

Prosody, Focus and Ellipsis in Irish

Ryan Bennett, Yale University
Emily Elfner, University of British Columbia
Jim McCloskey, University of California, Santa Cruz

October 17, 2015

1 INTRODUCTION

When we study how phonological representations align with syntactic and semantic representations, we principally study imperfect parallelism.¹ Prosodic representations must be to some degree faithful to the syntactic and semantic representations they express (otherwise, prosodic cues would not be as useful as they in fact are in syntactic and semantic processing, Wagner & Watson (2010)). But they must also meet purely phonological requirements, having to do especially with rhythm, balance, and the needs of phonologically dependent elements. Satisfying such requirements often leads to less than perfect parallelism across the systems of representation. This much is a virtual truism. The challenges come in understanding what the mechanisms actually are which guarantee parallelism in the first place and departures from parallelism in the second place.

Our goal in this paper is to contribute to the project of understanding these mechanisms. We do that by studying two cases in Irish in which full parallelism fails; the two cases are closely related and they interact with one another in intricate ways. Both involve the special status of subject pronouns in the language and their interaction with the inflected verbs that precede them. Both processes also interact with ellipsis in interesting and contrasting ways and thus provide a way of probing how the mechanisms of ellipsis do their work—the means by which syntactic objects are linked with silence. This is not always taken to be a question on the syntax-prosody interface, but it surely should be; after all, silence is phonological and there is no larger failure of parallelism than that in which a syntactic or semantic representation is mapped to silence.

¹This paper grows out of a presentation at the ET13 workshop held at McGill University in May 2014. We are grateful to the organizers and participants for creating an extraordinarily stimulating event. A presentation at the LRC Workshop on Syntax and Information Structure (UCSC, September 2014) helped a great deal, as did discussions with Anikó Liptak, Byron Ahn, and Amy Rose Deal. We owe a special debt to Vera Gribanova for important suggestions made at a crucial point. We also owe a special debt to Dónal Ó Baoill, Lillis Ó Laoire, Ailbhe Ní Chasaide, Pádraic Ó Ciardha, Caitlín Mhic Niallais, and Eibhlín Nic Dhonncha for their patient and perceptive help in establishing the data. Authors' names are listed alphabetically.

2 BACKGROUND

We begin by installing some familiar but necessary background. Irish is, as is well known, more or less rigidly VSO in all of its finite clauses:

- (1) Má bhriseann tú an fhaocha, tífídh tú na castáí atá ina leath
 if open.PRES you the periwinkle see.FUT you the twists C-be.PRES in-its half
 deirídh.
 rear.GEN
 ‘If you break open a periwinkle, you will see the twists that are in its hind parts.’

Word order in finite clauses of every type follows the informal schema of (2):

- (2) VERB < SUBJECT < OBJECT < OBLIQUE ARGUMENTS < ADVERBIALS

Departures from the patterns of (2) are tolerated, of course, under the right conditions, and among the possibilities that are permitted is one that will be of interest to us here. It involves unstressed forms of pronouns. Although it is not represented in any standard orthography, there is in Irish a crucial distinction between strong (stressed) and weak (unstressed) forms of personal pronouns. Some of the relevant forms are shown in (3).²

	ORTHOGRAPHY	STRONG FORM	WEAK FORM
(3) 3rd sg masc, non-subject	é	[e:]	[ə]
3rd sg fem, non-subject	í	[i:]	[i]
3rd pl, non-subject	iad	[iad]/[iəd]	[əd]
1st sg	mé	[me:]	[mə]

Strong forms of pronouns may bear an accent and their vowel nuclei are long; weak forms are unaccented and their vowels are characteristically shortened and centralized.

It is uncontroversial that the distinction between strong and weak forms of pronouns is of central importance in all varieties of current Irish (see the references of footnote 1 and also Doyle (2002), Bennett et al. (2013, 2015)) but the details of their realization are complex. The chart in (3) illustrates (in column four) fully reduced variants, but, depending on context, unstressed pronouns may have either reduced or unreduced vowels (see Ó Curnáin (2007: Volume Two, 1270–1274) for a particularly careful description of the range of possibilities). We will not deal with these complex realizational patterns here, but rather assume, with Bennett et al. (2013, 2015), that the core distinction reflects a lexical choice—each pronoun has a strong form and a weak form, the choice between them being free; the form selected for use in a given derivation is then subject to the usual

²See, for instance, Ó Sé (2000: 155–59) on the distinction in Munster varieties, Hughes (1994: 656), Ó Baoill (1996: 88–89) and Lucas (1979: 93) on Ulster varieties respectively, and Ó Curnáin (2007: Volume Two, 1270–1274) on the same distinction in Conamara.

vicissitudes of variable and context-sensitive phonetic realization.³

What will, though, be important for us here is the fact that strong and weak pronouns are distinguished not only by their form but also in the fact that they exhibit different ordering possibilities. Strong pronouns appear in their syntactically expected positions (that is, they appear in the same positions as full DP's which enter into the same set of syntactic relations). Weak pronouns, however, may displace to the right, as seen in (4). (4b) has a weak pronoun as its object; (4a) has a full DP:

- (4) a. Fuair sé nuachtán Meiriceánach óna dheartháir an lá cheana.
get.PAST he newspaper American from-his brother the-other-day
'He got an American newspaper from his brother the other day.'
- b. Fuair sé _ óna dheartháir an lá cheana [é].
get.PAST he from-his brother the-other-day it
'He got it from his brother the other day.'

The displacement seen in (4b) takes the pronoun all the way to clause-final position; more often, however, the displacement is to an intermediate position. (5) is typical:

- (5) chonac _ ag féachaint uirthi [é] go drúisiúil
see.PAST.S1 PROG look at-her him lasciviously
'I saw him looking at her lasciviously.'
- LG 314

The informal diagram in (6) (in which arrows indicate postposing patterns) summarizes the range of possibilities available to the unstressed pronoun.⁴

- (6) [V DP Pron XP YP ZP]
-

The puzzles represented by these observations are at the heart of Bennett et al. (2013, 2015) and Elfner (2012) and we assume as background here the proposals developed and defended in those papers. The core of those proposals is that the postposing schematized in (6) is not syntactic, but rather prosodic, reflecting a prosodic response to a prosodic dilemma. If an unstressed pronoun appears at the left edge of a phonological phrase (a ϕ -phrase), there will be a violation of a constraint (STRONG START in the sense of Selkirk (2011)) which penalizes the appearance of over-weak elements in that position. We will understand it as in (7) (see Bennett et al. (2013) for discussion and alternatives):

- (7) STRONG START: Prosodic constituents above the level of the word should not have at their left edge an immediate sub-constituent which is prosodically dependent, where by a 'prosodically dependent' constituent we mean any prosodic unit smaller than the word.

³This choice is largely a matter of expository convenience for our present purposes. As far as we know, the core of the analysis to be developed here is compatible with a number of ways of understanding the distinction.

⁴Stenson (1981: 42–45) and Ó Siadhail (1989: 207–210) provide clear overviews of the basic facts.

The constraint in (7), highly ranked in the phonological grammars of all contemporary varieties of Irish, privileges the left edge of prosodic constituents. If, however, a weak pronoun were to appear instead at the right edge of the phrase, there would be no violation of (7). This, in a word, is the proposal developed in Bennett et al. (2013, 2015): postposing is the placement of a weak pronoun at the right edge of a ϕ -phrase in order to avoid a violation of STRONG START. Thus, in (6), the possible ‘landing sites’ all mark right edges of nested phonological phrases and the origin point is a position (the left edge of a ϕ -phrase) in which a weak pronoun would trigger a violation of (7).

It is striking, given all this, that subject pronouns, even when weak, never postpose:

- (8) a. *Chuir – mo lámh ’mo phóca [mé].
 put.PAST my hand in-my pocket I
 ‘I put my hand in my pocket.’
 b. Chuir [mé] mo lámh ’mo phóca.

The stark impossibility of (8a) gives rise to two questions:

QUESTION 1. Why is postposing not available to subject pronouns?

QUESTION 2. How is the crucial prosodic dilemma actually resolved for subject pronouns? Why is the well-formed (8b) not ruled out as a fatal violation of STRONG START?

To see why these questions arise, consider in more detail how postposing works for an object pronoun such as in (9):

- (9) a. Fuair Eoghan [é] óna dheartháir an lá cheana.
 get.PAST Owen it from-his brother the-other-day
 ‘Owen got it from his brother the other day.’
 b. Fuair Eoghan – óna dheartháir an lá cheana [é].
 get.PAST Owen from-his brother the-other-day it
 ‘Owen got it from his brother the other day.’

The object pronoun of (9) is at the left edge of a maximal projection—the maximal verbal projection, out of which the verb itself has fronted. Matching constraints, therefore, if applied faithfully, will place the phonological exponent of the pronoun at the left edge of the phonological phrase corresponding to the verbal projection:

- (10) SYNTAX: [fuair Eoghan [_{vP} é óna dheartháir an lá cheana]]
 PROSODY: (ϕ fuair Eoghan (ϕ é óna dheartháir an lá cheana))

If the derivation happens to have begun with the choice of the strong form of the object pronoun, (10) is unproblematical and emerges as the variant in which the object pronoun has its strong, accented, form. If, however, the derivation happens to have begun with merger of a weak pronoun, we are threatened with a violation of STRONG START. The

system responds to this dilemma by providing a prosodic representation which is less faithful to the syntax but in which there is no violation of STRONG START. There are two ways in which it can do this, both of which exploit a now useful property of weak pronouns: that, almost alone among the function words of the language, they are enclitic rather than proclitic. This opens the space for two possible outcomes which are equally valued: the pronoun can adjoin at the right edge of a containing ϕ -phrase (yielding ‘postposing’ as in (9b)) or it can incorporate into the preceding prosodic unit, voiding the threatened STRONG START violation in a different way and yielding for the orthographic representation in (9a) the alternative prosodic parse in (11):

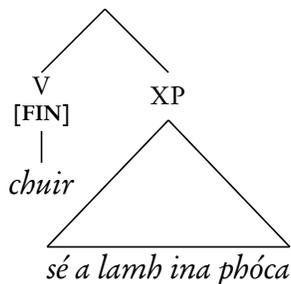
$$(11) \quad (\phi \text{ fuair Eoghan } \acute{e}) (\phi \acute{o}na \text{ dheartháir}) (\phi \text{ an } \acute{l}a \text{ cheana})$$

In (11), the enclitic pronoun is again at a right edge rather than at a left edge and all is well as far as (7) is concerned (at the cost, again, of a less than faithful correspondence between syntactic and phonological constituency).

This is how the ‘optionality’ of postposing is understood in the system proposed by Bennett et al. (2013, 2015)—the enclitic character of weak pronouns makes possible two equally valued ‘solutions’ to the prosodic problem that would be created if syntactic and prosodic representations were in maximally faithful correspondence.

In light of these proposals, consider now the case of subject pronouns in finite clauses. There is ample evidence (McCloskey (1991, 2011c)) that such clauses have the basic constituency schematized in (12):

- (12) a. Chuir sé a lámh ina phóca.
 put he his hand in-his pocket
 ‘He put his hand in his pocket.’
 b.



In (12) all the material following the finite verb forms a constituent, a maximal projection, which excludes the finite verb. We will consider shortly what the syntax is which yields (12b) as an outcome; for now, all that matters is that (12b) is, in outline, what we have at the end of the syntactic composition for VSO clauses of the Irish type. If prosodic constituency and syntactic constituency were to align perfectly, we would now have the prosodic structure in (13):

$$(13) \quad ((\omega \text{ chuir}) (\phi \acute{s}e \phi \phi))$$

It is in turn one of the most important results emerging from Elfner’s work (Elfner 2012, 2015) that the prosodic structure illustrated in (13) is one that is in fact attested under the right circumstances. But now all of the logic of the discussion of object pronouns should unfold in exactly the same way for subject pronouns. The post-verbal constituent XP of (12b) is mapped to a ϕ -phrase in (13). If we happen to have begun the derivation with a weak, rather than a strong, nominative pronoun, the faithful mapping of syntax to prosody shown in (13) would, exactly as before, force a violation of STRONG START and our expectation will be that subject pronouns should have available to them the same two repairs (prosodic incorporation to the left, or postposing to the right) as are available to non-subject pronouns. Why then is (8a) so firmly excluded?

The answer we pursue here is that subject pronouns have an alternative way of resolving the STRONG START dilemma, one which preempts postposing of the pronoun. We develop that alternative in what follows and pursue its implications, which turn out to be substantial. Understanding the mechanism of exemption will be the crucial thing in that discussion.

3 SUBJECT PRONOUN INCORPORATION

There is extensive evidence that in finite clauses, simple subject pronouns incorporate into the verbal complex to their left (Quiggin (1906: p. 155, §486), de Bhaldraithe (1966: p. 65, §339), Greene (1973), Lucas (1979: p. 120, §461), Chung & McCloskey (1987: 226–228), Doherty (1996: 23–25), Ó Baoill (1996: 88–89)): The example in (14a), for instance, has the prosodic structure indicated in (14b) and a phonemic realization as in (14c) (in Ulster varieties):

- (14) a. Chonaic mé fear mór ar an bhealach mhór.
 saw I man big on the way great
 ‘I saw a large man in the roadway.’
 b. (chonaic mé) (fear mór) (ar an bhealach mhór)
 c. (xanik^jmə) (fⁱar mɔ:r) (er^j ə valax wɔ:r)

In (14b) we observe the unstressed subject pronoun as an enclitic /mə/ on the finite verb /xanik^j/. We will call the process which leads to this outcome *Subject Pronoun Incorporation*, which we will occasionally abbreviate as SPI. In this section we lay out the core properties of SPI in an initial way. Our starting point is the informal statement in (15):

- (15) Simple subject pronouns right-adjoin to the inflected verb.

The term ‘simple pronoun’ in (15) is morphosyntactic rather than phonological. It refers to a monomorphemic pronoun which has not been augmented with any of the various suffixes or function words (contrastive, demonstrative, reflexive) which frequently appear to the right of pronouns in Irish. Various kinds of such complex pronouns are illustrated in (16) (for extensive relevant discussion see McCloskey & Hale (1984), Koopman (1999),

Doyle (2002), McCloskey (2004), Kane (2014)).

- (16) a. DEMONSTRATIVE
é sin: 3rd person singular masculine accusative + demonstrative particle: ‘that guy, that one’
 b. CONTRASTIVE
siad-san 3rd person plural nominative + contrastive particle: ‘they’ (as opposed to others)
 c. REFLEXIVE
sinn féin: 1st person plural + reflexive particle: ‘ourselves’

Morphological complexity here clearly mirrors internal syntactic complexity (Koopman 1999, McCloskey 2004, Kane 2014). But simple pronouns exhibit no such internal syntactic complexity. We take it then that they are not just monomorphemic but also syntactically simple, consisting only of a lexical item of category D (determiner) bearing features of person, number, gender and case which make the necessary discriminations among various members of the category.

Besides their syntactic and morphological simplicity, simple pronouns have an important additional property—they are incapable of bearing focus. If a pronoun is to be focused, it must be augmented with a contrastive suffix of the kind illustrated in (16b) and exemplified in (17):

- (17) Chuaigh si-se i dtreo na gcnoc, agus chuaigh mi-se i dtreo na
 go.PAST she-CONTR towards the hills and go.PAST I-CONTR towards the
 farrage.
 sea
 ‘SHE went towards the hills and I went towards the sea.’

Both of these properties of simple pronouns (their resistance to focus and their internal simplicity) will be important in what follows.

As for the incorporation process itself, one of its most important properties is that in syntactic and semantic terms, it is (like Pronoun Postposing) without consequence. It is presumably for this reason that the phenomenon has played no role at all in discussions of the syntax and semantics of subjecthood in Irish. For the relevant phenomena (word order, case, agreement, resumption, extraction, binding and so on) the work done by SPI is undetectable.

However, incorporation is clearly detectable in its phonological and morphological effects.

In the first place, given the proposals of Bennett et al. (2013, 2015), an explanation is needed for why weak pronouns do not trigger violations of STRONG START when in subject position. (this is our QUESTION ONE from above). The hypothesis of incorporation provides that explanation. SPI will ultimately yield a prosodic structure like that in (18b,c), repeated from (14) above:

- (18) a. Chonaic mé fear mór ar an bhealach mhór.
 saw I man big on the way great
 ‘I saw a large man in the roadway.’
 b. (chonaic mé) (fear mór) (ar an bhealach mhór)
 c. (xanik^jmə) (fⁱar mo:r) (er^j ə valax wo:r)

The potentially fatal violation of STRONG START in such cases is avoided because the subject pronoun is not at the left edge of the post-verbal ϕ -phrase, but is rather the rightmost sub-part of the verbal complex and is therefore at the right edge of the prosodic word corresponding to that complex. There is no violation of STRONG START in (18c).

In the second place, all observers are in agreement that simple subject pronouns are enclitic on the preceding finite verb (see Greene (1973: 128), Ó Sé (2000: 156), Ó Baoill (1996: 90, §6.3.2) among many others).

In the third place, simple subject pronouns and inflected verbs enter into a range of allomorphic interactions with one another which are understandable only if the pronouns and the verbal morphemes with which they interact are in a sufficiently local relation. The required locality is exactly what is delivered by SPI, since it places both morphemes involved in the alternation within the same complex word (in a sense that we will be more precise about as the discussion develops). We therefore take it that these patterns provide evidence for the reality of incorporation; in addition, and importantly, they also provide us with a probe for detecting whether or not incorporation has applied. They will play an important role in the discussion that follows, so we devote the following section to describing them. But let us first summarize our conclusions to date:

- SPI is part of the grammar of Irish;
- it creates a complex prosodic word by incorporating a simple subject pronoun into the verbal complex to its left;
- it has detectable morphological and phonological consequences;
- it has no detectable syntactic or semantic consequences.

This constellation of properties already suggests that SPI is post-syntactic. We will see other kinds of evidence for this conclusion as we proceed.

4 PATTERNS OF SUPPLETIVE ALLOMORPHY

We are concerned in the first place with allomorphic variation in the form of inflected verbs triggered by subject pronouns and, in the second place, allomorphic variation in the form of subject pronouns triggered by verbal endings. The details differ from dialect to dialect (because the morphophonology of the verb differs from dialect to dialect), but the effects are widespread and are well described in the dialectological literature. We will not try to catalog all such effects (see Wagner (1959: 95–96) on one Donegal variety), but we will consider a sample large enough (six cases) to give a full sense of the phenomenon.

TYPE ONE

In the dialects of Munster, the future tense ending spelled *-f(a)idh* is normally realized as /higʲ/. But before a simple pronoun, it is realized as /hi:/

cuirfidh Meáig: /kirʲhigʲ mʲa:ɣʲ/ ('Meg will put'), but:

cuirfidh mé: /kirʲhime/ ('I will put')

(see Ó Sé (2000: 23, 252, 258, 273, 285, 299)).

TYPE TWO

In Donegal and in Mayo, the same future tense ending (spelled *-f(a)idh*) is normally realized as /hi:/ or as /hi/ depending on dialect. It is realized as /hə/ before a simple pronoun:

cuirfidh Máire: /kʲiʲhi: ma:ɾʲə/ ('Mary will put'), but:

cuirfidh mé: /kʲiʲhəmə/ ('I will put')

(see Wagner (1959: 66, 95, §270(a)), Ó Baoill (1996: 30, §2.8.2, 31, §2.8.3)).

TYPE THREE

In Donegal and in Mayo, the conditional ending spelled *-f(e)adh* is normally realized either as /hu:/ or as /hu/ depending on the dialect. It is realized as /hitʲ/ before a simple subject pronoun with initial /ʃ/:

chuirfeadh Seán: /xʲiʲhu ʃa:n/ ('Sean would put') but:

chuirfeadh sé: /xʲiʲhitʲʃə/ ('He would put')

(see O'Rahilly (1932: 73), Wagner (1959: 96, §272), Ó Baoill (1996: 23, §2.1.3), and for the corresponding effect in Conamara Irish, Ó Curnáin (2007: Volume Two, 902)).

TYPE FOUR

In Donegal and in Mayo, the stem ending spelled *-(a)igh* (on which see especially Ó Sé (1991)) is normally realized as long /i:/ or as short /i/ depending on dialect (or occasionally as a half-long /i/). It is realized as /ə/ before a simple pronoun:

d'imigh Séamas: /dʲimi: ʃe:məs/ ('Seamas left'), but:

d'imigh sé: /dʲiməʃə/ ('He left')

(see, for instance, Wagner (1959: 96, §270(b)), Ó Baoill (1996: 22, §2.1.2)).

TYPE FIVE

In Kerry and in Donegal, the root of the verb 'go' in the past tense (spelled *chuaigh*) is realized as /xu:əɣʲ/ and /xuəi/ respectively. In both dialects, however, it is realized as /xuə/ before a simple pronoun. See Ó Sé (2000: 300, §546), Wagner (1959: 151, §411).

TYPE SIX

In all of the cases considered so far, the subject pronoun is the trigger for the allomorphy and the affected morpheme is part of the inflected verb. However, the interaction can also go in the other direction. The *s*-initial nominative pronouns, for instance, all have initial palatal /ʃ/, as seen in many of the examples already cited. However, in the Irish of Oileán Cléire (Cape Clear in County Cork), the conditional ending /-həx/ and the past habitual ending /-əx/ cause the initial /ʃ/ to be de-palatalized to /s/ (Ó Buachalla (1962: p. 105), Ó Buachalla (2003: §6.1.4, p. 48)):

do chuirfeadh sí (she would put): /də xʲiʲhəx si:/

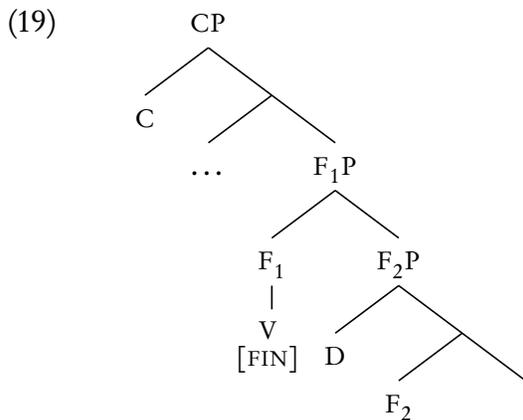
do bhíodh sé (he used to be): /də vʲi:əx se:/

In the alternations just described, we are dealing not with living phonological processes, but rather with suppletion. This is especially clear for the first and third types, in which the relation between the two allomorphs (/hu/ and /hitⁱ/ in one case, /hiɡⁱ/ and /hi/ in the other) is now completely opaque, although understandable in terms of remote linguistic history (on which, see the Appendix). Similarly, the depalatalization following /x/ seen in the final case (TYPE SIX) has no basis whatever in the phonology of the contemporary language.

Whatever mechanisms are responsible for these patterns must therefore do their work in a way consistent with the general theory of suppletive allomorphy. That theory has been the focus of a great deal of important recent work (see, among others, Embick (2012), Bobaljik (2012), Arregi & Nevins (2013), Merchant (2013), Bobaljik & Harley (2013), Bobaljik (2015), who in turn build on much earlier work) and as a result we are well placed to make deductions about the relations that must hold between the elements which participate in the interactions just described (pronoun and inflected verb).

Of course the pronoun and the inflected verb will always be adjacent (this is a VSO language). But, as has been emphasized throughout the relevant literature (see Bobaljik (2012), Svenonius (2012), Merchant (2013: 19, fn. 18 and passim)), the locality conditions governing such allomorphic interactions are much more stringent than can be captured by way of a simple adjacency condition. Many patterns which are in fact unattested should be frequent, if the trigger and the affected morpheme were required merely to be syntactically adjacent. We would expect, for instance, that the C-head of a complement clause might condition allomorphy on the verb or adjective which selects it.

We must therefore look beyond adjacency and consider what structural relations hold between the subject pronoun and the morphemes which ultimately constitute the inflected verb. The view of that relation provided by the best-supported current treatments of VSO structure in Irish is the one we see in (19).



In this general framework of analysis, the finite verb raises to a head-position in the extended projection of the clause, the subject appears in the specifier of a lower head, and what it means to be a VSO language of this type is to possess an inventory of functional heads whose properties conspire to permit or require such derivations. None of the de-

tails are crucial at present, but we will have reason to make more specific commitments as the discussion proceeds.

The question we now ask is whether the relation between F_1 in (19) and D (the simple subject pronoun) is sufficiently close that D could trigger suppletion on a proper sub-part of F_1 , or that a proper sub-part of F_1 could trigger suppletion on D. The answer to that question is ‘no’.

D of (19) is (the head of) the specifier of the complement of F_1 and is included in a maximal projection (namely F_2P) which excludes the position of the finite verb (F_1 in (19)). The syntactic relation might well in fact be more distant still, given the distinct possibility that other heads (and the phrases they project) intervene in the extended projection between F_2 and F_1 . In addition, D in (19) is not part of the extended clausal projection and therefore is not part of any span (in the sense of Svenonius (2012) and work cited there) which also includes F_1 .

These observations matter because it is absolutely crucial for an understanding of many of Bobaljik’s (2012) most important typological discoveries that the configuration in (19) NOT be a possible locus of suppletive allomorphy. If we are to understand, for instance, why root suppletion is commonplace in synthetic comparatives and superlatives, but unattested in analytic comparatives and superlatives, it is essential that the trigger and the target in relations of suppletive allomorphy may not be separated by a maximal projection boundary (for extended discussion, see Bobaljik (2012: 67–103), Bobaljik & Harley (2013), Bobaljik (2015)). These important results would be lost if we were to hold that the patterns of allomorphy described in section 4 above emerged from an unadjusted syntax like that in (19).

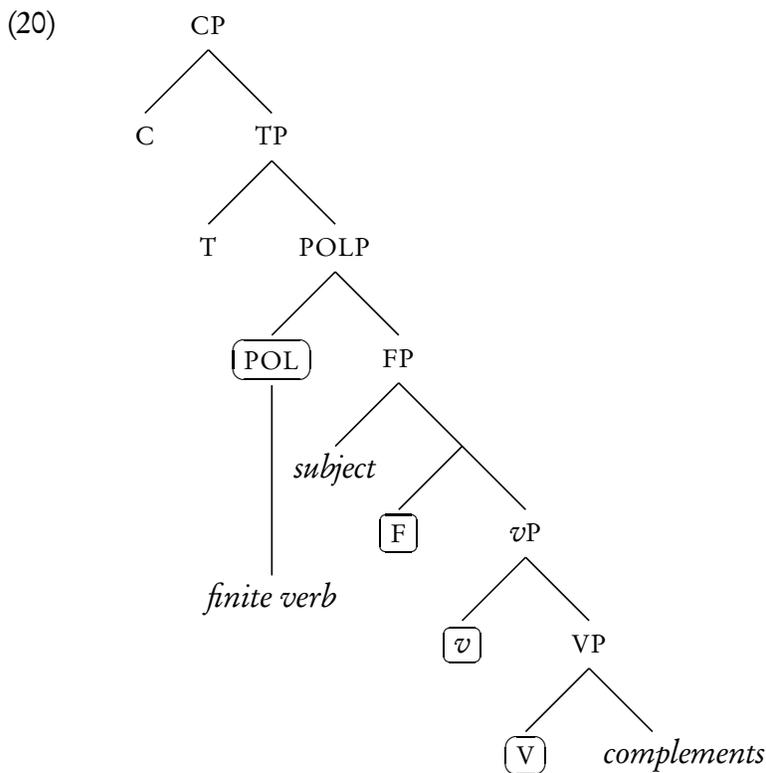
But of course we already have good reason to believe that a post-syntactic adjustment does in fact apply to (19), namely SPI, and that that operation creates a single complex word which includes both the pronoun and the morpheme whose shape is determined by the pronoun. Furthermore, as we will see in more detail in section 6 below, within that word the pronoun will always be adjacent to the element whose form it determines (*modulo* null exponents). Provided that SPI does apply then, as we propose, the patterns discussed in section 4 fall straightforwardly within the range of the uncontroversial and the routine as far as theory goes (for much relevant discussion, see for instance Embick (2012), Bobaljik (2012), Arregi & Nevins (2013), Merchant (2013)). And perhaps more important, it is now not an accident, as it surely should not be, that the evidence from allomorphy aligns so closely with the independent evidence for enclisis of the subject pronoun.⁵

⁵Bobaljik & Harley (2013) and Bobaljik (2015) discuss a case in Hiaki in which root suppletion for a relatively small class of high-frequency verbs is apparently determined by the number of the subject for intransitives and the number of the object for transitives. They develop an analysis according to which the suppletion in question is determined at a point in the derivation at which the triggering element (subject or object) is a sister of the verbal root (taking all of the relevant intransitives to be unaccusative). Their conclusion is that suppletive allomorphy is possible not just within the word but also within the immediate projection of a head (complements, but not specifiers, may trigger suppletion on heads). This does not help with (19), of course, and leaves intact the argument for SPI. In addition, there is reason not to

We take it then that SPI involves the creation of a complex word which includes the finite verb and the subject pronoun. If this is correct, we have a departure from strict parallelism between syntactic and phonological representations of the same material and we must face the challenge of better understanding how that mismatch arises. To face that challenge, we will need to be more specific about the syntax we assume. That is the work of the section which follows.⁶

5 CLAUSAL SYNTAX

Following much recent work, we assume that VSO order in Irish emerges as in (20):



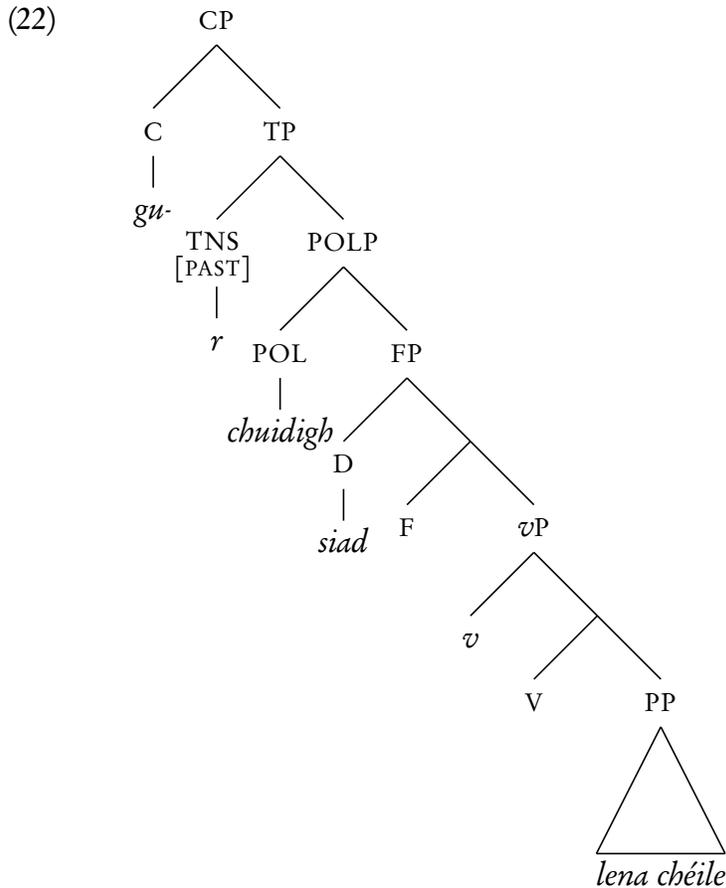
We will assume (see McCloskey (2011b), Acquaviva (2014)) that the finite verb lexicalizes the contiguous span: { V, v, F, POL } in the position of the polarity head. This yields VSO orders, given that the subject raises only as far as the specifier of the functional head

pursue for these Irish cases the line of analysis developed by Bobaljik and Harley for Hiaki. In Hiaki it is, crucially, always the root which undergoes suppletion, something which reflects its derivational connection with the triggering argument. In Irish, by contrast, suppletion applies, as we will see in more detail in section 6 below, to whatever morpheme happens to be adjacent to the incorporated pronoun, different in different configurations, and there is no constant syntactic or derivational relation between trigger and target. Thanks to Amy Rose Deal for causing us to think these matters through.

⁶For a different point of view on these matters, from a different perspective see Hayes (1990), Wagner (2011).

F, below the polarity head and therefore below the position of the inflected verb. We need not, for the present at least, take a position on the nature of F. For the specific case in (21), then, we will have the structure in (22).

- (21) gur chuidigh siad len- a chéile.
C-PAST help.PAST they with each other
'that they helped each other'



The proposals illustrated in (20) and (22) earn their plausibility in yielding an understanding of some fundamental aspects of clausal organization in Irish. First, they provide a way of understanding the body of observations which suggests that all the material following the finite verb forms a syntactic constituent which includes the verbal projection (McCloskey (1991, 2011c), Schloormemmer & Temmerman (2011)). That constituent is FP of (20) and (22). They also let us understand the body of observation which suggests that the subject raises out of the verbal domain (McCloskey (1996b, 2001, 2011b, 2014)) while at the same time letting us understand how those two conclusions are consistent with the fact of VSO order. The relation between finite clauses and their superficially very different nonfinite counterparts also emerges from the overall framework—they are identical except that each of the heads which is part of the contiguous span gathered up into the

finite verb in a finite clause is lexicalized independently in a nonfinite clause (Chung & McCloskey (1987), McCloskey & Sells (1988), Guilfoyle (1990), Duffield (1995)). Finally, these assumptions allow a simple and natural understanding of a characteristic Irish ellipsis type, for which we will use the term *responsive ellipsis*. Since that process will have an important role in our discussions later in the paper, we take some time here to lay out the basic facts.

5.1 RESPONSIVE ELLIPSIS

Responsive Ellipsis reduces a finite clause to a finite verb. It is this grammatical device which provides the conventional means (in the absence of words corresponding to *yes* or *no*) by which polar questions are answered, as seen in (23):

- (23) a. Ar chuir tú isteach ar an phost?
 Q.PAST put.PAST you in on the job
 ‘Did you apply for the job?’
 b. Chuir.
 put.PAST
 Yes.

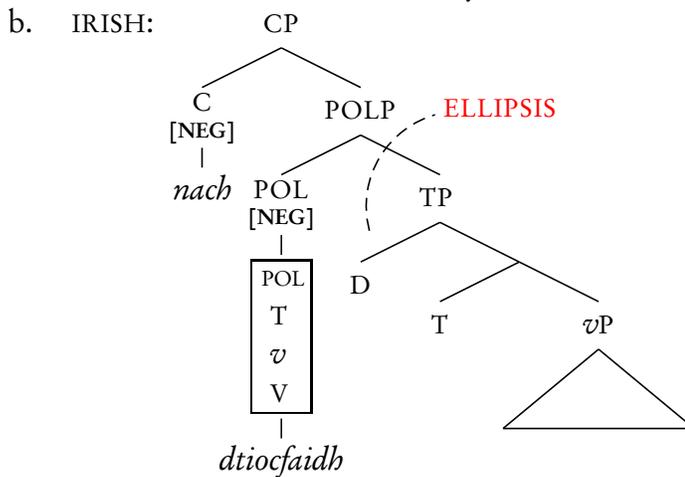
We use the term Responsive Ellipsis for this ellipsis construction partly in deference to traditional usage (which calls the verb in (23b) the ‘responsive’ form) and partly in recognition of its characteristic use in the context of (23). However, the term is not in fact appropriate, since the same pattern is used in a broad range of contexts which have nothing to do with the question-answer relation but which are characteristic of ellipsis more generally. We see the same pattern, for instance, in coordinate structures and in tag-questions:

- (24) a. Dúirt siad go dtiocfadh siad, ach ní tháinig ariamh.
 say.PAST they C come.COND they but NEG come.PAST ever
 ‘They said that they would come but they never did.’
 b. Beidh muid connáilte, nach mbeidh?
 be.FUT we frozen NEGQ be.FUT
 ‘We’ll be frozen, won’t we?’

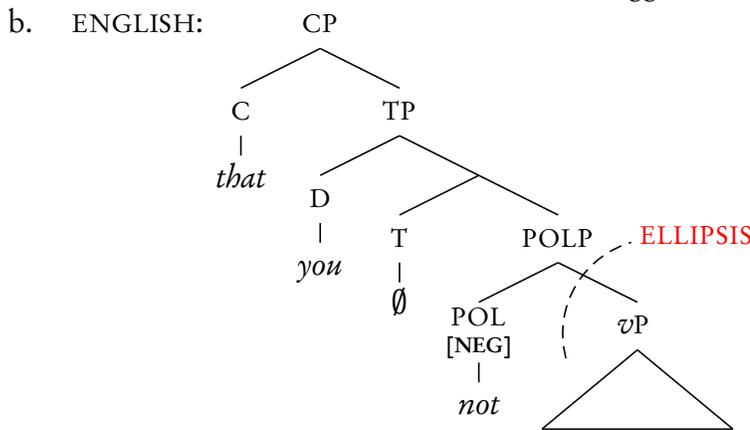
When the evidence is examined closely, it turns out that, in their distribution, in their range of functions, and in their formal properties, such single-word sentences mirror point for point the properties of VP ellipsis in English. For the detailed evidence and for further analysis, see McCloskey (1991, 2005, 2011c), Schloormemmer & Temmerman (2011). That is, Responsive Ellipsis is an instance of what has been known since Lotus Goldberg’s (2005) dissertation as ‘Verb Stranding VP Ellipsis’ (McCloskey (1991, 2005, 2011c), Doron (1991, 1999), Sherman (Ussishkin) (1998), Goldberg (2002, 2005), Ngonyani (1996), Martins (1994, 2000), Cyrino & Matos (2002, 2005), Griбанова (2010, 2011, 2013), Schloormemmer & Temmerman (2011), Takita (2013).) We take it (largely following the authors just cited) that Responsive Ellipsis is elision of the complement of

the head to which the verb raises. The verb (having raised) survives; the subject DP (being trapped within the ellipsis site) does not. In the present context this means that Responsive Ellipsis is elision of the complement of the polarity head (elision of FP in (20) and (22)). A consequence of this line of analysis is that Responsive Ellipsis in Irish and VP ellipsis in English emerge as structurally parallel in an important way: both reflect elision of the complement of the polarity head—high in Irish, low in English, as shown in (25) and (26), on which see Lobeck (1995), Potsdam (1997):

- (25) a. D'iarr mé air a theacht ach deir sé nach dtiocfaidh.
 PAST-ask I on-him come.NON-FIN but say he NEG-C come.FUT
 'I asked him to come but he says that he won't.'



- (26) a. You CAN smoke in these rooms, but we suggest that you not.



On this basis we might hope to eventually understand why the two processes share the many formal and distributional properties that they in fact do.⁷

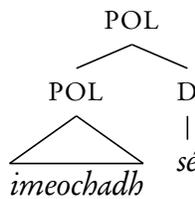
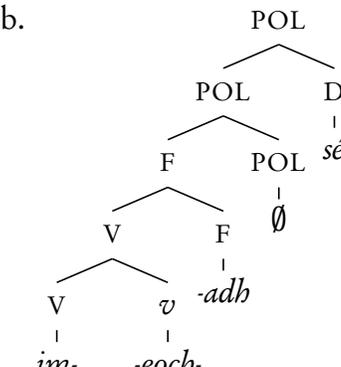
⁷See Laka (1990), López (1994, 1995, 1997), López & Winkler (2000) for very similar conclusions regarding English, Spanish, and certain German cases.

We have lingered over these matters because Responsive Ellipsis exhibits an interesting interaction with the subject incorporations that are the focus of our investigations here—a matter we turn to presently. In addition, notice that it is an entailment of this analysis that every finite verb in Irish contains within itself a semantically potent expression of polarity, positive or negative. This too will be important in what follows.

6 SUBJECT PRONOUN INCORPORATION AGAIN

With this much in hand, we can turn to the question of what kind of operation SPI is. We have already seen that it is post-syntactic and that it takes a simple pronoun in subject position (specifier of F in (20) and (22)) and adjoins it at the right edge of the inflected verb delivered by the lexicalization process. It therefore creates from the finite verb of (27) a complex word of the form in (28)—shown schematically in (28a), in more detail in (28b).

- (27) D’imeochadh sé go hAlbain.
 leave.COND he to Scotland
 ‘He would leave for Scotland.’

- (28) a.  b. 

We are now in a good position to understand the allomorphic alternations described in section 4. Given the fact that the polarity head has a null exponent and can therefore be pruned—ignored for the calculation of allomorphic adjacency (see Embick (2012: 28–29), Merchant (2013: §2))—the incorporated pronoun is adjacent to the element F in (28) and is therefore in a position to influence its form. In work in progress, McCloskey argues that F is a second, lower, Tense head, implicated in the expression of event time, which acts as probe in the agreement and case interactions which define subjecthood. It is therefore the syntactic expression of the information—finiteness, tense, and ϕ -features of the subject DP—which is expressed on the inflectional endings of fronted verbs. These are just the morphemes which participate in TYPE ONE, TYPE TWO, TYPE THREE, and TYPE SIX alternations in the discussion of section 4 above. Further, if the exponent of F (the lower Tense) were also null, then the influence of the incorporated pronoun should extend as far as *v*. This circumstance arises for the non-habitual past, whose exponent is null in the 3rd person singular. This is the TYPE FOUR allomorphy of section 4, in which we have

allomorphy triggered by the incorporated pronoun on the stem ending *-(a)igh*, which is very plausibly analyzed as an exponent of *v* (Acquaviva (2014: 553–556), building on Ó Sé (1991)). If POL, F, and *v* are all null, then the allomorphic influence of the incorporated pronoun should extend as far as the root itself. This is the TYPE FIVE allomorphy pattern of section 4. Given our initial understanding of SPI, then, along with the syntactic framework of the previous section, the patterns of allomorphy described in section 4 emerge as natural reflections of a well-supported general theory of suppletive allomorphy, one in which adjacency within a closely-delimited domain plays a central role.

We can also deduce from these observations that SPI must be obligatory—by stipulation or in a way that emerges from other requirements. We know this because the patterns of allomorphy just described are obligatory; they occur whenever an inflected verb of the relevant type is followed by a simple pronoun.⁸ Since the allomorphy patterns presuppose a locality which is delivered only by incorporation of the pronoun, SPI must itself be obligatory.

This is one of a number of considerations which lead us to conclude that SPI is not prosodic. The work that we build on here (Bennett (2008), Elfner (2012, 2015), Bennett et al. (2013, 2015)) makes clear that the system of prosodic structure building yields a number of different possible outcomes for VSO clauses. Sometimes the phrase structure of (12) is matched faithfully, with the verb forming a prosodic constituent distinct from the post-verbal material. Under the right circumstances, however, phrasings in which the verb and the subject together form an initial ϕ -phrase are possible and frequent, as we see in an example like (29) (see Bennett et al. (2013: §6) and references cited there for detailed discussion and justification):

- (29) a. Chuaigh na mílte go Cnoc Mhuire.
 go.PAST the thousands to Knock
 ‘Thousands traveled to Knock.’
 b. ((ϕ (ω chua’) (ω na mílte)) (ϕ go Cnoc Mhuire))

The processes which give rise to (29b) alongside more faithful matches of (12) above are driven by the imperative to create prosodic constituents which are binary-branching and whose constituents are rhythmically balanced. These constraints yield varying outcomes, presumably because there are more ways than one to optimize the often contradictory demands of the constraints that are in play. But the effects we attribute to SPI are different in kind from this: they are rigid, obligatory, and invariant.

⁸We know of only one potential exception to this generalization. Brian Ó Curnáin (personal communication) reports that alternations of TYPE THREE in section 4 above, those involving variation in form of the conditional ending, are optional in at least some Conamara varieties. In the framework of understanding we are gradually building here, there are two paths we might follow in trying to integrate this observation. We might say that SPI is optional in such varieties, or we could postulate that the allomorphic rule is itself optional. Given that the other effects we attribute to application of SPI are present in these varieties, the second path surely seems more plausible. But to really adjudicate the case, we would need to have a much closer knowledge of what the facts are than is available at present.

We must also not lose sight of the questions we originally posed, which were these:

- QUESTION 1. Why is postposing not available to subject pronouns? It is after all a commonly deployed repair for cases in which a weak pronoun violates STRONG START by appearing at the left edge of a ϕ -phrase.
- QUESTION 2. How is the crucial prosodic dilemma actually resolved for subject pronouns? Why isn't the well-formed (27) ruled out as a fatal violation of STRONG START?

We have answered the second: in fusing the subject pronoun with the inflected verb, SPI obligatorily removes a weak pronoun from the position (the left edge of the post-verbal constituent) in which it would have triggered a violation of STRONG START. But what of the first?

Recall the logic which drives the understanding of postposing developed in Bennett et al. (2013, 2015). Given the enclitic character of weak pronouns, the system of prosodic structure-building can respond in one of two ways to the violation of STRONG START that a weak pronoun may threaten. One option is to place the pronoun at the right edge of a containing ϕ -phrase (so-called 'postposing'); but an alternative is that the weak pronoun may be prosodically incorporated into the preceding prosodic unit. This is why postposing, to speak loosely, is 'optional'. To repeat an example discussed earlier (at (9) above), consider again (30):

- (30) a. Fuair Eoghan $\boxed{\acute{e}}$ óna dheartháir an lá cheana.
get.PAST Owen it from-his brother the-other-day
'Owen got it from his brother the other day.'
- b. Fuair Eoghan – óna dheartháir an lá cheana $\boxed{\acute{e}}$.
get.PAST Owen from-his brother the-other-day it
'Owen got it from his brother the other day.'

As we have seen, the two variants of (30) reflect the availability of these two options:

- (31) a. (ϕ fuair Eoghan \acute{e}) (ϕ óna dheartháir) (ϕ an lá cheana)
b. (ϕ fuair Eoghan) (ϕ (ϕ óna dheartháir an lá cheana) \acute{e})

Prosodic incorporation to the left yields (31a), while adjunction to the right edge of the ϕ -phrase yields (31b). But the prosodic incorporation seen at work in (31a) is not distinguishable from a prosodic interpretation of SPI. And if the same (or similar) operations were responsible for incorporation of subject pronouns and the incorporation of object pronouns illustrated in (31a), then our expectation will surely be that postposing will be as available for subject pronouns as it is for object pronouns. The relevant calculus (alternative available repair strategies for a threatened prosodic flaw) would be identical in the two cases, if both operations were part of the system of prosodic structure building. Put slightly differently, a prosodic interpretation of SPI will lead us to expect (falsely) that the

optionality seen in (30) and (31) will also be characteristic of subjects.⁹

We conclude from all of this that SPI is not a prosodic operation (a conclusion suggested in any case by the fact that its core term ‘simple pronoun’ is morphosyntactic rather than phonological). We will encounter additional evidence as the discussion develops; for now, though, we can summarize our conclusions about SPI as follows:

(32) SUBJECT PRONOUN INCORPORATION

- is post-syntactic (has no syntactic or semantic effects),
- should not be understood in prosodic terms,
- is obligatory,
- creates morphologically complex words which constitute the domain for the patterns of allomorphic variation considered in section 4, and
- preempts the building of prosodic structures such as (13), which are in turn the structures which threaten violations of STRONG START and thereby license postposing of weak pronouns.

This, it seems to us, is the profile of a morphological operation, especially given an overall architecture in which the output of syntactic structure building is the input to morphology and the output of morphology is the input to prosodic and other phonological operations. If SPI is a morphological operation and is therefore obligatory, it will guarantee the allomorphic patterns of section 4 and simultaneously preempt the building of prosodic structures like (13). This is because the mapping principles (Selkirk (2009, 2011), Bennett et al. (2013: §6.1)) will treat the structure of (28) as a single morphological word and will map it to a prosodic word, with the incorporated pronoun at its right edge. In this position, it will never trigger a violation of the STRONG START constraint and postposing will never be motivated. The preemption that we need is guaranteed, and we have an understanding both of why postposing never applies to subject pronouns and why there is no STRONG START violation in routine cases like (27).

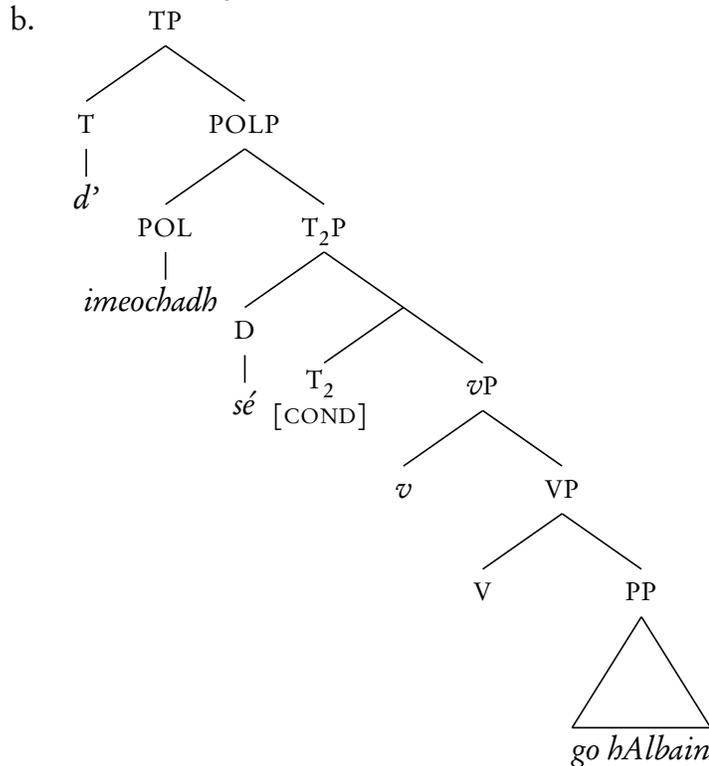
But if SPI is a morphological operation, what kind of morphological operation is it? There is, as far we know, just one proposal – that of Doherty (1996) – about the nature of SPI in Irish which is explicit enough to be assessed. Doherty proposes, in fact, that SPI is a species of head-movement. We argue here that this proposal is correct in its essence, but also that when we adapt it into a contemporary theoretical context, its place in the theoretical firmament shifts in interesting and useful ways.

In the theoretical context in which it was actually introduced, Doherty’s proposal was troubling. It involved claiming that head movement could target for raising a head which originated within a specifier (the subject position in fact). Given the theory of Bare Phrase Structure however (Chomsky (1995) and a great deal of subsequent work), the anomaly largely disappears. We will now have for the example in (27) (repeated as (33)) a structure

⁹There is interesting diachronic evidence (considered in the Appendix) that it is in fact correct to link a prosodic interpretation of SPI with the expectation that postposing should be available to subject pronouns.

along the lines of (34):¹⁰

- (33) a. D' imeochadh sé go hAlbain.
 PAST- leave.COND he to Scotland
 'He would go to Scotland.'



In (33), the simple subject pronoun *sé* is both minimal and maximal (minimal in that it consists only of a lexical item, maximal in that it does not project its label). In addition, although it is not part of the extended projection of the clause, it is the head which is adjacent to the polarity head (which of course hosts the inflected verb) and in addition it is the head which is most immediately commanded by the attracting head (POL) and which commands all other heads which the polarity head commands. All of this makes it plausible that the subject pronoun and the subject pronoun alone would be available for incorporation.

¹⁰The head-movement we propose here is similar, in certain respects, to a type which Chomsky 2013: 43 has argued should be impossible. The logic of the argument depends on a particular understanding of how labeling, cyclicity, and intervention interact. However, our proposals are in fact consistent with the framework proposed by Chomsky, as long as SPI is, as we have argued it is, post-syntactic and correspondingly that head-movements like T-to-C raising in English are syntactic. In the post-syntactic landscape (in which, for instance, lower instances of moved phrases will have been eliminated), the kind of interaction which Chomsky discusses will yield a different outcome. The issues raised here clearly deserve a much more considered discussion, but that discussion must be left for another occasion.

We will follow Doherty’s core intuition here in taking SPI to be a head movement—in the very general sense that the pronoun (a head) is displaced from its First Merge position; but the properties of SPI are very different from those of, for instance, finite T to C raising in Germanic or Romance languages, which we take to be a syntactic head movement (with potential semantic consequences). Rather SPI is, we believe, one of the ‘movement operations after syntax’ proposed by Embick & Noyer (2001) (see also Marantz’s (1989) Morphological Merger)—‘operations that affix terminals to each other to create complex heads in the PF component’ but which are ‘in addition to head movement’ (Embick, 2012: 35–36). We take the shift from Doherty (1996) towards the present proposal to be one part of the larger program of re-assessing the status of head-movement in linguistic theory—factoring out in a principled way that which is syntactic from that which is not (Chomsky (2001: pp. 37–38), Boeckx & Stjepanović (2001), Harley (2004), Schloormemmer & Temmerman (2011) and many others).

SPI then is crucially intermediate between syntax and phonology—it has access to syntactic representations like (33b) as its input, but it adds no new lexical material, need not obey the extension condition of Chomsky (2000, 2001) and has no effect on semantic interpretation. It combines the existing atoms of a syntactic object into new combinations—complex ‘words’—and provides the input to phonological operations, including the mapping principles which relate syntactic to prosodic form.

This cluster of assumptions allows an understanding of the properties of SPI as we have seen them so far, and also allows an understanding of one that we have not yet considered. This has to do with impersonal inflection on finite verbs, of the type seen in (34):

- (34) a. Tógadh suas an corpán ar bharr na haille
 raise .PAST-IMPERS up the body on top the cliff .GEN
 ‘The body was lifted to the top of the cliff’
 b. Scaoileadh amach na líonta
 release .PAST-IMPERS out the nets
 ‘The nets were let out’

Each tense and mood has such a form (known as the ‘autonomous’ inflection in the Irish grammatical tradition), and it licenses an interpretation for the subject argument which is very close indeed to that of impersonal subject pronouns like German *man* or French *on* (for discussion and analysis, see Stenson (1989), Noonan (1994), Ó Sé (2006), Nolan (2006), McCloskey (2007, 2010), Maling (2015)). The crucial property of these impersonal forms is that they license no promotion of the internal argument to subject position and, relatedly, that they always contain a null pronominal subject with an arbitrary or impersonal interpretation (see especially Stenson (1989), McCloskey (2007) for the evidence for this last claim). What then will our expectations be concerning the phenomena we have been concerned with?

Firstly, SPI should be impossible, since its application will be blocked by the intervening null impersonal pronoun, whose presence is required by the autonomous inflection, and which occupies the position of the pronoun *sé* in (33b). Since the pronoun cannot

be incorporated, the mapping principles are free to create prosodic structures like that in (13) and the logic of the analysis in Bennett et al. (2013) unfolds. If the pronoun is weak, a violation of *STRONG START* is threatened and the normal range of repairs becomes available—among them postposing. Therefore we expect that postposing should be freely available. This is correct. Postposing is a regular feature of these impersonal clauses, as seen, for example, in the pair of examples in (35). The pronoun is in its syntactically expected position in (35a); it is postposed in (35b). As usual, postposing is the preferred option.¹¹

- (35) a. Cuirtear iad i mboscaí.
 put .PRES-IMPERS them in boxes
 ‘They are put in boxes.’
- b. Cuirtear – i mboscaí (iad)
 put .PRES-IMPERS in boxes them
 ‘They are put in boxes.’

We also expect, of course, that the patterns of allomorphy discussed in section 4 above should never appear with impersonal forms. This is correct: there are no such variations in the form of the impersonal endings. Now of course the absence of such forms could simply reflect a series of morphological accidents or gaps; however, the analysis under consideration makes their absence a systematic and expected fact, since the allomorphic variation in question, we have argued, depends on a prior application of SPI, which serves to bring the two elements of the interaction into the required locality domain (the morphological word).

What is crucial in allowing an understanding of this cluster of observations is the Janus-like nature of SPI as a morphological operation—one face towards the syntax, one face towards the phonology. Because it has access to syntactic representations, it can be sensitive to the intervention of phonologically null elements like the impersonal subjects of (34) and (35); yet it creates the complex words that allomorphy and other form-determining operations are sensitive to.

If SPI were a process of prosodic, rather than morphological, incorporation, all of these facts would be mysterious. Prosodic incorporations should not be sensitive to the intervention of phonologically null elements and indeed a pronominal object which has not been postposed (as in (35a)) will easily and routinely cliticize phonologically to the impersonal verb to its left, oblivious to the presence of the null impersonal subject which blocks SPI. Such cliticization is, in fact, a standard alternative repair for a threatened violation of *STRONG START* (see section 7.1 of Bennett et al. (2013), especially (62).)

We take from all of this that SPI is a morphological rather than a prosodic operation. We will return to a specific implementation presently and to a specific set of commitments. To set the scene for that discussion, though, we need to consider two other phenomena in which SPI plays, we claim, a crucial role. As it turns out, the structure postulated

¹¹For detailed exemplification see especially the Appendix to Bennett et al. (2015).

in (28) for words created by SPI will be the key element in that discussion. The first of these involves an additional, and initially very curious, failure of isomorphism between syntactic and phonological representations of the same material. We turn to that puzzle in the next section.

7 A CURIOUS PHENOMENON

Many observers¹² have noted the existence in all contemporary varieties of Irish of a curious phenomenon, at the heart of which is a striking mismatch between semantic-pragmatic focus on the one hand and the phonological exponent of that focus on the other. For reasons that we will come back to, de Bhaldraithe (1953: 69, §166) uses the term *béimniú dúbáilte* or ‘double stressing’ for these cases. But the phenomenon has no generally agreed upon name at present and so we have to innovate one. We will use the term *Special Focus Construction* here and we will sometimes abbreviate that as SFC. The examples in (36) exemplify the Special Focus Construction in an initial way. Here and throughout, we use small caps to indicate the presence of a very prominent pitch accent.

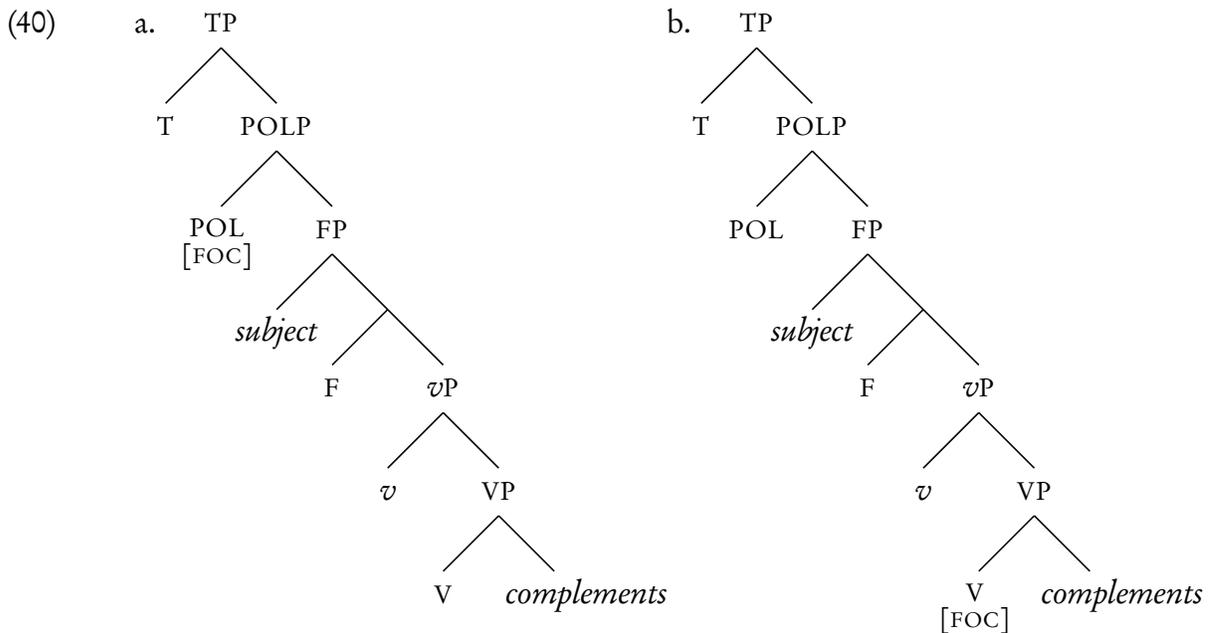
- (36) a. A: Cuir síos é. B: Ní rachaidh SÉ síos.
 send down it NEG go .FUT it down
 ‘Drive it down.’ ‘It won’t GO down.’
- b. A: An ngéillfidh siad? B: Caithfidh SIAD.
 Q yield .FUT they must they
 ‘Will they yield (on this)?’ ‘They HAVE to.’

The context for (36b) was a discussion of academic politics; the exchange in (36a) took place between two men trying to drive a fence-pole into hard earth.

What is so striking about such cases is the profound misalignment that we observe in them between phonological and interpretive systems of representation—the constituent on which the focal accent falls is not at all the constituent which bears interpretive focus. In the responses of (36a) and (36b), we have a simple pronoun as subject, upon which falls a strong focal accent. That much is already strange, since, as pointed out earlier (see the discussion around (17) in section 3 above), simple pronouns may not in general be focused. What is stranger still is that the pronoun upon which this accent falls is, as far as interpretation goes, un-focused. More than this, it is in fact necessarily given, referring to a discourse referent already established and made salient in the first part of the exchange (in the imperative of (36a), in the interrogative of (36b)). In (36a) interpretive focus is on the verbal stem *rach-* (go), while in (36b) it is on the modal verb *caithfidh* (must). The fact that an element other than the pronoun is focused means that the pronoun itself must inevitably be within a constituent that is given, or anaphoric; this follows from

¹²See for instance Greene (1973: 128), Wagner (1959: 98-99), Lucas (1979: 94, §360), Ó Baoill (1996: 89, §6.3.1), de Búrca (1970: 77, §383), de Bhaldraithe (1966: 65, §340), Ó Curnáin (2007: Volume One, 391, §1.383), Ó Sé (2000: 156, §336, 50, §56).

We contend that the framework already put in place (especially our understanding of SPI), when combined with some assumptions about the phonology of accent placement, allows an understanding of this set of observations. Consider first the syntactic side of things. The syntax will present to the interpretive systems structures like the two in (40):



The structures in (40) incorporate the standard assumption that a FOCUS feature (in the sense of Jackendoff (1972), Rochemont (1986), Selkirk (1996) and much subsequent work) can be applied to elements of the syntactic representation. That feature may of course appear on the polarity head POL, or on the verbal root *v* (among many other possibilities). We assume (with Samko (2014)) that the possibility in (40a) gives rise to the cluster of effects that was investigated by Tilman Höhle (1992) under the name of Verum Focus. We also assume for Verum Focus the kind of alternative semantics proposed by Samko (2014), building on Rooth (1985, 1992). That is, the focus semantic value of a clause containing an F-marked polarity head will be an alternative set consisting of positive and negative variants of the same propositional core (in effect, a polar question). Many important semantic and pragmatic issues arise at this point (see especially Schwarzschild (1999)) which we will have to set aside here; but these natural assumptions, we think, will provide a reasonable treatment of Verum Focus cases like (37)–(39). (40b) meanwhile, the case in which F-marking applies instead to the verbal root *v*, corresponds to our initial set of examples in (36). Here too the standard Roothian analysis in terms of an alternative semantics seems to yield a good theory of their interpretive properties. F-marking on *v* will give rise to a focus semantic value consisting of a set of propositions differing from one another only in that different verbal meanings will replace the sense of the verb found in the ordinary semantic value.

inflectional ending; in Slovenian (Dořák & Gergel (2004), Dořák (2007)) it is realized on an object clitic which would otherwise be stress-less; in German, the accent may appear on a complementizer, on a mono-morphemic element in the specifier of C position, or on an inflected verb fronted to the C-position (Höhle (1992)). In English meanwhile, the accent associated with Verum Focus may appear on a semantically inappropriate modal or aspectual auxiliary (Samko (2014)).

Let us begin, then, with the assumption that in Irish, as in these other languages, the focal accent must be realized independently of the lexical stress. If that is so, it is nevertheless reasonable to assume that it must be realized somewhere within the prosodic word that contains the focused element.¹⁵ On which sub-part of the word will we then expect it to be realized?

One relevant consideration is that the element on which the focus accent falls must have sufficient prosodic substance to bear such an accent. There is clear evidence, in fact, that the focal accent requires a bimoraic constituent for its realization. The evidence for this condition concerns how focus-realization works in the case of synthetic verb forms—verbs whose inflectional endings reflect person and number features of the subject. In such cases, the final syllable of an inflectional affix (the exponent of subject verb agreement) may be accented in a way that is very similar to our cases—but if and only if it hosts two moras (has two syllables or has a long vowel). These cases have been noted by de Bhaldraithe (1953: 69, §166), Ó Sé (2000: 50, §55, 52, §60), and de Búrca (1970: 77, §383). Typical examples are given in (42). In (42a) the focal accent is realized on the past tense third person plural morpheme *-adar*, which has two syllables, while in (42b) it is realized on the second person singular conditional ending *-f(e)á*, which has a long vowel.

- (42) a. An raibh siad ann? BhíoDAR.
 Q be.PAST they in-it be.PAST.P3
 ‘Were they present? They certainly were.’
 b. An mbeinn buartha dá ndéanfainn a leithéid? BheifEÁ.
 Q be.COND.S1 regretful if do.COND.S1 its like be.COND.S2
 ‘Would I regret it if I did such a thing? You certainly would.’

We conclude that the focal accent can only be realized on a bimoraic foot.

A second relevant consideration is that the accentual pattern observed in the SFC is very reminiscent indeed of the patterns found in compound words. Under SFC, the incorporated pronoun has its own stress and accent and is more or less equally stressed with the first syllable of the verb. This is exactly how stress is distributed in compounds (such as *droch-chladach* ‘bad shore’). As has been noted many times in the descriptive literature,

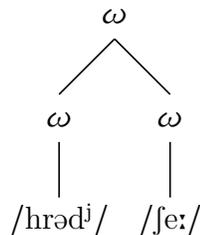
¹⁵One can imagine functional bases for both of these constraints. If the focal accent were on the lexically stressed syllable, its presence might not be obvious to a perceiver. But if it were to be realized in a position very distant from its point of origin, it might be difficult for a perceiver to retrieve the intended interpretation. A difficulty for this simple proposal, however, is that the phrasal accents identified by Elfner (2012, 2015) ARE realized on the syllable which bears lexical stress but are nevertheless acoustically distinct from the lexical stress.

both elements of a compound are equally stressed. The description in Mhac an Fhailigh (1968: 62, §267), for instance, is typical:¹⁶

Compound words that are felt to be such—loose compounds—have double stress about equal on their component parts.

The kind of ‘double stressing’ mentioned in such descriptions is very reminiscent of how the SFC is characterized in the same descriptive tradition. Taking this connection seriously, we suggest that the prosodic structure that underlies special focus is that in (43), which shows the prosodic structure (following SPI and prosodic phrasing) that we assume for the initial verbal complex of example (39).

(43) EXAMPLE (39):



In (43) there is a recursive prosodic word in which each constituent word bears a single accent; we also have a faithful match for the adjunction structure derived in the morphology by SPI (compare (43) with (28) above). Phonological constraints such as Binariness (Ghini (1993), Inkelas & Zec (1995), Ito & Mester (1992, 2006, 2009), Mester (1994), Selkirk (2000)) and Equal Sisters (Myrberg (2010))—constraints which play a particularly important role in regulating prosodic phrasing in Irish—are fully satisfied (Bennett et al. (2013), Elfner (2012, 2015)). More important, simple pronouns, we know, have both strong and weak variants (see (3) above) and the strong variants, having long vowels, are bimoraic. If the focal accent appears on the incorporated pronoun, then, the requirement that the focal accent be realized on a bimoraic foot will always be satisfied, as long as the strong variant of the pronoun is deployed. Finally, the incorporated pronoun, though crucially within the complex word which includes the F-marked element, will be as distant as it is possible to be, within that word, from the syllable bearing lexical stress. It follows in turn, then, that the drive to avoid stress clash will be maximally satisfiable in a structure such as (43) (compare Gouskova & Roon (2013) on secondary stress in Russian compounds).

What seems to happen, in sum, is that when a focal accent is ‘trapped’ within the complex morphological and prosodic word created by SPI, purely phonological principles of accent realization and distribution take over, forcing the accent to the right edge of the containing morphological word and therefore, accidentally so to speak, onto the pronoun. In this interplay, the important distinction between the two cases in (40) above is lost (verbal focus and Verum Focus are realized identically) and in addition a striking

¹⁶As is often observed in the dialect handbooks, in well-established or conventionalized compounds like *seanbhean* (old woman) the second element is either unstressed or only weakly stressed.

mismatch emerges between syntactic and semantic representations on the one hand and prosodic and phonological representations on the other. This mismatch is tolerated, it seems, because it makes possible the satisfaction of purely phonological desiderata.

We make two observations before moving on.

The first is that this analysis depends in an important way on one aspect of our syntactic proposals—namely that the finite verb in Irish VSO clauses lexicalizes the polarity head. This is what guarantees that every inflected verb in the language contains within itself a semantically potent expression of polarity, one which may end up being F-marked. If this possibility did not exist, then the entire chain of inference laid out here concerning the expression of Verum Focus would not even have a starting point. To the extent that our analysis of special focus is viewed as successful, then, we have support for our proposals about clause structure and for the larger framework of lexical decomposition in the syntax that they imply.

Our second observation is that these proposals entail that the Special Focus Construction is in an important sense parasitic on a prior application of SPI. Incorporation of the simple pronoun creates the compound-like structure in (28), which is in turn matched with the prosodic structure in (43). And it is the existence of this prosodic structure, we have argued, which allows for the realization of focal accents which would otherwise be trapped inside the inflected verb. If the subject pronoun were not incorporated into the verbal complex in the way that we have proposed, the understanding of the distribution of focal accents just presented would be untenable.

It is this aspect of our proposals that lets us understand the very surprising fact that special focus always implicates a simple pronoun, rather than one augmented with a contrastive element or a focus element such as *féin* (on which, see McCloskey (1999)). What is crucial is that simple pronouns are mono-morphemic lexical items. They are therefore minimal syntactic objects when introduced into a syntactic representation and are targeted by SPI as we have formulated it. Complex pronouns—those which combine with contrastive or other suffixes—have a complex internal syntactic structure (Koopman (1999) among others), therefore cannot be incorporated under SPI, and cannot, on our account, participate in special focus.¹⁷

There is, in addition, clear independent evidence that special focus is in fact parasitic on a prior application of SPI. That evidence has to do with the patterns of suppletive allomorphy discussed in section 4 above. The crucial observation is that the allomorphic

¹⁷In the absence of a simple pronoun subject or an inflectional ending with the appropriate phonological properties (see the discussion around (42) above), special focus is simply impossible and other means have to be found to express Verum Focus. Brian Ó Curnáin has suggested to us that the discourse particle *muis(e)*, whose meaning is, to say the least, unclear, may serve exactly this function in cases like (i):

- (i) A: An raibh Colm ann? B: Bhí muis.
 Q be.PAST there be.PAST
 ‘Was Colm there? He was indeed.’

The same mechanism may well be in play in (49) below.

variants triggered when a simple pronoun incorporates into an inflected verb are obligatory in the context of the SFC (Wagner (1959: p. 98–99, §276)). All examples of the relevant type that we have found in the descriptive literature are consistent with this generalization. In the examples of (44), for instance, we have reduction of the future ending to /ə/ in the context of Verum Focus and ellipsis. (44a) and (44b) are from an Ulster variety and so correspond to TYPE THREE of section 4 above; (44c) is from a Munster variety and is an instance of TYPE ONE of section 4.

- (44) a. Rachaidh MÉ /'rahə 'me:/
 go.FUT I
 'I WILL (go).' (Wagner, 1959: 98, §276)
- b. Coinneochaidh MÉ /'kiN^jahə 'me:/
 keep.FUT I
 'I certainly will (keep).' (Wagner, 1959: 99, §276)
- c. ach tiocfaidh SÉ /'t^jukə 'fe:/
 but come.FUT he
 'but he WILL (come)' (Ó Sé, 2000: 50, §56)

(45) is from a Conamara variety and is an example of TYPE FOUR of section 4. That is, the conditional modal of the response in (45b) was realized with the suppletive form /hit^j/, triggered by presence of the simple pronoun sé.

- (45) a. Ceapaim go mb'fhéidir go dteastódh sé uainn freisin muna
 think.PRES.S1 C perhaps C need.COND it from-us also if-not
 bhfeabhsaíonn an aimsir.
 improve.PRES the weather
 'I think that maybe we'd need it as well, if the weather doesn't improve.'
- b. Ó, d'fhéadfadh SÉ /'d^jɛ:tɪt^j 'fe:/.
 can.COND it
 'Oh, it could be. ("That's certainly possible.')" RNG 19-12-2012

In addition, work with six native speaker consultants confirms that these allomorphic variants are not just possible but are in fact required in the context of special focus.

But these patterns of suppletion are possible, we have argued, only if the pronoun has been adjoined to the morphological word corresponding to the inflected verb. The locality necessary for such interactions otherwise does not hold. The appearance of these triggered allomorphic variants is therefore a certain indicator that SPI has applied.

Finally: we have further support in all of this for the morphological, as opposed to the prosodic, interpretation of SPI. This is because we never see the special focus effect when the inflected verb and the subject come to form a close bond by way of purely prosodic mechanisms. Given our existing assumptions (Elfner (2012, 2015), Bennett et al. (2013, 2015)), prosodic phrasing gives rise to structures like (29b), repeated here as (46):

- (46) a. Chuaigh na mílte go Cnoc Mhuire.
 go.PAST the thousands to Knock
 ‘Thousands traveled to Knock.’
 b. ((ϕ (ω chua’) (ω na mílte)) (ϕ go Cnoc Mhuire))

in which two prosodic words (verb and subject) are sister constituents within an initial phonological phrase. Special focus is never observed in such contexts. In a case like (46), it is inconceivable that an accent on the subject DP should give rise to a Verum Focus interpretation or to an interpretation involving verbal focus. We capture this crucial contrast in the analysis developed here by drawing a firm line between incorporation of a subject pronoun and the routines of prosodic structure building. SPI is an obligatory morphological operation, a post-syntactic head-movement whose output is a morphological word—in effect a compound. The compound-like structure delivered by SPI is in turn the foundation upon which the SFC crucially rests—it provides a word large enough to host two independently realized accents (one lexical, one focal) in a way that does not violate constraints which disfavor stress clash.

For reasons that we lingered over at the beginning of this discussion, the special focus phenomenon seems bizarre at first blush. But when we examine the various components of the analysis that we have developed in this section, it turns out that the observed patterns emerge in a fairly natural way from an interplay among elements that have substantial independent grounding. The syntax of (40) was developed and argued for for reasons having nothing whatever to do with our present concerns; the evidence for SPI is strong and is also entirely independent of present concerns; the phonological constraints we have made appeal to are well established within Irish and beyond. Two assumptions are needed which are specific to the problem at hand:

- (i) A locality requirement which demands that a focal accent not be realized in a position too distant from the F-marking of which it is the exponent. Specifically, we have suggested that the accent must achieve its realization within a prosodic word which also contains the F-marked lexical item.
- (ii) That the focal accent will under certain circumstances resist being realized on the same syllable that bears lexical stress.

It hardly seems unnatural that there should be a requirement like (i), but (ii) remains unsatisfying, even if there is evidence to suggest that such a constraint, or something very like it, is active in a number of other languages (Huidobro (2005), Dořák (2007), Dořák & Gergel (2004)), especially in the context of Verum Focus.¹⁸ That said, the account of special focus that we have developed here is well integrated within a larger theoretical and analytical landscape and it lets us begin to understand the striking mismatch that lies at its core between the representations that govern interpretation and those that govern what Berwick & Chomsky (2011) call the process of ‘externalization’.¹⁹

¹⁸See Samek-Lodovici (2005) and Féry (2013) for important relevant discussion.

¹⁹Another outstanding issue for our analysis concerns the relation between subject pronouns and those bimoraic inflectional endings that bear focal accent under Verum Focus or verbal focus (42). Verbal inflec-

This is as far as we can take this aspect of the discussion at present. What remains are some puzzles having to do with how pronoun incorporation and special focus interact with ellipsis. That interaction turns out to be challenging and also, we think, revealing about the transition from syntactic-semantic representations to prosodic-phonetic representations. We therefore turn to it in the final section.

8 INCORPORATION, SPECIAL FOCUS, AND ELLIPSIS

Two observations define the interaction between Responsive Ellipsis and the mechanisms we have been concerned with here. The first is that simple pronouns are like subjects in general in not surviving ellipsis (Wagner (1959: 98, §276), McCloskey (1991)):

- (47) a. An bhfuil sé breoite?
 Q be.PRES he ill
 ‘Is he ill?’
 b. Tá (*sé).
 be.PRES he
 ‘He is.’

The second observation, apparently at odds with the first, is that in the context of special focus, the accented simple pronoun does survive ellipsis. We see this especially under Verum Focus, in which the SFC is accompanied by Responsive Ellipsis very frequently indeed.²⁰ In this case, the simple subject pronoun does survive, as seen in (48)–(51).

- (48) a. Amharc orm.
 look.IMPERV on-me
 ‘Look at me.’
 b. Eh? Amharc ort? Nach bhfuil MÉ?
 look on-you NEGQ be.PRES I?
 ‘Eh? Look at you? I AM. (Am I NOT?)’ RNG 26-5-2008

tion markers like *-adar*, which express person and number features of the subject, may carry focal accent under ellipsis (e.g. *Bhíodar* ‘They WERE’); this distinguishes them from other strings of light syllables belonging to the inflected verb (e.g. **d’imIR* ‘He DID (play)’). Why is it that these inflectional endings pattern with subject pronouns as a natural class in their ability to host focal accent? One possibility is that the inflectional endings in question just *are* subject pronouns, incorporated into the verb at a late stage of the derivation through a process analogous to (or even identical with) SPI. This is an old point of contention in Irish morphosyntax (McCloskey & Hale 1984, Baker & Hale 1990, Andrews 1990, Legate 1999, Ackema & Neeleman 2003, McCloskey 2011a). What is clear, however, is that inflectional endings share some underlying unity with subject pronouns, as demonstrated by their complementarity and their shared expression of the subject’s ϕ -features.

²⁰To such an extent that some descriptions (e.g. Wagner (1959: 98–99, §276)) claim, in effect, that the SFC is found ONLY in ellipsis contexts. This is not the case, as we have seen throughout section 7, but the perception that the two are necessarily linked is understandable.

- (49) a. Ar shíl tú ariamh go mbeadh sé i nDáil Éireann?
 Q.PAST think.PAST you ever C be.COND he in Parliament
 ‘Did you ever think that he’d be in Parliament?’
 b. Níor shíl, leoga; níor shíl MÉ.
 NEG.PAST think.PAST indeed NEG.PAST think .PAST I
 ‘Indeed I didn’t. I did not.’ RNG 29-11-2010
- (50) a. Cén aois anois tú, a Shéamais?
 what age now you VOC
 ‘How old are you now, Séamas?’
 b. Tá mé ag tarraingt ar na trí scór, a Rónáin.
 be.PRES I PROG draw on the three score VOC
 ‘I’m almost sixty, Rónán.’
 c. Níl TÚ.
 NEG-be.PRES you
 ‘You are not!’ RNG 23-04-2005
- (51) a. Mar sin ní raibh tú ag iarraidh jobannaí a chur i mbaol?
 like that NEG be.PAST you PROG try jobs put.NON-FIN in danger
 ‘So you weren’t trying to jeopardize jobs?’
 b. Ó, ní raibh MÉ; ní raibh MÉ!
 NEG be.PAST I NEG be.PAST I
 ‘Oh I was NOT; I was NOT!’ RNG 20-03-2005

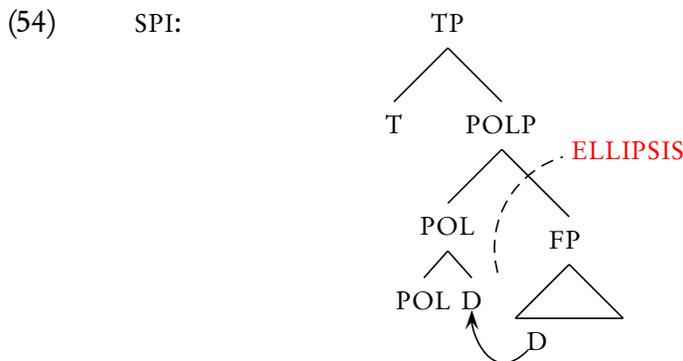
This is a remarkable fact, since subjects in general do not survive ellipsis. Furthermore, simple pronouns are necessarily un-focused in their interpretation. In contexts like (48)–(51), in fact, they are necessarily given, because F-marking on the polarity expression requires a discourse context in which there is an antecedent proposition differing only in polarity from the proposition expressed in the ellipsis site (Rooth (1992), Schwarzschild (1999), Fox (1999), Samko (2014)). The accented subject pronouns of (48)–(51), then, do not ‘survive ellipsis’ on semantic grounds. This becomes all the clearer when we observe that, in the context of special focus, even expletive pronouns survive (accented as always):

- (52) a. An gcuireann sé iontas ort anois gur fágadh ceithre mhí
 Q put.PRES it wonder on-you now C leave.PAST-IMPERS four month
 gan an obair seo a dhéanamh?
 without the work DEMON do.NON-FIN
 ‘Does it surprise you now that four months went by without this work being done?’
 b. Ó cuireann SÉ dáiríre.
 put.PRES it seriously
 ‘Oh, it certainly does.’ RNG 06-8-2012

- (53) a. Agus an gcuireann sé as duit an méid sin má bhíonn siad amuigh
 and Q put.PRES it out-to-you that-much if be.PRES-HABIT they out
 ar an bhfarraige?
 on the ocean
 ‘Does it bother you that much if they are out on the ocean?’
- b. Cuireann SÉ, mar tá áilleacht na háite le bheith millte
 put.PRES it for be.PRES beauty the.GEN place.GEN to be.NON-FIN destroyed
 go deo.
 forever
 ‘It absolutely does, for the beauty of the place is to be destroyed for all time.’
- RNG 27-11-2012

What then *is* the basis for the exceptional treatment of simple pronouns in (48)–(53)? We argue here that the crucial factor is prosodic and that, as in much of the empirical material we have dealt with here, SPI is the central actor. We develop these themes in what follows.

In adjoining a subject pronoun to the inflected verb, SPI lifts it out of the ellipsis site:



In the context of our proposals, then, the question of whether or not the subject pronoun ‘survives ellipsis’ is naturally construed as the question of how SPI interacts with ellipsis. That interaction can now be encapsulated in two generalizations:

- (55) GENERALIZATION A: Despite being obligatory in general, SPI does not apply in the context of Responsive Ellipsis.
- GENERALIZATION B: But SPI may apply out of an ellipsis site if the subject pronoun is destined to bear a focal accent in the Special Focus Construction.

Generalization A reflects our earlier observation that subject pronouns systematically delete in non-focal ellipsis contexts like (47). This deletion would be unexpected if the subject pronoun were incorporated into the verb, since ellipsis does not in general target subparts of morphological constituents.²¹ The interpretation in terms of SPI is supported by an additional observation. When subject pronouns are elided, the morphological traces of

²¹See Booij 1996, 2012 for an analysis of apparent counter-examples.

SPI—the allomorphic alternations of section 4—also disappear. Consider again our Type Three pattern from section 4, that involving the two forms of the conditional ending in Northern varieties. There is an elsewhere form (56a) and a form observed in the context of SPI (56b):

- (56) a. *chuirfeadh Seán ...* (John would put)
 /x̪iɾʲhu ʃa:n/
 b. *chuirfeadh sé ...* (he would put)
 /x̪iɾʲhitʲʃə/

Under ellipsis, it is the elsewhere form – (56a) – that is required:

- (57) a. *An gcuirfeadh sé fearg ort?*
 Q put.COND it anger on-you
 ‘Would it make you angry?’
 b. *Chuirfeadh.*
 /x̪iɾʲhu/ * /x̪iɾʲhitʲ/
 ‘It would.’

This is so even when the elided subject pronoun is, as in (57), one of those that forces appearance of the (56b) variant. The absence of verbal suffix allomorphy in such examples suggests strongly that SPI simply does not apply when subject pronouns happen to be within the constituent targeted by Responsive Ellipsis.

None of this is exactly surprising, and one might well conclude from the failure of SPI in this context that ellipsis precedes SPI—applying first, obliterating both the pronoun and the triggering context for incorporation, and thereby preempting it in a straightforward instance of derivational bleeding.

But things are not, of course, so straightforward. In the context of special focus, as we saw in (48)–(53), simple subject pronouns are not elided; rather, they survive to be pronounced, and end up bearing a strong focal accent. Generalization B of (55) attributes this possibility to SPI, and once again there is evidence from verbal allomorphy to support the attribution. The patterns described in section 4 appear, obligatorily, when accented pronouns in the special focus construction survive ellipsis. But we established in section 7 that such allomorphic interactions are parasitic on SPI (in the absence of SPI, the required locality does not hold). When we see such alternations, then, we must conclude that SPI has applied and we can understand what the mechanism is by which the subject pronouns of (48)–(53) survive: it is SPI, applying as in (54),

The two statements of (55), then, provide a good first-level description of the complex body of facts we are considering here. But they also seem to contain the seeds of a theoretical paradox. Pattern A suggests, as we have seen, that ellipsis is derivationally prior to SPI; but GENERALIZATION B seems to require that SPI be derivationally prior to ellipsis.

There is of course a crucial difference between the subject pronouns that are elided and those that resist elision: those that resist end up bearing the the focal accent which is the

phonological exponent of semantic focus (see section 7). Subject pronouns survive ellipsis, it seems, only when they are needed to provide the necessary prosodic infrastructure for realization of a focal accent.

We believe that this view is correct, but it seems to bring with it its own theoretical challenge. The derivational point at which SPI must apply or not apply, is one in which it cannot be locally determined that the incorporated pronoun will end up bearing a focal accent. As we saw in section 7, the pronoun itself is never F-marked and the ultimate placement of the focal accent, we have argued, reflects the operation of purely phonological mechanisms which shift the accent away from the F-marked constituent and on to the incorporated pronoun. But now our earlier ordering paradox seems to re-emerge as a severe problem of derivational look-ahead: to determine that a pronoun should exit the ellipsis-site by way of SPI, the system has to be able to foresee, so to speak, that in a future phonological afterlife its presence will be required to support a focal accent. The kind of interaction we observe here seems very problematic, then, given local and serialist views of the post-syntactic landscape. In what remains of this paper, we argue that these seeming paradoxes dissolve once we adopt certain independently reasonable positions about how the mechanisms of elision do their work and about how the post-syntactic computation is organized.

Ellipsis is a very complex phenomenon whose effects are distributed over all aspects of linguistic representation (pragmatics, semantics, syntax, morphology, phonology, the lexicon). But the generalizations in (55) are simplistic in presupposing a unitary operation of ‘ellipsis’. Things cannot be so simple. We take as our starting point, then, the following more nuanced assumptions, drawing especially on Merchant (2001) and on Merchant (2004:670–673):

- (58) a. The syntactic head H which licenses a given ellipsis type optionally includes a morpheme E, which has a semantic and a morpho-phonological component.
 b. The semantic component of E is a use-condition which guarantees that the requisite semantic parallelism condition(s) between antecedent and ellipsis site hold.
 c. The morphophonological component of E marks the terminal nodes of the complement of H for non-pronunciation in the phonological module (see also Postal 1970, Wasow 1972). We use the notation $X_{[\emptyset]}$ to indicate such ‘doomed’ terminals.
 d. In the case of Responsive Ellipsis in Irish, the head which includes the E-morpheme is the polarity head POL.

The most important consequence of this view for our present purposes is that terminal elements which are scheduled for elision will bear a formal mark which well-formedness constraints can make reference to.²²

²²A central theme in the literature on ‘Givenness’ is that Given-ness, in its semantic/pragmatic aspect, is a property of fairly large constituents but that its phonological consequences, in the form of de-accenting, must be distributed down to the terminal elements of that larger constituent (Schwarzschild (1999), Féry & Samek-Lodovici (2006), Selkirk (2008) among others). The feature $X_{[\emptyset]}$ in this context might be construed

Our second crucial assumption is that the post-syntactic derivation allows parallel and simultaneous optimization. In particular, we assume that certain facets of ellipsis, morphophonology, and prosody are computed in parallel, as in classic Optimality Theory.²³ In this context, the kind of look-ahead presupposed in Generalization B of (55) is not anomalous, but is rather expected and natural.

Let us begin with GENERALIZATION A, though, and focus on SPI in elliptical contexts without special focus. SPI, as we have argued throughout, has all the hallmarks of a post-syntactic and fundamentally morphological operation. It is also deeply idiosyncratic, in that SPI is limited to pronouns, serves no obvious syntactic purpose, and is not widely attested outside of the Celtic languages (see also Baker & Hale 1990). Further, it is clearly driven by properties of pronouns: simple pronouns must incorporate, but inflected verbs coexist without difficulty with non-pronominal subjects, or with no subjects at all. We therefore assume that SPI is driven by a property of the pronoun, a morphological subcategorization feature in the spirit of Rizzi & Roberts (1989). For concreteness, we assume that all subject pronouns in Irish (those which express nominative case) bear the subcategorization requirement in (59).²⁴

$$(59) \quad \begin{array}{c} \text{D} \\ \text{[NOM]} \\ \phi \end{array} : \quad [\text{POL} \quad - \quad]$$

The morphological subcategorization frame in (59) states that subject pronouns must be contained within a complex head of category POL (the category of the inflected verb in our analysis) at the end of the PF component of the derivation. This morphological requirement is responsible for triggering SPI, and for ensuring its obligatoriness: in the absence of SPI, subject pronouns would be, in effect, stranded affixes (Baker 1988 and many

as being dependent on G-marking (or as being a variant of G-marking). The effects we discuss here, then, especially Generalization B, would turn on what the expected interaction should be between the phonology of F-marking, the phonology of G-marking and the phonology of $X_{[\emptyset]}$. Relevant to that discussion is the fact that the SFC also supports so-called second occurrence focus, as seen in (i):

- (i) Ach ní fheicfidh tú Toraigh.
 but NEG see.FUT you Tory Island
 ‘but you WON’T see TORY’ RNG 02-09-2014.

In (i), the incorporated pronoun was articulated with a strong pitch accent and the object had a weaker, but clearly perceptible accent. The context was a discussion of landmarks that could or could not be seen from certain points on the Donegal coastline. In the terms of Selkirk (2008), the object here is both G-marked (because of the Verum Focus context) and F-marked (because it contrasts with other potential fillers of the same semantic slot). We leave the pursuit of these interesting questions and possibilities for future work.

²³Prince & Smolensky 1993/2004, and see Haugen 2008, Teeple 2008, Henderson & Tucker (2010), Bennett (2012, to appear) and references there for related arguments and proposals.

²⁴For some discussion of *why* subject pronouns come to have this property, see the Appendix. We depart from Roberts (1991) in placing morphological subcategorization requirements on the incorporated item itself (the pronoun) rather than on the host for incorporation (the verb). This is consistent with the widespread view that only dependent (obligatorily bound) elements have subcategorization frames (Lieber 1980, Inkelas 1990, etc.).

others).

In this context it is natural to assume that subcategorization frames like (59) are trivially satisfied when the selecting morpheme undergoes ellipsis—dependent morphemes cannot be ‘stray’ if they are not pronounced at all. On this view, then, SPI, as an operation, is optional, its application rendered obligatory only by an interface requirement (the ban on stray affixes), its application rendered unnecessary if those stray affixes are eliminated by the operations of (59).²⁵

These assumptions provide an immediate understanding of the interaction of SPI and ellipsis in non-focal contexts. Deletion is driven by the constraint $ELIDE(X_{[\emptyset]})$, which requires non-pronunciation of material marked for deletion. This constraint, being high-ranked, rules out candidates like (60b,c) which overtly realize the subject pronoun rather than deleting it ($X_{[\emptyset]}$ indicates a terminal node marked for deletion; \times indicates that deletion (non-pronunciation) of X has occurred). Recall that deletion of subject pronouns also leads to trivial satisfaction of the subcategorization frame (59). Since deletion satisfies both $ELIDE(X_{[\emptyset]})$ and the subcategorization frame (59), ellipsis of the pronoun will be preferred to SPI in elliptical contexts—deletion comes ‘for free’ in this case. Candidates (60c,d), which involve applications of SPI (covert in the latter case), are thus ruled out as unmotivated departures from syntax-morphology isomorphism (the constraint $F(S \Rightarrow M)$ of (60)). The intuition here is the venerable one that operations are costly and apply only if they yield some effect or benefit at the interfaces—an intuition routinely and naturally cashed out in terms of Faithfulness constraints in frameworks that assume parallel and simultaneous optimization. Candidate (60a) then prevails, having satisfied the requirements of both ellipsis and subcategorization in one fell-swoop through deletion of the subject pronoun. This constraint system thus correctly generates the bleeding interaction between ellipsis and SPI that we encapsulated in Generalization A of (55)).

(60)

	$[\Sigma P V^0_{[E]} \quad [TP D_{[\emptyset]}[NOM,PRO] \dots]]$	$ELIDE(X_{[\emptyset]})$	SC(SPI)	$F(S \Rightarrow M)$
a.	$\text{☞} V^0 \quad \text{☞}$			
b.	$V^0 \quad D_{[\emptyset]}$	*!	*!	
c.	$[V^0 + D_{[\emptyset]}]$	*!		*!
d.	$[V^0 + \text{☞}]$			*!

Donegal *chuirfeadh sé* /xir^j-hu fə/ ‘He would (put)’ (ellipsis applies, SPI does not)

Finally, we arrive at the interaction of ellipsis, SPI, and focus marking. To formally implement the proposal that ellipsis of the subject pronoun can be inhibited by prosodic factors related to focus, we assume that the constraint governing focal accent (FOCALPROSODY)

²⁵It follows that whatever operations build inflected verbs out of their component parts (classical head-movement) must be different in kind from SPI, since they apply routinely and obligatorily from within ellipsis sites, giving rise to the phenomenon of ‘Verb-Stranding Ellipsis’. It is partly for this reason that we insist on the morphological and post-syntactic character of SPI.

crucially dominates the constraint demanding non-realization of material marked for deletion in the narrow syntax (ELIDE($X_{[\emptyset]}$)). FOCUSPROSODY is a cover constraint, subsuming several different requirements related to focus, discussed earlier in section 7. Among these are the requirements that semantic focus be prosodically realized; that the focal accent must occur on the morpho-syntactic complex (or perhaps the prosodic word) containing the focalized element (polarity or the verbal root); that the focal accent be hosted by a bimoraic syllable; and that the focal accent be realized on a stressed syllable, distinct from the lexical stress on the verb. (In tableau (61) $X_{[f]}$ marks items bearing a focal accent.)

(61) FOCUSPROSODY \gg {ELIDE($X_{[\emptyset]}$), FAITH(S \Rightarrow M)}

$[\Sigma P \ V^0_{[E,FOC]} \ [TP \ D_{[\emptyset]}[NOM,PRO] \ \dots]]$	FOCPR	EL($X_{[\emptyset]}$)	SC(SPI)	F(S \Rightarrow M)
a. $\text{[}^{\text{E}} \text{[}^{\text{V}} + \text{D}^0_{[\emptyset, f]} \text{]}$		*		*
b. $\text{V}^0_{[f]} \ \text{\textcircled{D}}$	*!			

Donegal *chuirfeadh* SÉ /'xir^j-hit^j 'fɛ:/ 'He WOULD (put)' (SPI applies under focal accent, ellipsis does not apply to the subject pronoun)

By allowing FOCUSPROSODY to take precedence over ELIDE($X_{[\emptyset]}$), we correctly derive the non-application of subject pronoun ellipsis in focal contexts: better to retain material marked for deletion than to realize the focal accent on an imperfect host.²⁶

9 CONCLUSION

Our goal in this paper has been to contribute to a better understanding of the mechanisms which lead to imperfect parallelism between syntactic and phonological representations. We have been fairly deep in the specifics of the Irish phenomena and it is time now to stand back and ask what general lessons may be drawn from our investigation.

A central concern has been the process by which simple subject pronouns in Irish VSO clauses are incorporated into the finite verb. Our core claim has been that that process, though post-syntactic, is not phonological but rather morphological and we are led to claim that such morphological adjustments are important actors in negotiating the distance between syntax and phonology. Our conclusions on this score mirror in an interesting way conclusions reached about the process of complementizer-lowering in Irish – assumed to be phonological by McCloskey (1996a), but shown clearly to be morphological in recent work by Jason Ostrove (2015). There must be, then, a species of ‘head movement’ which is post-syntactic, which is very local, which has access to syntactic infor-

²⁶We assume that candidates like /'xir^j-hu-'bá: fɛ:/, which realize the focal accent on epenthetic material in order to permit deletion of the subject pronoun, are ruled out by high-ranked faithfulness constraints such as DEP(V).

mation (the presence of phonologically null interveners between origin site and landing-site for example), but which is driven by morphological requirements of the elements involved. This kind of head-movement must be different in kind from the operations (classical head-movements) which gather up contiguous spans of the extended projection into complex verbs, nouns, and adjectives. If these are also post-syntactic (Chomsky (2000) and much subsequent discussion), they must still be different in kind from the local morphological operations of which SPI is an instance. The two species are distinguished by their interaction with ellipsis and also by whether or not their domain of application is the extended projection (SPI, as we have seen, is not so constrained). Discussions about how ellipsis and head-movement interact must be careful to distinguish among the different kinds of operation that the informal term ‘head movement’ bundles together.

In pursuing that goal, much of our discussion has been driven by trying to better understand the interaction between subject pronoun incorporation and the Irish analogue of VP-ellipsis. What is most interesting here, we think, is that there is an interaction to discuss. There is a phonology and a morphology of ellipsis and our analysis has its starting point in the commitment that ellipsis sites have detailed internal morphosyntactic structure and that elements from within the ellipsis site participate in detectable syntactic, morphological and even phonological interactions. It will be, we think, difficult to make sense of the observations we made and analyzed in section 8 without recourse to this assumption.

This conclusion emerges with particular clarity when we consider how focus and ellipsis interact. It is taken as a given in much work on ellipsis that focused material may not be elided (see Heim 1997: 209, Takahashi & Fox 2005: 230, for example). When there is no misalignment between the phonological and the interpretive aspects of focus, it is very difficult to know whether that exclusion is semantic or phonological in nature. For the interaction in Irish that we have examined here (in section 8) it is very clear, probably independently of the analysis adopted, that the exclusion of F-marked material from ellipsis sites has a phonological rather than a semantic basis. That is, there is a phonology of the interior of ellipsis sites (there is phonology in the silence, to paraphrase Jason Merchant).

In the attempt to better understand these interactions, we have also been led to a particular point of view about the architecture of the post-syntactic derivation – it is not local and serialist but is defined rather by the OT logic of parallel and simultaneous optimization.

Needless to say, we are left with many unresolved questions. There is, in particular, much more to understand about why Verum Focus seems to have the special status that it does and why it shows such distinctive interactions with the post-syntactic operations we have been concerned with. Our analysis makes progress, we think, in understanding the Irish manifestation of Verum Focus (what we have called the Special Focus Construction, in one of its guises), but, as usual, many difficult puzzles and problems remain.

REFERENCES

- Ackema, Peter & Ad Neeleman. 2003. Context-sensitive spell-out. *Natural Language and Linguistic Theory* 21. 681–735.
- Acquaviva, Paolo. 2014. The categories of Modern Irish verbal inflection. *Journal of Linguistics* 50. 537–586.
- Ahlqvist, Anders. 1975/6. On the position of pronouns in Irish. *Éigse* 16. 171–176.
- Andrews, Avery. 1990. Unification and morphological blocking. *Natural Language and Linguistic Theory* 8. 507–557.
- Arregi, Karlos & Andrew Nevins. 2013. *Morphotactics: Basque auxiliaries and the structure of spellout*. Berlin: Springer.
- Baker, Mark. 1988. *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark & Kenneth Hale. 1990. Relativized minimality and pronoun incorporation. *Linguistic Inquiry* 21(2). 289–297.
- Bennett, Ryan. 2008. Donegal Irish and the syntax/prosody interface. Available at: <http://pantheon.yale.edu/~rtb27/>.
- Bennett, Ryan. 2012. Foot-conditioned phonotactics and prosodic constituency. Doctoral dissertation, University of California Santa Cruz.
- Bennett, Ryan. to appear. Output optimization in the Irish plural system. *Journal of Linguistics*.
- Bennett, Ryan, Emily Elfer & James McCloskey. 2013. Lightest to the right: An anomalous displacement in Irish. *Linguistic Inquiry* 47(2). To appear.
- Bennett, Ryan, Emily Elfner & James McCloskey. 2015. Pronouns and prosody in Irish. In Liam Breatnach, Ruairí Ó hUiginn, Damian McManus & Katharine Simms (eds.), *Proceedings of the XIV International Congress of Celtic Studies, Maynooth 2011*, 19–74. Dublin, Ireland: School of Celtic Studies, Dublin Institute for Advanced Studies.
- Berwick, Robert C. & Noam Chomsky. 2011. The biolinguistic program: The current state of its development. In Anna Maria Di Sciullo & Cedric Boeckx (eds.), *The biolinguistic enterprise: New perspectives on the evolution and nature of the human language faculty*. Oxford Studies in Biolinguistics, 19–41. Oxford and New York: Oxford University Press.
- de Bhaldraithe, Tomás. 1953. *Gaeilge Chois Fhairrge—an deilbhíocht*. Dublin: Institiúid Ard-Léinn Bhaile Átha Cliath.
- de Bhaldraithe, Tomás. 1966. *The Irish of Cois Fhairrge, County Galway*. Dublin: Dublin Institute for Advanced Studies.
- Bobaljik, Jonathan D. 2012. *Universals in comparative morphology*. Cambridge, Massachusetts: MIT Press.
- Bobaljik, Jonathan D. 2015. Suppletion: Some theoretical implications. *Annual Review of Linguistics* 1. 1–18.
- Bobaljik, Jonathan D. & Heidi Harley. 2013. Suppletion is local: Evidence from Hiaki. Manuscript, University of Connecticut and University of Arizona. Available at: <http://ling.auf.net/lingbuzz/001982>.
- Boeckx, Cedric & Sandra Stjepanović. 2001. Headings towards PF. *Linguistic Inquiry* 32. 345–355.
- Booij, Geert. 1996. Cliticization as prosodic integration: the case of Dutch. *The Linguistic Review* 13(3-4). 219–242.
- Booij, Geert. 2012. *The grammar of words: An introduction to linguistic morphology*. Oxford, UK:

- Oxford University Press.
- Breatnach, Liam. 1994. An Mheán-Ghaeilge. In Kim McCone, Damian McManus, Cathal Ó Háinle, Nicholas Williams & Liam Breatnach (eds.), *Stair na Gaeilge*, 221–333. Coláiste Phádraig, Maigh Nuad: Roinn na Sean-Ghaeilge.
- de Búrca, Seán. 1970. *The Irish of Tourmakeady*. Dublin: Dublin Institute for Advanced Studies.
- Chomsky, Noam. 1995. Bare phrase structure. In Héctor Campos & Paula Kempchinsky (eds.), *Evolution and revolution in linguistic theory: Studies in honor of Carlos P. Otero*, 51–109. Washington D.C.: Georgetown University Press.
- Chomsky, Noam. 2000. Minimalist inquiries, the framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–156. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2013. Problems of projection. *Lingua* 130. 33–49.
- Chung, Sandra & James McCloskey. 1987. Government, barriers and small clauses in Modern Irish. *Linguistic Inquiry* 18. 173–237.
- Cyrino, Sonia & Gabriela Matos. 2002. VP ellipsis in Brazilian and European Portuguese: A comparative analysis. *Journal of Portuguese Linguistics* 1. 177–195.
- Cyrino, Sonia & Gabriela Matos. 2005. Local licensers and recovering in VP ellipsis. *Journal of Portuguese Linguistics* 4. 79–112.
- Doherty, Cathal. 1996. Clausal structure and the Modern Irish copula. *Natural Language and Linguistic Theory* 14. 1–48.
- Doron, Edit. 1991. V-movement and VP-ellipsis. Manuscript, The Hebrew University of Jerusalem.
- Doron, Edit. 1999. V-movement and VP ellipsis. In Shalom Lappin & Elabbas Benmamoun (eds.), *Fragments: Studies in ellipsis and gapping*, 124–140. New York and Oxford: Oxford University Press.
- Dořák, Boštjan. 2007. Slovenian clitic pronouns and what is so special about them. *Slovenske jezike: Slovene Linguistic Studies* 6. 209–233.
- Dořák, Boštjan & Remus Gergel. 2004. Slovenian clitics: VP ellipsis in Yes/No questions and beyond. In Ileana Comorovski & Manfred Krifka (eds.), *ESLLI 16: Proceedings of the Workshop on the Syntax, Semantics and Pragmatics of Questions*, 85–91.
- Doyle, Aidan. 2002. *Covert and overt pronominals in Irish*. Lublin, Poland: Wydawnictwo Folium.
- Duffield, Nigel. 1995. *Particles and projections in Irish syntax*. Boston, Massachusetts: Kluwer Academic Publishers.
- Elfner, Emily. 2012. Syntax-prosody interactions in Irish. Doctoral dissertation, University of Massachusetts, Amherst.
- Elfner, Emily. 2015. Recursion in prosodic phrasing: Evidence from Connemara Irish. *Natural Language and Linguistic Theory* Published online, 04 February 2015.
- Embick, David. 2012. *Localism versus globalism in morphology and phonology*. Cambridge, Massachusetts: MIT Press.
- Embick, David & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32. 555–595.
- Féry, Caroline. 2013. Focus as prosodic alignment. *Natural Language and Linguistic Theory* 31. 684–734.

- Féry, Caroline & Fieri Samek-Lodovici. 2006. Discussion notes: Focus projection and prosodic prominence in nested foci. *Language* 82. 131–150.
- Fox, Danny. 1999. Focus, parallelism and accommodation. In Tanya Mathews & Devon Strolovitch (eds.), *SALT 15, Proceedings from Semantics and Linguistic Theory 15*, 70–90. Cornell University, CLC Publications. Available at: <http://elanguage.net/journals/salt/issue/view/292>.
- Ghini, Mirco. 1993. ϕ -formation in Italian: A new proposal. *Toronto Working Papers in Linguistics* 12. 41–79.
- Goldberg, Lotus. 2002. An elucidation of null direct object structures in Modern Hebrew. In Line Mikkelsen & Christopher Potts (eds.), *WCCFL 21*, 99–112. Cascadilla Press.
- Goldberg, Lotus. 2005. Verb-stranding VP ellipsis: A cross-linguistic study. Doctoral dissertation, McGill University, Montreal.
- Gouskova, Maria & Kevin Roon. 2013. Gradient clash, faithfulness, and sonority sequencing effects in Russian compound stress. *Laboratory Phonology* 4. 383–434.
- Greene, David. 1958. Analytic forms of the verb in Irish. *Ériu* 18. 108–112.
- Greene, David. 1973. Synthetic and analytic: A reconsideration. *Ériu* 24. 121–133.
- Gribanova, Vera. 2010. *Composition and locality: The morphosyntax and phonology of the Russian verbal complex*: University of California, Santa Cruz dissertation.
- Gribanova, Vera. 2011. Verb stranding verb phrase ellipsis and the structure of the Russian verbal complex. *Natural Language and Linguistic Theory* 33. 91–136.
- Gribanova, Vera. 2013. A new argument for verb-stranding verb phrase ellipsis. *Linguistic Inquiry* 44. 145–157.
- Guilfoyle, Eithne. 1990. Functional categories and phrase structure parameters. Doctoral dissertation, McGill University, Montreal.
- Harley, Heidi. 2004. Merge, conflation, and head movement. In Keir Moulton & Matthew Wolf (eds.), *NELS 34, Proceedings of the thirty fourth annual meeting of the North-Eastern Linguistic Society*, 239–254. GLSA, Graduate Linguistics Student Association, University of Massachusetts, Amherst.
- Haugen, Jason. 2008. *Morphology at the interfaces: Reduplication and noun incorporation in Uto-Aztecan*, vol. 117, *Linguistik Aktuell*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Hayes, Bruce. 1990. Precompiled phrasal phonology. In Sharon Inkelas & Draga Zec (eds.), *The phonology-syntax connection*, 85–108. Chicago: University of Chicago Press.
- Heim, Irene. 1997. Predicates or formulas? evidence from ellipsis. In Aaron Lawson (ed.), *SALT 7, Proceedings from Semantics and Linguistic Theory 7*, 197–221. Ithaca, New York: Cornell University, CLC Publications.
- Henderson, Robert & Matthew Tucker. 2010. Late insertion in K'ichee'. Presented to the 84th Winter Meeting of the LSA, Baltimore, Maryland, January 10th 2010.
- Höhle, Tilman. 1992. Über verum-fokus im Deutschen. In Joachim Jacobs (ed.), *Informationstruktur und grammatik*, 112–141. Westdeutscher Verlag.
- Horn, Laurence R. 1989. *A natural history of negation*. Chicago, Illinois: University of Chicago Press.
- Hughes, Art. 1994. Gaeilge Uladh. In Kim McCone, Damian McManus, Cathal Ó Háinle, Nicholas Williams & Liam Breatnach (eds.), *Stair na Gaeilge: In ómós do Pádraig Ó Fiannachta*, 611–660. Maynooth: Department of Old Irish, St. Patrick's College.

- Huidobro, Susana. 2005. Phonological constraints on Verum Focus in Argentinian Spanish. Manuscript, Department of Linguistics, SUNY Stony Brook.
- Inkelas, Sharon. 1990. *Prosodic constituency in the lexicon*. New York: Garland.
- Inkelas, Sharon & Draga Zec. 1995. The syntax-phonology interface. In John Goldsmith (ed.), *The handbook of phonological theory*, 535–549. London and Cambridge, Massachusetts: Basil Blackwell Publishers.
- Ito, Junko & Armin Mester. 1992. Weak layering and word binarity. In LRC *Working Paper 92-9*, Santa Cruz, California: Linguistics Research Center, University of California Santa Cruz. Reprinted in Takeru Honma, Masao Okazaki, Toshiyuki Tabata, and Shin-ichi Tanaka (eds.), *A New Century of Phonology and Phonological Theory. A Festschrift for Professor Shosuke Haraguchi on the Occasion of His Sixtieth Birthday*, 26–65. Tokyo: Kaitakusha.
- Ito, Junko & Armin Mester. 2006. Prosodic adjunction in Japanese compounds. *MIT Working Papers in Linguistics* 55. 97–112.
- Ito, Junko & Armin Mester. 2009. The extended prosodic word. In Baris Kabak & Janet Grijzenhout (eds.), *Phonological domains: Universals and derivations*, 135–194. Berlin: Mouton de Gruyter.
- Jackendoff, Ray S. 1972. *Semantic interpretation in generative grammar*, vol. Two Current Studies in Linguistics. Cambridge, Massachusetts: MIT Press.
- Kane, Frances. 2014. The fine structure of the Irish NP. Doctoral dissertation, University of Ulster.
- Koopman, Hilda. 1999. The internal and external distribution of pronominal DP's. In Kyle Johnson & Ian Roberts (eds.), *Beyond principles and parameters: Papers in honor of Osvaldo Jaeggli*, 91–132. Dordrecht: Kluwer Academic Publishers.
- Laka, Miren Itziar. 1990. Negation in syntax: On the nature of functional categories and projections. Doctoral Dissertation, MIT.
- Legate, Julie. 1999. The morphosyntax of Irish agreement. In Karlos Arregi, Benjamin Bruening, Cornelia Krause & Vivian Lin (eds.), *MITWPL 33: Papers on morphology and syntax, cycle one*, 219–240. Cambridge, MA: Department of Linguistics, MIT.
- Lieber, Rochelle. 1980. *On the organization of the lexicon*: Massachusetts Institute of Technology dissertation.
- Lobeck, Anne. 1995. *Ellipsis: Functional heads, licensing, and identification*. New York and Oxford: Oxford University Press.
- López, Luis. 1994. The syntactic licensing of VP ellipsis: A comparative study of Spanish and English. In Michael L. Mazzola (ed.), *Issues and theory in Romance linguistics: Selected papers from the Linguistic Symposium on Romance Languages XXIII*, 333–354. Washington DC: Georgetown University Press.
- López, Luis. 1995. Polarity and predicate anaphora. Doctoral dissertation, Cornell University.
- López, Luis. 1997. VP-ellipsis in Spanish and English and the features of Aux. *Probus* 11. 363–297.
- López, Luis & Susanne Winkler. 2000. Focus and topic in VP anaphora constructions. *Linguistics* 623–664.
- Lucas, Leslie W. 1979. *Grammar of Ros Goill Irish, County Donegal*. Queen's University Belfast: Institute of Irish Studies.
- MacManus, Damian. 1994. An Nua-Ghaeilge Chlasaiceach. In Kim McCone, Damian MacManus, Cathal Ó Háinle, Nicholas Williams & Liam Breatnach (eds.), *Stair na Gaeilge*, 335–445. Coláiste Phádraig, Maigh Nuad: Roinn na Sean-Ghaeilge.

- Maling, Joan. 2015. A syntactic Rubin's Vase: the inherent ambiguity of non-promotional passives and unspecified subject constructions. Presidential Address, Annual Meeting of the Linguistic Society of America, Portland, Oregon, January 2015.
- Marantz, Alec. 1989. Clitics and phrase structure. In Mark Baltin & Anthony Kroch (eds.), *Alternative conceptions of phrase structure*, 99–116. Chicago, Illinois: The University of Chicago Press.
- Martins, Ana-Maria. 1994. Enclisis, VP-deletion and the nature of Sigma. *Probus* 6. 173–205.
- Martins, Ana-Maria. 2000. A minimalist approach to clitic climbing. In Jo ao Costa (ed.), *Portuguese syntax, new comparative studies*, 169–190. Oxford University Press.
- McCloskey, James. 1991. Clause structure, ellipsis and proper government in Irish. *Lingua* 85. 259–302.
- McCloskey, James. 1996a. On the scope of verb raising in Irish. *Natural Language and Linguistic Theory* 14. 47–104.
- McCloskey, James. 1996b. Subjects and subject-positions in Irish. In Robert Borsley & Ian Roberts (eds.), *The syntax of the Celtic languages: A comparative perspective*, 241–283. Cambridge, England: Cambridge University Press.
- McCloskey, James. 1999. On the right edge in Irish. *Syntax* 2. 189–209.
- McCloskey, James. 2001. The distribution of subject properties in Irish. In William Davies & Stanley Dubinsky (eds.), *Objects and other subjects: Grammatical functions, functional categories, and configurationality*, 1–39. Dordrecht: Kluwer Academic Publishers.
- McCloskey, James. 2004. Irish nominal syntax 1: Demonstratives. Available at: <http://ohlone.ucsc.edu/~jim/papers.html>.
- McCloskey, James. 2005. A note on predicates and heads in Irish clausal syntax. In Andrew Carnie, Heidi Harley & Sheila Ann Dooley (eds.), *Verb first: On the syntax of verb-initial languages*, 155–174. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- McCloskey, James. 2007. The grammar of autonomy in Irish. *Natural Language and Linguistic Theory*, 25. 825–857.
- McCloskey, James. 2010. Impersonals in Irish and beyond. In Donna B. Gertz, John C. Moore & Maria Polinsky (eds.), *Hypothesis A/Hypothesis B: Linguistic investigations in honor of David M. Perlmutter*, vol. 49 Current Studies in Linguistics, 323–344. Cambridge, Massachusetts: MIT Press.
- McCloskey, James. 2011a. Inflection and silent arguments in Irish. Handout for a talk at CASTL, University of Tromsø, September 2011. Available at: <http://ohlone.ucsc.edu/~jim/papers.html>.
- McCloskey, James. 2011b. Polarity, case, and the cartography of the inflectional layer in Irish. Paper presented at GIST 3, Cartographic Structures and Beyond, University of Ghent, May 13th 2011.
- McCloskey, James. 2011c. The shape of Irish clauses. In Andrew Carnie (ed.), *Formal approaches to Celtic linguistics*, 143–178. Cambridge Scholars Publishing. Available at: <http://ohlone.ucsc.edu/~jim/papers.html>.
- McCloskey, James. 2014. Irish existentials in context. *Syntax* 17. 343–384.
- McCloskey, James & Kenneth Hale. 1984. On the syntax of person number marking in Modern Irish. *Natural Language and Linguistic Theory* 1. 487–533.
- McCloskey, James & Peter Sells. 1988. Control and A-chains in Modern Irish. *Natural Language and Linguistic Theory* 6. 143–189.

- Merchant, Jason. 2001. *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27. 661–738.
- Merchant, Jason. 2013. How much context is enough? Two cases of span-conditioned stem allomorphy. *Linguistic Inquiry*. 46. 273–303.
- Mester, Armin. 1994. The quantitative trochee in Latin. *Natural Language and Linguistic Theory* 12. 1–61.
- Mhac an Fhailigh, Éamonn. 1968. *The Irish of Erris, Co. Mayo*. Dublin, Ireland: The Dublin Institute for Advanced Studies.
- Myrberg, Sara. 2010. *The intonational phonology of Stockholm Swedish*. Stockholm Studies in Scandinavian Philology, New Series 53. Stockholm, Sweden: Acta Universitatis Stockholmiensis.
- Ngonyani, Deo. 1996. VP ellipsis in Ndendeule and Swahili applicatives. In Edward Garrett & Felicia Lee (eds.), *Syntax at Sunset, UCLA working papers in syntax and semantics, Number 1*, 109–128. Department of Linguistics, UCLA.
- Nolan, Brian. 2006. The passives of Modern Irish. In Werner Abraham & Larisa Leisiö (eds.), *Passivization and typology: Form and function*, 132–164. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Noonan, Michael. 1994. A tale of two passives in Irish. In Barbara Fox & Paul J. Hopper (eds.), *Voice: Form and function*, 279–311. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Ó Baoill, Dónall P. 1996. *An Teanga Bheo: Gaeilge Uladh*. Dublin: Institiúid Teangeolaíochta Éireann.
- Ó Buachalla, Breandán. 1962. Phonetic texts from Oileán Cléire. *Lochlann* II. 103–121.
- Ó Buachalla, Breandán. 2003. *An Teanga Bheo: Gaeilge Chléire*. Dublin: Institiúid Teangeolaíochta Éireann.
- Ó Curnáin, Brian. 2007. *The Irish of Iorras Aithneach County Galway*. Dublin: Dublin Institute for Advanced Studies.
- O’Rahilly, Thomas F. 1932. *Irish dialects past and present*. Dublin: Browne and Nolan. Reprinted by Dublin Institute for Advanced Studies, 1972.
- Ó Sé, Diarmuid. 1991. Verbal inflection in Modern Irish. *Ériu* 42. 61–81.
- Ó Sé, Diarmuid. 2000. *Gaeilge Chorca Dhuibhne*. Tuarascáil Taighde 26. Dublin: Institiúid Teangeolaíochta Éireann.
- Ó Sé, Diarmuid. 2006. Agent phrases with the autonomous verb in Modern Irish. *Ériu* 56. 85–115.
- Ó Siadhail, Mícheál. 1989. *Modern Irish—Grammatical structure and dialectal variation*. Cambridge and New York: Cambridge University Press.
- Ostrove, Jason. 2015. Allomorphy and locality in the Irish verbal complex. In *American International Morphology Meeting 3*, University of Massachusetts Amherst, October 2nd-4th 2015.
- Postal, Paul. 1970. On coreferential complement subject deletion. *Linguistic Inquiry* 1. 439–500.
- Potsdam, Eric. 1997. NegP and subjunctive complements in English. *Linguistic Inquiry* 28. 533–541.
- Prince, Alan & Paul Smolensky. 1993/2004. *Optimality Theory: constraint interaction in generative grammar*. Malden, MA: Blackwell. Revision of 1993 technical report, Rutgers University Center for Cognitive Science. Available online as ROA-537, Rutgers Optimality Archive,

- <http://roa.rutgers.edu/>.
- Quiggin, E. C. 1906. *A dialect of Donegal*. Cambridge and London: Cambridge University Press.
- Rizzi, Luigi & Ian Roberts. 1989. Complex inversion in French. *Probus* 1. 1–30.
- Roberts, Ian. 1991. Excorporation and minimality. *Linguistic Inquiry* 22. 209–218.
- Rochemont, Michael. 1986. *Focus in generative grammar*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Rooth, Mats. 1985. Association with focus. Doctoral dissertation, University of Massachusetts Amherst.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1. 75–116.
- Samek-Lodovici, Vieri. 2005. Prosody-syntax interaction in the expression of focus. *Natural Language and Linguistic Theory* 23. 687–755.
- Samko, Bern. 2014. Verum focus in alternative semantics. Paper presented at CUSP 7: California Universities Semantics and Pragmatics, UCLA November 7th 2014.
- Schloormemmer, Erik & Tanja Temmerman. 2011. Head movement as a PF-phenomenon: evidence from identity under ellipsis. Presented at WCCFL 29, University of Arizona, Tucson, April 23rd 2010.
- Schwarzschild, Roger. 1999. GIVENness, AVOIDF and other constraints on the placement of accent. *Natural Language Semantics* 7. 141–177.
- Selkirk, Elisabeth. 1996. Sentence-prosody: intonation, stress, and phrasing. In John A. Goldsmith (ed.), *The handbook of phonological theory*, 550–569. London and Cambridge, Massachusetts: Basil Blackwell Publishers.
- Selkirk, Elisabeth. 2000. The interaction of constraints on prosodic phrasing. In Gösta Bruce & Merle Horne (eds.), *Prosody: Theory and experiment—studies presented to Gösta Bruce*, 231–261. Dordrecht, the Netherlands: Kluwer.
- Selkirk, Elisabeth. 2008. Contrastive focus, givenness and the unmarked status of "discourse-new". *Acta Linguistica Hungarica* 55. 1–16.
- Selkirk, Elisabeth. 2009. On clause and intonational phrase in Japanese: The syntactic grounding of prosodic constituent structure. *Gengo Kyenku* 136. 35–73.
- Selkirk, Elisabeth. 2011. The syntax-phonology interface. In John Goldsmith, Jason Riggle & Alan Yu (eds.), *The handbook of phonological theory, 2nd edition*, 435–484. Hoboken, New Jersey: Wiley Blackwell.
- Sherman (Ussishkin), Adam. 1998. VP ellipsis and subject positions in Modern Hebrew. In Adam Zachary Wyne (ed.), *Proceedings of the 13th annual meeting of the Israel Association of Theoretical Linguistics, Bar-Ilan University, Tel-Aviv, Israel*, 211–229. Jerusalem: Akademon.
- Stenson, Nancy. 1981. *Studies in Irish syntax*. Tübingen: Max Niemeyer Verlag.
- Stenson, Nancy. 1989. Irish autonomous impersonals. *Natural Language and Linguistic Theory* 7. 379–406.
- Svenonius, Peter. 2012. Spanning. Unpublished manuscript, CASTL, University of Tromsø.
- Takahashi, Shoichi & Danny Fox. 2005. MaxElide and the re-binding problem. In Aaron Lawson (ed.), *SALT 15, Proceedings from Semantics and Linguistic Theory 15*, 223–240. Ithaca, New York: Cornell University, CLC Publications.
- Takita, Kensuke. 2013. V-stranding sluicing and its implications. In N. LaCara, L. Feinleib & Y. Park (eds.), *NELS 41, Proceedings of the forty-first annual meeting of the North-Eastern Linguistic Society*, 247–260. GLSA, Graduate Linguistics Student Association, University

- of Massachusetts, Amherst.
- Teeple, David. 2008. Prosody can outrank syntax. In Charles Chang & Hannah Haynie (eds.), *West Coast Conference on Formal Linguistics (WCCFL) 26*, 454–462. Somerville, Massachusetts: Cascadia Press. Available online at <http://www.lingref.com/>, document #1702.
- Wagner, Heinrich. 1959. *Gaeile Theilinn: Foghraidheacht, gramadach, téacsanna*. Dublin: Institiúid Ard-Léinn Bhaile Átha Cliath.
- Wagner, Michael. 2011. Production planning constraints on allomorphy. *Canadian Acoustics* 39(3). 160–161.
- Wagner, Michael & Duane Watson. 2010. Experimental and theoretical advances in prosody: A review. *Language and cognitive processes* 25. 905–945.
- Wasow, Thomas. 1972. *Anaphoric relations in English*: Massachusetts Institute of Technology dissertation.

APPENDIX—SOME DIACHRONIC ISSUES

Something is known of the historical development of the systems under discussion in this paper, and that history, we think, sheds additional light on the analytic and theoretical questions that we have been grappling with. We consider these issues in a summary way in this Appendix.

For this discussion, we will return to our TYPE THREE allomorphy (from section 4), which concerns the form of the conditional ending in Northern dialects. That ending has the orthographic form *-f(e)adh*. The availability of that single orthographic form hides from easy view the striking variation in form that we care about. That alternation is illustrated once more in (62):

- (62) a. *chuirfeadh Seán ...* (John would put)
 /*xir^jhu fa:n/*
 b. *chuirfeadh sé ...* (he would put)
 /*xir^jhit^jfə/*

(62a) shows the default form of the ending; (62b) shows the form that emerges in the context of SPI. The phonological distance between the two forms (*/hu/* and *-/hit^j/*) means that this alternation is deeply opaque in the context of the contemporary phonology of Irish and it is for this reason that we analyze it as an instance of suppletive allomorphy.

The two forms and their relation are, however, readily understandable in terms of the historical phonology of the language. The original form of this ending (in the Old Irish period, 600–900) was something like */həð/* with a final voiced dental fricative; it is for this reason that the standard orthographic form is still *adh*. But the dental fricatives were lost before the emergence of Early Modern Irish in the first half of the thirteenth century. They were lost by way of phonemic merger – Old Irish */ɣ/* and */ð/* merged to */ɣ/*. This development was complete by the time of the emergence of Early Modern Irish around 1200, but evidence for it first makes its appearance in the written record – sporadically – during the Middle Irish period—between 900 and 1200 (Breatnach 1994: 234, MacManus 1994: 351) Once this merger had done its work, the conditional ending would have had a form something like *-/həɣ/*.²⁷

In final unaccented syllables, the sequence */əɣ/* subsequently develops in different ways in different dialects. In Ulster (our focus for the moment) the development was as in (63):

- (63) */əɣ/* ⇒ */əw/* ⇒ */u:/* ⇒ */u/*

It is by way of this succession of changes that the ending *-f(e)adh* comes to have the form */hu/* in contemporary Ulster varieties.

The variant */hit^j/*, meanwhile, was stranded, preserving in its contemporary form a

²⁷We set aside some complex and unresolved questions about whether the initial consonant of the morpheme was originally */f/* or */h/*.

This is exactly the correlation that the logic of our discussion would lead us to expect.

While much work remains to be done to if these speculations are to be fleshed out (in particular, we would need more information than is at present available about the detailed chronology of the relevant changes), we take it to be a strength of our overall analysis that it opens this door to an understanding of how and why the strange ban on postposing of subjects emerged. The analysis invites us to make a link between that fact and apparently unrelated facts about the emergence of opaque allomorphic alternations in inflectional endings.