What type of null-subject language is Modern Irish?

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Abstract

Roberts' (2019) typology of null-subject languages (NSLs) includes four major categories of NSL: non-NSLs, consistent NSLs, partial NSLs and radical NSLs. This thesis asks where (Modern) Irish fits into this typology. I first show that Irish does not fit into any of the four categories of NSL already proposed. I then debate how to fit Irish into this typology, concluding that Irish is a new kind of NSL, in which null subjects come about through pronominal incorporation. Roberts sorts NSLs depending on whether they contain two types of features: ϕ- and D-features. Non- and consistent NSLs contain both ϕ- and D-features, partial NSLs contain only ϕ-features and radical NSLs contain neither kind of feature. This leaves one logically remaining possibility: a language with only D-features. I argue that Irish instantiates this remaining possibility. Some previous approaches (e.g., McCloskey & Hale, 1984) have assumed that Irish person-number agreement comes about through Agree (Chomsky, 2000) valuing ϕ-features on functional heads. Others (e.g., Doron, 1988; Brennan, 2009) have assumed it comes about through incorporation, but offer approaches with various pitfalls. I offer a novel approach based on the Labelling Algorithm (LA; Chomsky, 2013), in which pronouns incorporate into their hosts because they share D-features with them, so the LA can return a label. This approach has significant implications for Irish syntax and beyond, as I show that agreement does not come about only through Agree.

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Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for a degree or other qualification at this University or elsewhere. All sources are acknowledged as references.

Part I: Why Irish is not like other null-subject languages

1 Introduction

The phenomenon of null subjects (NSs) has long attracted the interest of syntacticians. It can be demonstrated by comparing the Spanish sentence and its English translation in (1)[1].

(1) (Yo) hablo español.
(I) speak.1SG Spanish
I speak Spanish (Spanish)

In languages like Spanish (as well as Italian, Greek, and many others), the pronominal subject (*yo* in (1)) may be omitted. In English, this is not permitted (with the same intended meaning as (1)):

(2) *Speak Italian.

In Roberts' (2019) typology (which will form the basis of this thesis), Spanish-type Null Subject Languages (NSLs) are called Consistent NSLs (CNSLs), because the omission of the subject pronoun occurs across the verbal paradigm and usually yields a pragmatically neutral interpretation. English-type languages, where in these contexts the subject may not be null, are called non-NSLs (NNSLs).

Taraldsen (1980) first proposed that the availability of NSs comes from the richness of verbal paradigms in languages like Spanish, which allows ϕ-features to be recovered from the verbal inflection, rendering the use of an overt pronoun superfluous. Compare the English (Table 1) and French (Table 2) paradigms (both NNSLs), with the (European) Spanish (Table 3) and Italian (Table 4) (both CNSLs) paradigms for the verb 'to speak.'

Table 1: English verbal paradigm for 'to speak'

	singular	plural
1st	I speak-**ø**	we speak-**ø**
2nd	you speak-**ø**	(you speak-**ø**)
3rd	he/she/it speak-**s**	they speak-**ø**

Table 2: French verbal paradigm for *parler* 'to speak'

	singular	plural
1st	je parl-**e**	nous parl-**ons**
2nd	tu parl-**es**	vous parl-**ez**
3rd	il/elle parl-**e**	ils/elles parl-**ent**

Table 3: European Spanish verbal paradigm for *hablar* 'to speak'

	singular	plural
1st	(yo) habl**o**	(nosotros) habl-**amos**
2nd	(tú) habl-**as**	(vosotros) habl-**áis**
3rd	(él/ella) habl-**a**	(ellos/ellas) habl-**an**

[1] Examples throughout are glossed using the Leipzig Glossing Rules. Examples not attributed to another source are my own.

Table 4: Italian verbal paradigm for *parlare* 'to speak'

	singular	plural
1st	(io) parl-**o**	(noi) parl-**iamo**
2nd	(tu) parl-**i**	(voi) parl-**ate**
3rd	(lui/lei/Lei/egli) parl-**a**	(loro/Loro/essi) parl-**ano**

The Spanish and Italian forms are all distinct from one another, whereas the English form is only different in 3SG. In French, despite the orthography being different, the singular forms and the 3PL form are pronounced the same, so there are really only three distinct forms.

To add to this picture, there are various languages which have 'intermediate' systems, where the verbal paradigm is in some way only partially complete. These are called Partial NSLs (PNSLs; Holmberg et al., 2009). Take, for instance, the Brazilian Portuguese verbal paradigm for 'to speak' (*falar*) in Table 5.

Table 5: Brazilian Portuguese verbal paradigm for *falar* 'to speak'

	singular	plural
1st	eu fal-**o**	a gente fal-**a**
2nd	você fal-**a**	vocês fal-**am**
3rd	ele/ela fal-**a**	eles/elas fal-**am**

In this paradigm, there are three distinct forms (*falo*/*fala*/*falam*) to cover six person-number combinations, making it an intermediate system between Spanish and Italian (with six distinct forms) and English (with only two). Note that French and Brazilian Portuguese both have three distinct forms in their verbal paradigms, but French is classified as an NNSL and Brazilian Portuguese as a PNSL. A crucial thread that will run throughout this thesis is that inflection is not the only property determining the type of NSL a language is.

As we would expect, the extent to which NSs are licensed in PNSLs is also intermediate between NNSLs (never licensed) and CNSLs (almost always licensed). For example, in the PNSLs Brazilian Portuguese (3) and Finnish (4), a NS is permitted if it is controlled by an antecedent in a higher clause.

(3) A Maria$_i$ admite que (ela$_i$) naô fala muito bem inglês.
DET Maria admits that she NEG speak.PRS.3SG very well English
'Mary admits that she doesn't speak English very well.' (Holmberg et al., 2009, 12c)

(4) Marja$_i$ myöntää ettei (hän$_i$) puhu englantia hyvin.
Mary admits that.NEG.3SG she speak.PRS English well
'Mary admits that she doesn't speak English very well.' (Ibid., 2009, 13c)

PNSLs also allow non-thematic NSs, such as in weather verbs.

(5) Está chovendo.
be.PRES.3SG raining
'It's raining.' (Ibid., 2009, 4a)

(6) Ulkona sataa.
outside rain.PRES.3SG
'It's raining outside.' (Ibid., 2009, 4b)

Finally, PNSLs tend only to allow NSs for certain person-number combinations; for instance, in Hebrew, NSs are only found for first- and second-person pronouns in the past and future (Borer, 1986:392). Note as well that not all PNSLs have intermediate levels of inflection; in Finnish, for instance, there are six distinct forms (Table 6).

Table 6: Finnish verbal paradigm for *puhua* 'to speak'

	singular	plural
1st	puh-**un**	puh-**umme**
2nd	puh-**ut**	puh-**utte**
3rd	puh-**uu**	puh-**uvat**

This is another example of inflection not correlating perfectly with the extent to which NSs are permitted; the key feature of PNSLs is that they only sometimes allow NSs.

Radical NSLs (RNSLs; e.g., Neeleman & Szendrői, 2007), also called discourse *pro*-drop languages, are another counterexample to the idea that inflection and the licensing of NSs are always linked. These allow both NSs (7a) and objects (7b), if the intended referent is discourse salient.

(7) a. — kanjian ta le
— see him ASP
'he saw him' (Neeleman & Szendrői, 2007, 3a)

b. ta kanjian — le
he see — ASP
'he saw him' (Ibid., 3b)

However, there is no verbal inflection in Chinese, with *kanjian* being the only form for 'see.' Therefore, the traditional, seemingly commonsense, assertion that rich verbal morphology is what licenses NSs does not always apply because of languages like Chinese, which have no verbal inflection and yet allow null arguments.

Finally, in semi-NSLs, such as Icelandic and German, expletives must be null under certain conditions (Biberauer, 2010). This is illustrated for Icelandic (8) and German (9) below. The exact conditions for null expletives are not relevant here. There are no referential NSs in these languages.

(8) a. Það rigndi í gær.
it rained yesterday
'It rained yesterday.'

b. Í gær rigndi (*það).
yesterday rained it
'Yesterday it rained.'

(9) a. Es ist heute ja doch ein Brief gekommen
it is today MOD.PART a letter come
'There did after all come a letter today.'

b. Heute kam (*es) ja doch ein Brief.
today came it MOD.PART a letter
'There did after all come a letter today.'

In summary, we arrive at five types of NSLs: CNSLs (Italian, Spanish, European Portuguese, Greek), NNSLs (English, French), PNSLs (Brazilian Portuguese, Hebrew, Finnish), RNSLs (Chinese, Japanese, Korean) and semi-NSLs (German, Icelandic)[2]. The goal of this thesis is to place Irish among these types. It will be found that it does not fit into any of the above types and I will suggest a new category of NSLs into which it can be placed.

This study is part of extending the empirical basis of studies of NSLs. This is important because, until now, most work on NSLs has focused on a relatively narrow set of languages, particularly Germanic, Romance and East Asian languages. It will be shown here that even in a language whose NS properties have previously been studied, there is much to learn from looking at these issues again from a new perspective (in this case, that of Roberts, 2019, and related work).

In the first part of my thesis, my goal is merely to show that Irish does not fit into the usual categories of NSL. In Section 2, I discuss in more detail the properties of the different types of NSL, focusing on the properties that will become relevant in the rest of my thesis. In Section 3, I describe the approach to NSLs I will be using in this thesis [3]. In Section 4, I introduce the properties of Irish NSs and related areas of the grammar. In Section 5, I conclude that Irish does not fit into any of the five NSLs I have discussed. The second part is then devoted to my analysis of Irish.

2 Types of NSL – Properties

Here I discuss the properties of the five major types of NSL. The relevance of these properties will become clear when I present Roberts' typology in Section 3.

2.1 Richness of inflection

Typical verbal paradigms for CNSLs, PNSLs, semi-NSLs, NNSLs and RNSLs are as follows (the paradigm for the CNSL, PNSL and NNSL are repeated from above for convenience):

Table 3: Spanish verbal paradigm for *hablar* 'to speak'

[2]These are the five NSLs discussed by Roberts (2019). The examples I have given for each NSL are not exhaustive.

[3]In this thesis, I focus solely on Roberts (2019) due to my goal of placing Irish within this particular typology of NSLs.

	singular	plural
1st	(yo) habl-**o**	(nosotros) habl-**amos**
2nd	(tú) habl-**as**	(vosotros) habl-**áis**
3rd	(él/ella) habl-**a**	(ellos/ellas) habl-**an**

Table 5: Brazilian Portuguese verbal paradigm for *falar* 'to speak'

	singular	plural
1st	eu fal-**o**	a gente fal-**a**
2nd	você fal-**a**	vocês fal-**am**
3rd	ele/ela fal-**a**	eles/elas fal-**am**

Table 7: German verbal paradigm for *sprechen* 'to speak'[4]

	singular	plural
1st	ich sprech-**e**	wir sprech-**en**
2nd	du sprich-**st**	ihr sprich-**t**
3rd	er/sie/es sprich-**t**	sie/Sie sprech-**en**

Table 1: English verbal paradigm for 'to speak'

	singular	plural
1st	I speak-**ø**	we speak-**ø**
2nd	you speak-**ø**	(you speak-**ø**)
3rd	he/she/it speak-**s**	they speak-**ø**

Table 8: Mandarin Chinese verbal paradigm for *shuo* 'to speak'

	singular	plural
1st	wo shuo-**ø**	women shuo-**ø**
2nd	ni shuo-**ø**	nimen shuo-**ø**
3rd	ta shuo-**ø**	tamen shuo-**ø**

The richness of the inflection decreases through these language types, with a complete paradigm in (European) Spanish (i.e., all six person-number combinations have fully distinct morphology) and other CNSLs, a partial paradigm in Brazilian Portuguese (with three distinct forms) and most PNSLs, poor inflection in English (with two distinct forms if we take no inflection as being one of them) and other NNSLs, poor inflection in German and other semi-NSLs, and no inflection in RNSLs.

2.2 Richness of D

'Rich D' refers to 'overt instantiation of ϕ-features on 3rd-person determiners where a lexical noun is present and/or . . . a morphological definiteness/indefiniteness distinction in the form of distinct affixes or articles' (Roberts, 2019:250). According to Roberts, CNSLs and NNSLs have relatively consistently 'rich D.' This includes Romance CNSLs, Greek, Bulgarian and Macedonian, alongside other South Slavic languages and Polish and Czech, which lack determiners but do have rich clitic systems. For NNSLs,

[4]Ignore the stem alternations. They are not present for all verbs. I chose *sprechen* despite the stem alternations to keep the verb ('to speak') consistent across all languages.

modern Germanic languages minus English and Afrikaans distinguish number and gender in determiners, and all except Icelandic (a PNSL) have definite and indefinite determiners. French patterns similarly with these languages. As a result, we can say that CNSLs and NNSLs have rich D. Conversely, RNSLs tend to lack articles altogether and PNSLs either lack articles (Russian, Marathi, Finnish) or have only definite articles (Hebrew, Icelandic). Hence, Roberts classifies RNSLs and PNSLs as having 'poor D.'

2.3 Indefinite subjects

How a language expresses indefinite (/arbitrary) subjects is related to the type of NSL it is (Holmberg et al., 2009). The first property is that 3SG NSs are interpreted as indefinite in PNSLs without any special marker. This can be demonstrated by comparing the following two examples from European Portuguese (EP; a CNSL, (10a)) and Brazilian Portuguese (BP; a PNSL, (10b)).

(10) a. É assim que se faz o doce.
be.PRES.3SG thus that SE make.PRES.3SG the.MSG sweet
'This is how one makes the dessert.'

b. É assim que faz o doce.
be.PRES.3SG thus that make.PRES.3SG the.MSG sweet
'This is how one makes the dessert.'

Both sentences have the same meaning, but in (10a) a special marker *se* is required to yield this meaning, whereas in (10b) this is achieved with only a 3SG inflected verb. This is a property of PNSLs more widely, as shown in (11) for Finnish.

(11) Täällä ei saa polttaa.
here NEG.3SG may smoke
'One can't smoke here.'

RNSLs also have null indefinite subjects, as in (12), although the indefiniteness of the subject must be discourse salient (Sylvia Shi, personal communication), as this sentence could also be interpreted as 'here I make cakes,' 'here you make cakes,' etc. (recall that the same was true in (7)).

(12) zheli zuo dangao
here make cake
'Here one makes cakes.'

The property, which will be crucial below, of NSs with 3SG inflection being interpreted as indefinite, which is shown in (10), is not found in RNSLs because there is no inflection. However, the fact remains that in RNSLs and PNSLs, indefinite subjects are null[5].

(10a) is a case of 3SG NSs occurring with the special marker *se* being interpreted as indefinite in a CNSL. CNSLs also have overt indefinite subjects, as in the Spanish

[5]Further discussion of this can be found in Holmberg (2010).

example in (13). NNSLs have a similar overt indefinite subject, as seen in the English translation in (13).

(13) **Uno** debe estirar-se después de hacer ejercicio.
one must stretch-oneself after of do.INF exercise
'**One** must stretch after doing exercise.'

In sum, in PNSLs and RNSLs, indefinite subjects are null. In NNSLs, they are overt and in CNSLs, they are either overt, or null, with a special marker like *se*.

2.4 Expletives

The extent to which different types of expletives are null depends on the type of NSL. The following typology is from Rizzi (1986) (I am adapting the presentation closely from Biberauer, 2010:154):

(14) a. Full NSL: licenses both referential and non-referential null pronominals – Italian Spanish, Greek.

b. Semi-NSL Type I: only licenses non-referential pronominals, i.e., quasi-argumental and non-argumental expletives – Icelandic, Yiddish.

c. Semi-NSL Type II: only licenses null non-argumental pronominals, but not referential or quasi-argumental expletives – Dutch, German.

d. Non-NSL: does not license null pronominals at all – English, French.

'Non-referential null pronominals' are null expletives, 'non-argumental' expletives are, for instance, those involved in extraposition (like in (15)), and 'quasi-argumental' expletives are, for instance, time and weather expletives (like in (16) and (18)). (14a) is our category of CNSL, (14b) are PNSLs, (14c) are semi-NSLs and (14d) are NNSLs.

Expletives are overt in NNSLs. (15-16) are examples from English, (17) is from French.

(15) **It** is interesting to see how much Bill has grown.

(16) **It** is always very rainy in April here.

(17) **Il** neige beaucoup en hiver.
EXPL snow a.lot in winter
'It snows a lot in winter.'

However, expletives are null in CNSLs:

(18) Nieva mucho en invierno.
snow.PRES.3SG a-lot in winter
'It snows a lot in winter.'

PNSLs do not all fit into Rizzi's (1986) picture[6]. For instance, Holmberg (2005)

[6]The term PNSL of course post-dates Rizzi (1986), so his terms do describe classes of languages,

argues that in Finnish, the expletive *sitä* is used to bar verb-initial sentences. In his words (541): 'Either a referential category (an argument or a referential adverbial) has to move and remerge with IP, or the expletive *sitä* has to merge.' He gives the following example (his (12)):

(19) a. *Sattui minulle onnettomuus.
happened me.ALL accident
b. Minulle sattui onnettomuus.
me.ALL happened accident
c. **Sitä** sattui minulle onnettomuus.
EXPL happened me.ALL accident
'I had an accident.'

So, the Finnish Extended Projection Principle (EPP) works in the following way (Holmberg's (18)):

(20) If the sentence contains one or more categories that can check the EPP, then one of them must remerge with IP, or an expletive must be merged with IP.

In other words, the expletive only appears when it is necessary. This is also the case in the semi-NSLs (recall (8-9)). For PNSLs and semi-NSLs, then, we expect expletives to be null under certain conditions and overt under other conditions.

RNSLs are not discussed by Rizzi. They are usually considered to lack expletives, as in (21) from Mandarin Chinese, although Greco et al. (2018) discuss a possible optional expletive in Vietnamese (22).

(21) a. tianqi zenmeyang
weather how
'How is the weather?'
b. (*ta) you feng
(*it) have wind
'Today, it is windy.'

(22) (Nó) không có cái bút nào.
EXPL NEG exist CLF pen any
'There are no pens.' (Cognola & Casalicchio, 2018, (5))

RNSLs, PNSLs and semi-NSLs are therefore all intermediate with regards to whether they license null expletives.

In fact, even certain languages usually considered CNSLs have optional expletives. The following examples from Camacho (2013) are cited by Cognola & Casalicchio (2018). (23) is from Dominican Spanish and (24) is from Galician.

(23) Ello vienen haitianos aquí.
EXPL come.3PL Haitians here
'People from Haiti come here.'

(24) El chove.
EXPL rain.3SG

but are just incomplete as there are more language types with regards to these properties.

'It rains.'

These optional expletives have been argued to not be true expletives for a few reasons. Perhaps most importantly, the fact they are optional means they do not fulfil the requirements of the EPP in the same way, by filling an empty subject position. Second, there are various differences in their distributions. Notice, for instance, the lack of the definiteness effect demonstrated for English in (25) in the Vietnamese example in (22).

(25) a. There is a car.

b. *There is the car.

I will therefore not take these optional expletives to be true expletives for the purpose of this thesis, while acknowledging some degree of complexity here.

In summary, in CNSLs and RNSLs, expletives are null (with the caveat about optional expletives, which I will ignore here for simplicity reasons), in NNSLs, they are overt, and in PNSLs and semi-NSLs, they can null or overt depending on the syntactic context[7].

2.5 Syntactic and discourse conditions required for appearance of NSs

Discourse and syntactic licensing of NSs is a feature of RNSLs and PNSLs. In NNSLs, NSs are (by definition) never permitted, and in CNSLs they are almost always permitted (again, by definition).

An example of a syntactic condition is that many PNSLs permit a NS that is controlled by an antecedent in a higher clause, as in (3), repeated here as (26).

(26) A Maria$_i$ admite que (ela$_i$) naô fala muito bem inglês.
DET Maria admits that she NEG speak.PRS.3SG very well English
'Mary admits that she doesn't speak English very well.' (Holmberg et al., 2009, 12c)

In Section 1.3, I discuss how 3SG NSs in PNSLs are interpreted as indefinite outside of these contexts.

Discourse context is always what license NSs in RNSLs. Recall that both (7a-b) are thus possible (repeated here as (27a-b)), depending on the discourse environment.

(27) a. — kanjian ta le
— see him ASP
'he saw him' (Neeleman & Szendrői, 2007, 3a)

b. ta kanjian — le
he see — ASP
'he saw him' (Ibid., 3b)

[7]See Biberauer (2010) for a more detailed look at expletives in different NSLs.

pro can also refer to any person/number, as there is no inflection specifying who it must refer to (the same was true in (12)).

Note that discourse licensing is relevant for NSs in CNSLs as well, such as in the following Italian example, where a NS cannot be used to refer to a non-topic ('the exhibition' is introduced in a passive construction in (28a)).

(28) a. Questa mattina, la mostra è stata visitata da Gianni$_i$.
this morning the exhibition has been visited by John
'This morning, the exhibition was visited by John.' (Camacho, 2013:146, 1a)

b. Più tardi, **pro*$_i$/egli$_i$/lui$_i$ ha visitato l' università.
more late *pro*/he/he has visited the university
'Later on, he visited the university.' (Ibid., 1b)

For this reason, I am careful to say that NSs are 'almost always' licensed in CNSLs. This case is different from that of PNSLs and RNSLs, however, in that the NS is blocked by this particular context, rather than licensed by it. In other words, without the context of (28a), (28b) would be perfectly grammatical. For this reason, I will say from now on that discourse/syntactic licensing of NSs is only a property of PNSLs and RNSLs, although there is this small proviso.

2.6 Summary

Table 9 is a summary of the results of this section.

Table 9: Summary of Properties of Different NSLs

	Richness of Inflection	Richness of D	Indefinite Subjects	Expletives	Syntactic and Discourse Licensing
CNSL	Complete set of distinct forms.	Yes	Special marker required, generic/arbitrary NSs are overt	Null	No
PNSL	Some distinct forms	No	3SG inflection, generic/arbitrary NSs are null	Can be dropped under certain syntactic conditions	Yes
NNSL	Few distinct forms	Yes	All indefinite subjects are overt	Overt	No
RNSL	No inflection	No	Null indefinite subjects in the right discourse environment	Null	Yes
Semi-NSL	Few distinct forms	Yes	All indefinite subjects are overt	Can be dropped under certain syntactic conditions	Syntactic conditions required for null expletives

3 Types of NSL - Analysis

3.1 Theoretical framework

Roberts (2010) develops an approach to incorporation that aligns it with head movement, which will be important to this account of NSs. The basic idea is that when a probe Agrees[8] with a goal that contains a proper subset of the features of the probe, the result is indistinguishable from movement.

(29) a. *Trigger for Agree*
v*[Pers:_ , Num:_] ... ϕ[Pers:a, Num:b] (Roberts, 2010, 30a)

b. *Outcome of Agree*
v***[Pers:a, Num:b]** ... (ϕ[Pers:a, Num:b]) (Ibid., 30b)

As Roberts points out, copying the features of the goal onto the probe in (29a-b) 'exhausts the content of the goal' (60), thereby creating an operation which is 'not distinguishable from the copying involved in movement' (Ibid.). Since the features in v* asymmetrically c-command the features in ϕ, a chain is formed and all the lower copies are deleted. When a goal has this relation with its probe, the goal is 'defective.'

3.2 Account of null subjects

We can propose structures of the following kind for the different NSLs[9]:

(30) **CNSL**: $T_{[D,\ \phi]}$ ... $pro_{[D,\ \phi]}$

(31) **PNSL**: $T_{[\phi]}$ ... $pro_{[\phi]}$

(32) **NNSL**: $T_{[\phi]}$ ... $pro_{[D,\ \phi]}$

(33) **RNSL**: $T_{[-\phi]}$ ... $pro_{[-\phi]}$

These structures are justified by the data presented in Section 2. CNSLs have both rich inflection and rich D, hence the D- and ϕ-features present on T and *pro*. As this is an instance of (29), *pro* incorporates into T, yielding a definite NS. The NS is definite due to the D-feature on T (Holmberg, 2005).

In PNSLs, however, there is no D-feature on T or *pro*. This means that when *pro* incorporates through the process in (29), it receives an indefinite interpretation, as a definite interpretation can only come about via a D-feature, which would allow the pronoun to be referential (Ibid.). This accounts for the difference between EP and BP in

[8]Here and throughout this thesis, Agree with a capital 'A' refers to Chomsky's (2000) Agree operation and agreement with a lower-case 'a' refers to agreement as a pre-theoretical notion.

[9]Semi-NSLs are not included here or in Roberts' (2019) typology since, as discussed above, expletives are not central to this account (Biberauer, 2010, proposes a different set of parameters to account for variation with regards to expletives). Their properties, besides having null expletives under certain syntactic conditions, mostly line up with NNSLs (see Table 9).

(10a-b). In EP, a special marker is required to yield the indefinite meaning, because an incorporated pronoun must be interpreted as definite. However, a 3SG incorporated NS in BP will be interpreted as indefinite, because there is no D-feature to yield a definite interpretation.

In NNSLs, Agree takes place, but does not cause incorporation because the features on *pro* are not a proper subset of those on T, which blocks the creation of a chain. This will rule out all NSs, definite or indefinite.

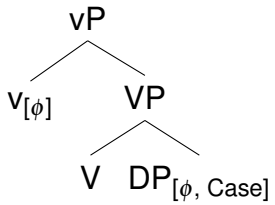
Note that *pro* in (30-33) does not refer to Chomsky's (1981) category of *pro*. Holmberg (2005) points out that Chomsky's *pro* does not fit with Minimalist assumptions about syntax (Chomsky, 1995) because it would involve agreement between two sets of uninterpretable features: on T and on *pro*. Holmberg points out that there are two logical solutions to this problem: Either the features on T are interpretable (e.g., Barbosa, 1995; Alexiadou & Anagnostopoulou, 1998) or the features on *pro* are interpretable and *pro* is a regular pronoun that is deleted at Phonetic Form (PF; Holmberg, 2005; Biberauer et al., 2010). Roberts (2019) assumes the latter, so *pro* for Roberts refers to a regular pronoun with interpretable features. Except where otherwise indicated, *pro* will also refer to a regular pronoun throughout this thesis.

3.3 RNSLs

RNSLs are different in that their NSs do not arise through the process in (29), because, unlike in the other types, Agree does not occur in RNSLs because there are no ϕ-features on T (recall the complete lack of inflection in RNSLs). For this reason, I treat RNSLs separately in this section.

Roberts (2019) follows Saito (2007) in arguing that this property is what allows for argument ellipsis (which surfaces as NSs) in RNSLs. The starting point is the 'Activation Condition' of Chomsky (2000), which requires a goal to be 'active' in order to enter into an Agree relation. A goal is active if and only if it has an uninterpretable (usually Case-) feature. Saito gives the following example (his (29)):

(34)



(34) is a case of object agreement. The object DP only qualifies as a goal because it has an uninterpretable Case-feature in line with the Activation Condition.

Now compare (35-36).

(35) a. John brought [$_{DP}$ his friend].

b. *But Bill did not bring _ . (Saito, 2007, (31a-b))

(36) a. Taroo-wa [$_{DP}$ zibun-no tomodati-o] turete kita.
Taroo-TOP self-GEN friend-ACC brought
'Taroo brought his friend.'

b. Demo Hanako-wa _ turete-konakatta.
but Hanako-TOP brought-not
'But Hanako did not bring her friend.' (Ibid., (32a-b))

In (35), in order to be interpreted correctly, [$_{DP}$ his friend] would have to be copied into the object position of (35b). At this point, [$_{DP}$ his friend] would already have checked its uninterpretable Case-feature in (35a), making it an invalid goal for Agree. However, in the Japanese case, Saito argues, because Agree need not occur, [$_{DP}$ zibun-no tomodati-o] may freely be copied into (36b). (37-38) (Saito's (45-46)) are suggestive of the same phenomenon applying in the case of radical NSs.

(37) Ziroo-ga hazimete Nagoya-ni kuru-node, minnda-ga iroirona basyo-ni kare-o
Zirro-NOM first.time Nagoya-to come-since all-NOM various place-to he-ACC
turete-iku yotei desu
take plan is
'Since Ziroo is coming to Nagoya for the first time, the plan is for everyone to take him to various places.'

(38) a. *[Hanako-no kare-o turete-iku] tokoro-wa Nagoya-zyoo -desu.
Hanako-GEN he-ACC take place-TOP Nagoya-castle is
'The place that Hanako is taking him is the Nagoya Castle.'

b. [Hanako-no *pro* turete-iku] tokoro-wa Nagoya-zyoo -desu.
Hanako-GEN take place-TOP Nagoya-castle is

(37) is the discourse context for (38). In (38a), the accusative marking on *kare* blocks a phenomenon in which genitive subjects are possible in Japanese. However, in (38b), a genitive subject is not blocked, suggesting *pro* is not Case-licensed because, if it were, we would expect the genitive subject to be ungrammatical.

In summary, in RNSLs like Chinese and Japanese, NSs appear through a kind of argument ellipsis which is permitted precisely because there is no agreement (perhaps against expectations). This means that, according to Roberts, NSs can come about through different processes depending on the features on T.

4 Properties of Irish NSs

Here I list the surface properties of Irish NSs which make them different to other NSLs, with no attempt at theoretical analysis of these properties. Their theoretical importance will be shown in later sections.

4.1 Complementarity between inflection and overt pronouns

If the verb is inflected for person and number, it cannot appear with an overt pronoun (39). These are called 'synthetic' verb forms because the verb and pronoun are expressed together.

(39) a. Chuirfinn an leabhar ar an mbord.
put.COND.1SG the book on the table.
'I would put the book on the table.'
b. *Chuirfinn mé an leabhar ar an mbord.
put.COND.1SG I the book on the table.

If an overt pronoun is present, it appears with a so-called 'analytic' form of the verb, i.e., a form that does not have any inflection for person/number (although it is marked for tense and mood).

(40) Chuirfeadh sé an leabhar ar an mbord.
put.COND he the book on the table
'He would put the book on the table.'

Analytic forms cannot appear without a pronoun:

(41) *Chuirfeadh an leabhar ar an mbord.

The analytic form also appears with full DPs.

(42) Chuirfeadh an fear an leabhar ar an mbord.
put.COND the man the book on the table
'The man would put the book on the table.'

In summary, synthetic forms cannot appear with overt pronouns/full DPs and analytic forms must appear with an overt pronoun/full DP; in other words, inflection and overt pronouns/full DPs are in complementary distribution.[10].

4.2 Distribution of analytic and synthetic verb forms

A typical Irish paradigm is 'patchy' and a synthetic form will not be available across the paradigm (like in PNSLs). A typical speaker may have the following paradigm for *labhair* ('to speak') in the present tense:

Table 10: Irish verbal paradigm for *labhair* 'to speak'

	singular	plural
1st	labhraí-**m**	labhraí-**mid**/labhraíonn muid
2nd	labhraíonn tú	labhraíonn sibh
3rd	labhraíonn sé/sí	labhraíonn siad

There are two synthetic forms (*labhraím* and *labhraímid*) and the analytic form (*labhraíonn*). The two forms separated by a backslash in 1PL indicate that there is the option of using either a synthetic form or an analytic form with a pronoun.

[10]See McCloskey & Hale (1984) for a more detailed description at this phenomenon.

The number of synthetic forms varies based on dialect and tense, aspect and mood (TAM). Thus, some speakers of southern varieties might additionally have the synthetic form *labhraír* for 2SG in Table 10 and a typical past habitual paradigm for *labhair* has more synthetic forms (Table 11).

Table 11: Irish past-habitual verbal paradigm for *labhair* 'to speak'

	singular	plural
1st	labhraí-**nn**	labhraí-**mis**/labhraíodh muid
2nd	labhraí-**teá**	labhraíodh sibh
3rd	labhraíodh sé/sí	labhraí-**dís**/labhraíonn siad

As shown in tables 10 and 11, there is sometimes optionality as to whether a synthetic form is used or an analytic form followed by a pronoun. Mostly, however, when a synthetic form is available, it must be used:

(43) *labhraíonn mé (< labhraí-m)

(44) *labhraíodh mé (< labhraí-nn)

4.3 Null arguments elsewhere in Irish

Irish (and all other Insular Celtic languages) have a set of inflected prepositions, which also involve null arguments and show complementarity between agreement and overt elements (45-46). Take for instance *le* 'with' (Table 12). Note that it fully inflects for all person-number combinations, including 3SG, unlike the verbal paradigms discussed above. There are a few prepositions which do not inflect at all, but inflecting prepositions inflect for all person-number combinations.

Table 12: Irish prepositional paradigm for *le* 'with'

	singular	plural
1st	li-**om**	li-**nn**
2nd	le-**at**	li-**bh**
3rd masc	le-**is**	le-**o**
3rd fem	lé-**i**	

(45) *leis sé
with.3MSG 3MSG
Intended: 'with him'

(46) *liom mé
with.1SG 1SG
Intended: 'with me'

McCloskey & Hale (1984) argue that there is also a null argument present in possessives (47).

(47) mo theach *pro*
my house

mo is then the result of agreement with *pro*, i.e., it is an agreement clitic rather than a true possessive pronoun. Their arguments in favour of this analysis are: (1) Genitive DPs usually follow their head noun (48-49), unlike possessives, which precede them (47); (2) possessives can take particles that usually accompany pronouns, such as the emphatic/contrastive particle *sa* (50); (3) some facts about extraction from relative clauses line up with those of other null arguments in Irish, but I will not discuss this here for space reasons.

(48) teach Eoghain
house Owen
'Owen's house'

(49) teach an tsagairt
house the.GEN priest.GEN
'the priest's house'

(50) mo theach *pro*-sa
my house *pro*-EMPH
'*my* house (not somebody else's)'

Table 13 is the paradigm for this agreement clitic[11].

Table 13: Irish paradigm for the possessive agreement clitic

	singular	plural
1st	mo	ár
2nd	do	bhur
3rd	a	a

Finally, Perry (2025) points out that object agreement has the same property in Irish (this object agreement only occurs with the progressive construction):

(51) Tá mé **ag** feiceáil an tsagairt.
be.PRES I PROG see.VN the priest.GEN.
'I am seeing the priest.'

(52) Tá mé **á** fheiceáil.
be.PRES I PROG.3MSG see.VN.
'I am seeing him.'

Again, the paradigm is complete (Table 14) and null objects are possible for all person-number combinations. Notice that the forms are essentially those in Table 13 with *do* ('to') added to them. I return to this in Section 8.2 below.

Table 14: Irish paradigm for object agreement on Prog

	singular	plural
1st	do mo	dár
2nd	do do	do bhur
3rd	á	á

[11] Another aspect of this is that the clitics cause different phonological mutations. Thus, *a* is distinguished for 3MSG, 3FSG and 3PL by the mutation it causes. I have left this out for simplicity.

Since in all three cases, *pro* is not in subject position, we should instead talk about 'null arguments' in Irish. McCloskey & Hale argue for a null argument in both inflectional prepositions (Table 12) and possessive DPs (47), which functions in essentially the same way as the null argument in verbal paradigms, in that it is licensed and identified through agreement with *pro*, as in Chomsky (1981). Perry (2025) extends this to object agreement (51-52).

In Roberts (2019) framework, a language could be a certain type of NSL on T and another type of NSL for other heads involved in person-number agreement in the language. The data in this section suggests that Irish is a regular CNSL for P, D and Prog, since the paradigms have a complete set of inflections and null arguments are always available, but the complementarity of agreement and overt DPs is unlike CNSLs and requires explanation.

4.4 Lack of discourse/syntactic conditions and pragmatic effects of presence/absence of overt subjects

Since in CNSLs, like Spanish, the verbal inflection carries all the necessary information about person and number, an overt subject carries a pragmatic effect (Roberts & Holmberg, 2010:7):

(53) *Yo* hablo español, pero *tú* hablas francés.
I speak.PRES.1SG Spanish but you speak.PRES.2SG French
'*I* speak Spanish, but *you* speak French.'

In Irish, however, the absence or presence of overt pronouns is linked to the absence or presence of a morphological form for that person-number combination; i.e., it is not based on pragmatics. This is even the case for the few cases where either a synthetic form or an analytic form with an overt pronoun is available. As far as I am aware, there is no pragmatic difference between (54-55)[12].

(54) Tá mé sa scoil anois.
be.PRES I at school now
'I am at school now.'

(55) Táim sa scoil anois.
be.PRES.1SG at school now

In order to emphasise pronominals in Irish, the emphatic particle *se*/*sa* [13] is used[14] (56-57), where they are in boldface, and (50) above. These only attach to *pro* (as in (50) and (56)) or overt pronouns (as in (57)).

[12] As Stenson (2020:Ch17) discusses, traditionally, pronouns cannot be contrasted without the emphatic particle, and this applies for both overt pronouns and *pro*, but she does not explicitly discuss whether cases like (54-55) are pragmatically identical. If there is a pragmatic difference, it is slight.

[13] The distinction between these two is based on phonological criteria not relevant here.

[14] Full DPs can be emphasised without the use of this particle, presumably because they are not clitics (see Section 7.2).

(56) Chuirfinn-**se** an leabhar ar an mbord.
put.COND.1SG-EMPH the book on the table
'*I* would put the book on the table.'

(57) Bhí mi-**se** ag dul siar, ach bhí tusa ag dul soir.
be.PAST I-EMPH PROG go.VN westwards, but be.PAST you.EMPH PROG go.VN eastwards
'*I* was going west, but *you* were going east.'

Notice that in (56), *pro* is emphasised pragmatically. This is unusual in NSLs, as Camacho (2013:Ch7) points out. Interestingly, there is no phonological stress, because there is no element to stress phonologically: The inflection cannot be stressed (I will argue in Section 7 that this is because it is an incorporated weak pronoun) nor can the emphatic particle be stressed, by virtue of the fact that it is a particle. Therefore, there is pragmatic emphasis of *pro*, without the corresponding element to stress phonologically (as in (53)).

4.5 Indefinite NSs in Irish

So far, we have seen definite NSs in Irish. We have seen that they are used (usually obligatorily) where there is a form available in the paradigm.

Irish also has what are called 'impersonal' or 'autonomous' verb forms (McCloskey's 2007 (1b-c); IMP = 'impersonal').

(58) Scaoileadh amach na líonta.
release.PAST.IMP out the nets
'One let out the nets.' (Or: 'The nets were let out.')

(59) Cuirtear i mboscaí iad.
put.PRES.IMP in boxes them
'One puts them in boxes.' (Or: 'They are put in boxes.')

Citing Stenson (1989), McCloskey (2007) develops a few 'decisive arguments' (828) that these impersonal verb forms contain *pro*, for example because these verbs can act as a controller (60), McCloskey's (8a), and an antecedent for a reciprocal (61), McCloskey's (13c).

(60) Socraíodh ar ionsaí a dhéanamh orthu.
settle.PAST.IMP on attack to make.VN on.3PL
'It was agreed to mount an attack on them.'

(61) Táthar a' strócadh a chéile.
be.PRES.IMP PROG tear.VN each.other
'People are tearing each other apart.'

Since these forms involve inflection, they are not like RNSLs (12), and since the inflection is not 3SG, they are unlike PNSLs ((10b), (11)). They are also not like indefinite subjects in NNSLs, which are overt. They are clearly closest to CNSLs, if we

assume these impersonal forms to be the 'special inflection' required for null indefinite subjects in CNSLs.

4.6 Expletives

McCloskey (1996) argues that Irish entirely lacks expletives. His argument is not that Irish has null expletives, which Rizzi (1982, 1986) proposed for Italian, but rather that Irish entirely lacks expletives. There are two elements in Irish which look like expletives, which McCloskey reanalyses as not being true expletives. By 'expletives,' we mean dummy subjects, which fulfil the requirements of the EPP.

4.6.1 *Ann*

McCloskey (2014) points out that examples like (62-63) appear to contain an existential expletive, *ann*, similar to English there. (64) shows that this expletive has a locative meaning when not found in constructions such as (62-63)[15], similar to English 'there.'

(62) Tá leabhar ann.
be.PRES book there
'There is a book.'

(63) Bhí daoine ann nuair a thagann muid.
be.PAST people there when COMP arrive.PAST we
'There were people (there) when we arrived.'

(64) Bhí muid ann.
be.PAST we there
'We were there.'

The first evidence that this element is not in fact an expletive is that it does not appear in subject position. For instance, (62) is closest to 'A book is there' if translated to English; i.e., the element in subject position (directly postverbal in Irish) is *leabhar*.

The second piece of evidence is that *ann* can appear as complement to non-verbal elements, most notably the copula[16] (65-66).

(65) **Ba** mhinic cásanna den chineál sin ann.
COP.PAST often cases of-the type DEM there
'There were often cases of that type.'

(66) **Is** annamh báisteach ann.
COP.PRES rare rain there
'There's rarely (any) rain.'

Doherty (1996) argues that the Irish copula is non-verbal. His argument is mainly based on the fact that it is a functional, rather than lexical, element by a range of

[15] It is also the 3MSG form of 'in,' so its literal meaning is 'in it.'

[16] In traditional grammars (e.g., Stenson, 2020), the 'copula' refers only to this non-verbal element and not the regular verb 'to be.' I follow this naming convention in this thesis.

criteria; for instance, the fact that it has weakened tense inflection[17], can only take one complement, and lacks descriptive content (in other words, its main function is syntactic). Since the copula cannot take subjects (because it is non-verbal), this is further evidence that *ann* is in fact not an expletive.

Another point is that *ann* always fills the position reserved for the predicate, not the subject.

(67) Is fada [$_{SC}$ daoine ann nach ngéilleann do phiseoga].
COP.PRES long people there COMP.NEG yield to superstitions
'There have long been people who don't give credence to superstitions.'

Compare this to the ungrammatical (68), where *ann* tries to appear in subject position:

(68) *Is ann fada daoine nach ngéillean do phiseoga.

This is equally as ungrammatical using the regular verb 'to be':

(69) *Tá ann fada daoine nach ngéilleann do phiseoga.
be.PRES there long people COMP.NEG yield to supersitions
Intended: 'There have long been people who don't give credence to superstitions.'

Clearly, *ann* does not fill the role of filling the subject position in these examples; it does precisely the opposite: It fills the obligatory position of the predicate.

Finally, *ann* is in complementary distribution with other predicates, as (70a-b) (McCloskey's (25a-b)) show, suggesting further that *ann* is a predicate.

(70) a. Tá leabhar ag mo dheirfiúr.
be.PRES book at my sister
'My sister has a book.'
b. *Tá leabhar ann ag mo dheirfiúr.
be.PRES book there at my sister
Intended: 'There is a book that my sister has.'

For these reasons, McCloskey concludes (along with me) that Irish does not have a true 'there'-expletive because this element, while being used in existential expressions and coming in the form of a locative, does not fill the subject position.

4.6.2 *Sé*

The other type of apparent expletive (*sé*) found in Irish can be seen in the following examples, where it is optional (McCloskey's (1996) (58-59)):

(71) Caithfidh (sé) go bhfuil sé breoite.
must (it) COMP is he ill
'It must be that he is ill.'

(72) Tharla (sé) go raibh siad ann.
happened (it) COMP were they there

[17] It has only two forms, *ba* and *is*, the former used for the past and conditional and the latter used for the present.

'It happened that they were there.'

It is in many ways similar to the 'it'-expletive found in English in the translations to (71-72): It is semantically vacuous, has the form of the masculine singular pronoun (in English it is the neuter singular pronoun) and is found in the usual subject position. One immediate difference, however, as noted above in Section 2.4 for optional 'expletives' in languages like Galician, is the fact that *sé* is optional in (71-72), suggesting it is not there to fulfil the requirements of the (obligatory) EPP.

McCloskey (1996) argues that their function is instead to 'mark the displacement of a clausal complement to right-peripheral position' (264). He points out first that clauses must be fully rightward dislocated, appearing to the right even of pronouns which are postposed in Irish, such as the subjects of small clauses (McCloskey's (64a-c)). In (73b), the pronoun is postposed, but not to the right of the clause, so the sentence is grammatical. (73c) shows that if the pronoun is postposed to the right of the clause, the derivation will crash.

(73) a. Chuala mé **é** ráite go mbíodh sé ann.
hear.PAST I it said COMP be.PAST.HABIT he there
'I heard it said that he used to be there.'
b. Chuala mé ráite **é** go mbíodh sé ann.
c. *Chuala mé ráite go mbíodh sé ann **é**.

In the process, pronominal copies may be left in the original, non-postposed, position (McCloskey's (65-66)):

(74) Tá mé cinnte de go mbeidh sí i láthair.
be.PRES I sure of.3MSG COMP be.FUT she present
'I am sure that she will be present.'

(75) Bhí siad dhá rá ar an nuacht go...
be.PAST they it say.PROG on the news COMP
'They were saying (it) on the news that...'

McCloskey argues that (74-75) are cases where the clause has been right-postposed (this is not visible on the surface in (74-75)) and a pronominal is left behind (in a preposition in this case), which marks this rightward postposing.

This is what McCloskey proposes is happening in (71-72): These are cases of rightward dislocation of clausal complements and, in this process more generally, pronouns are left in the original position of the clause. The theory of exactly how this process works goes beyond the scope of this thesis. Important for us is that Irish entirely lacks expletives, as the two elements, *ann* and *sé*, which appear to be expletives, are reanalysed as having other functions.

4.6.3 Time and weather expletives

Irish does have time and weather expletives (76-77).

(76) Tá sé gaofar.
be.PRES it windy

'It is windy.'

(77) Tá sé a haon a chlog.
be.PRES it one o' clock
'It is one o'clock.'

However, Biberauer & van der Wal (2014) argue that weather expletives are different to other kinds of expletives in being [+argumental]. This is different to the expletives in sections 4.6.1 and 4.6.2, which appear with the sole purpose of filling the empty subject position.

4.7 Does Irish have rich D?

Recall from Section 2.2 that the criteria for rich D are: 'overt instantiation of ϕ-features on 3rd-person determiners where a lexical noun is present and/or . . . a morphological definiteness/indefiniteness distinction in the form of distinct affixes or articles' (Roberts, 2019:250).

First, Irish does not meet the criterion for rich D of a separate affix for definite and indefinite nouns:

(78) a. an fear
the man
'the man'
b. fear
man
'a man'

As in many languages without rich D, indefinite nouns in Irish are expressed by simply omitting the definite article (78b).

Now, let us take the criterion of 'overt instantiation of ϕ-features on 3rd-person determiners,' which is slightly complicated to apply for Irish. Singular/plural distinctions are made transparently on definite articles:

(79) a. an bád
the.SG boat.SG
'the boat'
b. na báid
the.PL boat.PL
'the boats'

Gender distinctions, however, are mostly not made on definite articles, but instead on the first consonant of the noun. *sráid* is feminine, which means that when a definite article is present, a /t/ replaces the /s/ as the first consonant in the word ((80b), the <s> remains orthographically, but is not pronounced). For masculine nouns, however, the /s/ remains when a definite article is present (81b). (82-83) is another example: /b/ is replaced by /v/ (orthographically <bh>) at the start of the word for the feminine noun *bléid* when the definite article is present, but not for the masculine noun *buidéal*.

(80) a. sráid
street (feminine)
b. an **t**sráid
the FEM\street

(81) a. saol
life (masculine)
b. an **s**aol
the life

(82) a. bléid
blade (feminine)
b. an **bh**léid
the FEM\blade

(83) a. buidéal
bottle (masculine)
b. an **b**uidéal
the bottle

To summarise, while gender marking is not usually found on the definite article itself, it is found on the first consonant of the lexical noun when a definite article is present.

It is worth noting that in one case, gender distinctions are made on the definite article. This is if the DP is genitive, as in (84a-b). Notice first that the initial consonant mutations 'swap' in the genitive, with masculine nouns now being affected, and feminine nouns being left unaffected (compare to (80-83), where the opposite was the case). Crucially, there is also a difference in the definite article, with *na* appearing in the genitive only when the noun is feminine.

(84) a. **na** **b**léide
the.FEM.GEN blade.GEN
b. **an** **bh**uidéil
the.MASC.GEN MASC\bottle.GEN

Overall, I would argue that Irish does meet the criteria for rich D. There are occasionally ϕ-feature distinctions on third-person determiners (84a-b). Additionally, while gender features are not usually represented on determiners, the presence of determiners allows gender features to be represented on the lexical noun. Since Roberts only requires that either of the two criteria cited above are met, the evidence of ϕ-feature distinctions on third-person determiners is sufficient to establish Irish as having rich D.

5 Conclusion of Part I

In Part I of this thesis, I have first discussed the properties of Roberts' (2019) NSLs, followed by an analysis of these NSLs. I have then discussed where Irish fits into each of these properties. Table 15 is a summary of the properties of each type of NSL and where Irish fits into these properties (shaded in green).

Table 15: Properties of NSLs and Irish, with Irish properties shaded in green

	Richness of Inflection	Richness of D	Indefinite Subjects	Expletives	Syntactic and Discourse Licensing
CNSL	Complete set of distinct forms.	Yes	Special marker required, generic/arbitrary NSs are overt	Null	No
PNSL	Some distinct forms	No	Null, with 3SG inflection	Can be dropped under certain syntactic conditions	Yes
NNSL	Few distinct forms	Yes	All indefinite subjects are overt	Overt	No
RNSL	No inflection	No	Null indefinite subjects in the right discourse environment	Null	Yes
Semi-NSL	Few distinct forms	Yes	All indefinite subjects are overt	Can be dropped under certain syntactic conditions	Syntactic conditions required for null expletives
Irish	Few/some distinct forms	Yes	Null, with a special marker in the form of distinct inflections	Weather (quasi-argumental) expletives must be overt. No other expletives are present.	No

Let us consider where Irish can fit into Table 15. First, following McCloskey & Hale (1984) and Perry (2025), it is clear that Irish licenses NSs in the following environments: subject-verb agreement, object agreement, inflected prepositions, possessive DPs and impersonal verb forms. This suggests it is some form of NSL (i.e., not an NNSL). The other properties which argue against Irish being an NNSL are that it lacks overt expletives and has null indefinite subjects (with a special marker, but NNSLs tend to have a 'one'-type overt indefinite subject).

Secondly, Irish is unlikely to be an RNSL. This is because it does not have discourse/syntactic conditions on the appearance of NSs, it has agreement in its D-system, and pronouns are true pronouns and not lexical nouns, as I discuss in Section 7.2 (I have not discussed this property so far, because the form of the pronouns is only an identifier for RNSLs, but I discuss it below).

Thirdly, Irish is unlikely to be a PNSL because it lacks the crucial property of 3SG NSs being indefinite. In Irish, there are of course no 3SG NSs at all. This might suggest a potential solution in which the impersonal (indefinite) forms in Irish *are* the missing 3SG analytic forms and that Irish is a PNSL. There are a few problems with this analysis: First, Irish does not have the other properties of PNSLs, including a lack of rich D and no syntactic/discourse licensing of NSs. Second, I am aware of no positive evidence that impersonal forms are interpreted by native speakers as being the missing 3SG NS form. Third, in Breton, there are indefinite forms of prepositions (85), but also 3MSG and 3FSG inflected prepositions (86a-b). The impersonal endings on prepositions (85) are similar to those on verbs (87). Therefore, in Breton, impersonal forms co-exist with 3SG NSs in prepositional paradigms, suggesting that the impersonal forms are not in fact simply 3SG NS forms. Of course, there is the question of what we can learn about Irish from Breton, but in the face of no positive evidence that Irish impersonal forms are 3SG NS forms, I will assume that Irish truly lacks 3SG NSs, so it cannot be a PNSL.

(85) gan-eor
with-IMP
'with one'

(86) a. gant-añ
with-3MSG
'with him'

b. gant-i
with-3FSG
'with her'

(87) lenn-er
read.PRES-IMP
'one reads'

That leaves us with the possibility that Irish is a CNSL. Indeed, there are definite NSs in Irish, along with indefinite NSs if a special marker (impersonal inflection) is used. Irish also has some of the properties of rich D. However, I will argue that Irish is not a CNSL.

First, Irish does not have the complete and consistent verbal paradigms that CNSLs

have. This is already demonstrated above, e.g., comparing Table 3 for Spanish and tables 10 and 11 for Irish. Consistent verbal paradigms have been a crucial part of CNSLs going back to Taraldsen's Generalisation (Taraldsen, 1980) that rich inflection is associated with the possibility of NSs.

A possible counter-argument would be to say that Irish can still be thought of as a CNSL, because when there is an inflected form available, NSs are possible as in CNSLs. This line of argument about Irish starts with Jaeggli & Safir (1989), who argue that Irish is an example of how far Taraldsen's Generalisation can be taken, in that only where an inflected form is available is a NS possible (the term CNSL post-dates them, but I am interpreting their argument in these terms). Irish could then be a CNSL when a synthetic form is available and an NNSL when no synthetic form is available.

However, the problem is that the situation in Irish is then not comparable with that in other languages in which similar differences occur between varieties as to how complete the verbal paradigm is. Compare Table 5 (repeated from above) and Table 16. In BP, there are only three distinct forms in the paradigm (*falo*, *fala*, *falam*). In EP, on the other hand, there are six distinct forms.

Table 5: Brazilian Portuguese verbal paradigm for *falar* 'to speak'

	singular	plural
1st	eu fal-**o**	a gente fal-**a**
2nd	você fal-**a**	vocês fal-**am**
3rd	ele/ela fal-**a**	eles/elas fal-**am**

Table 16: European Portuguese verbal paradigm for *falar* 'to speak'

	singular	plural
1st	eu fal-**o**	nós fal-**amos**
2nd	tu fal-**as**	vos fal-**ais**
3rd	ele/ela fal-**a**	eles/elas fal-**am**

As BP came to have less distinct forms in its verbal paradigms, it moved from being a CNSL to being a PNSL. This involved a whole cluster of properties changing (Barbosa, 2019), including 3SG NSs being indefinite (10a-b), the allowance of bare singular nouns in subject position (88) and fully productive object drop (89)[18]. These three properties are all associated with the lack of D-features in BP.

(88) Cachorro gosta de gente.
dog like.3SG of people
'Dogs like people.' Barbosa, 2019, (37b)

(89) Eu fazia [sushis]$_i$ depois que voltamos do Japão, porque todos queriam
I made sushis after that returned from.the Japan because all wanted
continuar comendo [~~sushis~~]$_i$
continue eating
'I used to make sushi after we came back from Japan, because everybody wanted to keep on eating (it).' Cyrino & Ordóñez (2018), (3)

[18]While EP also has object drop, it is more extensive in BP. See Cyrino & Lopes (2016) for more detail.

In Irish, northern varieties have fewer synthetic forms than southern varieties. However, Irish uniformly does not allow bare singular nouns in subject position or productive object drop. Irish lacks 3SG NSs, but in BP third-person NSs are the most robustly attested (Duarte, 2000, finds that 58% of third-person pronominal subjects are overt, compared to 74% of first-person pronominal subjects and 90% of second-person pronominal subjects). Since 3SG NSs are important parts of the criteria for PNSLs, it is interesting that Irish would entirely lack this important feature given the development in Portuguese. The problem, then, with saying that Irish is either a CNSL or a PNSL is that in varieties with less NSs, it does not have the typical parametric cluster associated with the loss of NSs. Languages which are sometimes CNSLs and sometimes NNSLs, as might be suggested along the lines of Jaeggli & Safir, are as far as I am aware unattested[19].

There is one final possibility that has been raised in the literature with regards to Irish agreement (e.g., Legate, 1999). This is that analytic forms could be treated as 3SG forms which have expanded through the paradigms as other forms have been lost. For example, in (75), the verb *would* be agreeing with the subject, but the 3SG form it takes also happens to be the one which is used where no more specific form exists. This makes sense from the perspective that, according to Harley & Ritter's (2002) analysis, 3SG is default because it is [-plural, -participant]. However, this is not what I will assume in this thesis for a few reasons.

First, there is, as far as I am aware, no specific evidence to favour this analysis over the one I will present that analytic forms are non-agreeing forms with no person-number inflection. Morphologically, some verbs, like *bí* (Table 17), appear to be inflected in such a way that *tá* looks like a non-agreeing form, with the inflecting forms having a clear ending that the analytic forms do not have, whereas other verbs, like *labhair* appear to have analytic forms which could plausibly be analysed as a kind of 3SG inflection (*-onn*). I will not attempt a full morphological analysis here, but it appears that the evidence from the morphology is at best inconclusive, and I am not aware of any other direct evidence brought to bear on this issue.

Table 10: Irish verbal paradigm for *labhair* 'to speak'

	singular	plural
1st	labhraí-**m**	labhraí-**mid**/labhraíonn muid
2nd	labhraíonn tú	labhraíonn sibh
3rd	labhraíonn sé/sí	labhraíonn siad

Table 17: Irish verbal paradigm for *bí* 'to be'

	singular	plural
1st	tá-**im**	tá-**imid**/
2nd	tá tú	tá sibh
3rd	tá sé/sí	tá siad

Secondly, if we do assume them to be 3SG forms, this does not solve the problems we have had in categorising Irish as an NSL. The best assumption might be to take it as a PNSL, since the paradigm is incomplete like PNSLs, which leads to NSs not being universally available. However, Irish would then lack the crucial property of 3SG NSs

[19] I come back to the cluster of properties which are different between northern and southern varieties of Irish below.

being indefinite, because there would be true 3SG forms, but they cannot be null. Irish could not be a CNSL because under Legate's assumption, Irish does not universally allow NSs (in other words, she cannot say, like Jaeggli & Safir, that Irish allows NSs every time there is an agreeing form available, because for 3SG subjects, there is an agreeing form available, but it happens to be defective, so NSs are not permitted), and it cannot be a NNSL because it allows NSs. Finally, it could not be an RNSL under this perspective because there would be agreement for all forms (even if it is defective when the analytic form appears). For these reasons, I will assume below that analytic forms are forms with no person-number inflection whatsoever.

Part II: Fitting Irish into a null-subject typology

6 Previous approaches to Irish person-number inflection

In the first part of this thesis, I have shown that Irish cannot comfortably fit into any of the previously established types of NSL. This is because Irish NSs have various unusual properties, most notably complementarity of agreement and overt pronouns/DPs, and because of other aspects of Irish syntax, which do not align as they do for other languages. In the second part of this thesis, I will discuss how Irish should be incorporated into Roberts' typology.

In this section, I will discuss previous approaches to Irish NSs, which are of two kinds: agreement approaches (e.g., McCloskey & Hale, 1984; Perry, 2025) and incorporation approaches (e.g., Doron, 1988; Brennan, 2009). The agreement approaches assume that Irish NSs come about through agreement with functional heads, whereas the incorporation approaches assume that they come about through pronominal incorporation. In this section, I will examine both approaches and side in favour of the incorporation approaches, while admitting that they come across certain difficulties. Later, in Section 8, I will set out my own incorporation approach, which is unique in using the Labelling Algorthm to yield the Irish agreement patterns.

In the context of Roberts' NSL typology, I will argue that T in Irish is radically free of ϕ-features. In this sense, Irish is like an RNSL. I will focus here on T, but the same principles will apply to other heads involved in Irish person-number inflection, as I will show in Section 8. We will be left at the end of this section with the following abstract schema for Irish:

(90) **Irish**: $T_{[\text{-}\phi]}$ ... $pro_{[?]}$

In other words, while Irish has 'inflection' (taking this as a relatively theory-neutral term), the subject and the verb do not Agree. In Section 6.1, I discuss agreement approaches to Irish verbal inflection and in Section 6.2 I discuss why I reject these approaches, instead favouring a non-agreement approach. Finally, in Section 6.3, I look at Brennan's (2009) incorporation approach and its shortfalls.

6.1 Agreement accounts

Recall that Irish has what appears to be low-to-moderate levels of inflection in its verbal paradigms (I repeat Table 10 for convenience):

Table 10: Irish verbal paradigm for *labhair* 'to speak'

	singular	plural
1st	labhraí-**m**	labhraí-**mid**/labhraíonn muid
2nd	labhraíonn tú	labhraíonn sibh
3rd	labhraíonn sé/sí	labhraíonn siad

However, RNSLs have no verbal inflection at all (repeated from above):

Table 8: Mandarin Chinese verbal paradigm for *shuo* 'to speak'

	singular	plural
1st	wo shuo-**ø**	women shuo-**ø**
2nd	ni shuo-**ø**	nimen shuo-**ø**
3rd	ta shuo-**ø**	tamen shuo-**ø**

This would appear to suggest that Irish T cannot be like T in RNSLs in lacking ϕ-features.

Indeed, many approaches have assumed syntactic agreement in Irish, including McCloskey & Hale (1984), who have the following statement of the distribution of *pro* (their (82)).

(91) **pro* unless governed by AGR
[αF] [αF]
where [αF] is some combination of person-number features.

In other words, NSs appear with agreeing (i.e., synthetic) forms and Irish is analysed using Chomsky's (1981) theory of *pro*, so, according to them, Irish NSs are licensed by AGR as in CNSLs such as Spanish and Italian. This correctly rules out NSs with analytic forms, as in (41). However, note that there is no reason in (91) why synthetic forms may not appear with overt pronouns or full DPs:

(92) a. *Táim mé ag teacht.
be.PRES.1SG I PROG come.VN
'I am coming.'
b. *Bhíodar na páistí ag labhairt.
be.PAST.3PL the children PROG talk.VN
'The children were talking.'

McCloskey & Hale are forced to assume a surface filter (their (85)) to rule out cases like (92a-b), which they admit is stipulative and 'something of an embarrassment' (526) to their theory:

(93) *[... X^0 ... NP ...]
[αF] [+pro, [αF]]
if X^0 governs *pro*
and if *pro* has phonetic content

Perry (2025) proposes that we can avoid the surface filter in (93) using Roberts' (2019) theory of head movement and defective goals. Consider the following structure for an agreeing verb (Perry's (37-38)[20]):

(94) Rinne-**amar** (*sinn) é sin.
do.PAST-1PL (*we) 3MSG DEM.MED
'We did that.'

(95) *Agreeing finite verb with pronominal subject*

[20] Perry refers to Roberts' connection between head movement and defective goals as 'Defective Goal Incorporation' (DGI).

V+SubjProbe ϕ ...
[uϕ] [ϕ: 1PL] ... (Configuration before Agree)

V+SubjProbe ϕ ...
[uϕ:1PL] [ϕ: 1PL] ... (Agree applies)

V+SubjProbe ϕ ...
[uϕ:1PL] ~~[ϕ: 1PL]~~ ... (DGI applies)

V+SubjProbe ϕ ...
Rinne-amar ø é sin (Vocabulary Insertion)

The pronoun does not surface because it is a defective goal with respect to the verbal complex (cf. (29)). Therefore, an earlier problem for agreement approaches of requiring an arbitrary surface filter can be resolved using Roberts' DGI.

When the subject is a full DP, DGI does not apply as the features of the full DP are not a subset of those on the pronoun (97). The example Perry gives, which I replicate here, is of a full DP complement to a preposition, but the same principles would apply for full-DP subjects[21].

(96) ag na daoine úd
at.NONAGR the.PL people DEM.DIST
'at those people'

(97) *Agreeing preposition with full DP complement*

P D NP
[uϕ] [Def:+, ϕ: 3PL] ... (Configuration before Agree)

P D NP
[uϕ:3PL] [Def:+, ϕ: 3PL] ... (Agree applies)

P D NP
~~[uϕ:3PL]~~ [Def:+, ϕ: 3PL] ... (DGI does not apply)

P D NP
ag na daoine úd (Vocabulary Insertion)

So far, I have shown how Perry accounts for agreement with pronouns (95) and non-agreement with full DPs (97). He accounts for non-agreement with overt pronouns in the following way:

(98) Rinne *(siad) é sin.
do.PAST.NONAGR *(3PL) 3MSG DEM.MED
'They did that.'

(99) *Non-agreeing finite verb with pronominal subject*

[21] Perry also assumes, along with Iorio (2014), that in some cases the features of the *probe* fail to be spelled out.

V+SubjProbe ϕ ...
[uϕ] [ϕ: 3PL] ... (Configuration before Agree)

V+SubjProbe ϕ ...
[uϕ:3PL] [ϕ: 3PL] ... (Agree applies)

V+SubjProbe ϕ ...
~~[uϕ:3PL]~~ [ϕ: 3PL] ... (Impoverishment applies)

V+SubjProbe ϕ ...
[ϕ: 3PL] ... (DGI does not apply)

V+SubjProbe ϕ ...
Rinne siad é sin (Vocabulary Insertion)

Since no synthetic form is available here[22], Perry proposes that an impoverishment rule applies at PF that removes the ϕ-features from the verbal complex. In the next step, DGI does not apply because the features on the pronoun are not a subset of those on the verbal complex, because the verb lacks ϕ-features. This may seem rather *ad hoc*, as it involves introducing a new operation to account for this phenomenon, but because verbal paradigms in Irish are notably 'patchy,' as discussed above, some kind of operation at PF is required in any theory[23].

Another advantage of Perry's analysis to McCloskey & Hale's is that he avoids using Chomsky's (1981) *pro*, which, as described in Section 3.2, is conceptually problematic in Minimalist theories of syntax (Chomsky, 1995), because it would involve agreement between two sets of uninterpretable features (Holmberg, 2005).

6.2 Problems with agreement approaches

While Perry's account avoids stipulating the incompatibility of agreement and overt pronouns/full DPs, making his account less stipulative than other agreement approaches, there are still some issues with his approach, which I will explore in this section.

The main problem is how Perry should account for the ungrammaticality of a lack of agreement and overt pronouns/DPs (100-101)[24]. I also include the example of (101) because (100) could be related to the selection properties of verbs in Irish (they have to select a subject). What I am referring to is the requirement to have a subject raise to (Spec, TP).

(100) *chuaigh
went.PAST.NONAGR
Intended: 'I/you/he/she/it/we/you/they went'

(101) *Tá ag rith mé
be.PRES PROG run I

[22]There is the form *rinneadar*, but it is not used in all varieties

[23]He also needs the operation REDUCE (Sikuku et al., 2018), to which I return below.

[24](100-101) would be grammatical in elision contexts, e.g., in responses to yes/no questions, but I am referring to neutral contexts here.

Intended: 'I am running.'

(102) Tá mé ag rith.

The way Perry accounts for this, as shown in (95), is by saying that T in Irish has uninterpretable ϕ-features, which need to be checked by a subject in the appropriate configuration.

The problem is that this runs against what we find in a string of phenomena first discussed by McCloskey (1996), which we will see in Section 6.2.2, which show that there cannot be uninterpretable ϕ-features on T, because in a range of grammatical constructions they could not be checked. These phenomena form a parametric cluster, with the cross-linguistically unusual phenomena being more common in the south of Ireland, where NSs are also more widespread (because verbal paradigms are more complete), and more usual phenomena being found in the north of Ireland, where NSs are less common and verbal paradigms are less complete. Therefore, the phenomena appear to be directly related to the presence of NSs (this is also what McCloskey assumes). Looking at these phenomena in detail reveals, I will argue, a crucial defect in Perry's account.

6.2.1 A brief interlude into the EPP

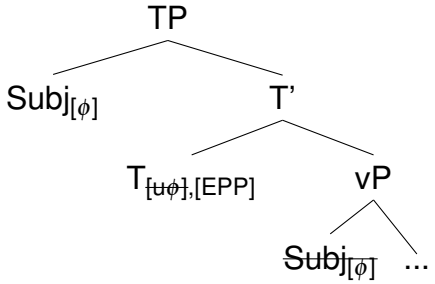
It is first necessary to take a brief interlude into the EPP, because this is what McCloskey (1996) uses to explain the difference between Irish and languages like English. The precise meaning of the EPP has changed since Chomsky (1982) first introduced it. In Chomsky (1982), it was the stipulation that all sentences must have subjects. Thus, a sentence like (103) is ungrammatical, because it lacks a grammatical subject. Instead, (104) is generated, with 'it' functioning as a dummy subject for 'is.'

(103) *Is raining.

(104) It is raining.

The problem pointed out by McCloskey (1996) is that Irish lacks expletives and has various other constructions, which I discuss below, in which the subject does not raise to TP . This led to the idea that the EPP only has to apply in certain languages (Chomsky, 1995). In these languages, T has an EPP-feature which requires a subject to be Merged into its specifier. In the process of agreement, the EPP-feature is checked, which moves the subject into the specifier of TP (see Biberauer, 2010).

(105)



This rules out sentences like (103) only in languages with this EPP-feature. Thus, in

languages like Italian, where in unaccusatives the subject does not need to raise into (Spec, TP) (as in (106a-b)), we can say that the EPP is not active.

(106) a. **È** arrivato Gianni.
AUX.3SG arrive.PSTPTCP.3MSG John
'John arrived.'
b. **Sono** arrivati Gianni e Maria.
AUX.3PL arrive.PSTPTCP.3MPL John and Mary
'John and Mary arrived.'

In (106a-b), the old EPP is violated because Gianni does not raise into the specifier of TP. In post-Chomsky (1995) terms, Italian T does not have an EPP-feature and there is no violation. However, notice the presence of agreement: With a singular subject (*Gianni*), we see the 3MSG verb form *è*, and with the plural subject (*Gianni e Maria*), we see the 3PL verb form *sono*.

The EPP McCloskey refers to is, then, split into two components: ϕ-features and an EPP-feature. ϕ-features cause subject-verb agreement and the EPP-feature forces the subject to move into (Spec, TP). There are thus four possible arrangements of these features on T: a language with both types of feature, a language with only ϕ-features, a language with only an EPP-feature, and a language with neither type of feature on T. A language with only an EPP-feature on T is ruled out on theoretical grounds, because it is assumed that EPP-related movement relies on Agree (Biberauer, 2010). A language with both kinds of features would be English, a language with only ϕ-features would be Italian (because, e.g., in (106a), *Gianni* does not raise above the verb) and I will argue here that Irish is an example of a language which lacks both features.

(107) *EPP and Agreement Typology (Proposed)*
a. English: $T_{[u\phi,\ EPP]}$
b. Italian: $T_{[u\phi]}$
c. Irish: $T_{[-\phi]}$

The crucial point, then, is that for McCloskey, the EPP is a stipulation about a syntactic position being filled, whereas for modern theories of the EPP, it is a feature which triggers when T Agrees with a subject, which causes the subject to move into (Spec, TP). Thus, many of the phenomena which McCloskey attributes to Irish lacking the EPP, I will attribute to Irish lacking Agree, because it is the first step of agreement with a subject which is lacking, rather than the second step of movement specifically to (Spec, TP).

Chomsky's (2000) Agree is formulated by Zeijlstra (2012) as in (108). For T to Agree, then, T must have [uϕ]-features. If T did not Agree, these features would be left unchecked and the derivation would crash[25].

(108) *Agree*: α can agree with β iff:
a. α carries at least one unvalued and uninterpretable feature and β carries a matching interpretable and valued feature.
b. α c-commands β.

[25] I return below to Preminger's (2014) Agree.

c. β is the closest goal to α.
d. β bears an unvalued uninterpretable feature[26].

To conclude this interlude into Agree and the EPP, I assume these to be separate operations: Agree is the operation that checks uninterpretable features under c-command and the EPP-feature simply forces the subject to move one step further into (Spec, TP).

6.2.2 McCloskey's (1996) subjectless constructions

In this subsection, I describe a range of phenomena in Irish where no subject raises to (Spec, TP), which McCloskey (1996) relates to Irish lacking the EPP; in the next subsection, I will discuss why these phenomena are a problem for agreement approaches under modern theories of Agree and the EPP. I will also argue in this section, following McCloskey, that these phenomena are part of the Irish NS parameter, with them being more or less common in different varieties.

McCloskey's first example of a subjectless construction in Irish are those involving optional 'expletives,' which we saw in more detail in Section 4.6. I repeat (72) as (109) for convenience. Recall that McCloskey argues that these are not in fact expletives[27]. In this case, there is no requirement for (Spec, TP) to host a subject and Irish appears to lack the EPP.

(109) Caithfidh (sé) go bhfuil sé breoite.
must.NONAGR (it) COMP is he ill
'It must be that he is ill.'

The second example McCloskey gives of Irish lacking the EPP is what he calls 'salient unaccusatives.' These are set expressions (i.e., they cannot be found with all verbs or with a predictable meaning) that use the analytic form without a subject pronoun followed by a PP as in the following examples (McCloskey, 1996: Appendix II gives a list of 47 examples across dialects, from which (110-11) are taken):

(110) Laghdaigh ar a neart.
decrease.PAST on his strength
'His strength decreased.'

(111) Rith leis.
run.PAST with.3MSG
'He did well.'

McCloskey uses a variety of tests to show that the subject position is empty in these examples and that the preposition is not just a kind of Case-marker. Therefore, these are another example of it being perfectly grammatical in Irish for (Spec, TP) to be left empty.

The third example is a range of constructions appearing in the 'perfective passive,' as McCloskey (1996) refers to it. This is a construction syntactically like a passive, in

[26] This is the Activation Condition we saw in Saito's (2007) analysis of RNSLs

[27] Even if McCloskey's reanalysis of these elements as a kind of resumptive pronouns is found not to work, the expletive is still optional, so it would still be the case that the subject position does not need to be filled.

that the object of a corresponding active clause would appear as the subject in these clauses, and that the subject of a corresponding active clause may appear optionally as a PP. (112-113) are McCloskey's (35a-b).

(112) Beidh an tráchtas críochnaithe agam amárach.
be.FUT the thesis finished at.1SG tomorrow
'I'll have the thesis finished tomorrow.' (Lit.: 'The thesis will be finished by me tomorrow.')

(113) Tá teach ceannaithe agam.
be.PRES house bought at.1SG
'I have bought a house.'

The difference between these constructions and the English passive is that they are more marked in Irish than in English and are used to highlight the perfective aspect, which is why McCloskey calls them the 'perfective passive.' What is crucial for our purposes is that perfective passives may appear with intransitive verbs which take optional internal arguments (114) and salient unaccusatives (115). (114-115) are McCloskey's (41a) and (42d).

(114) Agus sula raibh ite acu agus ólta acu...
and before be.PAST.NONAGR eaten to.3PL and drunk to.3PL
'And before they had eaten and drunk...'

(115) Bhí rite leis féin.
be.PAST.NONAGR run with himself
'He had done well.'

In (114-115), no subject raises to subject position and the constructions are, again, perfectly grammatical.

We have seen three examples where in grammatical constructions, no subject raises to (Spec, TP) in Irish, which McCloskey uses to argue that Irish lacks the EPP. The final point to make here is that depending on the variety of Irish, these phenomena are more or less common. According to McCloskey, optional expletives are less common in southern varieties, which also have more salient unaccusatives and subjectless constructions in the perfect passive are also more common. This is summarised in Table 18, where I also mention that in northern varieties there are less synthetic (NS) forms available. I will therefore say, along with McCloskey, that these phenomena are part of a parametric cluster, with the extent to which they are available depending on to what extent NSs are available.

Table 18: NS Properties of northern and southern varieties of Irish

	Northern varieties	Southern varieties
Synthetic forms available	less	more
Expletives	more	less
Number of salient unaccusatives	less	more
Availability of perfective passive	in less contexts	in more contexts

6.2.3 The problem for agreement approaches

(116-118) are the relevant parts of (109), (110) and (114):

(116) (X) caithfidh (Y) go...

(117) (X) raibh (Y) ite acu...

(118) (X) laghdaigh (Y) ar a neart

Since Irish is a VSO language, McCloskey argues that position (Y) is the subject position, found in the specifier of the category immediately below T. For simplicity, let us say that Y is (Spec, SubjP). (X) is the position of subjects in SVO languages – let us say (Spec, TP). The point is that X is always absent in Irish, because it is strictly VSO, but Y can optionally be filled.

McCloskey associates the optionality of whether Y is filled as being related to the absence of the EPP in Irish. However, as discussed above, the EPP in modern syntactic theories is actually the stipulation that subjects Agreeing with the verb raise to X. The EPP-feature, therefore, does not have any effect on whether Position Y does or does not have to be filled. Thus, the lack of an EPP-feature in Irish might work as an explanation for why Irish is VSO, but it does not work as an explanation for subjectless constructions in Irish.

The problem therefore remains as to why Position Y need not be filled, i.e., why T does not force an expletive to be formed in (116), low subjects to raise in (117) or for there to be subjects under passivisation (118). This, I claim, is related to the fact that T lacks uninterpretable ϕ-features and hence does not need to probe for a goal. Therefore, Irish instantiates option (107c) in our EPP and agreement typology.

Evidence that my analysis is on the right track comes from the fact that this is a parametric cluster (Table 18). Since southern varieties have more synthetic forms, in agreement approaches, it would be assumed that in southern varieties, the ϕ-features on T are stronger, as T Agrees more often with its subject. However, if this were the case, we would expect less 'subjectless' constructions and more expletives, as both of these properties are associated with agreement theoretically. Therefore, agreement approaches are met with an empirical difficulty in explaining this parametric cluster. I come back to my explanation in Section 8.5.

6.2.4 The problem with Perry (2025)

Now, returning to Perry (2025), the (implicit) argument in Perry is that what rules out (100-101) is that T has uninterpretable ϕ-features that need checking. The problem, as I have shown here, is a whole range of constructions in which T should be left with unchecked ϕ-features, but the construction is perfectly grammatical.

There is another approach to Agree, which may appear to resolve this problem – namely, that of Preminger (2014). In Chomsky's Agree, it is the valuing of features which is obligatory. In Preminger's Agree, on the other hand, it is the operation which is obligatory if the right conditions are met. Thus, in an example like (111), T would probe for ϕ-features in its domain, and Agree with these features if they are found, but if none are found, the derivation would not crash. We could say that in (111) P is a

barrier for Agree, so T does not find any ϕ-features in its domain, but the construction is grammatical using Preminger's Agree.

There are two issues I have with applying Preminger's approach to Irish agreement. First, consider (119):

(119) Bheadh ag rith liom.
be.COND PROG run.VN with.1SG
'I would do well.'

Bheadh has a possible synthetic form which could appear here (*bheinn*) if T Agreed with the (null) first-person singular pronoun. Prog may of course also Agree with the null first-person singular pronoun. In a theory like Preminger's, we might say that this Agree operation cannot happen because the preposition is in some sense a barrier to agreement (as described in the previous paragraph). However, the issue here is that Perry argues that P *is* Agreeing with that pronoun (97). Therefore, I see no reason why T and Prog should not Agree with the first-singular pronoun, yielding the ungrammatical[28]:

(120) *Bheinn do mo rith liom.
be.COND.1SG PROG.1SG run.VN with.1SG
Intended: 'I would do well.'

The second problem I see with trying to apply Preminger's Agree to Irish is the existence of optional raising, as in (121)

(121) a. Do ráinís an uair sin a bheith i gContae an Chláir
PAST chance.PAST.2SG the time that to be.VN in County the.GEN Clare.GEN
'You happened at that time to be in County Clare.'

b. ráingig an uair seo í a bheith i gContae an Chláir
chance.PAST the time this her to be.VN in County the.GEN Clare.GEN
'She happened at one time to be in County Clare.' (McCloskey, 2001, (16a-b))

Recall that Preminger argues that while feature valuation is optional, the operation Agree is. If we assume (as is commonly assumed) that raising is a side effect of Agree, it should not be optional according to Preminger, since the environment is the same in these two examples, so Agree should apply in both or neither of the cases[29].

One final problem for Perry, assuming Roberts' (2019) NSL typology, is that he must assume (although he does not explicitly discuss this) that T in Irish has D-features because NSs are definite without a special marker. This is a problem because it means that Irish must be a CNSL according to Perry, but it does not have the consistent verbal paradigms and other features usually associated with CNSLs.

So, to conclude, the problem for Perry is how to account for the obligatory raising

[28](120) would be also be ungrammatical if there was agreement on only T or Prog. Thus, it is not a problem specific to either T or Prog. The probes on T and Prog can never Agree with the first-person singular pronoun.

[29]McCloskey (2001) does not discuss in detail the conditions under which this raising does/does not occur.

of the subject. If he uses Chomsky's Agree, there are many cases in Irish of functional heads being left in their non-agreeing forms, so it is difficult to see how this approach could be made to work. Using Preminger's theory, there are similar problems, including mainly contexts where we would expect agreement, but we see none. In these cases, agreement is supposed to be obligatory in Preminger's theory, but we find empirically that it is not.

6.2.5 Other arguments against agreement approaches

The argument just presented against agreement approaches has not, as far as I am aware, been made previously in the literature on this subject (see Doron, 1988 and Brennan, 2009, in particular). I will now briefly survey some of the arguments that have been made previously.

The first argument comes from Irish emphatic clitics. Recall from above (56-57), repeated here as (122-123), that the emphatic particle *sa*/*se* may attach to any pronominal element, overt or null, but not to anything else, including full DP arguments.

(122) Chuirfinn-**se** an leabhar ar an mbord.
put.COND.1SG-EMPH the book on the table
'*I* would put the book on the table.'

(123) Bhí mi-**se** ag dul siar, ach bhí tusa ag dul
be.PAST I-EMPH PROG go.VN westwards, but be.PAST you.EMPH PROG go.VN
soir.
eastwards
'*I* was going west, but *you* were going east.'

Under McCloskey & Hale's (1984) analysis, the emphatic clitic combines with *pro* in (122):

(124) chuirfinn *pro*-se

The problem is that *pro* in Irish works differently to *pro* in other NSLs because *pro* cannot take emphatic stress in other NSLs (Brennan, 2009; Camacho, 2013). For instance, (125) is ungrammatical in Spanish (a CNSL) without an overt pronoun.

(125) *(*Yo*) hablo.
I speak.PRES.1SG
'*I* speak'

The second way that it makes Irish *pro* work differently to *pro* in other languages is that, as pointed out by Brennan (2009), *pro* cannot usually take nominal affixes:

(126) Watashi-ha John-ga suki da.
1SG-TOP John-NOM like COP
'I like John.' (Brennan, 2009, (18a))

(127) *pro* John-ga suki da.
John-NOM like COP
(Ibid., (18b))

(128) **pro* -ha John-ga suki da.
TOP John-NOM like COP

(Ibid., (18c))

The properties of *pro* that McCloskey & Hale (1984) suggest are, then, strange crosslinguistically.

These properties are easy to explain from the point of view of an incorporation approach, however. In these approaches, the pronoun is syntactically exactly like an overt one (Doron, 1988). Therefore, it can receive emphatic stress (given it has the required emphatic clitic – without this clitic, pronouns cannot be stressed, presumably because they are clitics, as I discuss in Section 7.2 below) and it can take nominal affixes.

A further problem, as pointed out by Doron (1988), is raised by the following examples (her (29a-b)), in which the (b) examples are responses to the (a) examples.

(129) a. Ní dhéanfainn a leithéid.
NEG do.COND.1SG its like
'I wouldn't do such a thing.'
b. DhéanFÁ!
do.COND.2SG
'You WOULD!' ('You certainly would!')

(130) a. An dtabharfaidh siad an phost dó?
Q give.FUT they the job to.3MSG
'Will they give him the job?'
b. Caitfidh SIAD!
must they
'They HAVE to!'

In these cases, what is stressed phonologically is either the ending (*fá*[30]) or the pronoun (*siad*). However, the meaning is as if the verb were stressed semantically ('they HAVE to'). To stress the pronoun semantically, it is necessary to use the emphatic clitics (122-123). The important point for our purposes is that, again, a null pronoun works in exactly the same way as an overt pronoun in (129-130). The overt pronoun does not act as its own overt pronoun, but instead as part of a verbal complex alongside the finite verb, suggesting the same structure for both overt pronouns and null pronouns, which again suggests that the key operation yielding null pronouns is morphological rather than syntactic in nature.

6.3 Previous incorporation accounts

What incorporation accounts have in common is that NSs come about through pronominal incorporation, rather than agreement. For instance, Doron (1988) proposes that (131a)

[30] In Irish, the conditional is made up of the past in the form of a consonant initial mutation (turning the initial <d> into <dh> orthographically) and the future in the form of the <f> in *dhéan**f**á* or *dhéan**f**ainn*. (See Acquaviva, 2014, for a full analysis of the decomposition of Irish tense morphemes.) The part after the <f> marks person-number agreement. In other words, the part which is stressed phonologically (*fá*) contains information about both conditional mood and person-number features.

and (132a) have the same structure, as indicated in (131b) and (132b), but in (132a), there happens to be a synthetic form available to replace the string *chuirfeadh mé*.

(131) a. Chuirfeadh sé isteach ar an phost sin.
put.COND he in on the job that
'He would apply for that job.'
b. [$_V$ chuirfeadh] [$_{NP}$ sé] isteach ar an phost sin (Doron, 1988, (27a-b))

(132) a. Chuirfinn isteach ar an phost sin.
put.COND.1SG in on the job that
'I would apply for that job.'
b. [$_V$ chuirfeadh] [$_{NP}$ mé] isteach ar an phost sin (Ibid., (28a-b))

Doron (1988) argues that her approach is superior to McCloskey & Hale's (1984) approach because it accounts better for, first, the complementarity of agreement and overt elements. If the pronoun simply *is* the inflection, that explains why a pronoun cannot appear alongside a synthetic form. Second, Doron argues she can better account for Left Conjunct Agreement (LCA) in Irish (133) (her (34)).

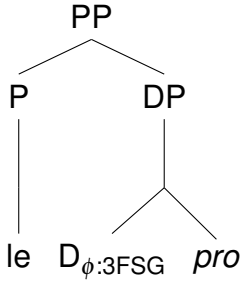
(133) dá mbeinn-se agus tu-sa ann
if be.COND.1SG-EMPH and you-EMPH there
'if I and you were there'

In (133), the subject is 'I and you' although the agreement is only with the leftmost element in the conjunct. This suggests the agreement is morphological because the locality condition is adjacency rather than constituency (which would include both members of the conjunct)[31].

While Doron first proposed this analysis of Irish, she did not enter into much detail of the structures involved. This task was taken up by Brennan (2009), who has the following structure for a preposition with a pronominal argument:

(134) *Derivation for a preposition with a pronominal complement (adapted from Brennan, 2009:15)*

léithi ('with her')



i. AGREE: [le$_{[u\phi]}$ [ϕ:3FSG]]
ii. MERGE: [ϕ:3FSG] [le$_{[u\phi:3FSG]}$ [ϕ:3FSG]]
iii. M-MERGER: [le$_{[u\phi:3FSG]}$ ϕ:3FSG [ϕ:3FSG]]

[31] McCloskey (1986) argues that the conditions for government by AGR should be redefined for Irish. This introduces unnecessary complications into the theory when the data can easily be explained by a morphological approach. See Marušič et al. (2015) for a similar PF approach to LCA.

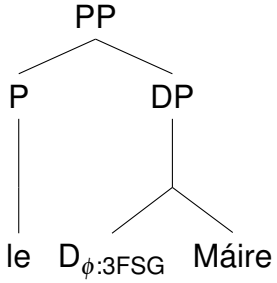
iv. SPELL-OUT léithi ø

In step (i), the preposition Agrees with D, valuing its features as 3FSG. In step (ii), the 3FSG pronoun is Merged above the preposition (Brennan does not explain why this occurs). M-merger (Matushansky, 2006) incorporates two linearly adjacent nodes at PF. In step (iii), M-merger incorporates the moved pronoun and the preposition into the same head, which at PF is spelled out as an inflected preposition.

Now, consider (135):

(135) *Derivation for a preposition with a full DP complement (adapted from Brennan, 2009:16)*

le Máire ('with Mary')



i. MERGE proper name and ϕ-features: [[ϕ:3FSG] [Máire]]
ii. MERGE P: [le [[ϕ:3FSG] [Máire]]]
iii. SPELL-OUT of DP: [le *Máire]*
iv. SPELL-OUT of P *le Máire*

When a preposition has a full DP complement, Brennan claims that the preposition and D do not Agree. This is, according to Brennan, because '[full DPs] contrast with pronominals simply by being licit *in situ*' (16). What this means is that the 3FSG ϕ-features never move to the position from which M-merger can apply and the preposition is spelled out in its non-agreeing form. He argues that this is part of a larger set of phenomena in Irish in which the movement of pronouns is goal-driven, i.e., driven by the requirements of the pronouns rather than the requirements of the probe. An example of this (which Brennan does not give) is subject postposing in Irish (Duffield, 1995), in which full DPs in Irish (but not pronouns) may stay low and not raise to subject position.

(136) a. Tagann chugam isteach an **sagart paróiste**.
comes to.1SG in the priest parish.GEN
'The parish priest comes in towards me.' (Duffield's, 1995, (115a))
b. Ghluais chugam aníos trasna an ghleanna **ceol píbe**.
came to.1SG up across the glen music pipes.GEN
'Pipe music came to me across the valley.' (Ibid., (115b))

In (136a-b), we might say that movement is not forced because full DPs in Irish do not need to incorporate into another head in order to be morphophonologically licit.

While the proposal I develop below will be in many ways similar to that of Brennan, there are a few issues with Brennan's analyses. First, it is unclear which part of the

theory which forces Irish to be goal-driven and for agreement to not occur with full DPs. To exacerbate this problem, Brennan sees pronouns as full DPs as well, but just with a different internal structure (compare (134-135)). A potential reason full DPs would not Agree is if DP was a barrier for Agreement in some way; this does not work if Brennan assumes both full DPs and pronouns to be DPs. (I also argue below that Irish pronouns are D-heads and not DPs.) Thirdly, Brennan uses *pro*, which is ruled out on theoretical grounds in Holmberg (2005), as I describe above in Section 3.2.

The final argument I will make against Brennan (2009) is that he uses Agree. The problem is that since Roberts (2010) (which, of course, postdates Brennan, 2009), the difference between incorporation and agreement approaches has not been as obvious. This is because, under Roberts (2010), DGI comes about through Agree between a probe and a goal containing a subset of the features of the probe. In effect, then, Perry's (2025) theory is Incorporation-through-Agree, so a combination of both theories. The crucial difference between incorporation and agreement approaches is therefore the lack of Agree. Perry offers the most succinct account currently available using the operation Agree, which also has some of the advantages of an incorporation approach. Therefore, it is hard to see the advantage of Brennan's theory, given it still relies on Agree, like Perry's. The theory I develop below will therefore avoid the operation Agree for Irish person-number agreement, which will instead arise purely from postsyntactic operations.

6.4 Summary

In this section, I have first described agreement approaches to Irish person-number agreement. I have shown that the most recent agreement approach, Perry (2025), accounts for the data while avoiding *pro* and without stipulating complementarity. This approach is superior to currently available incorporation accounts, which either do not present not full analyses, or involve extra operations and inconvenient theoretical commitments (e.g., *pro* and Agree).

The problem which remains, however, for Perry is the lack of necessity for T in Irish to Agree. This suggests that Irish lacks Agree entirely. Instead, it appears that the movement of pronouns in Irish is goal-driven, rather than probe-driven, as an agreement account would suggest. In terms of Roberts' (2019) framework, we are left with (137), which I repeat from (90) above.

(137) **Irish**: $T_{[-\phi]}$ ... $pro_{[?]}$

In line with (137), I will side below with incorporation accounts, while offering my own analysis. The desiderata for this analysis are that: (1) it accounts for complementarity without stipulation; (2) it is goal-driven in the sense that inflection in Irish appears to be driven more by the requirement of pronouns to cliticise onto something for morphophonoloigcal reasons than by the requirements of a functional head to Agree; (3) it allows Irish to be classified as a kind of NSL in Roberts' (2019) framework, which Perry does not succeed at because he would have to assume Irish is a CNSL, with both D- and ϕ-features on T, because Irish NSs are definite, but this cannot work because Irish verbal paradigms are patchy in the way CNSL paradigms usually are not.

7 Irish pronouns

Roberts' (2019) typology of NSLs derives the different kinds of NSL from the properties of both T and the pronouns of the language (which Roberts abbreviates as '*pro*'). So far, I have discussed the properties of T in Irish. In this section, I will turn my attention to Irish pronouns. In Section 7.1, I will argue that, unlike in RNSLs, they have ϕ-features. In Section 7.2, I will argue (following Brennan, 2009) first that they are clitics and second that Irish inflection shows the same pattern with respect to these clitic-like properties (again, following Brennan, 2009), which indicates that what I have argued in Section 6 about Irish inflection being an incorporated pronoun is on the right track.

7.1 Do Irish pronouns have ϕ-features?

Irish has a full pronominal paradigm varying for the features person, number and gender, so it may seem to be evidently the case that Irish pronouns have ϕ-features.

Table 19: Irish subject pronouns

	singular	plural
1st	mé	muid/sinn
2nd	tú	sibh
3rd masc	sé	siad
3rd fem	sí	

However, this does not necessarily mean that Irish pronouns have ϕ-features, as many RNSLs have a similar property of being able to refer to different people with pronoun-like elements, but some hypothesise they do not have true pronouns with ϕ-features (Kuroda, 1966; Roberts, 2019).

In Japanese, for instance, there are pronouns referring to different persons. However, this is an open class, with Kuroda (1966) listing seven first-person pronouns (*watakusi*, *watasi*, *ore*, *temae*, *boku*, *sessya*, *zibun*) and four second-person pronouns (*anata*, *kimi*, *omae*, *temae*). (The difference between them is usually related to pragmatic or sociolinguistic factors.) Kuroda argues that this is an indicator that Japanese 'pronouns' are really open-class lexical nouns.

Another argument Kuroda gives that Japanese pronouns are really lexical nouns is that they can be modified, unlike in English:

(138) a. the short man
b. ciisai hito
short man
'(the) short man'

(139) a. *short he
b. ciisai kare
short he
'(the) short he'

Finally, Kuroda shows that Japanese pronouns are not 'repeatable' in the following sense. In English, the usual way to say (140) is (141).

(140) George does George's work when George feels like doing George's work.

(141) He does his work when he feels like doing it.

However, in Japanese, it is not normal to say either of the equivalents to (140-141):

(142) George-wa George-ga George-no sigoto-o sitaitokini George-no
George-TOP George-NOM George-GEN work-ACC do.want.time George-GEN
sigoto-o suru.
work-ACC do
'George does George's work when George feels like doing George's work.'

(143) kare-wa kare-ga kare-no sigoto-o sitaitokini kare-no sigoto-o suru.
he-TOP he-NOM he-GEN work-ACC do.want.time he-GEN work-ACC do
'He does his work when he feels like doing it.'

Kuroda concludes that Japanese pronouns are more like lexical nouns than pronouns. Saito (2007) and Roberts (2019) use this in their theory of RNSLs (described in Section 3.3), in which Japanese pronouns do not receive Case through Agree, as occurs in other types of NSLs. The important part for us is that it is not evident that Irish pronouns have ϕ-features.

However, Irish pronouns clearly do not fit into the category of Japanese pronouns. They may not be modified:

(144) *mé beag
I little
Intended: 'little me'

Irish pronouns are also not open-class elements[32] and they are 'repeatable,' unlike in Japanese:

(145) Déanann sé a chuid oibre nuair a-tá fonn air í a
do.PRES he his CLF work.GEN when COMP-be.PRES desire on.3MSG 3FSG to
dhéanamh.
do.VN
'He does his work when he feels like doing it.'

I conclude that Irish pronouns have ϕ-features, so our updated schema for Irish is as follows:

(146) **Irish**: $T_{[-\phi]}$ ... $pro_{[\phi]}$

7.2 Are Irish pronouns clitics?

In this subsection, I will argue: (1) that Irish pronouns are clitics according to Cardinaletti & Starke's (1999) criteria (they are deficient and syntactically heads); (2) that overt pronouns have the same distribution and properties as person-number inflection in

[32]Table 19 might suggest that there are multiple forms for the 1PL pronoun, but *muid* and *sinn* are dialectal variants, rather than two distinct lexical items within one dialect.

Irish, so they should be treated the same syntactically. I will mainly follow Brennan (2009), with some additions.

First, Irish pronouns and inflection are clearly phonologically deficient. They cannot be stressed:

(147) a. *Tá MÉ ag labhairt.
be.PRES I PROG speak.VN now
'*I* am speaking.'
b. *Tá-IM ag labhairt.
be.PRES-1SG PROG labhairt.VN
'*I* am speaking.'

They also cannot appear on their own (example from O'Siadhail, 1980, as cited by Doron, 1988:212):

(148) a. Cé a-tá ansin?
who COMP-be.PRES there
'Who is there?'
b. *Mé/ mi-se.
I/ I-EMPH
'Me.'

The (b) example is in response to the (a) example. It is ungrammatical to respond simply with a pronoun, so instead the emphatic clitic must be added to create *mi-se*. In fact, nominative pronouns may not be separated from their finite verbs almost at all, as Roberts (2019: Ch5, fn53) points out, citing Jim McCloskey (personal communication): 'certain adverbs, such as *leoga* ('indeed'), can intervene between the finite verb and the subject, but "There is a very strong and clear prosodic off-set in these cases".' In sum, both Irish clitics and Irish inflection cannot be phonologically stressed (without an emphatic clitic) and can almost never appear separated from the finite verb. This indicates that morphophonologically Irish pronouns and inflection are deficient and have clitic-like properties.

Syntactically, they are also deficient, in that they cannot be coordinated without the emphatic clitic:

(149) a. Táim-se /tá mi-se agus tu-sa go maith.
be.PRES.1SG-EMPH /be.PRES I-EMPH and you-EMPH well
'I and you are well.'
b. *Táim/tá mé agus tu-sa go maith.

Full DPs do not have this property (in fact, the emphatic clitic cannot attach to full DPs in any case):

(150) Tá mo mháthair agus mo dheirfiúr go maith.
be.PRES my mother and my sister well
'My mother and my sister are well.'

This is evidence that Irish pronouns and inflection are syntactically deficient because they cannot be coordinated, unlike full DPs.

Finally, semantically, both pronouns and inflection may or may not be referential and may or may not refer to animate things (examples adapted from Brennan, 2009:12, who cites Doyle, 2002[33]).

(151) Dúradar/ dúirt siad go bhfuil sé fíor.
say.PAST.3PL/ say.PAST they COMP be.PRES it true
'They (referential/non-referential) say it is true.'

(152) Bhíodar/ bhí siad go deas.
be.PAST.3PL/ be.PAST they nice
'They (people/books) were nice.'

In sum, Irish pronouns are clearly deficient, following Cardinaletti & Starke's criteria. Given their inability to appear alone and theoretical reasons to be explained below, I wil assume they are heads and therefore clitics rather than weak pronouns. Inflected forms in Irish have exactly the same distribution, so I will assume them to contain a cliticised pronoun. Since they bring about definite NSs, they must have D-features. I will follow Roberts (2010) (who himself follows Muyksen, 1982, in assuming clitics to be simultaneously heads and maximal projections (X/XP), meaning that they can move as either Xs or XPs) in assuming that cliticisation involves head movement. Combining these facts, we can see Irish clitic pronouns as D-heads. We are left with the following abstract schema for Irish in the style of Roberts (2019):

(153) **Irish**: $T_{[-\phi]}$ ... $pro_{[D,\ \phi]}$

8 Placing Irish within Roberts' NSL typology

We are now in a position to look at my analysis of Irish person-number agreement. Recall from Section 4.3 that there are four cases of person-number agreement in Irish. These are inflecting prepositions (154), subject-verb agreement (155), possessive marking (156) and object marking found on Prog (157) (these data are from Perry, 2025:1-2).

(154) a. Níl aon leithscéal ac-**u**.
NEG.COP any excuse at.3PL
'They have no excuse.'
b. Níl aon leithscéal ag na páistí.
NEG.COP any excuse at the.PL children.PL
'The children have no excuse.'
c. *Níl aon leithscéal acu na páistí.

[33]Interestingly, the meaning of (151-152) is forced to be referential and referring to animate things respectively if the emphatic clitic is used. This, along with the coordination data (149a-b), suggests that the emphatic clitic makes clitics into strong pronouns. I will not attempt an explanation of how part of the full pronoun is able to incorporate into the finite verb in (149a), leaving the emphatic clitic behind, in this thesis

(155) a. Dhéan-**faidís** é.
do-**COND.3PL** 3MSG
'They would do it.'
b. Dhéan-**fadh** na páistí é.
do-**COND** the.PL children.PL 3MSG
c. *Dhéanfaidís na páistí é.

(156) a. **a** gcara
3PL.POSS friend
'their friend'
b. _ cara na bpáistí
_ friend the.PL.GEN children.PL.GEN
'The children's friend.'
c. *a gcara na bpáistí.

(157) a. Tá mé **á** moladh.
be.PRES I **PROG.3PL** praise.VN
'I am praising them.'
b. Tá mé ag moladh na bpáistí.
be.PRES I PROG praise.VN the.PL.GEN children.PL.GEN
'I am praising the children.'
c. *Tá mé á moladh na bpáistí.

I will show below that each of these cases of agreement does not involve Agree.

Recall as well that the overall question of my thesis is where Irish fits into Roberts' (2019) typology of NSLs (repeated from (30-33)):

(158) **CNSL**: $T_{[D,\ \phi]}$ ... $pro_{[D,\ \phi]}$

(159) **PNSL**: $T_{[\phi]}$ ... $pro_{[\phi]}$

(160) **NNSL**: $T_{[\phi]}$ ... $pro_{[D,\ \phi]}$

(161) **RNSL**: $T_{[-\phi]}$ ... $pro_{[-\phi]}$

I will argue that Irish can be analysed using the following abstract schema:

(162) **Irish**: $T_{[D]}$ ... $pro_{[D,\ \phi]}$

The same holds for agreement with Prog, D and P:

(163) **Irish**: $Prog_{[D]}$ ... $pro_{[D,\ \phi]}$

(164) **Irish**: $D_{[D]}$ ... $pro_{[D,\ \phi]}$

(165) **Irish**: $P_{[D]}$ ... $pro_{[D,\ \phi]}$

What this means is that the functional heads on which the agreement is found (T, Prog, D and P) do not have uninterpretable ϕ-features which probe for a goal. Instead, they have only D-features, which will interact differently with pronouns (which I assume to

be D-heads on the basis of the data presented in Section 7) and full DPs. These interactions are what yield complementarity of agreement.

I will start by discussing possessive DPs (Section 8.1) and the progressive construction (Section 8.2), as these are the simplest cases. I will then look at prepositions (Section 8.3). Finally, I will discuss subject-verb agreement (Section 8.4), which I treat last because it involves an extra operation, M-merger (Matushansky, 2006).

8.1 Possessive DPs

Recall that according to McCloskey & Hale (1984), possessive DPs involve null arguments when the possessor is pronominal. This is because full DP possessors stay below the possessed noun (166), whereas pronominal possessors are found above them (167).

(166) teach an tsaighdiúra
house the.GEN soldier.GEN
'the soldier's house'

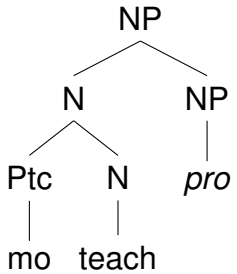
(167) mo theach
my house

According to McCloskey & Hale, the possessor is in fact in the same position in both (166-167). The simplest piece of evidence for this is that the emphatic particles mentioned above, which attach only to pronouns (overt or null), appear exactly where full DPs appear, and not where the agreement clitic appears[34]:

(168) mo theach *pro*-sa
my house *pro*-EMPH
'MY house (not somebody else's)'

They suggest the analysis in (169), in which there is an agreeing head above the lexical noun, which agrees with *pro* but not with full DPs. *mo* in (168) is then reanalysed as a kind of agreement clitic and possessive DPs are another instance of complementarity of agreement in Irish.

(169)



Evidence for an agreement account of this kind is that the emphatic clitic will come after any adjectives (which are postnominal in Irish):

(170) ár dteach beag compórdach-na
our house little comfortable-EMPH.1PL

[34] See McCloskey & Hale (1984:511-3) for further evidence.

'out little comfortable house'

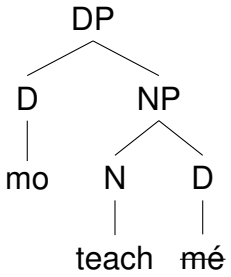
Legate (1999) and McCloskey (2011) reason that this is a problem for incorporation approaches, because the pronoun can be arbitrarily far from its identifying morphology, which suggests that assigning this movement to the postsyntactic component would result in rules too complex to be plausible.

A problem for agreement accounts (pre-Perry, 2025), on the other hand, is that they have to stipulate the complementarity between overt DPs and what they see as agreement clitics (171), using the surface filter discussed in Section 6.1.

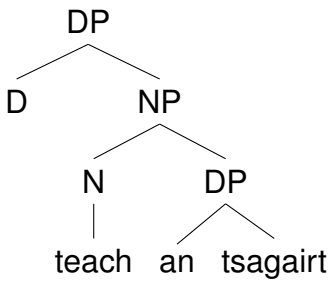
(171) *a theach an tsaighdiúra
his house the.GEN soldier.GEN
Intended: 'the soldier's house'

A labelling approach solves all these issues: the complementarity, the lack of agreement with full DPs, the prenominal placement of pronominal possessors and postnominal placement of full DP possessors. (172a-b) are rough trees of the structures involved.

(172) a.



b.



In (172a), we have the following structure before the pronoun moves above the noun:

(173) [N, D]

I assume that Irish pronouns do not share features with nouns, and that there is a head above nouns (D), which contains D-features. Because N and D do not share features in (172a), one of the heads must move to allow a label to be found; if the pronoun raises above the noun, it can share D-features with D and the Labelling Algorithm (LA) can successfully label the structure. (I agree with McCloskey & Hale, 1984, that the rule turning *mé* ('I') into *mo* ('my') is postsyntactic.) However, the problem does not arise in (172b), as here we have the structure in (174), where the features on N are closer, so they are found first by the LA.

(174) [N, DP]

This accounts for the complementarity effect, which is taken to come from whether the possessor moves. It accounts for the arbitrary distance of the movement (170) because adjectives would not have the necessary D-features, so the pronoun would have to keep raising past them. It also accounts for the different placement of pronouns and full DPs, because pronouns only move as a last-resort option for labelling.

8.2 Object agreement

I will propose a similar analysis of object agreement in the progressive construction (data repeated from (157)):

(175) a. Tá mé **á** moladh.
be.PRES I **PROG.3PL** praise.VN
'I am praising them.'

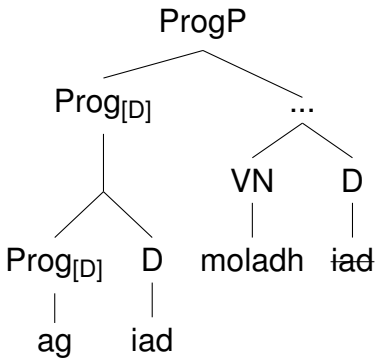
b. Tá mé ag moladh na bpáistí.
be.PRES I PROG praise.VN the.PL.GEN children.PL.GEN
'I am praising the children.'

c. *Tá mé á moladh na bpáistí.

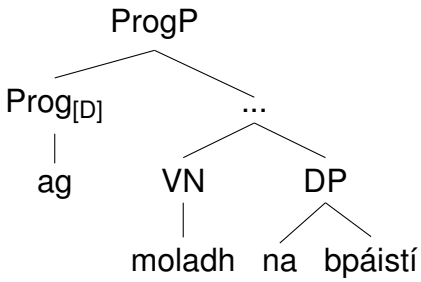
The data are clearly very similar: Pronominal arguments appear before the verbal noun as a kind of agreement on Prog, whereas full DPs appear below the verbal noun with genitive marking and Prog is in its non-agreeing form. Hence, it is rational to look for a similar analysis.

I propose the following analysis:

(176) a.



b.



The analysis is essentially the same as that of the possessives: The [VN, D] structure is unlabellable, so the pronoun must raise. I must assume, then, that the VN is a simple nominal head at the relevant stage in the derivation, without D-features. I assume that

á in (175a) is the result of incorporation into Prog.

I assume that Prog is a head with D-features, for which I believe there is some independent evidence. First, Prog acts as a kind of determiner for the verbal noun, along with other elements. Verbal nouns always appear with some kind of element before them:

(177) Tá mé **ar** theacht.
be.PRES I on come.VN
'I am about to come.'

(178) Inniu **mo** theacht.
today my come.VN
'I am cominng today.'

(179) Rinne mé é sin chun é **a** fheiceáil.
do.PAST I 3MSG that in.order him to see.VN
'I did that in order to see him.'

We could take these elements as being determiners for the verbal noun (i.e., elements which are part of the D-system associated with the verbal noun, and which are required to license it).

Another feature of Prog is that its paradigm is essentially the possessive agreement paradigm with the preposition *do* ('to') attached (apart from for third-person forms). Compare the agreement paradigm for Prog (Table 20) and that for possessives (Table 21).

Table 20: Irish paradigm for the possessive agreement clitic

	singular	plural
1st	mo	ár
2nd	do	bhur
3rd	a	a

Table 21: Irish paradigm for object agreement on Prog

	singular	plural
1st	do mo	dár
2nd	do do	do bhur
3rd	á	á

We could see the presence of *do* as a form of dative case-marking, which arises from the D- (here, Case-) features on Prog (note as well that it is unclear from an agreement perspective why *do* should appear).

We can see that, schematically, agreement in possessive DPs and object agreement work in the same way in Irish, involving the LA. The key feature is that instead of Agree occurring through Prog and D having uninterpretable ϕ-features, we have labelling motivated by pronouns, which I assume to be D-heads, freezing when they find a place where they can share features with the head they have been Merged into (cf. Rizzi, 2007; Chomsky, 2015).

8.3 Prepositions

There are two types of preposition in Irish: inflecting (180) and non-inflecting (181).

(180) leis
with.3MSG
'with him'

(181) seachas é
besides him
'besides him'

As described above in Section 4.3, inflecting prepositions also show complementarity between overt forms and inflection:

(182) *leis é /mo dhearthair
with.3MSG him /my brother
'with him/my brother'

(183) *le
with
Intended: 'with him'

Acquaviva (2003) argues that the difference between these types of preposition is simply that inflecting prepositions have an [AGR] feature. I will instead argue that the difference between the two types of preposition has not to do with Agree, but instead the presence/absence of D-features. I will follow Stewart & Joseph (2009) and Hutchinson (2025), who argue for Scottish Gaelic (SG) that inflected prepositions like (180) in Irish are actually case-marked pronouns. Irish is then like, for instance, Finnish in having a wide array of cases which carry out semantic, as well as syntactic, functions (Karlsson, 2018). The prepositions that carry out Case-related roles will be said to have a D-feature, unlike the non-inflected prepositions, which will be said to lack this D-feature. How this ensures that inflected prepositions inflect and non-inflecting prepositions do not inflect will be shown below.

8.3.1 Inflected prepositions as case-marked pronouns

In this subsection, I will discuss two papers. Both discuss SG, but their results are transferrable to Irish. I will first discuss Stewart & Joseph (2009), who show that SG inflected prepositions are morphologically more like case-marked pronouns. Then, I will discuss Hutchinson (2025), who gives some syntactic reasons why we should take inflected prepositions to be case-marked pronouns.

First, consider tables 22 and 23[35]. (Stewart & Joseph's, 2009, Table 1 shows the same point for SG.)

Table 22: Irish prepositional paradigm for *roimh* 'before'

[35]The pronunciations provided in the tables in this section are from the Irish of Erris, County Mayo (Mhac an Fhailigh, 1968:201-2). The same point could be made for any variety of Irish. The apostrophes represent palatalisation.

	singular	pronunciation	plural	pronunciation
1st	romh-**am**	[roːm]	romh-**ainn**	[roːɴ']
2nd	romh-**at**	[rõːt]	romh-**aibh**	[rõːv']
3rd masc	roimh-**e**	[rĩ̃v'ə]	rom-**pa**	[rumpuː]
3rd fem	roim-**pe**	[rimp'iː]		

Table 23: Irish prepositional paradigm for *ag* 'at'

	singular	pronunciation	plural	pronunciation
1st	ag-**am**	[agəm]	ag-**ainn**	[agiɴ']
2nd	ag-**at**	[agəd]	ag-**aibh**	[agiː]
3rd masc	aig-**e**	[eg'ə]	ac-**u**	[akuː]
3rd fem	aic-**e**	[ek'iː]		

Compare this to a table of Irish object pronouns, which would be expected to be found next to these forms:

Table 24: Irish object pronouns

	singular	pronunciation	plural	pronunciation
1st	mé	[m'eː]	muid/sinn	[mid']/[ʃiɴ']
2nd	tú	[tuː]	sibh	[ʃiv']
3rd masc	é	[eː]	iad	[ied]
3rd fem	í	[iː]		

Some of the forms are what one might expect through regular phonetic erosion; thus, *aic-i* (pronounced [ecə]), is similar to what one might expect from *ag* + *í*. However, others are clearly not. For instance, the 3PL forms for each preposition have no phonetic relationship with *iad*, there is no clear phonetic justification for the deletion of [ʃ] in the 2PL forms and forms can look very different for different prepositions for the same person-number combination (compare [akuː] and [l'ofə]). Stewart & Joseph (2009) conclude that Irish inflected prepositions must be organised into paradigms of some form (as in tables 22 and 23), because the forms are not predictable.

The question that Stewart & Joseph (2009) ask is how the paradigms should be arranged. They argue that, for morphological reasons which I will describe momentarily, the paradigms should be in effect 'rotated' so that they are organised 'by pronoun' (as in Table 25) rather than 'by preposition' as they are in tables 22 and 23. In arguing for a by-pronoun analysis, they see what appear to be inflected prepositions as in fact case-marked pronouns.

Table 25: By-pronoun analysis of Irish inflected prepositions

translation as preposition	3MSG form	case label
default	*sé*	Nominative
default	*é*	Accusative
'of'	*a*	Genitive
'at'	*aige*	Locative
'on'	*air*	Suressive
'in'	*ann*	Inessive
'to'	*dó*	Dative
'toward'	*chuige*	Adessive
'with, by'	*leis*	Agentive/Instrumental
'from'	*uaidh*	Ablative
'about'	*uime*	Thematic
'before'	*roimhe*	Antecedent
'under'	*faoi*	Subessive

(Stewart & Joseph of course look only at SG prepositions, but the same can apply to Irish. Table 25 is not exhaustive, but serves to make Stewart & Joseph's point[36]. Stewart & Joseph cite Beard, 1995, for some of the more obscure case labels.)

The evidence presented by Stewart & Joseph (2009) for the by-pronoun organisation in Table 25 is mainly based on segmentation. The problems are also visible in the Irish paradigms (tables 22 and 23). For instance, if we segment *roimpe* as segmented in Table 22, we have a 3FSG morpheme of //-pe// that is not found in *aice*. If we segment it as //roimp + e//, the preposition is //roimp//, which is not found anywhere else in the paradigm. There is a similar issue with //aig//, //ac// and //aic// that appear in the paradigm for *ag* and the ambiguity between //-pa// and //-u// for the 3PL morpheme. This would be a problem for many theories of morphology, in particular Distributed Morphology (Halle & Marantz, 1993), in which we would expect each morpheme to correspond to a functional head. To summarise, there are problems with the segmentation of inflected prepositions which occur when we organise them by preposition as in tables 22 and 23 because we would need to stipulate rules to generate the correct forms.

However, Stewart & Joseph argue that these problems do not occur when we organise them by pronoun. They do not discuss explicitly why a case-marking analysis is better, but they presumably are referring to the fact that in languages like German and English, which mark case on pronouns, no clear segmentation is available:

Table 26: Case-marking on 3MSG pronouns in German and English

Case	German	English
Nominative	er	he
Accusative	ihn	him
Dative	ihm	him
Genitive	sein	his

As Table 26 shows, there is no requirement for a clear segmentation between the morphology of the case and the pronoun in Case-marking systems, as we would

[36]There are also some prepositions which may prove problematic, such as *idir* ('between'), which is perhaps harder to analyse as a Case-marker because it involves two separate arguments. I leave any questions such as this that arise from Table 25 to future work.

expect for inflecting prepositions, where we might expect clearer segmentation. This leads Stewart & Joseph to offer a paradigm where inflected prepositions are organised by pronoun rather than by preposition.

As Hutchinson (2025) points out, however, this argument is not sufficient to make the significant conclusions Stewart & Joseph wish to make. They want to say that not only is this a more convenient synchronic analysis of SG prepositions, but they also use it as evidence that SG has a large case system present only on prepositions, which they point out would be unusual (p108). Hutchinson therefore presents distributional evidence to back up Stewart & Joseph's claims.

His argument is that there is semantic bleaching involved with SG prepositions, which indicates that they have more of a functional, rather than lexical, role in the language. Hutchinson takes this to be the crucial difference between case markers, with a functional role, and prepositions, with a lexical one (usually with a spatial semantics). One example of the idiomatic usage of prepositions is the use in the constructions for 'have' and 'own'[37].

(184) a. Tá leabhar agam.
be.PRES book at.1SG
'I have a book.'

b. Tá leabhar ag mo mháthair.
be.PRES book at my mother
'My mother has a book.'

(185) a. Is liom-sa an leabhar.
COP with.1SG-EMPH the book
'I own the book.'

b. Is le mo máthair an leabhar.
COP with my mother the book
'My mother owns the book.'

In the (a) examples, we see the use of prepositions in semantically bleached form. In order to say 'have,' in Irish, the preposition 'at' is used and 'with' is used for 'own.' Hutchinson takes this as evidence that the prepositions are case-markers rather than prepositions. Notice in the (b) examples that the same applies to full DPs, where the inflected prepositions are of course not used. I incorporate this fact into my analysis below.

Prepositions are also used with stative nominal predicates:

(186) Tá ionadh/eagla/ocras/tart/codladh orm.
be.PRES surprise/fear/hunger/thirst/sleep on.1SG
'I am surprised/scared/hungry/thirsty/sleepy.'

(187) Tá ionadh ar mo mháthair.
be.PRES surprise on my mother
'My mother is surprised.'

[37] As before, Hutchinson's examples are of course from SG, but I cite similar examples from Irish. While there may be a couple of differences in the details, the languages are similar enough in these points to make the same general point.

Hutchinson takes this as further distributional evidence for the Case-marking role of prepositions in SG (/Irish)[38].

To conclude, there is both morphological and syntactic evidence that inflecting prepositions in Irish are Case-marking in nature.

8.3.2 Comparison with non-inflecting prepositions

In this subsection, I will compare the properties of inflecting and non-inflecting prepositions. There are three types of non-inflecting preposition in Irish. In this section, I cover what I will term Type I non-inflecting prepositions. In Section 8.3.3, I will cover the remaining two types.

Table 27 compares the meanings of inflecting and Type I non-inflecting prepositions.

Table 27: Meanings of inflecting and type I non-inflecting prepositions in Irish

Inflecting prepositions	Type I non-inflecting prepositions
ag ('at'), *ar* ('on'), *as* ('out of,' 'from'), *chuig* ('towards'), *de* ('from,' 'off'), *do* ('to,' 'for'), *'faoi'* ('under'), *fara* ('along with'), *i* ('in'), *idir* ('between'), *ionsar* ('towards'), *'le'* ('with'), *ó* ('from'), *roimh* ('before'), *thar* ('above'), *trí* ('through'), *um* ('about,' 'at')	*a* (similar to infinitival 'to'), *amhail* ('like'), *dar* ('by' in asseverations), *gan* ('without,' negates small clauses), *go*/*go dtí* ('until'), *mar* ('because'), *seachas* ('besides'), *os* ('over')

Notice the difference in meaning between the two types, with inflecting prepositions having mostly locative meanings ('at,' 'with,' 'from,' 'towards,' etc.) and non-inflecting prepositions having mostly clausal meanings (infinitival 'to,' 'because') or meanings that are not spatial (e.g., 'like' compares two objects and says that they are similar, but does not tell us about their location with respect to another object). 'Until' is temporal rather than spatial in its semantics. One might argue that 'before' is also temporal, but it also has a spatial meaning in Irish of 'ahead of' (188).

(188) Siúlfaidh mé romhat.
walk.FUT I before.2SG
'I walked ahead of you.'

Go ('until') also has a clausal function as a complementiser (189), unlike *roimh* ('before').

(189) Creidim go bhfuil sé go maith.
think.PRES.1SG COMP be.PRES he well
'I think he is well.'

'Without' is not spatial like its opposite 'with,' because the absence of something is not a positive specification of where it is in relation to something else. It is also used to negate small clauses in Irish (190), so again has a clausal function.

(190) Dúirt sé léi **gan** teacht isteach.
say.PAST he with.3FSG without come.VN in
'He told her not to come in.'

[38] For Irish, another example would be salient unaccusatives, which, as far as I am aware, only appear with inflecting prepositions (McCloskey, 1996).

The other two Type I non-inflecting prepositions in Table 27 (*os* and *dar*) are relatively rare, with *dar* being used for asseverations (191) and *os* almost exclusively being used as part of a compound (192) (the elements with which it appears are nouns) – I cover these compound prepositions in more detail in the next subsection.

(191) Dar Dia!
by God
'By God!'

(192) os cionn an tí
above head.DAT the.GEN house.GEN
'above the house'

Therefore, while this is not the place for a full analysis of all Irish prepositions, I will assume that the difference between inflecting and Type I non-inflecting prepositions in Irish is that only inflecting prepositions are Case-marking, which I will take to be related to their spatial meanings, which, as in languages like Finnish, are expressed through Case. Type I non-inflecting prepositions, on the other hand, have more to do with the clausal system and are not Case-marking. In featural terms, I will assume that the difference between the two types of preposition is in the presence of D-features (i.e., Case-features) on inflecting prepositions and the absence thereof on Type I non-inflecting prepositions. This is in line with the Minimalist approach to syntactic variation (the Borer-Chomsky Conjecture; Baker, 2008) because parametric variation can be reduced to the distribution of features across functional heads.

It is also worth noting the improvement on previous approaches to Irish inflecting prepositions; e.g., Acquaviva (2003) argues that the difference between inflecting and non-inflecting prepositions is simply the presence/absence of an [AGR] feature on the preposition. My approach represents an improvement because the presence/absence of D-features is related to the wider syntax and semantics of the prepositions, rather than it being entirely *ad hoc*.

8.3.3 Two further types of Irish prepositions

There are two further types of Irish prepositions, which I mention here for the sake of clarity and completeness, despite the fact I think they are quite evidently different to the inflecting and Type I non-inflecting prepositions.

The first type, which I will term Type II non-inflecting prepositions, called prepositions in traditional grammars (Stenson, 2020), but they are probably nouns. They include *cois* ('beside'), *fearacht* ('like'), *tigh* ('at the house of'), *timpeall* ('around') and *trasna* ('across'). The first property which suggests they are in fact nouns is that they take the genitive, unlike the types of preposition I discuss in sections 8.3.1 and 8.3.2:

(193) D'fhanamar i dteach lóistín cois na farraige.
stay.PAST.1PL in house lodging.GEN beside the.GEN sea.GEN
'We stayed in a lodging house beside the sea.'

(194) timpeall na tíre
around the.GEN country.GEN
'around the country'

Some type II non-inflecting prepositions, such as *timpeall*, can also be used as a possessive (i.e., 'in my around'), again suggesting they are nominals of some kind:

(195) Spáinnis ar fad a chloisim i mo thimpeall.
Spanish entirely REL hear.PRES.1SG in my around
'I hear Spanish all around me.'

For these reasons, I will assume that Type II non-inflecting prepositions have an entirely different syntax along the lines of a nominal element rather than a preposition.

The second element of interest is the Irish compound preposition, which I will term Type III non-inflecting prepositions. We saw an example of this in (192). Other examples include *os comhair* ('in front of'), *ar nós* ('in the style of'), *i ndiaidh* ('after') and *tar éis* ('after'). In each case, the second element is a noun and the first element is usually a preposition. They also take the genitive and can appear with possessives, as in (196).

(196) Abair i mo dhiaidh é.
say.IMP in my edge it
'Repeat it after me.'

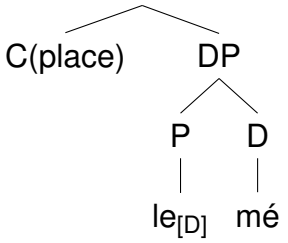
I will therefore take these compound prepositions to involve usually prepositions with, crucially, nominal complements, such that the structure is again entirely different from the inflecting and Type I non-inflecting prepositions.

8.3.4 Analysis of inflecting and type I non-inflecting prepositions in Irish

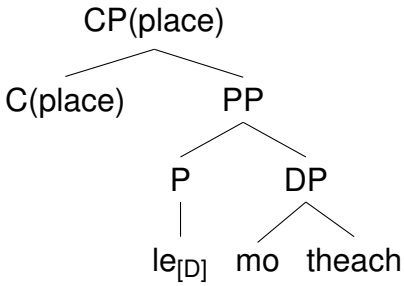
In this subsection, I present my analysis using labelling for inflecting and Type I non-inflecting prepositions. I do not discuss Type II and Type III non-inflecting prepositions for the reasons discussed in Section 8.3.3.

I propose the following structure for inflecting prepositions (the higher CP(place) is from Koopman's, 2010, analysis of Dutch r-pronouns and will become useful below):

(197) a.



b.



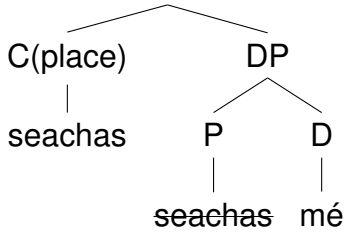
In (197a), the preposition has a pronominal complement. As described above, I assume Irish pronouns are D-heads with D-features and I assume inflecting prepositions are Case-marking and therefore also have D-features. Therefore, the LA finds the shared D-features between these two elements and labels their set as a DP. At PF, this is interpreted as a Case-marked pronoun, yielding the morphology that Stuart & Joseph (2009) discuss. However, in (197b), where the preposition has a full-DP complement, there is no labelling paradox, as there are no equidistant elements as there are in (197a). I claim that therefore the set of [le[mo theach]] is labelled as a PP, because the preposition is closest and these are the most salient features of *le*. At PF, a preposition followed by a full DP is outputted.

The complementarity effect therefore arises at PF, indirectly because of the LA. The LA labels a preposition with a pronominal complement as a DP, but labels a preposition with a full nominal complement as a PP. I propose that at PF, there are spell-out rules, such as (198), which take a DP containing a preposition such as *le*, which contains an [Agentive] Case-feature, and outputs a case-marked pronoun (*liom*). The complementarity effect with prepositions is therefore different to that found with other heads because there is no syntactic incorporation driven by labelling-related movement, but instead the LA simply causes effects at PF, which are not relevant syntactically.

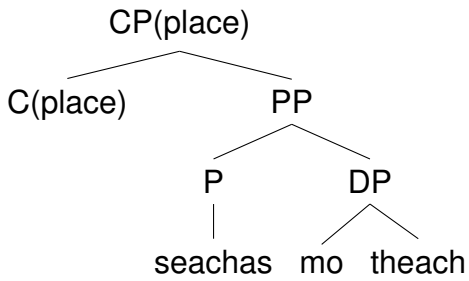
(198) $[_{DP}$ le$_{[Agentive]}$ mé$_{[\phi: 1SG]}] \rightarrow$ liom

For Type I non-inflecting prepositions, one option is that the only difference for Type I non-inflecting prepositions is the lack of the D-feature on the preposition.

(199) a.



b.

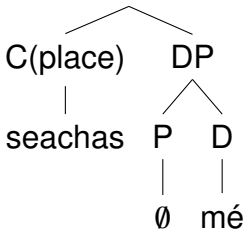


The effect this has is that in (199a), the preposition and the pronoun no longer share any features, so the LA will force one of the elements to raise so the structure can be labelled. The preposition, in this case *seachas*, could raise and share prepositional features with CP(place).

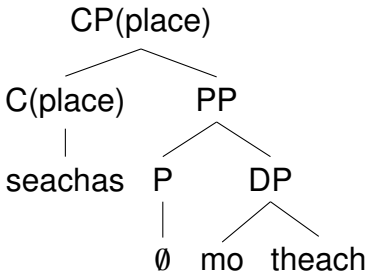
The problem is that this would mean that in (199b), there would be no movement. As CP(place) is home to complementiser-like prepositions in Koopman's (2010) analysis

of Dutch r-pronouns and I am not aware of any difference in the syntactic distribution of expressions like *seachas mé* and *seachas mo theach*, it is unlikely that they have different syntactic structures. I therefore propose that Type I non-inflecting prepositions are simply base-generated in C(place) and that they represent a different category to inflecting prepositions. P is null in these cases. This allows a uniform analysis regardless of the complement taken by a Type I non-inflecting preposition.

(200) a.



b.



A possible objection is how Case is assigned in these constructions. As I will discuss below in Section 9.4, I propose that in Irish, a [uCase]-feature is only assigned to nominals in vP. Therefore, there is no requirement for the nominals in (200) to receive Case. This also explains how the case-marked pronouns work in (197). They are case-marked, in the sense of morphology coming from the inherent Case of the preposition, but they do not have [uCase]-features, which would force them to receive Case in some way. That they do not receive Case syntactically is shown by examples such as (197b), where no Case is assigned to *mo theach*, but there is no ungrammaticality. This means that the relevant processes must only occur at PF, where a DP with an [Agentive] Case-feature and 1SG ϕ-features is outputted as *liom*. This is what marks the clear difference between how inherent Case and structural Case is dealt with in Irish.

In summary, inflecting prepositions also come about through issues related to labelling. Only Case-marking prepositions have D-features, which means that only these prepositions can share a label with pronouns; when prepositions and pronouns share a label, the surface result is a case-marked pronoun. This approach is superior to an Agree approach because it accounts for the distribution of inflecting and non-inflecting prepositions[39] (in terms of their syntax and semantics), the morphology of case-marked pronouns and the complementarity effect. It is also superior to Brennan's account in avoiding stipulation and undesirable theoretical baggage, such as *pro*.

[39]Unlike Acquaviva (2003), who assumes they come about through an [AGR] feature on inflecting prepositions.

8.4 Finite verbs

There are two problems one faces when trying to reanalyse Irish subject-verb agreement as something that does not involve the operation Agree: (1) moving the subject into subject position without Agree (which is usually what forces move); (2) accounting for what looks like agreement with pronominal subjects. I adapt Adger (2016) to solve the first problem.

8.4.1 Adger (2016)

Adger sets out to explain salient unaccusatives in Irish, which, recall from Section 6.2.2, are attributed to Irish lacking the EPP in McCloskey (1996). In salient unaccusatives ((201), repeated from (110)), the single argument remains low in a PP, in comparison to putative unaccusatives (202), where the single argument is a DP/pronoun and raises to the regular subject position.

(201) Laghdaigh ar a neart.
decrease.PAST on his strength
'His strength decreased.'

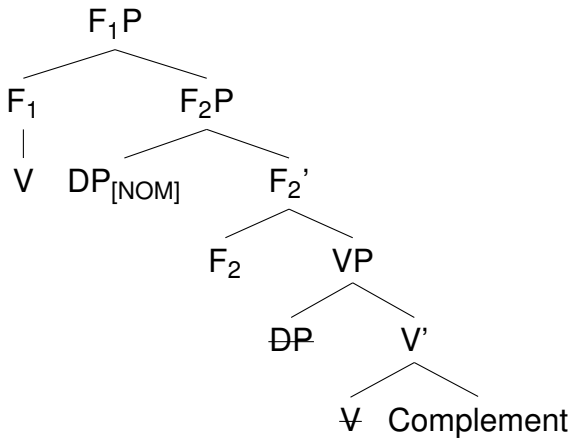
(202) Laghdaigh a neart.
decrease.PAST his strength
'His strength decreased.'

McCloskey (1996) shows, most clearly using the progressive construction (203a-b), that in (201) the subject stays low in a PP and does not raise into the subject position of (202).

(203) a. Bhí ag laghdú ar a neart.
be.PAST PROG decrease.VN on his strength
'His strength was weakening.'
b. Bhí a neart ag laghdú.
be.PAST his strength PROG decrease.VN
'His strength was weakening.'

McCloskey (1996) shows that salient unaccusatives do not contain a null expletive (e.g., due to the lack of definiteness effects), so they should violate the EPP. Since they are grammatical, McCloskey concludes that Irish lacks the EPP. His analysis can be summarised as follows (adapting a tree from Adger):

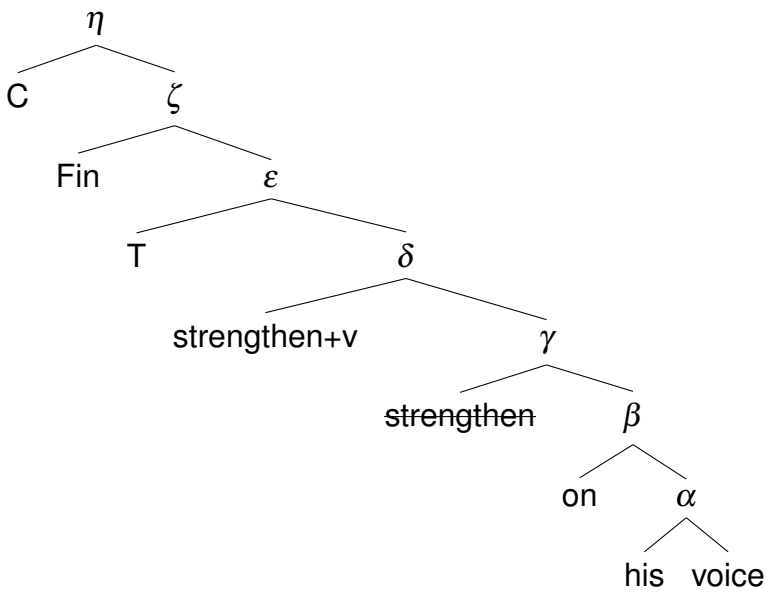
(204)



McCloskey argues that there is an optional functional projection, F_2, in Irish, which hosts subjects and needs to check its Nominative Case with a DP in its specifier. He argues that it is present in putative unaccusatives and absent in salient unaccusatives. This leaves the subject low in salient unaccusatives, and high in putative unaccusatives (because it must raise to check the Nominative Case features). While this analysis works, Adger points out it is rather *ad hoc* because it amounts to simply saying that when there is no PP, a functional projection appears to host the subject, and when there is a PP, that functional projection does not appear; while the analysis works empirically, it does not provide an explanation for the properties.

Instead, Adger proposes a theory based on labelling (Chomsky, 2013, 2015). For salient unaccusatives, we would have a situation along the lines of (205). Since [$_{DP}$his voice] is in a PP, it receives Case and may be Transferred during the v phase, where α and β receive a label from their heads, and γ receives the same label as β because the root is invisible to labelling. In the C phase, η is labelled by C, ζ by Fin, ε by T and δ by v. As a result, no movement is required.

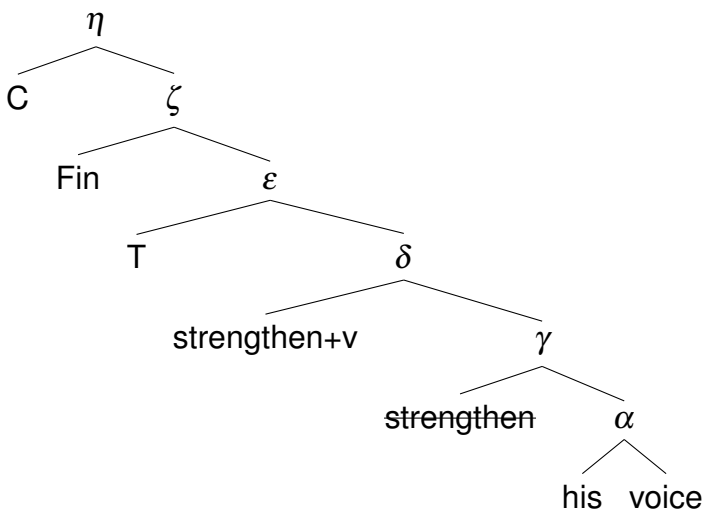
(205)



The situation is different however with the putative unaccusatives (206). Now [$_{DP}$his

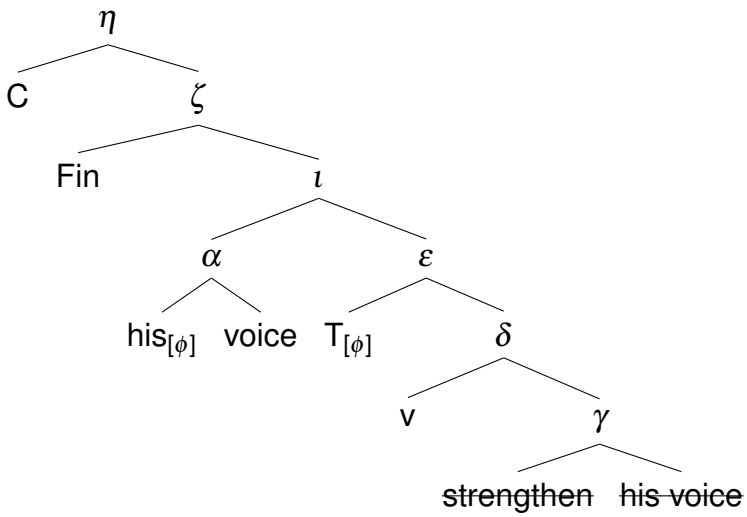
voice] is not in a PP, so does not receive Case, so the derivation would crash. However, Adger argues, the DP cannot Merge with any category until T, because no category until T contains ϕ-features and the resultant structure would not be labellable (crucially, Adger assumes that unaccusative v does not bear uninterpretable ϕ-features).

(206)



The result of this movement is the following structure:

(207)



To summarise, the explanation of the difference between (201) and (202) with regards to the position of the subject is that in (201) the subject receives Case as part of a PP, so may immediately be Transferred without resulting in grammaticality. However, in (202), the subject has an unchecked Case-feature, so Transferring it would result in ungrammaticality, so it instead must raise, but the first option of a head to raise to is T, because it also has ϕ-features.

8.4.2 Problems with Adger (2016)

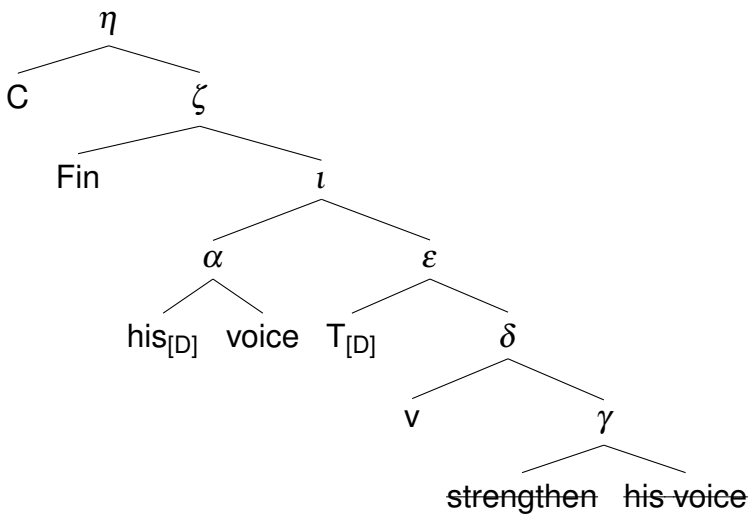
There are a few issues with Adger's analysis. First, it uses ϕ-features, which we would like to avoid for the reasons detailed above. It is also unclear why ϕ-features are

necessary: If T just does not Agree with subjects, the theory can be made simpler by having Case-assignment and movement related to the LA coming from only one type of feature (D-features). Second, an issue for my adoption of Adger's analysis is that I take pronouns (D-heads) and full DPs to crucially work differently with regards to labelling theory, but they have the same behaviour in salient and putative unaccusatives in terms of raising (pronominal subjects must raise in putative unaccusatives and stay low in salient unaccusatives). Third, if Nominative is assigned through an uninterpretable feature, this feature should still be left unchecked in salient unaccusatives.

8.4.3 My proposal

My proposal is essentially Adger's but I instead propose that T contains only D-features and no ϕ-features, as in (208). This D-feature assigns Nominative in Irish. I will assume that unaccusative v does not assign Case to its single argument, but v* does assign Case. This has the effect that putative unaccusative subjects are not assigned Case in v, so must move in order to be licensed, but salient-unaccusative subjects receive Case as part of a PP. The LA operates at the phase head v (Chomsky, 2015). At this stage, in putative unaccusatives, the subject is illicit because it has not been assigned Case, so the subject may not be Transferred, so it raises until it finds a head with which it can share features, which in this case is T. Therefore, the only difference with my account is that I use only the notion of Case and do not use ϕ-features. The issue of Nominative features perhaps being left unchecked is dealt with by the assumption that categorial features do not Agree in the conventional sense, and therefore are not left unchecked in the same way (I have assumed this throughout this thesis). D-heads and DPs both need to be assigned Case, so both must raise in putative unaccusatives to be licensed.

(208)

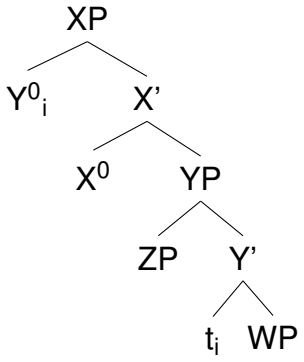


What remains now is the complementarity effect (155a-c): We have successfully moved subjects not housed in a PP into subject position using a theory based on Case and labelling, but we have not accounted for the difference between pronouns and full DPs. Since both pronouns and full DPs raise to subject position in putative unaccusatives and stay low in a PP in salient unaccusatives, they would both be

treated in the same way under Adger's theory. Complementarity can then come from Matushansky's (2006) M-merger. M-merger (as described briefly in Section 6.3) incorporates two adjacent *heads*; since it applies only to heads, it will not incorporate full DPs.

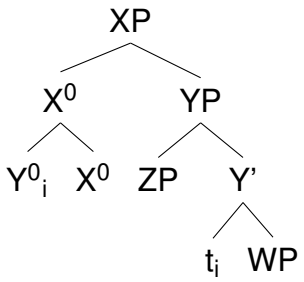
There are two problems with this, which centre around the exact formulation of M-merger in Matushansky and Irish VSO word order. M-merger works on two adjacent heads, where the first head has been moved into the specifier of the second head, as in (209).

(209)



In (209), Y^0 has been moved into the specifier of XP. This allows M-merger to apply, yielding (210), which is the incorporated structure that we require.

(210)



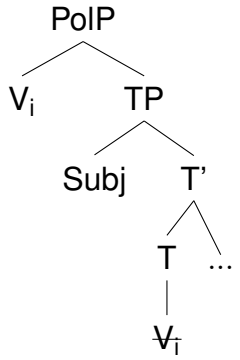
Returning to the issue at hand, there will be a point at which the subject is in (Spec, TP) and the finite verb is in T. In other words, the subject has been moved into the specifier of the category which is hosting the finite verb, so there is the right environment for M-merger. We account for complementarity because M-merger can apply only to pronouns (D-heads) and not to full DPs.

An issue this raises is how to account for complementarity between agreement and overt pronouns (where there is no synthetic form available, as in (40)). I propose that this comes from rule ordering. McCloskey (2017) argues that, subsequent to the verb being in T and the subject being in (Spec, TP)[40], there is further verb movement to Pol. Adger (2016) assumes this rule to be postsyntactic, as I will. In that case, there are two rules, V-movement and M-merger, which both apply postsyntactically. As (211a) shows, if V-movement applies first, the verb moves out of T and into Pol and bleeds M-merger by removing the environment for it to apply; this is what I propose occurs with analytic forms. However, (211b) shows that if M-merger applies first, the pronominal

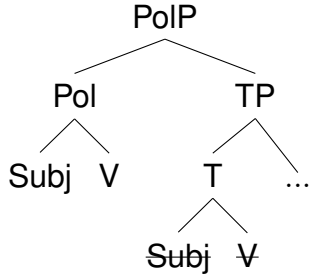
[40]It is an open question under my account how the Subj gets to (Spec, TP) given the discussion in Section 6 about T in Irish lacking an EPP-feature.

subject incorporates into the verb and the verb and the subject move together to Pol; this is what I propose occurs with synthetic forms.

(211) a. V-MOVEMENT FOLLOWED BY M-MERGER



b. M-MERGER FOLLOWED BY V-MOVEMENT



To conclude, I have mostly followed Adger (2016) in my account of pronominal incorporation into finite verbs in Irish, with a few extensions and adaptations. ϕ-features are removed from the theory and movement is motivated entirely by Case and labelling. I also extend Adger to include an account of incorporation and non-incorporation with pronominal subjects.

8.5 Returning to McCloskey's (1996) parametric cluster

Recall from Table 18 McCloskey's (1996) parametric cluster. He points out that a range of subjectless constructions are more common in the south, where NSs are also more abundant. In Section 6.2.3, I point out that agreement approaches predict that the [uϕ]-features on T should be *stronger* in southern varieties, where paradigms have more abundant agreement, but it is in these varieties that subjectless constructions are more common, where they should be barred as the [uϕ]-features on T would be left unchecked. I return now to how my account can deal with this parametric cluster.

I propose that the difference between northern varieties and southern varieties is that northern varieties have an [uD]-feature on T, whereas in southern varieties it is interpretable[41]. What this means is that northern varieties have a more crosslinguistically common [uD]-feature on T, which assigns Nominative Case (Holmberg, 2010). If this [uD]-feature is not checked by movement of a D/DP into subject position, the derivation

[41] Since the differences in Table 18 are mostly gradient (e.g., northern varieties have some salient unaccusatives but not as many as southern varieties), it would be more correct to say that northern varieties are moving towards having a [uD] feature on T. For simplicity, I will discuss these phenomena as if the transition is already complete.

crashes. Children acquiring northern varieties would plausibly posit this [uD]-feature because there are more overt subjects in northern varieties, i.e., there is more often a requirement for some element to occur directly after the finite verb.

This parametric difference accounts for why subjectless constructions are less common in northern varieties because the [uD]-feature on T would be left unchecked; for instance, in salient unaccusatives, no Nominative is assigned, so the [uD]-feature would be left unchecked and the derivation would crash. The same would apply in constructions lacking expletives and in passives of intransitive verbs lacking an internal argument.

An advantage of this analysis is that it accounts for why the parametric differences between different varieties of Irish are all related to subjects, rather than other cases of person-number agreement. Since I suggest that the only difference between northern and southern varieties is whether the D-feature on T is uninterpretable, I do not predict any differences for Prog, P or D.

A potential problem with the analysis is that there is an apparent incompatibility between my [uD] analysis of optional expletives, in which northern varieties are shifting towards having an uninterpretable D-feature on T and concomitantly expletives are required to check this feature, and McCloskey's analysis of these expletives, which sees them as having nothing to do with the EPP and the requirement for the subject position to be filled. My suggestion would be that in northern varieties, these 'expletives' are coming to be interpreted as true expletives (hence why they are more common in the north) and that their function is more and more to check the [uD]-feature on T.

Another possible criticism is that the [uD]-feature I propose is essentially the same as an EPP-feature. The difference between my account and the modern EPP-feature is the presence/absence of Agree. In modern theories, the EPP is a diacritic which applies as a side-product of Agree (Biberauer, 2010). However, our theory of Irish needs to see the EPP-feature as not coming from Agree, due to the arguments made in this thesis that T does not have [uϕ]-features.

The [uD]-feature is an attempt to develop such a theory. The feature works in such a way that T must contain a nominal in its domain. The checking for this nominal cannot however occur through Agree. An example of how this could work is that T could have to govern a [uCase] nominal, thereby giving it Case à la Chomsky (1981). The only difference with Chomsky's theory is that T would have to govern a nominal for the derivation not to crash. This theory would allow T to vary between dialects as to whether it needs a nominal to be Merged into its domain, thereby accounting for the EPP-like properties in the north which exist to a lesser extent in the south, without the use of Agree. Descriptively, the facts are clear (lack of Agree, T does not have to assign Case in southern varieties, T has to assign Case in northern varieties, T assigns Nominative Case to arguments which raise into its specifier), but no current theory of Case accounts for these facts fully. In any case, the theory presented here with an interpretable D-feature works well for the southern Irish varieties, where T has no requirement to be filled by a DP. The [uD]-feature, assuming it can work without Agree, is a useful addition to account for the situation in northern varieties.

8.6 Conclusion

Roberts' (2019) typology of NSLs is based on the distribution of ϕ- and D-features. Roberts proposes that CNSLs have both ϕ- and D-features on T and pronouns, PNSLs have ϕ-features only on both, NNSLs have only ϕ- features on T and ϕ- and D-features on pronouns, and that RNSLs have neither. I have argued here that Irish represents one of the remaining logical possibilities: It is a language with only D-features on T (and Prog, P and D) and pronouns (pronouns also have phi-features, but these are not relevant here). This means that while null arguments are referential (due to their D-features), they do not come about through the operation Agree. Instead, they are the result of pronominal incorporation caused by labelling, which is brought about through the fact that Irish pronouns are D-heads, and therefore enter into {H, H} structures with the functional heads containing ϕ-features in Irish.

However, the relationship between a functional head and a DP cannot be the correct one for Labelling-via-Agree, because it would always be {H, XP}. Since there are no uninterpretable features on T, P, D or Prog, there is no other way to yield an agreeing form, so agreement is impossible with a full DP. In other words, even if an XP were to raise (e.g., to receive Case), it would never enter into the required configuration and, therefore, a NS is impossible. Agreement with an overt pronoun is impossible because I assume lower copies are deleted at PF. Therefore, agreement is possible only with null arguments because the 'agreement' is an incorporated pronominal, which can only come about through the mechanics described here.

9 Residual issues

In this section, I look at a few residual issues with the analyses presented here. They mainly revolve around how these analyses can fit into a wider theory of Irish syntax.

9.1 Possessive DPs

My analysis needs to be extended to a wider theory of Irish possessives. In Duffield's (1995:285) analysis, lenition, one of the initial-consonant mutation processes in Irish, is caused in the nominal domain by a lexicalised D-head. This assumption is well founded, and appears to suggest that lexical nouns in fact raise to D:

(212) a. capall [**mh**ac **Sh**eáin]
horse.NOM [son.NOM Seán.GEN]
'Seán's son's horse'

b. gluaisteán [**mh**ac **dh**eartháir an tsiopadóra]
car [son.NOM brother.NOM the.GEN shopkeeper.GEN]
'the shopkeeper's brother's son's car'

The lenited consonants are in bold. Notice that lenition affects all possessor's to the right of the head noun. The problem is that I assume the head noun in these constructions is in N, and that only pronominal possessors raise to D, so proper-noun

possessors like *Seán* should not be lenited. My analysis is therefore incompatible with Duffield's.

Another required extension is to the related phenomenon of construct state nominals in Celtic (and Semitic) (see, e.g., Borer, 1999).

(213) (*an) teach an fhir
(the) house the.GEN man.GEN
'the man's house'

(214) (*ir-)ras l-mara
(the-)head the-woman.GEN
'the woman's head' Maltese; Duffield (1995:268)

As shown in (213-214), the article may not be present in these constructions in Irish (and other Celtic languages) and Maltese (and other Semitic languages). In other words, to express 'the house of the man,' it is only possible to say 'house of the man.' Future work should look to extend my analysis to construct state nominals.

9.2 Object agreement

Perry (2025) points out that cases like (215) could be a problem for incorporation accounts.

(215) Tá an t-athrú seo á dhéanamh (~~an t-athrú seo~~)
be.PRES the change this PROG.3MSG make.VN
'This change is being made.'

In (215), there is (apparent) A-movement above Prog, and complementarity is voided. The problem is that I assume that inflected forms like *á* come about through incorporation of a pronoun into Prog. However, in (215), as shown in brackets, *an t-athrú seo* is the (apparent) complement of the verbal noun, so, according to my analysis, there should be no incorporation.

Perry (2025) accounts for these cases using the operation REDUCE ((216); Sikuku et al., 2018; Yuan, 2021), which reduces lower members of chain, in this case *an t-athrú seo*, to a bare pronoun, in this case, *é* after *an t-athrú seo* has raised. The pronoun is then a defective goal for Prog and DGI occurs. It is worth noting that this introduces some degree of stipulation into his account, since an extra operation is required.

(216) REDUCE (Perry, 2025:13)
REDUCE a copy of an XP to only the ϕ-features of its head X, a pronoun, such as ϕ-agreement chains involving XP are maintained only with the reduced copy.

Perry discusses (215) as a counterexample to incorporation approaches (his Section 1.2); however, for the approach I have outlined in this thesis, it is not as much of a problem, because there are still movement chains and REDUCE could therefore still theoretically apply.

A potential problem, though, is the order of operations. If REDUCE applies to the lower copy of *an t-athrú seo*, yielding the 3MSG pronoun *é*, then this pronoun could have the same difficulties with labelling described in Section 8.2, and it could incorporate into Prog to solve these problems (this is the desired outcome from the point of view of my proposal).

However, the issue is that labelling applies at the end of each phase (Chomsky, 2015). As described above, at the vP phase, *an t-athrú seo* would be found to be lacking Case and would move to (Spec, vP) (the top of the vP phase). If *Reduce* then applied, it would reduce the lower copy of *an t-athrú seo* to the 3MSG pronoun (*é*. At this point, the {H, H} structure, which is required to force movement of pronouns in my approach, would be created. However, for the LA to 'see' that this problematic structure had been created, a second pass of the LA would be required after the lower copy had been reduced. This could either happen in the vP phase but, as far as I am aware, a second pass of the LA within a single phase is unattested elsewhere, or in the CP phase, but this may be a violation of the strict cyclicity which phases are intended to capture (Chomsky, 2008).

The second option is to deny that (215) is a simple case of raising. What Perry assumes is the kind of raising seen in English passives:

(217) The book was read (~~the book~~) by the children.

However, there are various problems with this assumption. First, the construction is ambiguous with a regular transitive interpretation:

(218) Tá mé á dhéanamh.
be.PRES I PROG.3MSG do.VN
'I am doing it.'

In this construction, on standard assumptions using an agreement approach like Perry's, we might have the following structure:

(219) Tá mé [$_{\text{ProgP}}$ ag$_{[u\phi]:3msg}$ [$_{vP}$ mé [$_{v}$ dhéanamh [$_{VP}$ [$_{V}$ ~~dhéanamh~~] [$_{D}$ é$_{[\phi:3msg]}$]]]]]

There is a locality problem in this structure according to the principle of relativised minimality (Rizzi, 2001): The closest goal for Prog is *mé* rather than *é*, which should yield the ungrammatical:

(220) *Tá mé do mo dhéanamh.
be.PRES I PROG.1SG do.VN
Intended: 'I am doing it.'

Therefore, the most obvious analysis of these constructions may not be the right one. In particular, it is not clear that *déanamh* is really a verb (as glossed, it is a verbal noun); I assume in Section 8.2 that it is part of the nominal system. In that case, the construction is along the lines of the following (with English words):

(221) I am at (the) doing of it.

The argument structure could be seen as the same as a verb with a PP complement, as in:

(222) I am at the castle.

I would suggest, then, that an *t-athrú seo* is first Merged above this PP. *é* is obligatory due to the VN *déanamh* (which requires an 'object'). The structure, then, is the following:

(223) Tá an t-athrú seo [$_{PP}$ ag + é [$_{vP}$ [$_{v}$ dhéanamh [$_{VP}$ [$_{V}$ ~~dhéanamh~~] [$_{D}$ ~~é~~]]]]]

In other words, *é* is Merged separately as its own vocabulary item; if it was not generated, the derivation would crash as the selectional criteria for the verbal noun would not have been met. *an t-athrú seo* is first Merged in the vP for *tá*, which is the only vP generated in the sentence. A later operation would then interpret *an t-athrú seo* and *é* as either being coindexed (a 'passive') or having different indexes (a regular transitive sentence):

(224) The change$_i$ is at the making of it$_i$.

(225) The change$_i$ is at the making of it$_j$.

The meaning in (225) is of course clunky, but the point remains.

While this approach is of course different to how passives are usually dealt with, and requires rules at Logical Form (LF) to coindex nominals in this way, there is some evidence in Irish that raising does not work as it does in other languages. McCloskey (1980) argues that Irish raising has various unusual properties. In cases of raising in English like (226a), the sequence 'Mr. Herzog to resign' is not a syntactic constituent, as can be shown using a cleft structure (226b).

(226) a. I expected Mr. Herzog to resign.
b. *It was Mr. Herzog to resign that we expected.

The same does not hold of Irish 'raising.'

(227) a. Mhol mé dó bean saibhir a phósadh.
recommend.PAST I to.3MSG woman rich to marry.VN
'I advised him to marry a rich woman.'
b. Níor mhol mé dó ach bean saibhir a phósadh.
NEG recommend.PAST I to.3MSG but woman rich to marry.VN
'It was only to marry a rich woman that I advised him to do.'

McCloskey (1980) shows that *ach* in these constructions always targets constituents, so the same sequence which in English is not a constituent, must be a constituent in Irish. Recall from (121a-b) that there are also cases of raising being optional in Irish.

Secondly, a problem which Perry acknowledges for his approach is the lack of agreement with putative unaccusatives:

(228) Tá mé ag teacht (mé).
be.PRES I PROG.NONAGR come.VN (I)
'I am coming.'

Here, there is no agreement on Prog. This is a problem for Perry if he assumes that *mé* originates below *teacht*, as marked in (228) and as one would expect with

unaccusatives, because he would predict that Prog should Agree with *mé*. A possible solution would be to assume that *teacht* does not demand an 'object', so does not s-select one, in comparison to passives, which can only come from transitive verbs with a true 'object' argument that can be raised to subject position. The perhaps unlikely analysis that I have suggested in this section may, therefore, be on the right lines, with Irish working differently to most other languages in having a clear distinction between agreement patterns in unaccusatives and passives. Compare, for instance, French:

(229) La femme est arrivé-**e**.
the woman AUX arrive.PSTPTCP-FSG
'The woman arrived.'

(230) La femme a été envoyé-**e** en prison.
the woman AUX be.PSTPTCP send.PSTPTCP-FSG in prison
'The woman was sent to prison.'

Here, the feminine singular agreement is found in raising in both unaccusatives (229) and passives (230). Therefore, it is unclear why Irish should work differently in other languages in showing agreement under A-movement with passives (215) but not unaccusatives (228). My suggestion is that VNs of unaccusative verbs do not select a complement, whereas VNs of transitivies obligatorily do. Under 'passivisation,' this complement may be interpreted as being coindexed with a higher DP.

To conclude, it is an open question how (215) is to be accounted for. Perry (2025) uses the operation REDUCE, but this is *ad hoc*; in other words, his account does not predict that complementarity should be voided under passivisation – he stipulates this – and it is an open question why lower copies behave differently to higher copies in Irish with respect to DGI. This problem is exacerbated by the fact that (apparent) raising associated with unaccusatives does not have the same effect – something which remains a problem for Perry. This suggests that what appears to be raising may in fact not be raising at all, but instead a rule at LF, which optionally interprets two elements with the same ϕ-features as being coindexed, yielding (224). While unorthodox, and undesirable theoretically because the raising analysis ensures the coindexing without extra operations at LF, we may be forced towards this approach because of the unusual nature of raising in Irish.

9.3 Prepositions

My analysis of prepositions has broken Irish prepositions up into different kinds, and has argued that the inflecting prepositions are case-marking, meaning they contain D-features, while the non-inflecting prepositions are of three kinds: (1) prepositions related to the clausal domain, which do not contain D-features; (2) multi-word prepositions, which are underlyingly prepositions combined with lexical nouns; (3) prepositions which are really lexical nouns. A distinction between different kinds of adpositions is not new, and future work should integrate what I have discussed here into analyses provided in previous work, most notably Cinque (2010).

The two types of preposition discussed by Cinque are simple and complex prepositions. Simple prepositions are functional and basic (i.e., stative and directional), e.g., 'at,' 'to,'

'from,' etc., whereas complex prepositions are lexical and syntactically complex, e.g., 'in front of,' 'under,' 'behind,' 'next to,' 'inside,' etc. Languages distinguish between these types systematically; for instance, in Italian, simple prepositions differ from complex prepositions in obligatorily taking a complement and therefore not allowing preposition stranding:

(231) a. Vengo proprio adesso da *(Roma).
come.PRES.1SG just now from (Rome)
'I have just come from (Rome).'
b. L' hanno messo sopra (la sedia).
3MSG AUX.PRES.3PL put.PSTPTCP on (the chair)
'They put it on top (of the chair).' (Cinque, 2010, (1a-b))

(232) a. *Quale paese viene da?
which country come.PRES.3SG from
'Which country is (s)he from?'
b. A chi eri seduto sopra?
on whom be.PAST.2SG sit.PSTPTCP on
'Who were you sitting on?' (Ibid., (2a-b))

Similar distinctions are made in Kîitharaka (Bantu, Niger-Congo). Muriungi (2006, Section 3.3) also shows that simple prepositions are able to assign Case directly, unlike complex prepositions. This can be linked to Italian, where most complex prepositions can and sometimes must be followed by one of the simple 'functional' prepositions.

Cinque (2010) has the following structure for complex prepositions:

(233) $[_{PPstat}$ (at) $[_{DPplace}$ $[_{XP}$ under $[X$ $[_{PP}$ P $[_{NPplace}$ the table [PLACE]]]]]]]

(The details of this are not relevant here, but can be found in Cinque, 2010.) The key point is how this sheds light on various differences between the two types of preposition; for instance, only complex prepositions may constitute an independent binding domain:

(234) a. Max_i saw a ghost next to/over $himself_i$/him_i.
b. $John_i$ spoke to/about $himself_i$/*him_i.

In (233), complex prepositions are modifiers of a DP, so their behaviour with respect to binding domains would make sense, as their behaviour is like ordinary DPs:

(235) $Lucie_i$ saw a picture of $herself_i$/her_i.

Future work should interrogate Irish prepositions in this way, in an attempt to establish a more detailed internal structure for, in particular, inflecting and Type I non-inflecting prepositions. Detailed native-speaker judgements should be found for Irish prepositions according to the properties mentioned above and others, which distinguish between simple and complex prepositions.

On the surface, an issue is that inflecting prepositions are syntactically and semantically simpler (see Section 8.3). For this reason, we would expect them to represent Cinque's 'simple prepositions.' However, it is complex prepositions, according to Cinque, which are modifiers of DPs and may constitute an independent binding domain. The potential

issue is that I have of course said that Type I non-inflecting prepositions (which appear most similar to complex prepositions) are exactly those which do not have D-features. I leave these issues to future work.

9.4 Finite verbs

9.4.1 On the assignment of structural Case in Irish

I assume above that DPs need to receive Case and will move until this can occur, but it appears that Case-assignment is often optional in Irish. For instance, Irish appears to have an accusative case:

(236) a. Chuirfeadh sé thú ar an mbord.
put.COND he.NOM you.ACC? on the table
'He would put you on the table.'
b. Chuirfeadh tú é ar an mbord.
put.COND you.NOM he.ACC? on the table
'You would put him on the table.'

The issue is that these 'accusative' forms appear in a range of constructions where Accusative does not appear to be assigned:

(237) Is é an dochtúir é.
COP he.ACC? the doctor he.ACC?
'He is the doctor.'

(238) Is dochtúir é.
COP doctor he.ACC?
'He is a doctor.'

(239) agus é ag labhairt liom
and he.ACC? PROG speak.VN with.1SG
'while he is speaking with me'

(237) and (238) are examples including the copula in Irish, which has been argued to be non-verbal (see, e.g., Doherty, 1996; McCloskey, 2025), so likely cannot assign Accusative (note that *é* in (237-238) also performs the role of the semantic subject). (239) is a small clause introduced by *agus*, which usually means 'and' but has the meaning of 'while' in this construction, again a non-verbal element which likely cannot assign Accusative. The point is that in both cases the apparent 'accusative' case is used, despite the fact that they don't appear to be Accusative-assigning environments. For this reason, as Stenson (2020:Ch17) points out, the 'Nominative' in Irish is closer to a Case assigned to pronouns appearing directly next to the finite verb; i.e., nominative case-marking rather than a system of Nominative Case assignment. This suggests that Accusative is not assigned in (237-239) and that no Case is in fact assigned to the pronouns in these examples, so it appears pronouns and full DPs in Irish do not *need* to be assigned Case. This would be a problem for my analysis because I assume that raising to subject position occurs to assign Nominative Case, where Accusative cannot be assigned, but it appears in (237-239) that a D/DP not receiving Case is grammatical

in Irish.

I propose that only v assigns a [uCase]-feature to its argument(s). This means that these arguments only have a [uCase]-feature in verbal contexts. (237-239) are all non-verbal contexts, and, hence, I propose that the pronouns do not have [uCase]-features and do not need to be assigned Case. All and only arguments which are introduced by v must be assigned Case.

9.4.2 Outlook

There are two areas that future research should study in more detail in relation to finite verbs. The first is that the phenomena described here might best be understood alongside other 'quirky subjects' in the world's languages. As Preminger (2014: Ch8) describes, there is often a failure of Agree when the subjects are 'quirky'; quirky subjects are those which have strange Case properties, such as being Dative (e.g., (240)), and strange agreement properties, such as not agreeing for number when they are quirky (also (240)).

(240) Morgum studentum **liki/*lika** verkið.
many student.PL.DAT like.3SG/*3PL job.the.NOM
'Many students like the job.'

Note that this pattern is much like Irish salient unaccusatives, in that a Case-marked (which is what I argue is the function of Irish inflecting prepositions) subject does not Agree (fully) with the finite verb. The difference, of course, is that Irish quirky subjects stay low but Icelandic ones raise. My analysis could benefit from being extended to such cases, given the clear similarities.

Secondly, while it is clear that optional raising is a challenge for agreement approaches, it is also unclear how I can account for it. My view is that since T in my account does not attract subjects for Agree, I do not predict that there should not be optional raising. The question of why subjects do not always raise comes from the requirements of the subjects, perhaps related to the optionality of Case-assignment in Irish (237-239) in non-verbal constructions. How precisely this might work goes beyond the scope of this thesis, but future work should study these properties of Irish in more detail.

10 Conclusion and outlook

10.1 Conclusion

There have been two parts to this thesis. In the first part, I have shown that Irish does not fit into any of the categories of NSL discussed in Roberts (2019). This has involved looking at salient properties of different NSLs and arguing that Irish does not have the set of properties of any of the kinds of NSLs. As I have already summarised the findings of this section in more detail above (Section 4), I will focus on the second part of my thesis here.

In the second part of my thesis, I have advanced my theory of how to fit Irish into this typology. I have argued that Irish is a language with the following abstract

configuration (repeated from (162)):

(241) **Irish**: $T_{[D]}$ ... $pro_{[D,\ \phi]}$

In other words, pronouns have both ϕ-features and D-features. The ϕ-features are present on pronouns because they vary depending on person, number and gender, and are presumably related to their interpretation at LF. The D-features I take (following Roberts) as being part of their definite interpretation, in the sense that they are able to refer without any syntactic or pragmatic context. Unlike pronouns, the functional heads into which they incorporate (P, Prog, D and T) do not have ϕ-features. This is because they do not Agree in the sense we are used to from other languages. Instead, they have only D-features, which I take to be categorial features that do not Agree with other features in the sense of seeking a value and getting this value by probing for one from a lower goal. The D-features are related both to the definite nature of the resultant NSs and the Case-related function of the functional heads involved.

Evidence for this point of view has come from showing, first, that Agree does not fit the Irish data well and always involves stipulating in some way the complementarity effect, and that there are phenomena in the language, such as optional raising, which are not accounted for by agreement approaches. Secondly, I have shown that there is a viable alternative to Agree approaches, something which Perry (2025) points out has been lacking. For this, I have used the LA, which is a novel approach to this problem. While I have mentioned in Section 9 that there are residual issues which need to be solved, I would argue that the evidence presented in this thesis is promising and that this proposal should be taken seriously and followed up on in future work.

Recall Roberts' NSL typology (repeated from (30-33) above):

(242) **CNSL**: $T_{[D,\ \phi]}$ ... $pro_{[D,\ \phi]}$

(243) **PNSL**: $T_{[\phi]}$ ... $pro_{[\phi]}$

(244) **NNSL**: $T_{[\phi]}$ ... $pro_{[D,\ \phi]}$

(245) **RNSL**: $T_{[-\phi]}$ ... $pro_{[-\phi]}$

Roberts describes the distribution of NSLs using two types of features: ϕ- and D-features. There are languages with both kinds of features (CNSLs and NNSLs), languages with only ϕ-features (PNSLs) and languages with neither kind of feature (RNSLs). Therefore, if we assume my analyses are along the right track, Irish may represent the missing kind of NSL: one with only D-features. This, I believe, gives the analyses presented here, along with Roberts' typology, some credence, as Roberts' typology predicts languages with only D-features to exist, but none are described in Roberts (2019).

Due to the presence of D-features on T, we explain the fact that Irish has definite NSs and that indefinite NSs come about only with some kind of special marking. However, the lack of agreement in the traditional sense explains the patchy verbal paradigms, and the weakness of the pronouns means that they cannot stay on their own and must cliticise onto something to form a morphophonologically complete element.

10.2 Outlook

In this thesis, I have focused only on Irish and presented an original analysis of its NSs. As discussed above, future work should extend these analyses and give more detail of the internal structure of, in particular, Irish prepositions and possessive DPs. The analyses should also be extended, if possible, to other Celtic languages, which show similar, but not entirely the same, properties. For instance, as (246) shows, in Welsh, overt pronouns may appear alongside inflected forms, but the pronouns are in a special form (Roberts & Shlonsky, 1996:182, call them 'echo pronouns'); it would be interesting to see to what extent my analysis could be extended to these cases, perhaps seeing 'echo pronouns' as cases of clitic doubling. It is also essential to look for languages outside of Celtic for which an analysis along these lines may be applied, such as the Carib language Macushi (Abbott, 1991), in which there is also complementarity between overt pronouns and verbal agreement (247).

(246) 'roeddwn i 'n cwyno
be.PAST.1SG I PROG complain
'I was complaining.'

(247) (*uurî-ya) i-koneka-'pî-u-ya
(1SG-ERG) 3SG-make-PAST-1SG-ERG
'(*I), I made it.'

The key feature of this NSL is that NSs appear through pronominal incorporation motivated by the LA, which moves the pronoun until another head with D-features is found with which the pronoun can share its features. Thus, other NSLs of this type should have clitic pronouns, non-agreeing forms along with agreeing forms, pronouns agreeing where full DPs do not. Additionally, due to the presence of D-features, NSs are definite without a special marker.

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