

# IRISH PREPOSITIONAL AGREEMENT AND AUTONOMOUS MORPHOLOGY

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## Abstract

A morphological analysis shows that the inflection of Irish prepositions involves more than the attachment of pronominal endings to a stem. Some paradigmatic regularities suggest that inflecting prepositions have an abstract morphological agreement marker, absent in the syntax; pronominal endings are just one way of realizing it. Apart from the immediate empirical results, a morphological approach to prepositional conjugation can provide new insights into the syntactic questions posed by Irish inflection.

## Introduction

In all dialects of Irish, and indeed of Goidelic and Celtic, prepositions have both a base form and a set of inflected forms. The paradigms in (2) and (3), respectively from the Connacht and Munster areas (from De Bhaldraithe 1997:141, 143 and Ó Sé 2000:198, 204), illustrate two realizations of the orthographic standard set in (1):

(1)	<i>le</i> "with"	<i>ag</i> "at"
1sg	<i>liom</i>	<i>agam</i>
2sg	<i>leat</i>	<i>agat</i>
3sg masc.	<i>leis</i>	<i>aige</i>
3sg fem.	<i>léi</i>	<i>aici</i>
1pl	<i>linn</i>	<i>againn</i>
2pl	<i>libh</i>	<i>agaibh</i>
3pl	<i>leo</i>	<i>acu</i>

(2)	l'e	eg'
1sg	l'um	a:gəm, a:m
2sg	l'æt	a:gəd, a:d
3sg masc.	l'e]	eg'ə
3sg fem.	l'e:	ek'ə
1pl	l'in'	a:gin', æ:n'
2pl	l'ib'	a:gi:
3pl	l'o:b	a:kəb, a:pək

(3)	l'e:	eg'
1sg	l'um	əgúm
2sg	l'at	əgút
3sg masc.	l'e]	igé
3sg fem.	l'e:, l'e:hi	ikí
1pl	l'in'	əgín'
2pl	l'iv'	əgív'
3pl	l'o:, l'o:hə	əkú

Although the segmentation is not always straightforward, it appears that inflected prepositions consist of a stem plus a suffix, the latter being a fused exponent for person and number (and gender in the 3rd person singular). These suffixes, it would seem, encode pronominal agreement of a preposition with its argument, more or less as final *s* encodes information about the subject in a English non-past lexical verb like *hit-s*. The prepositional stem would then correspond to the syntactic head P, and the suffix to an Agreement head specified for the pronominal features of the argument.

This paper contends that the simple picture just sketched is not correct. Instead, a closer look at the morphosyntactic properties of Irish prepositions justifies a rather different view, summarized in (4):

- (4) a All and only the 3rd person masculine singular forms are suffixless stems.
- b The suffixes do not realize a syntactic Agr head.
- c The forms traditionally regarded as "base" and "3rd sg. masc." are in

fact alternative realizations of P alone, whose choice depends on the morphosyntactic context.

These conclusions, if correct, entail a specific view of the place of morphology within the architecture of grammar. More generally, they cannot be sustained unless the grammar includes a morphological component distinct from the syntactic and phonological ones.

### **Why Irish conjugation is special: syntax**

A significant number of studies has clarified the syntactic peculiarities of Irish (and Celtic) verbal and prepositional inflection, which can be jointly termed "conjugation" in opposition to nominal declension (McCloskey & Hale 1984, McCloskey 1986, Andrews 1990, Guilfoyle 1990, McCloskey 1996, Legate 1999, Acquaviva 2000a, b; for Scottish Gaelic, Adger 1997, 1999; for Welsh, Rouveret 1991, 1994, Shlonsky & Roberts 1996). The different analytical approaches of these studies all take as their descriptive point of departure a cluster of syntactic properties, which for Modern Irish can be summarized as follows (see especially McCloskey & Hale 1984, McCloskey 1986 for extensive exemplification; suffixes and pronouns are underlined):

- (5) Pronominal suffixes of verbs and prepositions behave like personal pronouns, and conversely:
- i. suffixes and pronouns are mutually exclusive: \* *bhidís siad* "they were" ;
  - ii. a suffixed form, if available, is obligatory (blocking): \* *bhíodh siad* "they were";
  - iii. a suffixed form, even if available, is impossible with a full DP (anti-blocking): \* *bhidís na páistí* "the children were";
  - iv. suffixes can act as resumptive pronouns;
  - v. suffixes can be conjoined with a full DP: *bhidís agus na páistí* "they and the children were";
  - vi. unlike full DPs, pronominal arguments must be strictly adjacent to V or P;
  - vii. just as not all verbal finite forms have a suffix, not all verbs have a DP (not even a null DP) in subject position (McCloskey 1996).

Regardless of the theoretical explanation for this state of affairs, the cluster of properties described in (5) means that the personal endings of Irish verbs and prepositions cannot be equated with the agreement suffixes of inflectional languages. The difference, in pre-theoretical terms, is that there is no agreement, or extended exponence, of pronominal features in the Modern Irish conjugation (as opposed to the Old Irish one, and generally to the nominal inflection). At the same time, however, the pronominal endings of inflected verbs and prepositions are formally and distributionally affixes rather than incorporated clitics (cf. especially McCloskey 1986 and Roberts & Shlonsky 1996 in this regard). Since these endings behave as affixes morphologically, but as pronouns syntactically, clearly one cannot simply say that they "agree with" the pronominal features of a DP argument. Either one posits that the presence of a personal ending entails a null pronoun, as in most of the papers cited above (most recently, cf. Legate 1999), or the endings themselves are regarded as the spell-out of pronominal arguments (Guilfoyle 1990). But the first alternative is just a restatement of the facts, and the second is contradicted by solid evidence (see McCloskey 1986) unless the relation between pronouns and suffixes is viewed as non-syntactic. This is the route pursued by Adger 1997 and Acquaviva 2000a, b, who in different ways consign this relation to a post-syntactic morphological module, along the guidelines of Distributed Morphology (Halle & Marantz 1993).<sup>1</sup>

In conclusion, any attempt at a syntactic explanation of the syntactic effects listed in (5) must address the questions of just what pronominal suffixes are exponents of, and how this relation of exponence must be characterized in order to explain the

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<sup>1</sup> Adger (1997) argues that V/P and its argument D (or N) are syntactically distinct, but must enter morphological interpretation as a single unit; to respect this condition, they undergo Merger in the sense of Halle and Marantz (1993). He relates this property to the VSO order and to the obligatory adjacency between V/P and pronoun. I think this is not the solution, because 1) Merger, as opposed to Fusion, is defined as creating two distinct (if adjacent) slots, not one; 2) in Welsh, just as in Irish and Scottish Gaelic, pronominal suffixes have the syntactic function of pronouns, but here special "echo pronouns" show that the argument position has not been collapsed with V; 3) McCloskey 1996 shows that Irish verbs can be without any DP argument, so Merger of V with a D cannot be driven by affixal properties of V; and 4) Old Irish is just like Modern Irish in that suffixes "take over" the syntactic function of personal pronouns, yet it is different in that a suffix can coexist with a full DP: again, this shows that the position of the DP argument and that of the suffix are not one and the same.

differences between the personal suffixes of Irish and those of, say, Latin. These are specifically morphosyntactic questions, which warrant a morphological analysis.

### **Why Irish conjugation is special: Morphology**

Even though the wealth of syntactic studies just reviewed has brought to the fore the problem of the exponence of pronominal suffixes, this issue has largely been side-stepped, falling as it were between the two stools of purely syntactic and purely morphological analysis (for the latter, cf. Wigger 1972, Greene 1973, Ó Siadhail 1989, Ó Sé 1991, all restricted to verbal inflection), except for those contributions that explicitly advocate a morphosyntactic solution for the syntactic problems just outlined (Andrews 1990, Adger 1997, 1999, Legate 1999). But even this latter trend does not analyze the structure of the inflectional paradigm, and the prepositional conjugation in particular has been conspicuously neglected. As I have argued on previous occasions (Acquaviva 2000a, b), however, some important morphosyntactic results only emerge by examining the way pronominal suffixes are paradigmatically organized.

The system of prepositional suffixes differs in some important ways from that of verbal pronominal inflection. For a start, not all prepositions inflect, while all verbs (including those with a defective paradigm) have finite forms; secondly, inflecting prepositions have suffixes for all six combinations of person and number, plus a gender distinction in the 3rd singular, while verbal paradigms (different for each dialect) notoriously have pronominal endings only in a subset of the person-number combinations. This means that the base form of the preposition lies, in a certain sense, outside the inflectional system: for example, the form *le* "with" does not fill any slot in the paradigm, because each possible combination of pronominal features has already its own suffix. This contrasts starkly with more familiar inflectional systems where each form corresponds to a combination of features. For example, each form of a German finite verb corresponds to a combination of features, or sometimes to several combinations, in cases of syncretism (like *haben*, which is either 1st or 3rd plural in the present indicative). But the Irish base form is not syncretic; rather, it does not fall in any slot of person/number/gender combination. Apparently, this means that the base form is simply uninflected, in contrast with the inflected, suffixed ones.

This conclusion, in effect, equates "inflection" with "affix": a form without the latter is without the former. I would like to challenge this view, however.

### The 3rd sg. masc. form as default

Consider a few forms inflected for the same combination of features, taken from the same dialect (Connemara, De Bhaldraithe 1977:140-143)<sup>2</sup>:

(6) a 2nd sg.

a:gəd, a:d <i>agad</i> "at you"	wet' <i>uait</i> "from you"
ort <i>ort</i> "on you"	d'i:t, ji:t <i>d(h)iot</i> "of you"
a:səd, a:sdəd <i>as(t)ad</i> "out of you"	l'æ:t <i>leat</i> "with you"

b 3rd pl.

a:kəb, a:pək <i>agad</i> "at them"	wo:b <i>uathab</i> "from them"
orəb <i>orthab</i> "on them"	di:b, ji:b, i:b <i>d(h)aob</i> "of them"
a:səb, a:sdəb <i>as(t)ab</i> "out of them"	l'o:b <i>leób</i> "with them"

c 1st pl.

a:giN', æ: N' <i>againn</i> "at us"	wen' <i>uainn</i> "from us"
oriN' <i>orainn</i> "on us"	di:N', ji:N', i:b <i>d(h)inn</i> "of us"
a:s iN', a:sd iN' <i>as(t)ainn</i> "out of us"	l'iN' <i>linn</i> "with us"

There is little doubt that these inflected prepositions share the same kind of ending, or the very same ending. The forms inflected for 3sg fem. seem to lack this shared ending:

(7) 3rd sg. fem.

ek'ə <i>aice</i> "at her"	wo: <i>uaithe</i> "from her"
orə <i>uirthe</i> "on her"	d'i, ji, i <i>d(h)i</i> "of her"
æ:fdə <i>aiste</i> "out of her"	le: <i>lé</i> "with her"

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<sup>2</sup> I have omitted some alternative forms that do not affect the point.

In fact, even here there are significant generalizations: prepositions whose stem ends in a vowel consistently end in a long vowel in this slot, and those ending in a consonant end in schwa; other changes can affect the stem, but these instances of conditioned allomorphy on the stem do not conceal the fact that, even in this combination, a suffix is recognizable. The 2 pl. forms display another type of sub-regularity:

(8) agi: <i>agaibh</i> "at ye"	fu:b' <i>fúthaib</i> "under ye"
ori: <i>oraibh</i> "on ye"	uNti:, i:Nti: "in ye"
a:si: <i>asaibh</i> "out of ye"	l'ib' <i>lib</i> "with ye"
d'i:b' <i>dóib</i> "to ye"	web' <i>uaib</i> "from ye"
di:b' <i>daoib</i> "of ye"	ru:b' <i>roimhaib</i> "before ye"

The ending is [i:] for all bisyllabic forms, [b'] for all monosyllabic ones. This happens to be an independently attested morphophonological generalization, a change motivated by the syllabic structure of the resulting form and not by the lexical choice of a stem instead of another<sup>3</sup>. The conclusion holds good, then: each one of the feature combinations {1sg., 2sg., 3 sg. fem., 1. pl, 2 pl., 3 pl.} has a suffix whose form does not depend on the choice of the P stem (which does not exclude morphophonological readjustments).

The 3 sg. masc. endings, by contrast, have no invariant shape across prepositions:

(9) eg'ə <i>aige</i> "at him"	fi: <i>faoi</i> "under him"
er' <i>air</i> "on him"	a:N <i>ann</i> "in him"
a:s <i>as</i> "out of him"	l'eɪ <i>leis</i> "with him"
d'e, γo: <i>de, dó</i> "of him"	wai <i>uaidh</i> "from him"
do:, γo: <i>dó</i> "to him"	riv'ə <i>roimhe</i> "before him"

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<sup>3</sup> Cf. Ó Siadhail 1989:78-79: "... there is in Connemara a defricatization of slender *bh* /v/ in monosyllabic second plural personal pronouns, e.g. *sibh* /s'ib'/ "you", *libh* /l'ib'/ (~l'i:b'/) "with you" as opposed to disyllabic second plural personal pronouns where the second syllable is exceptionally pronounced with a long *i* /i:/, e.g. *oraibh* /ori:/ "on you", *asaibh* /asi:/ "out of you".

If these forms are suffixed, like all other inflected ones, then each preposition has a different suffix. But this formulation distorts the facts: a suffix exists as such if it can be isolated on the basis of more than one stem. The 3 sg. masc. forms, then, pose a particular problem of segmentation: they are unambiguously inflected, yet no suffix can be isolated independent of the choice of the P stem.

This odd state of affairs happens to be precisely circumscribed to the feature combination with the least marked values: third person, or non-person, or non-participant, singular as opposed to plural, masculine as opposed to feminine. Conceivably, this coincidence may be accidental; but two more irregularities characterize the very same feature combination.

Firstly, there is a definite tendency to replace the base form of a preposition with the 3 sg. masc. form. The standard base *ar* "on", for example, is normally pronounced with the same palatalized final as the 3rd sg. masc. *air*, in Connacht dialects (for this and other examples, see Ó hUiginn 1994:598-602). As pointed out to me by Síle Harrington (personal communication), this tendency shows up also in early stages in the acquisition of Irish. Apparently, there must be something special in the 3 sg. masc. form, because this drift does not concern any other inflected form; in addition, the replacement constantly takes place in one direction only, from the base form to the 3 sg. masc.; the generalized form is always the inflected, one, never the base. In itself, this fact calls for an explanation.

Secondly, in all dialects the two prepositions *le* "with" and *trí* "through" must exceptionally appear in the 3 sg. masc. form whenever they linearly precede the definite article *an*, and its plural *na* in some dialects.<sup>4</sup> This very idiosyncratic change takes place regardless of constituency, as illustrated in the following example:

- (10)      Feicfidh mé leis [an t-alt seo a léamh]  
              see.FUT I with.3 sg m [the article here PRT read]  
              "I will try to read this article."

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<sup>4</sup> In the Munster dialect of Corca Dhuibhne *leis* appears in front of the determiner *gach* "every" as well, as reported by Ó Sé 2000: 192.



The rule is triggered by the article itself, not by its semantic correlate; for instance, *le* must remain unchanged in front of definite, but articleless, expressions like a proper name (*le Nuala* "with N."), a noun preceded by a possessor (*le mo dheartháir* "with my brother"), or a state construct genitive (*le gluaisteáin an mhúinteora* "with the car of the teacher"). Also, the gender of the DP headed by the article is irrelevant: the feminine *an fhuinneog* "the window" must be preceded by the form *tríd* "through", inflected for 3 sg. masc., and not by the base form *trí* or by the feminine 3rd sg. *tríthi*, even if this brings about a gender clash between the features of P and the DP. Finally, notice that this would be the only time where grammatical features are expressed twice between the inflecting P and its complement D; the only instance of "agreement" in the whole Irish conjugation. For all these reasons, we must conclude that the change in question is a purely formal morphological readjustment. The output of the change is the form "3rd sg. masc.", but its interpretation has nothing to do with the featural content "third person", "singular", or "masculine". There is no agreement.

In sum, the 3rd sg. masc. form stands out because 1) it has the least marked feature values 2) alone, it does not display an invariant suffix 3) alone, it tends to take over the function of the base form 4) alone, it replaces the base form in one particular context. Taken together, these are strong indications that the form traditionally labelled "3rd sg. masc." has a special status in the paradigm. How can we formalize this intuition in a revealing way?

### **Suffixed vs. modified stems**

If the 3 sg. masc. form really has no personal suffix, then the different shapes taken by the stem in this slot of the paradigm are really stem extensions, as opposed to inflected forms or the base. Forms like *tríd*, *leis* or *air* are in fact modified stems, not complexes of stem + suffix.

The observed facts become at once more understandable if we follow this line of reasoning. A stem extension, unlike an affix, is not the exponent for a morphosyntactic property (although it is often used in tandem with such exponents, especially in the Irish nominal morphology; cf. Ó Siadhail 1989). Therefore, in the form labelled "3rd sg. masc.", no constituent part of the word (no morpheme, no formative) specifically expresses information about pronominal features. This groups it together with the base form, against all suffixed forms. On the other hand, it is

formally different from the base form, and by virtue of this opposition it can be employed to fill the only slot not covered by the suffixed forms, namely, 3rd sg. masc.

Consider in this light the four peculiar characteristics of the 3rd sg. masc. form, in the order in which they have been listed at the end of the last section. The first property is not surprising: if the suffixes available for prepositions cover all but one of the inflectionally relevant combinations of pronominal features, it is wholly expected that the gap should coincide with the most unmarked combination. The second peculiarity, the lack of suffix, is precisely our point of departure. The third, by which the base takes the form of the 3rd sg. masc., is a little more complex. It makes intuitive sense that, if any "inflected" form should take over the role of the base, this should befall the only form which, like the base, does not carry any specific pronominal information. But it is not so clear at this stage why such a development should happen in the first place, nor why it never happens the other way around (with the base form ousting the 3rd sg. masc.). These two questions will find their answer later, when the analysis will have been made more precise. As for the last peculiarity, the "pseudo-agreement" in front of the article, again the change itself seems mysterious, but it is intuitive that the target form should be the only one without a pronominal suffix: remember that the resulting form is exceptional because it does not have the meaning of "3rd sg. masc.", and indeed the extended stem does not contain any formative with this interpretation. The reasons for this surprising quirk of Irish morphology are ultimately historical<sup>5</sup>, and elsewhere (Acquaviva 2000a) I have developed a full analysis where the phenomenon is treated as a morphological juncture phenomenon, something quite common in the Irish morphophonology. As this solution is not essential for the present argument, I will not discuss it any further here.

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<sup>5</sup> In a nutshell, the explanation runs as follows. In Old Irish, the article was *in*, and the 3rd sg. masc. of the preposition *le* was *leis*. However, the sequence *le + in* required an epenthetic palatal *s*, giving rise to *lessin* "with.the" (a juncture phenomenon motivated by the ancient initial sibilant of the article in pre-documentary times, *\*sindos*). But the medial *s* was synchronically unmotivated: hence, the sequence *lessin* was liable to be re-segmented as *leis* (3rd sg. masc.) + *in* (article), rather than the etymologically justified *le + s + in*. Now reanalyzed as requiring the 3rd sg. masc. before the article, the rule spread to the preposition *trí*.

To sum up, we can conclude that the "3 sg. masc." form of a preposition is a special form of the stem, without a pronominal suffix. This single hypothesis brings together several puzzling facts in a revealing way. Now, however, we must clarify how the morphological analysis can be reconciled in a revealing way with the syntax of Irish conjugation.

### **Inflection as an inherent property**

The syntactic facts summarized in (5) above pose the question of why elements that are morphologically suffixes behave, in all non-morphological respects, as if they were pronouns. This problem has proven unexpectedly hard to solve, and I believe that a major reason for this lies in the unchallenged assumption that inflected forms of prepositions (and of finite verbs as well) are uniformly made up of stem plus suffix. If all and only inflected forms are suffixed, then it is only natural to equate inflection with the presence of a suffix. But the evidence considered in the last section points to the opposite conclusion: the default value for pronominal features has no special suffix, so that its phonological realization varies with the choice of the stem. Yet this form too is certainly part of the inflected paradigm of prepositions; therefore, at least in this case the property of being inflected is an intrinsic property of the *stem*; the properties of being inflected and being suffixed are dissociated.

This purely morphological result raises a morphosyntactic question, as noted: if the default form is not an exponent for the features "3 sg. masc.", what is it an exponent of? It cannot be grouped together with the suffixes of the remaining forms, because these are spell-outs of pronominal features, while the default forms are exponents of the prepositional stem; the latter cannot be the elsewhere case for the former. On the other hand, the default form is still an inflected form in so far as it contrasts with the base. So, it is inflected but has no specified pronominal value.

This conclusion is only at first sight paradoxical. Admittedly, speaking of "pronominal inflection without pronominal features" is as meaningless as speaking of, say, a noun specified for "case" but not for any specific value like nominative or dative. But we have seen that, while there can be no caseless noun in an inflectional language like Latin or Russian, the Irish prepositions distinguish a non-inflected base form from the *set* of inflected forms; the property of being inflected denotes a natural class within the complete catalogue of forms of each preposition, not the totality of the forms available. But there is more: recall that not all prepositions have an

inflecting paradigm, a fact that has never received attention in the syntactic literature on Irish conjugation. While all verbs can be finite, and therefore inflect (although the available suffixes vary across dialects), not all prepositions inflect: most do (11), but some do not (12), including the very common *gan* "without" which used to inflect in Old Irish. The availability of an inflected paradigm thus denotes a natural class within the set of prepositions:

- |       |                              |   |                                    |
|-------|------------------------------|---|------------------------------------|
| (11)a | <i>ag</i> "at"               | i | <i>idir</i> "between"              |
| b     | <i>ar</i> "on"               | j | <i>ionsar</i> "towards"            |
| c     | <i>as</i> "(out) of"         | k | <i>le</i> "with"                   |
| d     | <i>chun /chuig</i> "towards" | l | <i>ó</i> "from"                    |
| e     | <i>de</i> "of, from"         | m | <i>roimh</i> "in front of, before" |
| f     | <i>do</i> "to, for"          | n | <i>thar</i> "beyond"               |
| g     | <i>faoi</i> "under"          | o | <i>trí</i> "through"               |
| h     | <i>i</i> "in"                | p | <i>um</i> "towards"                |
- 
- |       |                          |
|-------|--------------------------|
| (12)a | <i>ach</i> "except, but" |
| b     | <i>amhail</i> "like"     |
| c     | <i>gan</i> "without"     |
| d     | <i>mar /marach</i> "as"  |
| e     | <i>seachas</i> "except"  |
| f     | <i>trasna</i> "through"  |

The fact that pronominal inflection is available to a lexically determined set of prepositions justifies the introduction of a diacritic marking inflecting stems as such, without specifying a choice of pronominal features. This is exactly the kind of marking independently required for the form traditionally labelled "3 sg. masc.": an abstract marker that defines inflection as an inherent property of the stem itself, regardless of the syntactic context (even though the *content* of this inflection, i.e. the values for pronominal features, depends on the syntactic context). I will encode this marking as a morphological feature: [AGR].

Note that [AGR] is not provided to the stems in question by an abstract syntactic head (Agr, or any other inflectional head).<sup>6</sup> In fact, the lack of extended exponence in the Irish conjugation makes it quite unlikely that any such head should exist at all (I believe this contrasts with Welsh, where there is extended exponence and there are reasons to think that P incorporates onto Agr: Rouveret 1991, 1994). It is not a feature of P in need of checking by an inflectional head (cf. Chomsky 1995, and generally work in the minimalist "framework"), because that would predict the usual pattern of inflecting, where pronominal affixes reduplicates the pronominal features of an agreeing argument; but as we have seen, this is precisely what Irish conjugation does not display. [AGR] is thus a morphological entity, associated with specific lexical entries (Vocabulary items, in the framework of Distributed Morphology) and not with a syntactic structure.

On the other hand, [AGR] is an abstract property of stems, not the content of a suffix. Unlike the suffixes, which spell out pronominal information as segmentable "morphemes", [AGR] is a property of the stem, and only gets spelt out if the stem is. It is a morphological entity, but a unit of the meaning, not of the form: an abstract constituent of morphological structure.

In sum, all and only inflecting prepositions are characterized by a feature [AGR]; this is morphological as opposed to syntactic, and abstract in the sense that it does not correspond to a segmentable affix. Coming back to the morphosyntactic question raised above, this is what the default inflected form is an exponent of:

- (13)      *default inflected form*  
             WITH, AGR <---> *leis*

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<sup>6</sup> This is what distinguishes my proposal from the idea that suffixless forms are marked [AGR] but, unlike suffixed ones, have no values. McCloskey (1986: 253) stated precisely in these terms the difference between suffixless and suffixed (finite) verbal forms; on this basis, he claimed, the suffixed form blocks the suffixless one because it is more richly specified (the Paninian elsewhere principle). But, as Andrews (1990) correctly pointed out, the suffixed verb blocks a sequence V + pronoun, not just the suffixless verb; A blocks B if they compete for the realization of one and the same position, but the inflected verb (or preposition) and the pronoun occupy two distinct positions. Rather than establishing blocking relations between whole syntactic representations, as Andrews (1990) proposed, I suggest that AGR is a non-syntactic entity.

The formulation in (13) states that the form orthographically represented as *leis* realizes two types of features: those which define the lexical stem of the preposition meaning "with", and the feature [AGR], which is inherently provided to the stem as a property of Irish morphology. Notice that there is no mention of third person, singular number or masculine gender. The realization schema in (13) defines a biunique relation between a phonological entity and morphosyntactic (not just syntactic) information. In so far as the latter side of the mapping includes the stem, (13) may be seen as one of the ways to spell out the stem. But the form *leis* cannot be segmented into a part that only realizes WITH and another that only realizes AGR: it is an extended stem, not a suffixed one. That is why each preposition has its own way to realize the slot corresponding to the 3rd sg. masc.: because that slot is filled by a special form of the stem itself.

Analyzing the 3rd sg. masc. as a special form of the stem as in (13), then, provides us with several results. No suffix can be segmented, because there is none; the form expresses the least marked combination of features, because it actually does not express any pronominal features; the feature [AGR] encodes inflection as a lexical property, not as a bundle of pronominal feature values, and this is exactly the kind of marking necessary to characterize the set of inflecting prepositions. Yet, nothing in what I have proposed so far distinguishes the default inflected form from the base form; while the two share some distributional traits, their form and content is definitely distinct. We know that the base form cannot be simply AGR-less, for AGR is a lexical property of the stem; how can we distinguish, then, the abstract featural content of the two forms in a non-ad-hoc fashion?

### **Feature discharge and allomorphy**

The concept of exponence is formalized in Distributed Morphology by reference to the notion of *discharge*: if the features associated with a listed form (Vocabulary Item) are a subset of those present under a syntactic terminal, then the Vocabulary Item is inserted under the terminal, transforming abstract features into an exponent. The features are thereby discharged, or eliminated from the morphosyntactic representation. As a result, morphosyntactic features should have exactly one exponent each. However, it is well known that there are properties which, while being realized by an appropriate exponent, condition formal changes in the shape of the

stem or of other morphemes. For example, the German alternation *Horn-Hörner* "horn-horns" involves two distinct exponents for the plural property, the suffix *-er* and the fronting of the root vowel. Each of these two is elsewhere employed as an exponent of plurality in German, so it would appear that the feature [plural] triggers the realization of more than one affix. To reconcile these cases of allomorphy with the idea that every feature can be realized just once, Noyer argues that "Discharged features continue to be visible, but may thereafter condition only allomorphy in rules which discharge other features" (Noyer 1997:15). Exponents may have a contextual restriction requiring an already discharged feature: for example, the ablaut of the stem vowel in *Hörner* requires [plural]. The required feature may have been already discharged by another morpheme (like the suffix *-er* in *Hörner*), or may be an inherent feature of the stem (such as [plural] for plural-only nouns like *scissors*).

I have argued above that the stem of inflecting prepositions has the feature [AGR] regardless of the syntactic context. The realization rule in (13) discharges both features; since it is interpreted as the default inflected form, the problem now is to find a way to characterize the base form as different from (13), while at the same time keeping to the idea that [AGR] is inherently associated to the stem.

The distinction between discharge and allomorphy is crucial here. Being an inherent feature, [AGR] will be visible whenever the stem is. Therefore, a realization rule may discharge the lexical features of P, while requiring the presence of [AGR]:

- (14)        *base form*  
               WITH (AGR) <---> *le*

In (14), the exponent *le* discharges only WITH, but this rule cannot apply unless [AGR] is also visible (this is indicated by the parenthesis, following Noyer's notation). Being inherently provided to the stem, rather than introduced by the syntactic context, [AGR] will certainly be visible for a rule that lexicalizes the stem. Therefore (14), alongside (13), is another legitimate way of realizing the preposition [WITH, AGR]. But the two are not identical: only (13) discharges [AGR]. The base form, realized by (14), mentions [AGR] without discharging it.

This distinction may seem suspiciously subtle, especially if one realizes that – in functional terms – it has no purpose at all: both (13) and (14) spell out the stem, both

require that the stem has an inherent AGR feature, and it does not really matter whether this AGR is formally discharged or not, because if you spell out the stem you necessarily spell out all that is associated with the stem. The formal difference between (13) and (14), therefore, appears vacuous.

I think this is the right result. But to see why, we have to briefly consider how the rest of the paradigm is spelt out.

### **The morphosyntax of abstract [AGR]**

A suffixed form like *liom* "with 1st sg." has the syntactic distribution of a structure [WITH [Pro 1 sg.], just as the default *leis* normally corresponds to a structure [WITH [Pro 3 sg. masc.]. The base, on the other hand, appears whenever the complement of P is anything different from a simple personal pronoun: *le Pól* "with Paul". Syntactically, therefore, the default form belongs with the suffixed forms, even though it sides with the base in purely morphological terms. There should be a trait grouping together the default and the suffixed forms, therefore, against the base.

The rules (13) and (14) have made explicit what distinguishes the default from the base: the former, but not the latter, discharges [AGR]. This suggests that the suffixes of the remaining inflected forms are ways to discharge [AGR] as well, when it has a positive specification of pronominal values. A suitable format is illustrated in (15), where the feature bundle [2 sg.] receives the realization /t/ (subject to morphophonological readjustments on the stem) when it follows a P:

- (15) *prepositional suffix(example)*  
 [AGR: 2 sg.] <---> /t/ / P\_\_\_\_\_

But what about the realization of the pre-suffix form of the stem? It cannot require the input WITH, AGR, because this would be lexicalized by (13) (giving the default form), nor the input WITH (AGR), because this would be lexicalized by (14) (giving the base). However, the simple WITH works in this case, provided it is restricted to contexts immediately followed by an AGR suffix:



- (16) *pre-suffix form*  
 WITH <---> /l'-/ / \_\_\_\_ AGR

Because of the contextual restriction, (16) will apply only in front of a suffix, and will not bleed (13) or (14). In all other contexts, i.e. whenever the preposition is not suffixed, (13) or (14) will bleed (16) because their input is more richly specified: WITH and AGR, not just WITH. Note that the contextual requirement in (16) is purely positional, and as such it differs from the rule for the base form (14): AGR must already be visible for (14) to apply, while (16) simply mandates that the spell-out of that form of the stem should immediately precede an AGR suffix. But AGR need not be (and is not) discharged when (16) applies.

All prepositional forms are now accounted for: the base requires but does not discharge AGR (14), the so-called "3rd sg. masc." discharges AGR without reference to pronominal values (13), the pre-suffix form does neither but must appear before a position where AGR is lexicalized (16), and finally the suffixes are ways to lexicalize AGR by itself (15) (when it is a prepositional suffix: the pronominal endings of verbs are different).

Now we can go back to the distinction between (13) and (14), here repeated:

- (13) *default inflected form*  
 WITH, AGR <---> *leis*
- (14) *base form*  
 WITH (AGR) <---> *le*

As ways to lexicalize the stem of a preposition, the two are equivalent, for the reasons we have seen; but (13) does more, because it discharges AGR. Because of this formal (not functional) difference, (13) thus has one trait in common with the realization rules for suffixes, which likewise realize AGR features – only they do so in greater detail, so to speak. For this reason, I believe, the default form is routinely employed to fill the gap in the paradigm of the suffixes (3rd sg. masc.), although it could be perfectly well employed where the preposition has no pronominal argument, i.e. as a base form. That is why the default inflected form (13) often ousts the base form (14),

but never the other way around: because (13) can do the job of (14) as well, but not conversely. Functionally, a rule like (14) is a luxury; but (13) is not, because it discharges AGR and this is apparently necessary whenever the preposition has a pronominal argument. Therefore, if one rule takes over the role of the other, it is the "superfluous" one which disappears.

This final result, now, brings us back to the central problem posed by Irish inflection, here framed in morphosyntactic terms: the morphological realization (discharge) of AGR on P in all and only the contexts where P takes a simple personal pronoun as a complement. This formulation is better than one focussing on the complementarity of pronominal endings and overt DP arguments (pronouns or lexical DPs), because prepositions taking non-nominal complements have no pronominal endings either. For example, *faoi* in (17) is not inflected for 3rd pl. despite being linearly followed by the pronoun "them"; this shows that its complement is the bracketed clausal constituent, not the pronoun:

- (17)            Bhí sí inníoch faoi [iad a bheith amuigh].  
                  be.PAST she worried about [they PRT be out]  
                  "She was worried about them being out."    (McCloskey 1984:462)

The periphrasis *feic le* "to try" in (18) provides another illustration; this time it is *le* "with" which takes a clausal complement and correspondingly shows no inflection:

- (18)            Feicfidh mé le [labhairt le Máire]  
                  see.FUT I with [talk with Máire]  
                  "I will try to talk to Máire."

In the terms of my analysis, the prepositions in (17) and (18) are spelt out by rule (14), which mentions AGR without discharging it. Since nothing could possibly block the discharge of AGR here, we must conclude that AGR does not need to be discharged for the well-formedness of P itself, but rather for the well-formedness of the complex structure consisting of P and, crucially, a simple pronoun. The analysis I have presented cannot explain this long-standing syntactic problem; it does, however, have some consequences for it, which I now briefly consider by way of conclusion.

## Concluding remarks

If what I have claimed is correct, then the pronominal endings of Irish prepositions (and verbs) cannot have an origin outside P (and V) itself. The syntactic literature, including those works that have considered the morphological dimension (Andrews 1990, Adger 1997, 1999) has without exception grouped together all the pronominal forms against the base. I have argued that this grouping reflects the property of having AGR discharged: the base form does not, all other forms do (the pre-suffix stem in (16) also does not, but that is not recognized as a morphological unit in any account that I know). But different morphological criteria produce different groupings: the 3rd sg. masc. sides with the base against all other forms in not having a suffix and in not specifying any feature value; and *all* prepositional forms (again with the exception of the pre-suffix stem), including the base, share an abstract inflectional marker, which I chose to call AGR. So, the syntactic property of entailing a null pronominal argument correlates with just one morphological property (the discharge of AGR), not with the presence of AGR in general or with the presence of a suffix. It cannot be claimed that "inflection", as a morphological property, is brought about syntactically, because "inflection" consists in more than one property; only one correlates directly with the syntax, namely, the discharge (or morphological realization) of AGR. And, if inflection is not brought about syntactically, it cannot be brought about by means of an inflectional head independent of P (and V).

There is another problem. We have seen that the syntactically relevant property consists in the discharge of AGR (in the sense that the traditional "inflected" forms are all and only those which discharge AGR). But this property cannot affect the syntax, because it is defined as a purely morphological property of the *realization* of some forms; discharge is meaningless when applied to an abstract representation like the syntactic one. In the framework that underlies my analysis (Distributed Morphology) the morphological component manipulates and interprets completed syntactic structures – *after* syntax. It cannot be the fact of discharging AGR that explains why there is a pronoun in the syntactic representation. The question must rather be, what connection holds between the syntactic context [P [pro]], and only that, and the discharge of AGR on P. This question concerns the morphological interpretation of a syntactic structure, not the syntactic structure itself.

In sum, if what I have claimed is true, the problem posed by the Irish conjugation is only syntactic in the pretheoretical sense that it concerns syntagmatic structures.

But it is morphological in the technical sense that it concerns the way in which abstract grammatical information is organized into sound-meaning mappings; not how these "mappings" are arranged with each other, but precisely how the mapping is accomplished.

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