at the base of a nominal projection – one contained within the small clause complement to ‘be’. This pairing of possibilities is one we will return to.

TYPE FIVE: PROPOSITIONAL ATTITUDE ASCRIPTIONS

Many propositional attitude expressions also use the syntactic foundation of (34), the holder of the attitude hosted in the ARG<sub>1</sub>-position and the content of the attitude in the ARG<sub>2</sub>-position.

- (45) a. Is rún domh fanacht sa bhaile.  
T<sub>MI</sub> intention to.me remain.NON-FIN in.the home  
 ‘I intend to remain at home.’
- b. Is dóigh leis nach dtiocfaidh sí ar ais  
T<sub>MI</sub> probable with.him C.NEG come.FUT she back  
 ‘He thinks that she won’t come back.’
- c. is dearbh liom gu- -r mian leat mo bhás a thabhairt  
T<sub>MI</sub> certain with.me C T<sub>MI</sub> desire with.you my death VCE bring.NON-FIN  
 ‘I am certain that you want to bring about my death.’

- (46) a. ní ∅ feasach domh gu- -r chaoin tú aon deór ariamh  
 C.NEG TMI knowledgeable to.me C TMI cry.PAST you one drop ever  
 ‘I don’t know that you ever cried a tear.’
- b. nuair ná- -rbh eol d’ éinne mé a bheith ag éisteacht  
 when C.NEG TMI know to anyone me be.NON-FIN PROG listen.NON-FIN  
 ‘when nobody knew that I was listening’
- c. ní- -or léar dúinn gu- -r doirse iad  
 C.NEG TMI clear to.us C TMI doors them  
 ‘It wasn’t clear to us that they were doors.’

The holder of the attitude is marked by one of the dative prepositions – *do* or *le* – a point we return to below.

TYPE SIX: STRUCTURES OF ADVERBIAL QUANTIFICATION

An apparently very different kind of predication also exploits the syntax of (34) – what are often called structures of ‘adverbial quantification’ although in Irish at least they are in no way adverbial; rather the syntax is as in (34), with *x* an expression of frequency or rarity. Such examples express ‘quantification over cases’ in the sense explored initially by David Lewis (1975) and by many others since (see, for example, Heim (1982: Chap. 2), Higginbotham (2000), Rooth (2022)).

- (47) a. Is minic leis an gclover cheithre bhileoig a bheith air  
 TMI often with the clover four leaves VCE be.NON-FIN on.it  
 ‘The clover often has four leaves.’
- b. Is iondúil go mbailíonn siad leo i ndeireadh na Bealtaine  
 TMI usual C gather.PRES they with.them in end the.GEN May.GEN  
 ‘They usually take themselves off at the end of May.’
- c. Ba ghnáthach cuid mhór fidileóirí a bheith ag gabhail san am sin  
 TMI usual share great fiddle-players be.NON-FIN PROG go.NON-FIN in.the time DEMON  
 ‘There used to be a lot of fiddle-players around at that time.’
- (48) a. Is annamh a thig duine ar bith acu ar ais.  
 TMI rare C COME.PRES person any of.them back  
 ‘It’s rare for any of them to come back.’
- b. is tearc duine sna tíortha seo a dtig sé air  
 TMI scant person in.the countries DEMON C COME.PRES it on.him  
 ‘People in these countries rarely catch this (disease).’

According to an analysis widely accepted since Lewis (1975) there is in such cases a quantifier over ‘cases’ (often related to a temporal expression) which takes two arguments – a restrictor and a clause which defines its scope. For Irish the structure for such cases is the instantiation of (34) seen in (49):

- (49) [ TMI FREQ (ARG1) ARG2 ]

where ARG2 is clausal and expresses the scope of the quantifier FREQ and ARG1 is missing or silent if the restrictor is implicit (as in (48e)). The predicate *annamh* has, by contrast, an explicit restrictor (in the ARG1 position) in (50):

- (50) Is annamh bliain nach dtig siocán anseo fá Bhealtaine.  
T<sub>MI</sub> rare year C.NEG COME.PRES frost here around May  
 ‘There’s rarely a year when there isn’t frost here in May.’

Viewed in this way, such structures are probably not to be distinguished from the cases considered in the section which follows.

#### TYPE SEVEN: STRUCTURES OF WEAK QUANTIFICATION

The predicate *beag* (in other contexts an adjective meaning ‘little’) may appear in the x-position of (34) followed by a restrictor in the ARG1 position (a small nominal projection) and a clause with a predicative interpretation in the ARG2 position.<sup>5</sup>

- (51) a. Is beag duine a théann anois ann.  
T<sub>MI</sub> little person C go.PRES now there  
 ‘Few people go there now.’  
 b. Ba bheag cabhair a bheadh ar fáil dóibh.  
T<sub>MI</sub> little help C be.COND available to.them  
 ‘There was little help that would be available to them.’

As seen in (51), *beag* associates both with count and mass nouns. Its antonym *iomaí* associates only with count nouns. More relevant for us here though, is that it, unlike *beag*, appears in no other syntactic context but that described by (34).

- (52) Is iomaí turas a rinne mé go dtí an t-ionad naofa seo.  
T<sub>MI</sub> many journey C make.PAST I to the place sacred DEMON  
 ‘I made many journeys to this sacred place.’

These structures express the kind of quantification expressed by adjectival quantifiers in English such as *many*, *much*, *few* or *little*, on which there is a large literature (for an authoritative overview see Rett (2018)).

#### TYPE EIGHT: EXISTENTIAL PROPOSITIONS

In verbal clauses, existentials take the form exemplified in (53) (McCloskey (2014)):

- (53) Ní- -or chreid Antaine go raibh a leithéid ariamh ann.  
C.NEG T<sub>MI</sub> believe.PAST C be.PAST its like ever ann  
 ‘Anthony didn’t believe that there had ever been such a thing.’

The predicate *ann* of (53) is locative, an inflected preposition meaning ‘in it’ or ‘there’. It also appears in the context of (34), apparently in position x, its single argument marked by the dative preposition *do*:

- (54) a. ba chosúil ná- -rbh ann dóibh  
T<sub>MI</sub> like C.NEG T<sub>MI</sub> ann to.them  
 ‘It seemed they didn’t exist.’

<sup>5</sup>Rendered predicative either by an application of  $\bar{A}$ -movement or by its status as a small clause.

- b. Muna- -r ann do Dhia  
if-not TMI *ann* to God  
'If God does not exist.'
- c. mothaíonn tú gu- -rb ann duit anseo  
feel.PRES you C TMI *ann* to.you here  
'You feel that you (really) exist here.'

## TYPE NINE: TEMPORAL DURATION

There are, finally, some types of temporal predication (notably duration) which are characteristically expressed in the nonverbal mode. The lexical items *fada* ('long') and *gearr* ('short') support such interpretations when used in the x-position of (34). In such cases, ARG2 is either clausal or is a temporal PP (as in (56)). We will consider the status of ARG1 in such structures in the section which follows.

- (55) a. Is fada san uaigh iad.  
TMI long in.the grave them  
'They have been in the grave for a long time.'
- b. Ní ∅ fada a mhair a bhuile.  
C.NEG TMI long C last.PAST his frenzy  
'His frenzy didn't last long.'
- c. Ní- -orbh fhada go raibh na paidreacha Laidne aige.  
C.NEG TMI long C be.PAST the prayers Latin.GEN at.him  
'It wasn't long until he knew the Latin prayers.'
- (56) Is fada anois ó bhí sé abhus.  
TMI long now from be.PAST he here  
'It's a long time since he was here.'
- (57) a. Is gearr go gcaithfidh muid teitheadh.  
TMI short C must we retreat.NON-FIN  
'We will soon have to retreat.'
- b. Is gearr a bheas bunscoil i Leitir Mealláin.  
TMI short C be.FUT primary-school in  
'There won't be a primary school in Leitir Mealláin for much longer.'

## OVERVIEW

This has been a long trawl through a lot of data. But in the course of it I hope to have made clear that there is a rich syntactic and semantic subsystem here which should repay deeper exploration. I hope also to have made it believable that that subsystem has a common syntactic foundation which is reasonably well described by the schematic proposal in (34). We will return shortly to the important question of what these predication-types have in common. There are further patterns to be discussed, though, before we turn to those analytic issues.

## SUBJECTIVE AND OBJECTIVE PERSPECTIVES

The classification just laid out, while maybe useful, conceals some important patterns. In particular, it fails to make clear that the way of expressing subjective perspective seen in the Type

Three predications – the subjective attitude ascriptions of (41) – extends across the system to many of the other types discussed separately in the previous section. In addition, this way of marking the subjective perspective (by way of the dative preposition *le*) contrasts systematically with a way of expressing objective perspective. We deal with the second issue first and then turn to the first.

Irish has two dative prepositions – *le* (conventionally ‘with’) and *do* (‘to’ or ‘for’) – both of which have inflected forms for incorporated pronominal objects:

- (58) a. Ní- -or labhair mé ariamh le Ciarán.  
C.NEG TMI speak.PAST I ever with  
 ‘I never spoke to Ciarán.’
- b. Ní -or inis mé an scéal sin ariamh do Chiarán.  
C.NEG TMI tell.PAST I the story DEMON ever to  
 ‘I never told that story to Ciarán.’

Consider now the element *fiú*, which appears only in the environment of (34). It means ‘worth’ and may take clausal complements, as seen in (59):

- (59) a. scoláireachtaí a- -r fiú céad míle euro iad  
scholarships C TMI worth hundred thousand euro them  
 ‘scholarships that are worth a hundred thousand euro’
- b. Is scéal é gu- -r fiú é a inseacht.  
TMI story it C TMI worth it VCE tell.NON-FIN  
 ‘It’s a story that is worth telling.’

In addition it supports the two possibilities in (60):

- (60) a. B’ fhiú duit labhairt leis.  
TMI worthwhile to.you speak.NON-FIN with.him  
 ‘It would be worth your while to speak to him.’
- b. Ní ∅ fiú liom labhairt leis.  
C.NEG TMI worthwhile to.me speak.NON-FIN with.him  
 ‘I don’t find/judge/think it worth my while to speak to him.’

In the two examples of (60), the position x of (34) is occupied by the element *fiú*, the ARG1-position is occupied by a dative prepositional phrase – headed either by *do* or *le* – and the ARG2-position is occupied by a nonfinite clause whose subject is controlled by the dative argument. In both cases, the dative argument expresses perspective, but the perspectives presented in (60a) and (60b) are not the same. (60a) expresses the claim that, given current circumstances, the worlds in which the addressee speaks to whoever ‘him’ refers to are worlds in which some benefit accrues to the addressee. This claim is presented as objective and contestable. The perspective expressed in (60b), on the other hand, (that of the speaker) is subjective, private and incontestable – the set of worlds judged to be beneficial for the speaker is knowable only via introspection on the part of the speaker.<sup>6</sup> In (59b) the dative argument is either missing entirely or is implicit.

The element *cuma* shows a parallel set of possibilities. It too may appear only in the context of (34); it means ‘insignificant’ or ‘of no account’ and it favours alternatives (disjunctive or interrogative) as its internal (clausal) argument. It supports the same triad of possibilities as *fiú*:

<sup>6</sup>On this contrast see also Anonamous (1960: §443, p. 214; §497-499. pp. 239-241) and Stenson (1981: p. 101).

- (61) SUBJECTIVE PERSPECTIVE:
- a. Ba cuma le mo dheartháireacha cén t-am a thagainn abhaile.  
TMI matterless with my brothers what time C COME.PAST.HABIT.SI home  
 ‘My brothers didn’t care when I got home.’
- OBJECTIVE PERSPECTIVE:
- b. Is cuma dhuitse cé dhó a tá mé geallta.  
TMI matterless to.you who to.him C be.PRES I engaged  
 ‘It’s no concern of yours who I am engaged to.’
- NO OVERT MARKER OF PERSPECTIVE:
- c. Is cuma cén creideamh gu- -r leis sibh  
TMI matterless which religion C TMI with.it you-PL  
 ‘It doesn’t matter which religion you belong to.’

*Miste* is a negative polarity item meaning something like ‘any harm’ or ‘any the worse for’.

- (62) SUBJECTIVE PERSPECTIVE:
- a. A- -r mhiste leat mé sin a thabhairt liom?  
C.Q TMI any-harm with.you me DEMON VCE take.NON-FIN with.me  
 ‘Would it be OK by you if I took that with me?’
- OBJECTIVE PERSPECTIVE:
- b. ionas ná- -r mhiste duit do bhéile a ithe den urlár  
SO-that C.NEG TMI any-harm to.you your meal VCE eat.NON-FIN of.the floor  
 ‘(so clean that) it would be no harm for you to eat your meal off the floor’
- NO OVERT MARKER OF PERSPECTIVE
- c. ní- -or mhiste an bhó sin a bhleán  
C.NEG TMI any-harm the COW DEMON VCE milk.NON-FIN  
 ‘It would be no harm (it would be a good idea) to milk that cow.’

This pattern of alternations is systematic, as shown below in the examples below.

- (63) a. daoine a- -r furast leo dearmad a dhéanamh  
people C TMI easy with.them forgetfulness VCE do.NON-FIN  
 ‘people who find it easy to forget’
- b. Is furast dó a rogha rud a dheánamh  
TMI easy to.him his choice thing VCE do.NON-FIN  
 ‘For him it’s easy to do whatever he pleases.’
- c. Is furast a leithéid a shamhlú.  
TMI easy its like VCE imagine.NON-FIN  
 ‘It’s easy to imagine such a thing.’

*Trua*, in other contexts a noun meaning ‘pity’, means ‘matter for regret’.

- (64) a. Is trua liom gu- -r thug tú féin aistear seo.  
TMI pity with.me C TMI take.PAST you about.the journey DEMON  
 ‘I think it’s a pity that you undertook this journey.’
- b. Is trua don duine a tá ina muinín.  
TMI pity to.the person C be.PRES in.their trust  
 ‘Too bad for the one who depends on them.’

- c. is trua nach  $\emptyset$  bás a fuair mé!  
 TMI pity C.NEG TMI death C get.PAST I  
 ‘It’s a pity I didn’t die!’

*Breá* appears also in adjectival projections, but when in the x-position of (34) it supports the same triad of expressed perspectives:

- (65) a. Is breá liom a bheith i lár na cathrach.  
 TMI fine with.me be.NON-FIN in middle the.GEN city.GEN  
 ‘I love being in the city-centre.’  
 b. Nach breá dhuit a bheith i lár na cathrach!  
 C.NEG.Q fine to.you be.NON-FIN in middle the.GEN city.GEN  
 ‘Isn’t it great for you to be in the city centre!’  
 c. Is breá a bheith i lár na cathrach.  
 TMI fine be.NON-FIN in middle the.GEN city.GEN  
 ‘It’s great to be in the city centre.’

I have used the term ‘objective perspective’ here, but it remains unclear whether the effect in question reflects a specific semantic requirement imposed by the *do*-argument, or if in these cases there is no subjectivity requirement (whatever the nature and source of that turns out to be) and the issue of subjective versus objective perspective is simply left open. I suspect that the second alternative is more likely to be correct, in which case the b-cases of (61)–(65) would resemble English cases like (66), which seem to allow both interpretations.

- (66) It doesn’t matter to me if you stay or go.

What we have seen so far, then, is that the syntactic structure in (34) can be used to express subjective perspective when a PP headed by the dative preposition *le* appears in the ARG1 position. But this grammatical option appears in an additional set of contexts which we need to consider:

- Probably in at least some of the propositional attitude predicates (see (45)),
- certainly in the temporal predications of (55)–(57),
- and certainly also with some of the modals exemplified briefly in (39).

We begin (in the subsection which follows) with the most straightforward case ...

#### TEMPORAL JUDGMENTS REDUX

In the context of Kennedy (2013) and Kennedy & Willer (2022:1401) it is unsurprising that examples like those in (55)–(57) can be extended by the addition of a dative argument headed by *le* and that the resultant effect should be to express a subjective attitude:

- (67) a. B’ fhada leo go dtiocfadh an mhaidin.  
 TMI long with.them C come.COND the morning  
 ‘It felt like a long time to them until the morning would come.’  
*conveys*: ‘They couldn’t wait till the morning would come.’  
 b. nuair a b’ fhada léi a bhí Siobhán gan labhairt  
 when C TMI long with.her C be.PAST without speak.VN  
 ‘when it felt to her like a long time had passed without Siobhán speaking.’

- (68) Ba ghairid le Sorcha cuairt Néill sa bhaile.  
T<sub>MI</sub> short with visit in.the home  
 ‘Sorcha felt Niall’s visit home to have been short.’

Examples such as (67) and (68) express what Kennedy (2013) calls ‘qualitative’ (rather than ‘quantitative’) temporal judgments; these are judgments which measure the felt experience of passing time rather than any objective or absolute measure of its passing. Given that understanding, it is, in some sense, understandable that such predicates should be compatible with an explicit marker of subjective perspective.

#### PROPOSITIONAL ATTITUDES REDUX

All of the propositional attitudes that are expressed using the syntax of (34) (there are many) have the form in (69):

- (69) T<sub>MI</sub> X PP CP  
[DAT]  
 (see the examples in (45))

For values of *x* which correspond to verbs in the *think*-class, the dative PP is headed by *le*; for the *know*-class, the dative PP is *do*. It is tempting, then, to analyze such examples in the same way as the other cases considered here.

This analytic move is especially appealing for the root *cuimhin*, which appears only in this syntactic context and which translates *remember*:

- (70) is cuimhin liom gu- -r thugas faoin scrúdú in athuair.  
T<sub>MI</sub> MEMORY with.me C T<sub>MI</sub> take.PAST.SI about.the exam again  
 ‘I remember that I attempted the exam again.’

Given what Fodor (1979: 134) calls the ‘curious kind of epistemic privacy’ communicated by the verb ‘remember’ (see especially Vendler (1979), Higginbotham (2003), Recanati (2009), Stephenson (2010)), it seems natural to understand (70) also as a subjective attitude ascription.<sup>7</sup>

#### MODALS REDUX

Two of the necessity modals which exploit the structure in (34) are illustrated in (71) and (72). The first is built around the root *foláir* – which appears only in this context and which must appear in construction with the negative complementizer. It supports both circumstantial and epistemic interpretations.

- (71) a. ní ∅ foláir dúinn bheith gasta sa ghnó  
C.NEG T<sub>MI</sub> necessity to.us be.NON-FIN quick in.the business  
 ‘We must be quick about this.’  
 b. Ní- -orbh fholáir do Mháirín a bheith ag ullmhú don turas.  
C.NEG T<sub>MI</sub> need to be.NON-FIN PROG prepare.VN for.the journey  
 ‘Máirín must have been preparing for the journey.’

<sup>7</sup>Questions arise, though, in extending this claim to the entire class – why should ‘intend’ express its first argument with *do* (see (45a) above)?

The second such modal is built around the element *gá* meaning ‘necessity’ or ‘need’:

- (72) a. ní- -or ghá dom an scéal a insint.  
C.NEG TMI need to.me the story VCE tell.NON-FIN  
 ‘I didn’t have to tell the story.’  
 b. eolas úr a- -r ghá é a phlé  
information new C TMI need it VCE discuss.NON-FIN  
 ‘new information that it was necessary to discuss it’

The modal expressions in (71) and (72) instantiate the structure in (34) with the ARG1 position realized as a dative PP headed by *do* – as is typical for modals.

Some dialects, however, (certain Munster varieties at least) allow an additional possibility, in which the first argument of these modals is realized instead as a *le*-dative. Such examples express, as we would now expect, subjective attitudes towards modal claims (Ó Laoghaire (1924: 183), Anonymous (1960: §498(b), p. 240)):

- (73) a. Ní- -orbh fholáir leis go n-adharfaí é.  
C.NEG TMI need with.him C adore.COND.IMPERS him  
 ‘He felt it necessary that he be adored.’  
 b. na mactíri ná- -rbh fholáir liom a bheadh romham sa chosán  
the wolves C.NEG TMI need with.me C be.COND before.me in.the path  
 ‘the wolves that I thought must be before me on my path’  
 (74) aoinne nách Ø gá leis teacht i láthair an lucht  
anyone C.NEG TMI need with.him come.NON-FIN in the presence of the people  
 scrúduithe  
examination.GEN  
 ‘anyone who does not feel they need to come before the examiners’

#### OVERVIEW

If this survey is roughly accurate, then five of the nine predication-types reviewed above (types 2–6) have much in common: They show a distinctive alternation between two kinds of dative PP (headed by *le* or by *do*) which compete for the ARG1-position of (34) and express a distinction between subjective and non-subjective perspective.<sup>8</sup> All five predication-types have a modal semantics involving an accessibility relation linking an individual in the world of evaluation with a set of possible worlds, suggesting that the dative PP in ARG1-position of (34) introduces that accessibility relation and that its referent provides the individual anchor for that relation. The *le*-dative introduces in addition a presupposition (perhaps the RADICAL COUNTERSTANCE CONTINGENCY presupposition of Kennedy & Willer (2022)), which is the source of the subjective character of any attitude report or modal which invokes it.

Before trying to make sense of all of this rich body of material and how it relates to our fundamental question – what is the range of interpretive possibilities expressible in a nonverbal argument domain? – three cautionary notes are in order.

<sup>8</sup>That the attitude predicates and the necessity modals in particular should show such striking commonalities of form is in a certain sense expected, given the tradition of investigation that extends from Heim (1992) and includes von Stechow (1999), Rubinsteyn (2017) and von Stechow & Heim (1997–2021: 60).

- (i) We have dealt so far with just one of the subgroups of nonverbal clause defined in (10) – the ‘lexically headed’ class. Virtually nothing has been said about the phrase-headed types which have been the focus of almost all previous research.
- (ii) Within the lexically headed class, two subgroups have emerged – one defined by a modal semantics and the possibility of expressing subjective perspective, the other defined by the expression of weak quantification of various kinds. These two represent the most productive and most commonly encountered predication-types in the class, but there are other types whose profiles fit easily enough into the syntactic framework of (34), but whose semantic character remains to be investigated.
- (iii) There is clearly systematicity and productivity in this subsystem, but there must also be a role for lexical idiosyncrasy. The necessity modals of (73)-(74) show that there is no fundamental incompatibility between their semantics and the expression of subjective perspective; yet this option is permitted only for a relatively small subset of modal expressions in a relatively small subset of dialects and idiolects.

## 8 AN INTERPRETIVE COMMONALITY?

With this overview in place we can finally return to the ‘urgent task’ highlighted at page 14 above – what is *x* of (34)? That question might be approached by first asking if there is a commonality of meaning across the various predication-types we’ve been discussing – of which *x* might be the syntactic expression.

It seems unlikely *a priori* that there should be a single interpretive trait common to all of the verbless structures displayed in (10) and reviewed in 7. I will argue, though, with most existing work (both in the descriptive tradition and in more theoretically oriented work) that there is such a common trait; I will argue, though, that that common trait is not the one usually argued for.

Two themes run through existing discussions of this question: One is that ‘copular’ clauses express properties that are permanent rather than transitory, inherent rather than ephemeral (Ó Máille (1912: 57-58), Ó Searcaigh (1939:232-3), Ó Cadhlaigh (1940: 144), Anonymous (1960: §448, p. 216). A second (minority) theme is that finite verbless clauses express fundamentally pragmatic distinctions – ‘emphasis’ or focus, or the articulation of old versus new information (Stenson (1981: 117), Ó Siadhail (1989: 249)). A common theme throughout the discussion has been a recognition that the terms at the heart of the discussion (‘permanent’ versus ‘transitory’, ‘old’ versus ‘new’, ‘emphatic’ versus ‘neutral’ and so on) are fragile and elusive.

I will focus here on the first theme – that ‘copular’ clauses express only properties which are, in some sense, permanent or definitional.

In assessing such a claim in the present context, we need to be sensitive to the distinction between the lexically headed cases which have been our focus here and the true copular clauses. Consider first then the hypothesis that true copular clauses always express ‘defining characteristics’ or ‘permanent states’ That hypothesis is difficult to reconcile with routine examples such as those in (75)–(78).

- (75) Duibhneach a- -r theagascóir í faoi láthair in Ollscoil na hEireann  
           C TMI tutor her at-present in university the Ireland  
           ‘A woman from the Kerry Gaeltacht who is at present a tutor in the NUI.

In (75), the adverbial phrase *faoi láthair* ('at present') explicitly invites the inference that the state which is asserted to hold is temporary rather than permanent. In (76), there is no such element, but the discourse-context in which it was used makes clear that the state which is asserted to hold is a very brief one:

- (76) Ba díol truaighe dáiríribh an uair sin an triúr sin.  
TMI matter pity.GEN seriously the time DEMON the three DEMON  
 'Those three really deserved to be pitied on that occasion,' U 40

This narrative describes a brief moment of farewell – after which a family of three (father, mother, baby girl) is forced to separate because of obligations taken on by the father. This moment of extreme sadness is contrasted with their former, and steady, happy state.

(77) is similar – the discourse context makes clear that the state described is brief:

- (77) Ba fear bródúil Máistir Keane an uair sin.  
TMI man proud Master the time DEMON  
 'Master Keane was a proud man on that occasion.' SJCCF 300

(77) describes a sporting event, in the course of which a young man who had been mentored by Master Keane had done exceptionally well. The central point is to observe that Master Keane, though not, in any intrinsic or definitional sense, a proud man, experienced on this occasion a temporary and uncharacteristic state of pride. Similarly in (78):

- (78) Ba teach ciúin tigh Thadhg Uí Chatháin an lá tar éis na sochraide.  
TMI house quiet house the day after the funeral  
 'Thadhg Ó Catháin's house was a quiet house the day after the funeral.' FG 170

The context for (78) makes clear that the house in question is a quiet house on a particular day and for very particular reasons; further that this state is far from being definitional, permanent or intrinsic. Quite the opposite in fact - what is at issue in (78) is the contrast between the quiet of that particular day and the liveliness and chatter that is its natural or more permanent state. Consider finally the kind of example illustrated in (79):

- (79)a. séideadh feadóg le fógra a thabhairt gu- -r thráth oibre é arís.  
blow.PAST.IMPERS whistle to notice VCE give.NON-FIN C TMI time work.GEN it again  
 'a whistle was blown to give notice that it was time for work again.'  
 b. Is tráth gnímh anois é.  
TMI time action.GEN NOW it  
 'It's a time for action now.'

The rhythm of a workday is not broken up into intervals that are in any way lasting or permanent. What (79a) refers to is the set of temporary states which in sequence define a longer but equally impermanent state – a workday – in a pattern that might or might not be repeated on other days.

Consider now the lexically headed cases described in section 7. For these cases, it is more difficult still to maintain a requirement of permanence. Consider (80):

- (80) Is maith liom tú a fheiceáil ag damhsa.  
TMI good with.me you VCE see.NON-FIN PROG dance.NON-FIN

‘I like to see you dancing.’

(80) is a subjective attitude ascription and an instantiation of the pattern in (34). In (80), the position of *x* is occupied by *maith* (‘good’) and the higher argument position is occupied by the ‘subjective’ dative PP. Many previous discussions present this possibility as an instance of lexical idiosyncrasy – a listed idiomatic equivalent of the English verb ‘like’. But what that view crucially misses is the fact that the pattern in (80) represents not an idiosyncrasy, but rather one cell in a matrix of regular and predictable possibilities, one which includes, for instance, the three-way alternation illustrated in (61)–(65) above:

- (81) OBJECTIVE PERSPECTIVE:
- a. Is maith do Dhonnchadh nach  $\emptyset$  mise an máistir.  
T<sub>MI</sub> good to/for C.NEG T<sub>MI</sub> I the master  
 ‘It’s a good thing for Donnchadh that I’m not the teacher.’  
 NO OVERT MARKER OF PERSPECTIVE:
- b. Ba mhaith tabhairt faoi comh luath agus is féidir  
T<sub>MI</sub> good take.NON-FIN under.it as early and T<sub>MI</sub> possible  
 ‘It would be good to start on it as soon as possible.’

The example in (80) makes reference to a mental state which might be long-lasting or even permanent in the attitude holder, but that is by no means the only way of interpreting such structures, as is shown by the examples of (82).

- (82) a. Is maith liom go dtáinig tú isteach.  
T<sub>MI</sub> good with.me C come.PAST you in  
 ‘I’m glad you came in.’
- b. Á! Ní  $\emptyset$  maith liom é sin a chloisteáil, a Jim.  
C.NEG T<sub>MI</sub> good with.me it DEMON VCE hear.NON-FIN  
 ‘Ah, I’m sorry to hear that, Jim.’

(82b), for example, was used in an email response to a message containing some bad news. Cases such as those in (82) have in common with (80) that they express subjective psychological states – attitudes towards states of affairs described in the complement clause. In (80) the interval during which that state holds may be quite long (even life-long); but in (82) (and many similar examples) the relevant state is fleeting and of the moment; no inherent or long-term property is self-ascribed.

A similar point is made by a predication type which we have not yet considered, that exemplified in (83). In these cases the position of *x* in (34) is occupied by the root *deas* (‘nice’ or ‘pleasant’) and the ARG1 position is occupied by a prepositional phrase headed by *ó*, meaning ‘from’:

- (83) Is deas uait é sin a rá.  
T<sub>MI</sub> nice from.you it DEMON VCE SAY.NON-FIN  
 ‘It’s nice of you to say that.’

(83) refers to a particular occasion and to a particular saying event. It expresses a judgment about that event – that the saying (or the content of the saying) is appreciated. It makes no general claim about any participant. In particular, it attributes no inherent or intrinsic niceness to the

addressee and could naturally be preceded by an assertion like ‘You’re not a nice person in general, but I have to admit that ...’

The more general point is that there can be no across the board requirement that nonverbal clauses express permanent or long-lasting properties or states.

#### INDIVIDUAL-LEVEL PREDICATION?

In the context of contemporary semantics, the natural counterpart to the claim of temporal permanence is the claim that verbless clauses always express individual-level predications, in the sense of Milsark (1974, 1977), Carlson (1977, 1979), Kratzer (1995), Diesing (1992), Chierchia (1995), Magri (2009), Husband (2012) and many others. This link was made first for Irish by Cathal Doherty (1996), and has been central in discussions of copular clauses in Irish and in Scots Gaelic ever since (Carnie (1995), Ramchand (1996), Adger & Ramchand (2003), Roy (2013), McCloskey (2017)).

I do not adopt this position here - partly on general grounds and partly for reasons particular to Irish.

The tests which are supposed to distinguish stage-level from individual-level predications do not yield (in languages for which they have been investigated carefully) consistent classifications. Schafer (1995) shows for English, and (Jäger, 2001: 93–99) shows for English and German, that the standard diagnostics are sensitive to different properties and fail to identify two coherent classes (Fernald (2000: Chapter 6), Higginbotham & Ramchand (1996), Pearson (2013: 125–9)).

Gerhard Jäger (2001) argues in particular that the diagnostics which probe ‘permanence’ (or ‘tendential stability’ – Chierchia’s (1995) term) do not reflect a grammatical distinction, but rather common sense or conventional assumptions about which properties tend to be long-lasting and which tend to be short-lived. Such assumptions shift easily from context to context and judgments about well-formedness then also shift. An underlying binary distinction can then be maintained only by very free appeal to coercion. As Kratzer 1995: 125–6 puts it:

*If a distinction between stage-level and individual-level predicates is operative in natural language, it cannot be a distinction that is made in the lexicon of a language once and for all ... That is, the argument structure of ‘having brown hair’ changes when you start using it as a stage-level predicate.*

Jäger argues further that those tests which turn on interpretive properties of subjects (Fernald’s (2000) ‘subject effects’) reflect differences (structural and interpretive) between categorial andthetic judgment-types (Brentano (1874/1973), Kuroda (1972, 1992), Ladusaw (1994)).

For Irish, relying on the usual tests for distinguishing between individual-level and stage-level predicates is very fraught. Verbless clauses, being necessarily finite, cannot be small complements to perception verbs. For the same reason, they cannot appear in the absolute adjuncts argued by Stump (1985) and others to be relevant for the ILP/SLP distinction. Existential clauses are compositionally different from their counterparts in English (McCloskey (2014)) and exhibit no equivalent of Milsark’s (1977) ‘Predicate Restriction’. We are thus deprived of what has been the single most reliable test in English for distinguishing stage-level from individual-level predications. Assessing whether or not there are ‘subject effects’ is in addition complicated by the fact that the informal term ‘subject’ is even more than usually opaque when it comes to verbless clauses (O’Nolan (1920: 1–8), Anonymous (1960: 208–219), Stenson (1981: 5–6)). For these reasons, it has proven very difficult to take discussion of these issues for Irish beyond the level of raw intuition.

There are, though, relevant empirical observations.

It has been recognized since Carlson's (1977) original discussion that the link between temporal permanence and individual-level predication is, as (Fernald, 2000: 5) puts it, 'intuitive but elusive'. Nevertheless, the data assembled in the previous section to show that verbless clauses in Irish are not restricted to expressing essential or inherent properties are also challenging for the hypothesis that they express individual-level predications. Many of the examples cited describe states which are neither essential nor definitional.

It is sometimes claimed that individual-level predications resist modification by temporal adverbials (Kratzer (1995: 128), Chierchia (1995)), but nonverbal clauses in Irish show no resistance to such modification. We have seen this already (examples (75)–(79) above); additional examples are presented in (84) (for dunominal copular clauses) and in (85) for some of the other types.

- (84) a. Ní  $\emptyset$  rí thú feasta.  
 C.NEG TMI king you in-future  
 'You are no longer a king.'
- b. ba fear ró-dháirire, milleánach uaireanta é  
 TMI man too-serious fault-finding sometimes him  
 'He was sometimes an over-serious, censorious man.'
- (85) a. Is uaigneach anocht mé.  
 TMI lonely tonight me  
 'I'm lonely tonight.'
- b. ba dheacair léi, uaireanta, an teorainn idir seanchas agus béadán a  
 TMI hard with.her sometimes the border between lore and gossip VCE  
 fheiceáil  
 see.VN  
 'She found it hard sometimes to see the borderline between lore and gossip.'
- c. is maith í uaireanta ach uaireanta eile méadaíonn sé an t-éadóchas.  
 TMI good it sometimes but times other increase.PRES it the despair  
 'It's good sometimes, but other times it magnifies despair.'
- d. cé ná- rbh eol dom é san am  
 although C.NEG TMI knowledge to.me it at.the time  
 'although I didn't know it at the time'
- (86) a. fíor-dhroch-bhóthar nach  $\emptyset$  le héinne é fé láthair  
 really-bad-road C.NEG TMI with anyone it at-present  
 'a really bad road that is not owned by anyone at present'

Examples such as these are routine and easy to find; they are not awkward or forced in any way and show no sign of involving coercion or accommodation.

Locative modification is less frequent, but unproblematic in an appropriate context. See (87) and (possibly) (90a) below.

- (87) chruthaigh sé go mba beo an teanga i mBaile Átha Cliath  
 prove.PAST he C TMI alive the language in  
 'He proved that the language was alive in Dublin.'

Finally, many of the predicates in the lexically headed class have translation equivalents, or near-equivalents, in English which are stage-level by standard diagnostics. Existentials were discussed earlier (see (54) above); some additional examples are given in (88):

- (88) a. má -s beo mé, beidh mé anseo ar an ceathair  
 if <sub>TMI</sub> alive me be.<sub>FUT</sub> I here on the four  
 ‘if I’m alive, I’ll be here at four’
- b. Má -s in ísle bri duit, lean na mná seoigh seo.  
 if <sub>TMI</sub> in lowness spirit.<sub>GEN</sub> to.you follow the women joyful <sub>DEMON</sub>  
 ‘If you’re feeling low, follow these wonderful women.’
- c. an té gu- -r amuigh dó go maidin  
 the one C <sub>TMI</sub> outside to.him until morning  
 ‘the person who has been out till morning’

English *alive* has been recognized as stage-level since Carlson’s (1977) pioneering discussion; for the remaining two examples, the predicates in the English versions are stage-level by all standard criteria. Such cases are numerous. The table below presents a small sample in schematic form.

COP suim le X Y:	<i>X is interested in Y</i>
COP le X Y:	<i>X intends/hopes to Y</i>
COP rún do X Y:	<i>X intends to Y</i>
COP dóigh le X Y:	<i>X thinks that Y</i>
COP leasc le X Y:	<i>X is reluctant to Y</i>
COP mian le X Y:	<i>X wants/desires to Y</i>
COP oth le X Y:	<i>X regrets to Y</i>
COP ceadmhach do X Y:	<i>X is permitted to Y</i>
COP cuimhin le X Y:	<i>X remembers Y</i>
COP tostach X:	<i>X is silent</i>
COP deimhin le X Y:	<i>X is certain that Y</i>
COP léir do X Y:	<i>Y is clear to X</i>
COP neamhbhuan do X:	<i>X is impermanent</i>
COP ciontach X as Y:	<i>X is guilty of Y</i>

#### LIFETIME EFFECTS

I know of one positive empirical argument for the individual-level proposal about copular clauses. Doherty (1996) and Ramchand (1996) demonstrate for Irish and for Scots Gaelic respectively that such clauses exhibit so-called ‘lifetime effects’ (in the sense of ENÇ (1987), Musan (1997) and others). Consider Doherty’s Irish example in (89):

- (89) Ba dhochtúir Seán.  
<sub>TMI</sub> doctor  
 ‘Seán was a doctor.’

Use of this example, with the past tense marker *ba*, easily gives rise to an inference or an implicature that Seán is now dead. Since at least Kratzer (1995), the availability of this inference or implicature has been taken to be one of the markers of individual level predication.

However it is by no means the case that the inference always arises in such clauses, as is shown, for instance, by the examples in (90):

- (90) a. nuair a ba mhúinteoirí óga fá Dhoire iad  
 when C <sub>TMI</sub> teachers young around Derry them  
 ‘when they were young teachers around Derry’

- b. ní- -or mhac léinn feasta é  
 C.NEG TMI student in-the-future him  
 ‘He was no longer a student.’
- (91) A: An  $\emptyset$  tú an cailín aimsire a tá ag De Búrca, an dlíodóir?  
 C.Q TMI you the servant-girl C be.PRES at Burke the lawyer  
 ‘Are you the servant-girl who works for Burke, the lawyer?’
- B: Ba mé.  
 TMI I  
 ‘I was.’

In the actual context of use of (90a), the two men referred to are alive and are reminiscing about their shared past; in (90b) an elderly aunt observes the maturing of her nephew, who has graduated and who has just started a new job; in (91), the former servant-girl is alive enough to truthfully answer an impertinent question.

We also now have a better understanding of lifetime effects – of when the implicature arises and when it does not – in the work of Renate Musan (1995, 1997), as developed further by Daniel Altshuler and Roger Schwarzschild (Altshuler & Schwarzschild (2023), Altshuler (2016:97-107)). On this account the ‘cessation implicature’ arises by way of standard Gricean reasoning grounded in an interaction between world knowledge (assumptions about which states are characteristically long-lasting or short-lived) and the temporal profile of stative predicates. These empirically more successful analyses make no appeal to the individual-level/stage-level distinction. Stativity, though, especially in the Altshuler-Schwarzschild development of the account, is of central importance.

#### ASSESSMENT

The clearest conclusion to emerge from this discussion is that, if we are searching for a semantic commonality which unites the various forms of nonverbal predication, we should not seek it in a requirement that they express permanent, or definitional, or individual-level properties. That conclusion is perhaps clearest for the lexically-headed class described in section 7. Such a restriction, then, cannot be the trait which unifies all instances of nonverbal predication in Irish. But the discussion of copular clauses seems to me to establish that one cannot impose such a requirement on true copular clauses either, without bleaching the relevant term (‘permanent’, ‘definitional’, ‘intrinsic’, ‘individual-level’) of all substantive content.

#### STATIVE EVENTUALITIES

The lexically-headed predications, however, do seem to share a semantic property – they express stative predications. Consider again the nine classes considered in the survey presented earlier:

##### GROUP ONE

- (i) predicative adjective constructions
- (ii) subjective attitude ascriptions
- (iii) psychological state ascriptions
- (iv) propositional attitude ascriptions
- (v) existentials
- (vi) qualitative temporal judgments
- (vii) modals

## GROUP TWO

- (viii) weak quantification
- (ix) quantification over cases

It is uncontroversial, I think, that six of the seven predication-types in Group One are stative. For the seventh, the class of modals, the question of which aspectual category they belong to is less discussed. See Homer (2021: 17-22), however, for persuasive arguments that modal predicates in French form stative predicates of eventualities and see Vendler (1967: 105, 115-116) for an early discussion.

For the GROUP TWO predications, involving quantification-over-cases as well as quantification over individuals, the matter seems much less clear and I will postpone that discussion for the moment.

But we can now consider an alternative (and weaker) hypothesis about what might link the various kinds of nonverbal clause – namely, that they all express stative eventualities. This is a weaker claim than those we have been considering in that it leads us to expect a broader range of possibilities – ‘stage-level’ predicates which are stative should appear in nonverbal clauses. Fernald (2000: 6-9) observes that the empirical consequences of adopting the weaker hypothesis are however not large:

*The ILP/SLP distinction overlaps significantly with the stative/non-stative aspectual distinction ... As it turns out, all ILP's are stative, and all non-statives are SLP's. The only reason we have for positing the existence of the ILP/SLP distinction at all is that there exist some stative SLP's ... Because the stative/non-stative distinction is so close to the ILP/SLP distinction, we must exercise caution in our work; otherwise, we may accidentally identify a stativity distinction as one of predicate levels.*

Given that the principal outcome of this discussion has been exactly that such states (impermanent and contingent) are frequently expressed within the nonverbal syntactic subsystem, it seems that the misstep that Fernald warns of here exactly describes the wrong turn that much work on nonverbal clauses in the Gaelic languages (my own included – McCloskey (2017: 139-140)) has taken.

The general hypothesis of stativity extends straightforwardly to the class of true copular clauses (predicational and identificational) illustrated in (7) and (8) above. Such clauses are classic and uncontroversial instances of stative predication. We might then understand the persistent analytic intuition that such clauses express permanent or unchanging states as a reaction to the temporal profile of stative predicates. States, unlike other eventualities, are not dynamic but are, rather, temporally stable – they hold of each subinterval within the larger interval (short or long) during which they hold. Or as Vendler (1967: 111) puts it: states *go on in time in a homeogenous way; any part of the process is of the same nature as the whole.*

The possibility remains open that the truly ‘copular’ instances of the nonverbal clause-type (like (7) and (8)) may be subject to some additional requirement (that they express individual-level states, or perhaps abstract or ‘Kimian’ states in the sense of Maienborn (2005) or Moltmann (2012), for example, or that they must express categorial rather thanthetic judgments). At present, though, it is unclear what explanatory gain such elaborations might bring with them. In dealing with states and stativity, on the other hand, we are building our analyses on theoretical and ontological bedrock.

However that discussion resolves itself, what will be important for our present concerns is the stative character of nonverbal predications and in particular the idea that stativity is the semantic commonality which grounds the syntax of (34).

Before going farther, though, there are additional kinds of nonverbal clause that we should consider as the hypothesis of stativity is evaluated.

#### COMPARATIVE CLAUSES

One kind of (phrasally-headed) verbless clause that we have not yet considered is the class of comparative clauses. Comparative clauses may be either verbal or non-verbal in their syntax; in the non-verbal frame, they take the general form schematized in (92) and exemplified in (93).

(92) [ TMI<sub>[COMPAR]</sub> A DP<sub>1</sub> ( ná DP<sub>2</sub> ) ]

(93) COMPARATIVE CLAUSES

a. Is sine Ciarán ná Eoghan.

TMI old.COMPAR than  
'Ciarán is older than Eoghan.'

b. Is iontaí an fhírinne ná an chumraíocht

TMI strange.COMPAR the truth than the invention  
'Truth is stranger than fiction.'

UB I23

Consistent with the proposal that stativity is the semantic commonality which unites all nonverbal clauses in Irish, Wellwood (2016, 2019) (see also Cariani et al. (2024)) develops and defends a semantic analysis of comparative clauses which is Neo-Davidsonian and state-based.

#### PREPOSITIONAL CLAUSES

Nonverbal clauses headed by prepositions or prepositional phrases are commonplace. As far as I am aware, all such cases are clearly stative in their semantics, a claim I will try to render plausible here by providing a quick survey of the possibilities.

The preposition most commonly found in the nonverbal context is the partitive preposition *de*, which most often expresses ethnic, cultural, or geographical origin:

(94)a. Ní- -or de thógáil na tíre seo ceachtar aca.  
C.NEG TMI of raising the.GEN country.GEN DEMON either of.them  
'Neither of them was from this country.'

b. Nuair a ba den tsaol seo mé.  
when C TMI of.the life DEMON me  
'When I was of this world.' (spoken by a ghost)

Similarly the prepositions *as* ('out of') and *ó* ('from'):

(95) B' as uachtar na conndae í.  
TMI out-of higher-part the.GEN county.GEN her  
'She was from the south of the county.'

(96) cé gu- -r ó dhá shaol dheifriúla an dá shórt duine  
although C TMI from two life different the two sort person

‘although the two kinds of people were from two different worlds’

As is well-known, the preposition *le* expresses ownership or (permanent) possession:

- (97) Ba leo an talamh agus na tithe anois.  
TMI with.them the land and the houses now  
 ‘The land and the houses were theirs now.’

And as is perhaps less well-known (but as noted above at (15)) it may also be used to express a future-oriented propositional attitude:

- (98) má’ s leat fanacht sa tír seo  
if TMI with.you stay.NON-FIN in.the country DEMON  
 ‘if you intend/want/hope to remain in this country’

Finally, the simple preposition *mar* (‘as,like’):

- (99) faid ba mhar sin don scéal  
as-long-as TMI AS that to.the situation  
 ‘as long as the situation was like that’

I hope that this (reasonably complete) survey is enough to make clear that this sub-pattern too serves to express stative propositions. As always, such states may be permanent or long-lasting (the expression of possession in (98), for instance) or they may be transitory, as already seen in (88b) above, or in (100):

- (100) An  $\emptyset$  i mBaile Átha Cliath duit?  
c.Q TMI in Dublin to.you  
 ‘Are you in Dublin?’

PE 041224

Two interesting and challenging categories now remain for the stativity hypothesis – Group Two of the lexical class, involving quantification (over cases), and cleft sentences.

#### QUANTIFICATION (OVER CASES)

We are dealing here with cases like the two exemplars in (101), which represent an extremely productive and well-attested subgroup of the nonverbal clause-type.

- (101) a. Is minic leis an gclover cheithre bhileoig a bheith air  
TMI often with the clover four leaves VCE be.NON-FIN on.it  
 ‘The clover often has four leaves.’  
 b. Is beag duine a théann anois ann.  
TMI little person C go.PRES NOW there  
 ‘Few people go there now.’

In such cases, the link with stativity is less than intuitive.

Richard Larson (2024), however, building on earlier work by George Boolos (1981) and especially Susan Rothstein (1995), has provided powerful arguments that natural language quantification structures like those in (101) must express states (‘quantificational states’) and more

specifically that quantifiers themselves, like other predicates, introduce variables over eventualities of a stative sort in the Neo-Davidsonian fashion. Larson shows that quantificational assertions appear in environments (the complement position of perception verbs and causatives) which are thought to be restricted to eventuality-denoting expressions and further that they can themselves provide the variable required for higher instances of ‘event quantification’. He also develops a compositional system in which the postulated quantification states, whose parameters share formal properties with thematic roles as treated in the Neo-Davidsonian tradition, play a crucial role, especially in accounting for the matching effects that Boolos and Rothstein were so concerned with.

It is a striking feature of his compositional proposals that they transpose smoothly and straightforwardly to that developed here for the lexically-headed class of nonverbal clauses – the structure in (34) and its further development in sections to come – despite its being very different from the English syntactic system he is primarily concerned with. The Irish evidence presented here – in which quantificational predicates appear in a syntactic frame dedicated to the expression of stative eventualities – should be taken as providing support for Larson’s proposals, the two sets of proposals being in fact mutually supporting.

#### CLEFT SENTENCES

Cleft sentences must also ultimately be within the domain of this investigation, since their matrix environment clearly exploits the same morphosyntactic frame as copular clauses. And indeed the syntax of (104) provides a fine syntactic foundation for clefts. Their general form is as shown in (102); typical examples are given in (103), the first involving fronting of a prepositional phrase, the second involving fronting of an indefinite nominal.

(102) [ TMI XP [CP C [ ... – ... ]]]  
           [PIVOT] [OP]

(103)a. Is orm a bhí sí ag breathnú – .

TMI on.me C be.PAST she PROG look.NON-FIN

‘It’s me she was looking at.’

b. B’fhéidir gu- -r taisme a bhain – dó.

maybe C TMI accident C take.PAST to.him

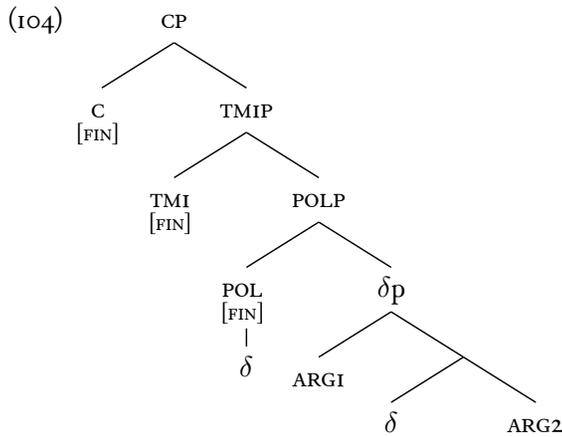
‘Maybe it’s an accident that happened to him.’

Many languages have copula-based structures in which a phrase is fronted to a privileged position and which express some non-neutral discourse relation; Irish clefts, though, may be atypical in the range of distinct discourse-relations so expressed. In this, they more resemble root Verb Second structures in German than clefts in English (see McCloskey (2023)).

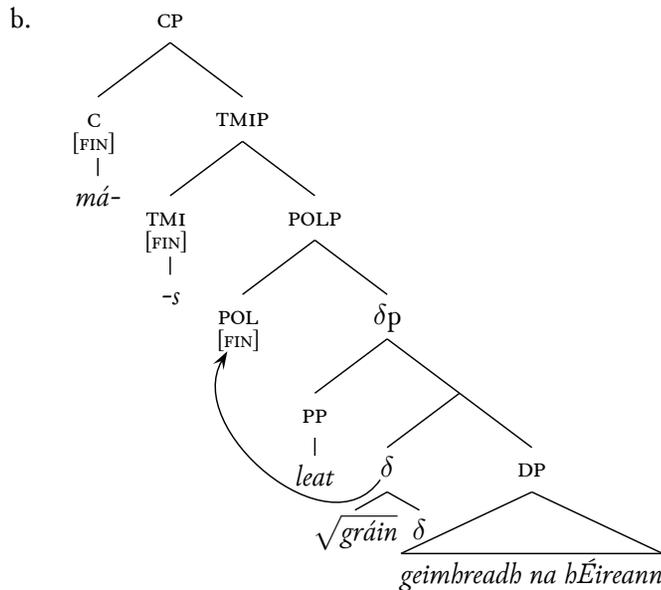
Such possibilities represent the single largest challenge I know of for the stativity hypothesis in its most general form – that whenever we detect the distinctive morphosyntactic signature of a finite nonverbal clause, we should also detect a state-based semantics. For this to be a plausible approach, the state in question must be at least as abstract as Larson’s (2024) ‘quantification states’; probably we need to talk about states of the discourse, and the framework defined in Krifka (2015), Kamali & Krifka (2020) provides a framework for such an investigation which seems promising. Meanwhile, and in the absence of any alternative theory of why cleft sentences use copula syntax, I will work here with the strong form of the stativity hypothesis.

9 IMPLEMENTATION

I will assume, then, that states play a role in semantic composition (as Higginbotham (2000) puts it, they are ‘visible’ to the semantics), that states are a sub-type of eventuality and that state variables play the same kind of role in semantic composition as event variables do in the neo-Davidsonian tradition (following Parsons (2000), Higginbotham (2000), Moltmann (2012), Altshuler (2016), Schwarzschild (2024) among many others). The postulated head  $x$  of (34) I now take to be a functional head which, following Hale & Keyser (2002: 205-225), I will label  $\delta$ .  $\delta$  introduces a state-variable and projects the syntactic structure within which the arguments defining that state are introduced. A root associates with  $\delta$  and restricts the variable it introduces to being a particular kind of state. The material in the ARG<sub>1</sub> and ARG<sub>2</sub> positions of (34) provide values for the two open parameters which further define the stative eventuality so introduced. (34) now becomes (104), and the example in (105a) has the structure in (105b):



(105)a. Má -s gráin leat geimhreadh na hÉireann  
 if TMI hate with.you winter the.GEN Ireland.GEN  
 ‘If you hate the Irish winter’



I will assume in addition that the mechanisms which regulate that association are responsible for the variation and idiosyncracies that we observe. More for convenience than out of conviction, I will assume that the mechanism of association is a species of compounding which applies in the lexicon, one that creates complex lexical items of category  $\delta$  which can then be selected for use in the system of syntactic and semantic composition.

By way of illustration, consider the ‘lexically headed predication-type in (106):

- (106) má ’s mian libh mé codladh agus biseach a fháil  
 if<sub>TMI</sub> desire with.you me sleep/nfin and recovery<sub>VCE</sub> get.VN  
 ‘if you want me to sleep and get well again’ ACO 146

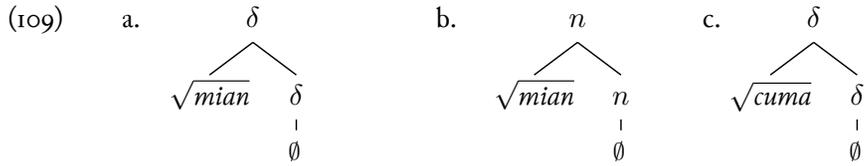
Every dictionary will tell you that the root *mian* is a noun. And indeed it forms a plural (*mianta* - ‘desires’) and appears freely in nominal projections with all of their internal possibilities and characteristic distribution, as illustrated briefly in (107):

- (107)a. aon uair a bhuail an mhian í  
 any time C.WH strike.PAST the desire her  
 ‘any time the desire struck her’ LG 136
- b. Ba í a mian deiridh go gcuirfí í san oileán  
 TMI it her desire end.GEN C bury.COND.IMPERS her in.the island  
 ‘Her final wish was that she be buried in the island.’ TUAIR 221222
- c. ní bhfuair sí a mian  
 C.NEG get.PAST she her wish  
 ‘She did not get her wish’ TUAIR 221222
- d. na mianta a bhí múscailte ionam  
 the desires C.WH be.PAST awakened in.me  
 ‘the desires that had been awakened in me’

None of the privileges of occurrence in (107), however, are available to *mian* when used in the syntactic frame of (106). All of the possibilities exhibited in (108) are grotesque:

- (108)a. \*Is mo mhian labhairt leat.  
 TMI my desire speak/nfin with.you  
*Intended:* ‘I want to speak with you.’
- b. \*Is mian a tá múscailte ionam (liom) labhairt leat.  
 TMI desire C.WH be.PRES awakened in.me with.me speak/nfin with.you  
*Intended:* ‘A wish that has awakened in me is to speak with you.’
- c. \*Is an mhian mhór liom labhairt leat.  
 TMI the desire great with.me speak/nfin with.you  
*Intended:* ‘I have a great desire to speak with you.’

This is as expected in the system under development here. In that system the root *mian* is acategorial and can become nominal only in virtue of associating with the nominalizing head *n*. Alternatively, it can associate with  $\delta$  and may then appear at the base of the structure in (104), yielding (106). So the complex lexical item in (109a) yields (106) by way of the  $\delta$ -projection in (104), while that in (109b) yields the examples of (107), by way of the extended nominal projection. The awkward locutions in the subsection titles of section 5 above (‘Cases in which an apparent noun is the main predicate’) now give way to the expected options of (109a and b).



And those heads which in our earlier discussion we called ‘acategorical’ (such as *fiú* or *cuma* in (16)), we now understand as involving those roots which associate only with  $\delta$ ; for them, (109c) is the only path by which they can participate in a syntactic derivation. This is the sense in which structures such as (106) are *sui generis* and reflect the existence of a distinct syntactic subsystem for the expression of nonverbal predication.

In this context, though, consider a final example – one which highlights an analytic consequence not yet discussed. The pattern in (110) is available in at least some dialects of Munster (but not anywhere outside Munster, as far as I am aware).

- (110) Is clos dom go bhfuil stráinséaraí tagtha chun an oileáin.  
TMI HEAR to.me c be.PRES strangers come.PERF to the island  
 ‘I hear/gather/am informed that there are strangers come to the island.’

The item *clos* which is at the heart of the structure in (110) is a root which also appears as the lowest element in verbal projections, expressing ‘hear’:

- (111) Cloiseann siad ceol na n-éan.  
hear.PRES they.NOM music the.GEN birds.GEN  
 ‘They hear the songs of the birds.’

(110), which is built around the same root seen in (111), expresses a reportative evidential (on which see, for instance, *AnderBois* (2014) and references cited there). That is, it expresses a particular kind of doxastic state, similar in crucial respects to the ones we examined earlier (in section 7) and is thus semantically appropriate for the structure in (104). The root *clos* is conventionally thought of as a verbal root and it indeed occurs with high frequency in verbal extended projections (as in (111)). This might seem anomalous or surprising, given that the announced focus of our investigation has been that of the expressive possibilities available to ‘nonverbal’ predication-types. But nothing in the framework being considered here guarantees that roots such as *clos*, which appear regularly in the context of a verbal projection, should not also be possible in such clauses – as long as the crucial semantic condition of stativity is met. The possibility of (111) is thus expected, not anomalous or surprising. Speakers of the Munster varieties in which (111) is found, but not speakers of other dialects, are exposed to the crucial input data during the acquisition period and include in their evolving grammars an association between the root *clos* and the  $\delta$ -structure in (104), thus yielding the possibility of (110).

## 10 IMPLICATIONS

Despite the descriptive ambitions announced earlier, many issues remain open at this point. In particular, the phrasally headed clause-types have barely been mentioned. Nevertheless, certain implications of some theoretical importance are already clear.

Consider once more the example in (110). The dative argument is licensed in this case and is part of the structure that expresses the (evidential) epistemic state. But what, specifically, licenses

the appearance of that dative argument? Notice that it cannot be the root *clos*. That root appears also in verbal contexts and with an evidential interpretation:

- (112) Cloisim go bhfuil stráinséaraí tagtha chun an oileáin.  
 hear.PRES.SI C be.PRES strangers come.PERF TO the island  
 ‘I hear that strangers have come to the island.’

What is impossible is the appearance of the dative PP in the context of a verbal syntax:

- (113) \*Cloiseann dom go bhfuil stráinséaraí tagtha chun an oileáin.  
 hear.PRES to.me C be.PRES strangers com.PERF TO the island  
 ‘I hear that strangers have come to the island.’

Consider an additional case. The element corresponding in Irish to English ‘true’ is *fíor*, which may appear in nonverbal clauses:

- (114) a. Is fíor sin.  
 TMI true that  
 ‘That’s true.’  
 b. B’ fhíor an méid sin.  
 TMI true the amount DEMON  
 ‘That much was true.’  
 c. Is fíor go bhfuil an fharraige fealltach.  
 TMI true C be.PRES the sea treacherous  
 ‘It’s true that the sea is treacherous.’

But *fíor* may have an additional argument.

- (115) a. Is fíor duit go bhfuil sé teintrí.  
 TMI true to.you C be.PRES he hot-tempered  
 ‘You’re right that he’s hot-tempered.’  
 b. B’ fhíor dó go ndéanfaí feall orthu.  
 TMI true to.him C do.COND-IMPERS treachery on.them  
 ‘He spoke the truth when he said that they would be betrayed.’

Examples like (115) are appropriately used only if the referent of the dative argument has made a public commitment to the truth of the proposition expressed by the propositional argument. The effect is to re-affirm or to deny (in the case where there is sentential negation in the matrix environment) the truth of that proposition. This is a stative predication of a fairly special kind – I take it that the state in question is the (metalinguistic) abstract state of having committed publicly to the truth of the proposition expressed by its second argument. The first (higher) argument – a dative PP again – encodes, as usual, the holder of that state.

But what licenses the dative argument? *Fíor* may appear in the context of an adjectival syntax, as in (116):

- (116) Tá sé fíor go bhfuil an fharraige fealltach.  
 be.PRES it true C be.PRES the sea treacherous  
 ‘It’s true that the sea is treacherous.’

But the dative argument can be expressed only in the structural context of (104), never in the verbal context:

- (117) \*Tá sé fíor duit go bhfuil sé teintrí.  
 be.PRES it true for.you C be.PRES he hot-tempered  
 ‘It’s true for you that he’s hot-tempered.’

There are scores of such cases – where the selectional capacities of the same root differ radically between the verbal context and the nonverbal context of (104). Consider, for another instance, the Subjective Attitude Ascriptions described in section 7:

- (118) b’ ait liom ar fad an sáipéal.  
 TMI strange with.me entirely the chapel  
 ‘I found the chapel really strange.’

The root *ait* appears also in verbal-adjectival contexts such as in (119a), but, as seen in (119b), the verbal syntactic context of (119) absolutely will not accept the dative PP which in (118) identifies the holder of the subjective epistemic state:

- (119) a. Tá an sáipéal ait ar fad.  
 be.PRES the chapel strange entirely  
 ‘The chapel is really strange.’  
 b. \*Tá an sáipéal ait ar fad liom.

The possibility of licensing that argument depends entirely on the  $\delta$ -structure of (104).

The issues are perhaps clearest of all for the large class of experiencer predicates described in section 7. Consider (120):

- (120) a. Is fuath liom iad.  
 TMI hatred with.me them  
 ‘I hate them.’  
 b. Tá fuath agam orthu.  
 be.PRES hatred at.me on.them  
 ‘I hate them.’

The two examples of (120) are built around the same root and express exactly the same proposition. Yet they have entirely different syntactic structures determined by entirely different selectional requirements. (120a) is an instance of the structure (104) expressing a subjective cognitive state, with the dative ARG<sub>1</sub> identifying the holder of the state and the bare DP ARG<sub>2</sub> expressing the internal argument.

In the alternative syntax of (120b), the internal argument is the PP-complement of the non-nominalized root *fuath* and the external (experiencer) argument is expressed by way of a locative prepositional phrase different from that in (120a) (on such structures, see McCloskey & Sells (1988), Adger & Ramchand (2006)). It is not the root *fuath* which determines these selectional restrictions, but rather the  $\delta$ -structure in (120a) and the *nP* in the case of (120b).

Additional evidence for the claim of syntactic distinctiveness despite semantic identity comes from Polarity Ellipsis. That process is subject to a syntactic condition that the argument-domains of antecedent and ellipsis-site must be parallel in their internal syntax (McCloskey (2022), Chung (2013), Rudin (2019), Anand et al. (2021, 2025)). We expect, then, that ellipsis should succeed as

long as antecedent and ellipsis-site both have verbal or nonverbal argument domains; it should fail if there is a mismatch in either direction. This expectation is realized, as is shown in the example-groups of (121) and (122).

In (121), the argument-domains match and the ellipsis is routine.:

- (121) a. **A:** An bhfuil fuath agat don fhear sin? **B:** Tá.  
 c.Q be.PRES hatred at.you to.the man DEMON be.PRES  
**A:** ‘Do you hate that man?’ **B:** ‘I do.’
- b. **A:** An  $\emptyset$  fuath leat an fhear sin? **B:** Is fuath.  
 c.Q TMI hatred with/you the man DEMON TMI hatred  
**A:** ‘Do you hate that man?’ **B:** ‘I do.’

In the four examples of (122), we mismatch the antecedent side and the ellipsis side and the result is profound ill-formedness (judged without disagreement by five native speaker consultants; it is difficult to overstate how strongly speakers react against such examples).

- (122) a. \***A:** An  $\emptyset$  fíor gu- -r amhránaí breá é? **B:** Tá.  
 c.Q TMI true C TMI singer fine him be.PRES  
**A:** ‘Is it true that he’s a fine singer?’ **B:** ‘It is.’
- b. \***A:** An bhfuil sé fíor gu- -r amhránaí breá é? **B:** Is fíor.  
 c.Q be.PRES it true C TMI singer fine him TMI true  
**A:** ‘Is it true that he’s a fine singer?’ **B:** ‘It is.’
- c. \***A:** An  $\emptyset$  fuath leat an fhear sin? **B:** Tá.  
 c.Q TMI hatred with-you the man DEMON be.PRES  
**A:** ‘Do you hate that man?’ **B:** ‘I do.’
- d. \***A:** An bhfuil fuath agat don fhear sin? **B:** Is fuath.  
 c.Q be.PRES hatred at.you to.the man DEMON TMI hatred  
**A:** ‘Do you hate that man?’ **B:** ‘I do.’

Such cases can be multiplied at will and in all of them, it is the  $\delta$ -structure of (104), not the root, which makes available the expressive possibilities we have been studying here. This conclusion, in addition, seems to be independent of the particular set of analytic assumptions we have argued for here.

There is little that is surprising in any of this, given the theory of the syntax of argument structure laid out in the work of Alec Marantz and colleagues (see especially Hale & Keyser (2002), Marantz (1997, 2013)). The core components of this framework are (i) that roots are inherently acategorical; rather (ii) that roots appear in adjectival, nominal, verbal, or  $\delta$ -projections when they associate with a particular kind of argument-domain (such as the  $\delta$ -projection of (104)), which are in turn projected by particular functional heads ( $v$ ,  $n$ ,  $a$ ,  $\delta$  ...). Thus, syntactic and semantic composition are driven not by selectional properties of verbs (as in the GB tradition) but rather by the inventory of syntactic argument-domains which the syntax of the language provides. This framework grows out of a synthesis of the Minimalist Program for syntax and the framework of Distributed Morphology and has led to a rich and insightful line of research on the syntactic expression of argument-structure across languages and language-types

A question that has been much discussed in the context of this research program has been the extent to which roots may bring their own selectional requirements to bear on the syntactic environments in which they appear (see in particular Harley (2014), with its commentaries,

Merchant (2018), and Coon (2019)). The answer that emerges with some clarity from our Irish data is similar to that which emerges from Merchant's (2018) consideration of English – roots do not carry their apparent selectional properties from one syntactic context to the next. The clarity with which that conclusion emerges in the Irish case comes from the fact that the argument domain of nonverbal clauses is very different indeed in its internal organization from its verbal kin. It constitutes what I called in opening the discussion a distinct syntactic subsystem embedded within a severely truncated inflectional domain.

## II PROSPECTS

I take this paper to be the first step in a larger project whose goal is to provide a reasonably comprehensive account of the expressive possibilities open to finite clauses in Irish with nonverbal argument domains. Much, obviously, remains to be done.

That project should, in turn, be part of a larger theoretical and typological project to address the same questions at the crosslinguistic level. Martin Haspelmath opens that investigation in his 2025 survey, but the inventory of clause-types he identifies in that paper does not show a lot of overlap with the findings reported here. There is clearly much to discover in this investigation about syntax, semantics, acquisition and their interactions.

Work over the past 25 years or so exploring the syntactic expression of argument-structure within the general framework just outlined has been extraordinarily productive and has led to real insight, but it seems to presuppose throughout that that expression is always verbal in its syntax (though I know of no explicit statement to that effect). But that cannot be so. And it seems likely that when we look beyond the verbal domain there will be much to discover and challenging questions to address. Among those questions will be these:

- Are there languages in which clausal argument domains are never verbal in their syntax?
- In Irish it is very clear (see the data in the Appendix) that the nonverbal argument domain is marked and less used than the verbal. Is that always the case and, if it is, how do our theories allow for the mix of productivity and markedness that we see in the Irish data? That is a question both about syntax and about acquisition.
- Are there languages in which eventive predications can be expressed in the nonverbal mode?
- And relatedly – are nonverbal argument domains typically or always stative?

I don't believe we know the answers to any of these questions at present, but the project of providing answers should be a rewarding one.

## APPENDIX: USAGE FREQUENCIES FOR THE DIFFERENT CLAUSE-TYPES

The tables below summarize for the three major dialects the relative usage-frequencies of various kinds of finite clause. The figures derive from a count of the various clause-types found in 20 randomly chosen pages of text for each dialect.

## ULSTER

VERBAL	COP	NONVERBAL A/N	NONVERBAL P	CLEFT
1110	38	86	4	79

## CONNACHT

VERBAL	COP	NONVERBAL A/N	NONVERBAL P	CLEFT
1290	73	216	6	121

## MUNSTER

VERBAL	COP	NONVERBAL A/N	NONVERBAL P	CLEFT
904	83	241	12	115

In these tables:

- the VERBAL clause-type is the type of finite verb-initial clauses like those in (3);
- the COP clause-type is that of predicative and identificational copular clauses such as those in (7) and (8);
- the NONVERBAL A/N clause-type is the type of finite nonverbal clauses whose main predicate is a non-verbal lexical item – the type we focus on here;
- the NONVERBAL P clause-type is the type of finite clause whose main predicate seems to be prepositional;
- the CLEFT clause-type is the type of cleft clauses – which utilize the same syntactic base as the copular clauses of (7) to express a broad range of discourse-pragmatic relationships. See McCloskey (2023).

Note that among finite clauses:

- In all dialects, the verbal type is by far the most frequent.
- Among nonverbal clauses, those headed by A or N are by far the most frequent (roughly three times more frequent than copula clauses), and therefore:
- Such clauses are the ones which most shape the course of acquisition for nonverbal clausal syntax.

## REFERENCES

- Acquaviva, Paolo. 2014. The categories of Modern Irish verbal inflection. *Journal of Linguistics* 50. 537–586.
- Adger, David & Gillian Ramchand. 2003. Predication and equation. *Linguistic Inquiry* 34. 325–359.
- Adger, David & Gillian Ramchand. 2006. Psych nouns and the structure of predication. In Christopher Davis, Amy Rose Deal & Youri Zabbal (eds.), *Proceedings of the 36th Annual Meeting of the North East Linguistic Society*, 89–102. Amherst, Massachusetts: GLSA.
- Ahlqvist, Anders. 1972. Some aspects of the copula in Irish. *Éigse* XIV. 269–274.
- Alexiadou, Artemis, Elena Anagnostopoulou & Martin Everaert (eds.). 2004. *The unaccusativity puzzle - explorations of the syntax-lexicon interface* (Oxford Studies in Theoretical Linguistics 5). Oxford and New York: Oxford University Press.
- Altshuler, Daniel. 2016. *Events, states and times: An essay on narrative discourse in English*. Warsaw and Berlin: De Gruyter Open Ltd.
- Altshuler, Daniel & Roger Schwarzschild. 2023. Moment of change, cessation implicatures and simultaneous readings. In Emmanuel Chemla, Vincent Homer & Grégoire Winterstein (eds.), *Proceedings of Sinn und Bedeutung* 17, 45–62. Paris.
- Anand, Pranav & Valentine Hacquard. 2010. The role of the imperfect in Romance counterfactuals. In *Proceedings of Sinn und Bedeutung* 14, 37–50. Vienna: University of Vienna.
- Anand, Pranav, Daniel Hardt & James McCloskey. 2021. The Santa Cruz sluicing dataset. *Language* 97(1). e68–e88.
- Anand, Pranav, Daniel Hardt & James McCloskey. 2025. The domain of formal matching in sluicing. *Linguistic Inquiry* 56. 353–373.
- Anand, Pranav & Natasha Korotkova. 2022. How to theorize about subjective language: A lesson from ‘de re’. *Linguistics and Philosophy* 45. 619–681.
- AnderBois, Scott. 2014. On the exceptional status of reportative evidentials. In Todd Snider, Sarah D’Antonio & Mia Wiegand (eds.), *Semantics and linguistic theory (SALT)*, vol. 24, 234–254. LSA and CLC Publications.
- Anonymous. 1960. *Graiméar Gaeilge na mBráithre Críostaí*. Baile Átha Cliath: M. H. Mac an Ghoill agus a Mhac Tta.
- Arregui, Anna. 2005. On the accessibility of possible worlds: The role of tense and aspect. Doctoral dissertation, University of Massachusetts Amherst.
- Arregui, Anna. 2007. When aspect matters: The case of *would*-conditionals. *Natural Language Semantics* 15. 221–264.
- Bach, Emmon. 1986. The algebra of events. *Linguistics and Philosophy* 9. 5–16.
- Baglini, Rebekah. 2015. Stative predication and semantic ontology. Doctoral dissertation, University of Chicago.
- Baker, Mark C. 2003. *Lexical categories: Verbs, nouns, and adjectives* (Cambridge Studies in Linguistics 102). Cambridge, Massachusetts and London, England: Cambridge University Press.
- Barker, Chris. 2013. Negotiating taste. *Inquiry* 56. 239–256.  
<https://doi.org/10.1080/0020174X.2013.784482>.
- Beller, Charles & Erin Zaroukian. 2012. Stage-level evaluativity is desiderativity. In Ana Aguilar Guevara, Anna Chernilovskaya & Rick Nouwen (eds.), *Proceedings of sinn und bedeutung*, vol. 16 1, 71–86.

- Benmamoun, Elabbas. 2008. Clause structure and the syntax of verbless sentences. In Robert Freidin, Carlos P. Otero & Maria Luisa Zubizarreta (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud* (Current Studies in Linguistics 45), 105–131. Cambridge, Massachusetts: MIT Press.
- Bennett, Ryan, Emily Elfner & James McCloskey. 2016. Lightest to the right: An apparently anomalous displacement in Irish. *Linguistic Inquiry* 47. 169–234.
- Bennett, Ryan, Emily Elfner & James McCloskey. 2019. Prosody, focus, and ellipsis in Irish. *Language* 95. 66–106.
- de Bhaldraithe, Tomás. 1953. *Gaeilge Chois Fhairrge—an deilbhíocht*. Dublin: Institiúid Ard-Léinn Bhaile Átha Cliath.
- Boolos, George. 1981. For every a, there is a b. *Linguistic Inquiry* 12. 465–467.
- Bouchard, Denis. 2012. Long distance degree quantification and the grammar of subjectivity. Doctoral dissertation, McGill University, Montréal.
- Brentano, Franz. 1874/1973. *Psychologie vom empirischen standpunkt*. London: Routledge. Translated, 1973, as *Psychology from an Empirical Point of View*, by Linda L. McAlister, Antos C. Rancurello and D.B. Terrell.
- Cariani, Fabrizio, Paolo Santorio & Alexis Wellwood. 2024. Confidence reports. *Semantics and Pragmatics* 17(EA).
- Carlson, Gregory. 1977. Reference to kinds in English. Doctoral dissertation, University of Massachusetts Amherst.
- Carlson, Gregory N. 1979. Generics and atemporal *when*. *Linguistics and Philosophy* 3. 49–98.
- Carnie, Andrew. 1995. Non-verbal predication and head-movement. Doctoral dissertation, MIT, Cambridge, Massachusetts.
- Carnie, Andrew. 1997. Two types of non-verbal predication in Modern Irish. *Canadian Journal of Linguistics/Revue Canadienne de Linguistique* 42. 57–73.
- Carnie, Andrew. 2000. On the notions XP and X<sup>0</sup>. *Syntax* 3. 59–106.
- Chen, Tony & Jonathan K. Hartshorne. 2021. More evidence from over 1.1 million subjects that the critical period for syntax closes in late adolescence. *Cognition* 214. 104706.
- Chierchia, Gennaro. 1995. Individual level predicates as inherent generics. In Gregory N. Carlson & Francis J. Pelletier (eds.), *The generic book*, 176–223. Chicago, Illinois: University of Chicago Press.
- Chomsky, Noam. 2020. The UCLA lectures, October 2020. *LingBuzz*. Available at <https://ling.auf.net/lingbuzz/005485>.
- Chomsky, Noam. 2022. Genuine explanation and the strong minimalist thesis. *Cognitive Semantics* 8. 347–365.
- Chomsky, Noam, T. Daniel Seeley, Robert C. Berwick, Sandiway Fong, M.A.C Huybregts, Hisatsugu Kitahara, Andrew McInnerney & Yushi Sugimoto. 2023. *Merge and the strong minimalist thesis*. Elements in Generative Syntax. Cambridge, Massachusetts and London, England: Cambridge University Press.
- Chung, Sandra. 2013. Syntactic identity in sluicing: How much and why? *Linguistic Inquiry* 44. 1–44.
- Chung, Sandra & James McCloskey. 1987. Government, barriers and small clauses in modern Irish. *Linguistic Inquiry* 18. 173–237.
- Coon, Jessica. 2014. Predication, tenselessness, and what it takes to be a verb. In Hsin-Lun Huang, Ethan Poole & Amanda Rysling (eds.), *Proceedings of the 43rd Annual Meeting of the North East Linguistic Society*, 77–90. Amherst, Massachusetts: GLSA.

- Coon, Jessica. 2019. Building verbs in Chuj: Consequences for the nature of roots. *Journal of Linguistics* 55. 35–81.
- Coon, Jessica & Martina Martinović. 2023. Predication, specification and equation in Ch'ol. In Suet-Ying Lam & Satoru Ozaki (eds.), *Proceedings of the 53rd Annual Meeting of the North East Linguistic Society*, 177–190. Amherst, Massachusetts: GLSA.
- Coppock, Elizabeth. 2018. Outlook-based semantics. *Linguistics and Philosophy* 4. 125–164.
- Dalmi, Gréte. 2012. Copular sentences expressing Kimian states in Irish and Russian. *Canadian Journal of Linguistics/Revue Canadienne de Linguistique* 77. 341–358.
- DeGraff, Michel. 1997. Nominal predication in Haitian and Irish. In Emily Curtis, James Lyle & Gabe Webster (eds.), *WCCFL 16: Proceedings of the Sixteenth West Coast Conference on Formal Linguistics*, 113–128. Stanford, California: CSLI Publications.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, Massachusetts: MIT Press.
- Doherty, Cathal. 1996. Clausal structure and the Modern Irish copula. *Natural Language and Linguistic Theory* 14. 1–48.
- Doherty, Cathal. 1997a. Predicate initial constructions in Irish. In Brian Agbayani & Sze-Wing Tang (eds.), *WCCFL 15: Proceedings of the Fifteenth West Coast Conference on Formal Linguistics*, 81–95. Stanford, California: CSLI Publications.
- Doherty, Cathal. 1997b. The pronominal augment in Irish identificational sentences. In Anders Ahlqvist & Věra Čapková (eds.), *Dán do Oide, Essays in memory of Conn R. Ó Cléirigh*, 135–147. Dublin: Institiúid Teangeolaíochta Éireann.
- Duffield, Nigel. 1995. *Particles and projections in Irish syntax*. Boston, Massachusetts: Kluwer.
- Enç, Mürvet. 1987. Anchoring conditions for tense. *Linguistic Inquiry* 18. 633–657.
- Fernald, Theodore B. 2000. *Predicates and temporal arguments*. Oxford and New York: Oxford University Press.
- Ferreira, Marcelo. 2005. Event quantification and plurality. Doctoral dissertation, MIT.
- Ferreira, Marcelo. 2016. The semantic ingredient of imperfectivity in progressives, habituals and counterfactuals. *Natural Language Semantics* 24. 353–397.
- von Stechow, Kai. 1999. NPI licensing, Strawson entailment, and context dependency. *Journal of Semantics* 16. 97–148.
- von Stechow, Kai & Irene Heim. 1997–2021. *Intensional semantics*. Cambridge, Massachusetts: MIT.
- Fodor, Jerry A. 1979. *The language of thought*. The Language and Thought Series. Cambridge, Massachusetts and London, England: Harvard University Press.
- Fulst, Scott. 2006. The structure of comparison: An investigation of gradable adjectives. Doctoral dissertation, University of Maryland.
- Grimshaw, Jane. 1991. Extended projection. Published 2005 in *Words and Structures*, Stanford, California: CSLI Publications: 1–74.
- Hale, Ken & Samuel Jay Keyser. 2002. *Prolegomenon to a theory of argument structure* (Linguistic Inquiry Monograph 39). MIT Press.
- Harley, Heidi. 2014. On the identity of roots. *Theoretical Linguistics* 40. 225–276.
- Hartshorne, Jonathan K., Joshua B. Tenenbaum & Steven Pinker. 2018. A critical period for second language acquisition: Evidence from 2/3 million English speakers. *Cognition* 177. 263–277.
- Haspelmath, Martin. 2001. 107. The European linguistic area: Standard Average European. In Martin Haspelmath et al (ed.), 2. *Halbband Language Typology and Language Universals* 2. *Teilband*, 1492–1509. Berlin and Boston: DeGruyter Mouton. doi: 10.1515/9783110194265.

- Haspelmath, Martin. 2025. Nonverbal clause constructions. *Language and Linguistics Compass* 19. e70007. <https://doi.org/10.1111/lnc3.70007>.
- Heim, Irene. 1982. The semantics of definite and indefinite Noun Phrases. Doctoral dissertation, University of Massachusetts, Amherst.
- Heim, Irene. 1992. Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9. 183–221.
- Higginbotham, James. 2000. On events in linguistic semantics. In Higginbotham et al. (2000) 49–79.
- Higginbotham, James. 2003. Remembering, imagining, and the first person. In A. Barber (ed.), *Epistemology of language*, 496–533. Oxford and New York: Oxford University Press. Also in *Tense, Aspect, and Indexicality*, James Higginbotham, Oxford University Press, 2009, pp 212–245.
- Higginbotham, James, Fabio Pianesi & Achille V. Varzi (eds.). 2000. *Speaking of events*. Oxford and New York: Oxford University Press.
- Higginbotham, James & Gillian Ramchand. 1996. The stage-level/individual level distinction and the mapping hypothesis. Manuscript, Oxford University.
- Hintikka, Jaakko. 1962. *Knowledge and belief – an introduction to the logic of the two notions*. Texts in Philosophy. Ithaca, New York: Cornell University Press. Reprint edition prepared, 2005, by Vincent F. Hendricks and John Symons.
- Homer, Vincent. 2021. Actualistic interpretations in French. *Semantics and Pragmatics* 14(12). 1–56. doi:10.3765/sp.14.12.
- Husband, E. Matthew. 2010. On the compositional nature of stativity. Doctoral dissertation, Michigan State University.
- Husband, E. Matthew. 2012. *On the compositional nature of states*. Amsterdam and Philadelphia: John Benjamins Publishing Company. doi:10.1075/la.188.
- Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry* 31. 231–270.
- Iatridou, Sabine. 2010. Some thoughts about the imperfective in counterfactuals. Manuscript, MIT.
- Ippolito, Michaela. 2013. *Subjunctive conditionals: A linguistic analysis*. Cambridge, Massachusetts: MIT Press.
- Jelinek, Eloise & Richard A. Demers. 1994. Predicates and pronominal arguments in Straits Salish. *Language* 70. 697–736.
- Jäger, Gerhard. 2001. Topic comment structure and the contrast between stage level and individual level predicates. *Journal of Semantics* 18. 83–126.
- Kamali, Beste & Manfred Krifka. 2020. Focus and contrastive topic in questions and answers, with particular reference to Turkish. *Theoretical Linguistics* 46(1/2).
- Kennedy, Christopher. 2013. Two sources of subjectivity: Qualitative assessment and dimensional uncertainty. *Inquiry* 56. 258–277. <https://doi.org/10.1080/0020174X.2013.784483>.
- Kennedy, Christopher & Malte Willer. 2022. Familiarity inferences, subjective attitudes and counterstance contingency: Towards a pragmatic theory of subjective meaning. *Linguistics and Philosophy* 45. 1395–1445.
- Kiparsky, Paul. 2021. Phonology to the rescue: Nez Perce morphology revisited. *The Linguistic Review* 38. 391–442.
- Kratzer, Angelika. 1995. Stage-level and individual level predicates. In Gregory N. Carlson & Francis J. Pelletier (eds.), *The generic book*, 125–175. Chicago, Illinois: University of

- Chicago Press.
- Krifka, Manfred. 2008. Basic notions of information structure. *Acta Linguistica Hungarica* 52(3/4). 243–276.
- Krifka, Manfred. 2015. Bias in commitment-space semantics. In Sarah D’Antonio, Mary Moroney & Carol Rose Little (eds.), *Semantics and linguistic theory (SALT)*, vol. 25, 328–345. LSA and CLC Publications.
- Kuroda, S.-Y. 1972. The categorical and thethetic judgment. *Foundations of Language* 9. 153–185.
- Kuroda, S.-Y. 1992. Judgment forms and sentence forms. In *Japanese syntax and semantics: Collected papers.*, vol. 27, Studies in Natural Language and Linguistic Theory, 13–77. Dordrecht, Boston and London: Kluwer Academic Publishers.
- Ladusaw, William. 1994. Thetic and categorical, stage and individual, weak and strong. In Mandey Harvey & Lynn Santelmann (eds.), *Semantics and Linguistic Theory (SALT)*, vol. 4, 220–229. Linguistic Society of America and CLC Publications. .
- Landau, Idan. 2002. (Un)interpretable Neg in Comp. *Linguistic Inquiry* 33. 465–492.
- Larson, Richard K. 2024. Quantification, matching and events. *Natural Language Semantics* 32. 269–313.
- Lasersohn, Peter. 2005. Context-dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy* 28. 643–686.
- Lash, Elliott. 2011. A synchronic and diachronic analysis of Old Irish copular clauses. Doctoral dissertation, Cambridge University.
- Legate, Julie. 1997. Irish predication: A minimalist analysis. Masters Thesis, University of Toronto.
- Legate, Julie. 1998. Reconstruction and the Irish nonverbal predicate construction. Unpublished MS, MIT.
- Legate, Julie Anne. 2021. Noncanonical passives: A typology of passives in an impoverished Universal Grammar. *Annual Review of Linguistics* 7. 157–176.
- Lewis, David. 1975. Adverbs of quantification. In Edward Keenan (ed.), *Formal semantics of natural language*, 3–15. Cambridge, Melbourne, and New York: Cambridge University Press.
- Lewis, David. 1979. Attitudes *de dicto* and *de se*. *The Philosophical Review* 88. 513–543.
- MacFarlane, John. 2014. *Assessment sensitivity*. Oxford: Clarendon Press.
- Magri, Giorgio. 2009. A theory of individual-level predicates based on blind mandatory scalar implicatures. *Natural Language Semantics* 17. 245–297.
- Maienborn, Claudia. 2001. On the position and interpretation of locative modifiers. *Natural Language Semantics* 9. 191–240.
- Maienborn, Claudia. 2005. On the limits of the Davidsonian approach. *Theoretical Linguistics* 31. 275–316.
- Maienborn, Claudia. 2007. On Davidsonian and Kimian states. In Ileana Comorovski & Klaus von Heusinger (eds.), *Existence: Semantics and syntax*, 107–130. Springer.
- Marantz, Alec. 1997. No escape from syntax: Don’t try morphological analysis in the privacy of your own lexicon. In Alexis Dimitriadis, Laura Siegen, Clarissa Surek-Clark & Alexander Williams (eds.), *Proceedings of the 31st Penn Linguistics Colloquium (PLC 21)*, vol. 4, 201–225. Philadelphia PA: Penn Linguistics Club.
- Marantz, Alec. 2013. Verbal argument structure: Events and participants. *Lingua* 130. 152–168.
- McCloskey, James. 1991. Clause structure, ellipsis and proper government in Irish. *Lingua* 85. 259–302.

- McCloskey, James. 1996. Subjects and subject-positions in Irish. In Robert Borsley & Ian Roberts (eds.), *The syntax of the Celtic languages: A comparative perspective*, 241–283. Cambridge, Melbourne, and New York: Cambridge University Press.
- McCloskey, James. 2001. The distribution of subject properties in Irish. In William Davies & Stanley Dubinsky (eds.), *Objects and other subjects: Grammatical functions, functional categories, and configurationality*, 1–39. Dordrecht: Kluwer Academic Publishers.
- McCloskey, James. 2005/21. A note on predicates and heads in Irish clausal syntax. In Andrew Carnie, Heidi Harley & Sheila Ann Dooley (eds.), *Verb first: On the syntax of verb-initial languages*, 155–174. Amsterdam and Philadelphia: John Benjamins. Revised and extended version available at: <https://people.ucsc.edu/~mcclosk/papers.html>.
- McCloskey, James. 2011. The shape of Irish clauses. In Andrew Carnie (ed.), *Formal approaches to Celtic linguistics*, 143–178. Cambridge Scholars Publishing. Available at <http://gramadach.net/jim/papers.html>.
- McCloskey, James. 2014. Irish existentials in context. *Syntax* 17. 343–384.
- McCloskey, James. 2017. Ellipsis, polarity, and the cartography of verb-initial orders in Irish. In Enoch Aboh, Eric Haeberli, Genoveva Puskás & Manuela Schönenberger (eds.), *Elements of comparative syntax: Theory and description.*, vol. 127 Studies in Generative Grammar, 99–151. Boston and Berlin: De Gruyter Mouton.
- McCloskey, James. 2022. The syntax of Irish Gaelic. To appear in *The Palgrave Handbook of Celtic Languages and Linguistics*. Available at: <http://gramadach.net/mccloskey/papers.html>.
- McCloskey, James. 2023. Clefts in Irish and the syntactic articulation of discourse structure. Presented to the Workshop on the Linguistics of the Gaelic Languages, Royal Irish Academy, Dublin, June 9th 2023. Handout available at <http://gramadach.net/mccloskey/papers.html>.
- McCloskey, James & Peter Sells. 1988. Control and A-chains in Modern Irish. *Natural Language and Linguistic Theory* 6. 143–189.
- Merchant, Jason. 2018. Roots don't select, categorial heads do; lexical selection of PP's may vary by category. Unpublished manuscript, University of Chicago, available at <https://home.uchicago.edu/merchant/pubs/TLRSelection.pdf>.
- Milsark, Gary. 1974. Existential sentences in English. Doctoral dissertation, MIT.
- Milsark, Gary. 1977. *Existential sentences in English*. Distinguished Dissertations in Linguistics. New York: Garland Publishing.
- Moltmann, Friederike. 2012. On the distinction between abstract states, concrete states and tropes. In Alda Mari, Claire Beyssade & Fabio Del Prete (eds.), *Genericity*. Oxford Studies in Theoretical Linguistics, 292–311. Oxford and New York: Oxford University Press.
- Moltmann, Friederike. 2022. Natural language ontology. Stanford Encyclopedia of Philosophy. Available at: <https://plato.stanford.edu/entries/natural-language-ontology/>.
- Musan, Renate. 1995. On the temporal interpretation of noun phrases. Doctoral dissertation, MIT.
- Musan, Renate. 1997. Tense, predicates and lifetime effects. *Natural Language Semantics* 5. 271–301.
- Noonan, Máire. 1992. *Case and syntactic geometry*. Montreal, Canada: McGill University dissertation.

- Ó Cadhlaigh, Cormac. 1940. *Gnás na Gaedhilge*. Baile Átha Cliath: Oifig an tSoláthair.
- Ó Giollagáin, Conchúr (ed.). 1999. *Stairsheanchas Mhicil Chonraí – Ón Máimín go Ráth Chairn*. An Spidéal: Cló Iar-Chonnachta.
- Ó Laoghaire, An tAthair Peadar. 1924. *Lúcián*. Baile Átha Cliath: Brún agus Ó Nóláin, Teoranta.
- Ó Máille, Tomás. 1912. Contributions to the history of the verbs of existence in Irish. *Ériu* 6 6. 1–102.
- O’Nolan, Gerald. 1920. *Studies in Modern Irish: Part one*. Dublin, Ireland: The Educational Company of Ireland.
- Ó Sé, Diarmuid. 1987. The copula and preverbal particles in West Kerry Irish. *Celtica* 19. 98–110.
- Ó Sé, Diarmuid. 1990. Tense and mood in Irish copula sentences. *Ériu* 41. 62–75.
- Ó Sé, Diarmuid. 2000. *Gaeilge Chorca Dhuibhne*. Dublin: Institiúid Teangeolaíochta Éireann.
- Ó Searcaigh, Séamus. 1939. *Coimbréir Ghaedhilg an tuaiscirt*. Dublin, Ireland: Government Publications Office.
- Ó Siadhail, Mícheál. 1989. *Modern Irish: Grammatical structure and dialectal variation*. Cambridge, Melbourne, and New York: Cambridge University Press.
- Parsons, Terence. 1990. *Events in the semantics of English. a study in subatomic semantics*. Cambridge, Massachusetts: MIT Press.
- Parsons, Terence. 2000. Underlying states and time travel. In Higginbotham et al. (2000) 81–104.
- Pearl, Lisa. 2022. Theory and predictions for the development of morphology and syntax: A Universal Grammar + statistics approach. *Journal of Child Language* 48(5). 907–936.
- Pearson, Hazel. 2013. A judge-free semantics for predicates of personal taste. *Journal of Semantics* 30. 103–154.
- Pianesi, Fabio & Achille C. Varzi. 2000. Events and event talk: An introduction. In Higginbotham et al. (2000) 3–47.
- Portner, Paul. 1998. The progressive in modal semantics. *Language* 74. 760–787.
- Ramchand, Gillian. 1996. Two subject-positions in Scottish Gaelic: The syntax-semantics interface. *Natural Language Semantics* 4. 165–191.
- Recanati, François. 2009. De re and de se. *Dialectica* 63. 249–269.
- Rett, Jessica. 2018. The semantics of *many*, *much*, *few*, and *little*. *Lang Linguist Compass* 12e12269. <https://doi.org/10.1111/lnc3.12269>.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: Handbook of generative syntax*, 281–337. Dordrecht, the Netherlands: Kluwer Academic Publishers.
- Rizzi, Luigi (ed.). 2004. *The structure of CP and IP* Oxford Studies in Comparative Syntax. Oxford and New York: Oxford University Press.
- Rooth, Mats. 2022. On Lewis’s ‘Adverbs of Quantification’. In Louise McNally & Zoltán Gendler Zsábó (eds.), *A reader’s guide to classic papers in formal semantics*, vol. 100. Studies in Linguistics and Philosophy, 295–310. Cham, Switzerland: Springer Nature Switzerland AG.
- Rothstein, Susan. 1995. Adverbial quantification over events. *Natural Language Semantics* 3. 1–31. <https://doi.org/10.1007/s11050-023-09216-x>.
- Roy, Isabelle. 2013. *Nonverbal predication – copular sentences at the syntax-semantics interface*. Oxford Studies in Theoretical Linguistics 45. Oxford and New York: Oxford University Press.
- Rubinstein, Aynat. 2017. Straddling the line between attitude verbs and necessity modals. In

- Ana Arregui, Maria Luisa Rivero & Andrés Salanova (eds.), *Modality across syntactic categories*, 109–131. Oxford and New York: Oxford University Press.
- Rudin, Deniz. 2019. Head-based syntactic identity in sluicing. *Linguistic Inquiry* 50. 253–283.
- Saebø, Kjell Johann. 2009. Judgment ascriptions. *Linguistics and Philosophy* 32. 327–352.
- Schafer, Robin. 1995. The SLP/ILP distinction in ‘have’-predication. In Mandy Simons & Theresa Galloway (eds.), *Semantics and Linguistic Theory (SALT)*, vol. 5, 292–309. Linguistic Society of America and CLC Publications.  
<https://journals.linguisticsociety.org/proceedings/index.php/SALT/article/view/2711/2457>.
- Schwarzschild, Roger. 2024. Pure event semantics. Lingbuzz/006888.
- Stalnaker, Robert. 2014. *Context*. Oxford and New York: Oxford University Press.
- Stenson, Nancy. 1981. *Studies in Irish syntax*. Tübingen: Max Niemeyer Verlag.
- Stephenson, Tamina. 2007. Towards a theory of subjective meaning. Doctoral dissertation, MIT.
- Stephenson, Tamina. 2010. Vivid attitudes: Centered situations in the semantics of ‘remember’ and ‘imagine’. In Nan Li & David Lutz (eds.), *Semantics and Linguistic Theory (SALT)*, vol. 20, 147–160. Linguistic Society of America and CLC Publications. <https://doi.org/10.3765/salt.v20i0.2582>.
- Stowell, Tim. 2007. The syntactic expression of tense. *Lingua* 117. 437–463.
- Stump, Gregory. 1985. *The semantic variability of absolute constructions*. Dordrecht, Boston and London: D. Reidel Publishing Company.
- Vendler, Zeno. 1967. *Linguistics in philosophy*. Ithaca and London: Cornell University Press.
- Vendler, Zeno. 1979. Vicarious experience. *Revue de Métaphysique et de Morale* 84. 161–173.
- Wellwood, Alexis. 2014. Measuring predicates. Doctoral dissertation, University of Maryland.
- Wellwood, Alexis. 2015. On the semantics of comparison across categories. *Linguistics and Philosophy* 38. 67–101.
- Wellwood, Alexis. 2016. States and events for s-level gradable adjectives. In Mary Moroney, Carol-Rose Little, Jacob Collard & Dan Burgdorf (eds.), *Semantics and Linguistic Theory (SALT)*, vol. 26, 166–184. Linguistic Society of America and CLC Publications. doi: 10.3765/salt.v26i0.3802.
- Wellwood, Alexis. 2019. *The meaning of more*. Oxford and New York: Oxford University Press.
- Williams, Edwin. 2009. There is no alternative to cartography. In Jeroen van Craenenbroeck (ed.), *Alternatives to cartography*. (Studies in Generative Grammar 100), 361–374. Berlin and Boston, Massachusetts: Mouton de Gruyter.
- Yang, Charles. 2016. *The price of linguistic productivity: How children learn to break the rules of language*. MIT Press.