Old Irish Pronouns: Agreement Affixes vs. Clitic Arguments*

Aaron Griffith

1 Introduction

Classical Old Irish, spoken from roughly 750-900 CE, has an exceedingly complex morphology. Like the other Celtic languages it shows person and number agreement on verbs, noun phrases, and prepositions:[1]

1) a. do·biur inna=libru
PRV·gives.1SG.PRES DET.ACC.PL=book.ACC.PL
"I give the books"

b. do-s·biur
PRV-3PL.OBJ·gives.1SG.PRES
"I give them"

* I would like to thank two anonymous reviewers, my University of Vienna colleagues Dalina Kallulli, Martin Prinzhorn, Stefan Schumacher, and David Stifter, and the audiences of FACL and the 36th Österreichische Linguistiktagung, especially Elliott Lash, for helpful comments and suggestions on this paper, the work for which has been supported in part by an Austrian Science Foundation (FWF) grant #P19137-G03.

[1] When example sentences represent uncontroversial facts, I have felt free to make the examples up. When, however, the facts are less well-known or are critical to an analysis, I have cited examples from the Old Irish Glosses, the oldest significant source of Old Irish literature in contemporary manuscripts. The typographic conventions, i.e. the use of the turned period · and hyphen -, follow the standard practice as outlined in *GOI* (25) and Schumacher (2004: 29), though here the equals sign = is used to indicate both enclitics (usually separated by a hyphen) and proclitics (not generally marked as such at all). Macrons are used to show long vowels that are not so indicated in the manuscript. The following abbreviations are used in the interlinear glosses: NOM = nominative, ACC = accusative, GEN = genitive, DAT = dative, S = singular, PL = plural, M = masculine, F = feminine, N = neuter, SBJ = subject, OBJ = object, PRES = present, FUT = future, SBJV = subjunctive, PERF = perfect, COP = copula, PRV = preverb, DET = determiner, NAS = nasalization, NEG = negation, REL = relative, PN = proper noun.

Formal Approaches to Celtic Linguistics, edited by Andrew Carnie. Cambridge Scholars Press. pp. 000-000.

2) a. athair inna=sacart
father.NOM.SG DET.GEN.PL=priest.GEN.PL
"the father of the priests"

b. a=n-athair
3PL.GEN=NAS-father.NOM.SG
"their father"

3) a. fíad día
in.presence.of God.DAT.SG
"in the presence of God"

b. fíado
in.presence.of.3SM/N
"in his presence"

Traditionally, these pronominal forms are interpreted as infixed or suffixed pronouns (*GOI*[2] 255-276). This assumption will be challenged here, and I will argue these should rather be treated as pure agreement markers. The lack of personal pronouns that results from this analysis is filled by reanalyzing a second group of clitic pronouns, the *notae augentes*, as personal pronouns. Finally, possible implications of this reanalysis for Old Irish clause structure and for the analysis of the verb are briefly considered.

[2] *Abbreviations for sources:*
DIL = *Dictionary of the Irish Language*. 1913-1975. Dublin: Royal Irish Academy.
FML = Fergus Mac Léti; see Binchy, D. A. 1952. "The saga of Fergus mac Léti". *Ériu*, 16: 33-48.
GOI = Thurneysen, Rudolph. 1946. *A Grammar of Old Irish*. Dublin: DIAS.
Ml = Milan Glosses, in *Thes* i.
Sg = St Gall Glosses, in *Thes* i.
TBC I = *Táin bó Cúailnge*: *recension I*. 1976. Cecile O'Rahilly (ed.). Dublin: DIAS.
Thes = *Thesaurus Palaeohibernicus*. 1903-5. Whitley Stokes and John Strachan (eds.). Dublin: DIAS.
VKG = Pedersen, Holger. 1913. *Vergleichende Grammatik der keltischen Sprachen*. Volume II. Göttingen: Vandenhoeck und Ruprecht.
Wb = Würzburg Glosses, in *Thes* i.

2. Descriptive Facts

While the focus of this paper is on pronominal marking, it is still necessary to outline the structure of the Old Irish verb, since a good deal of pronominal marking appears there.

2.1 The Verb

The Old Irish verbal complex is made up of a several parts. Mandatory are the verb stem and ending. The former indicates tense and mood, while the latter indicates person and number. In addition, there may also be a conjunct particle, one or more preverbs, and an object marker. Conjunct particles include the negative particle, the interrogative particle, complementizers, and some conjunctions. They are always unaccented. Following Carnie, Harley, and Pyatt (2000: 44), who base their analysis in part on Modern Irish as argued in Chung and McCloskey (1987), it is assumed here that the conjunct particles are complementizers, i.e., they correspond to C°. Preverbs are much like prepositions and change the meaning of verbs they are attached to in much the same way as Germanic particle verbs (e.g., *clean up* or *aufräumen*). The object markers will be discussed more fully below. Finally, two sets of clitics can also attach to the end of the verbal complex.

Old Irish has the standard person and number distinctions of most Western European languages: 1st, 2nd, and 3rd persons and singular and plural number. For subject marking, the verb has for each particular person/number category two endings, "absolute" and "conjunct". The conjunct endings are found whenever a conjunct particle or preverb is present. If both are present, the conjunct particle precedes. The accent in such a verbal complex is always on the second element, i.e., the first element following a conjunct particle, or, if there is no conjunct particle, the first element after the (first) preverb (whether it be another preverb or the verb stem). When no conjunct particle or preverb is present, the accent is initial and the absolute endings surface. Examples follow (the accented vowel is in bold):

4) a. **gai**rid
calls.3S.PRES
"he calls"

b. ní·**gair**
NEG·calls.3S.PRES
"he does not call"

c. ad·**gair**
PRV·sues.3S.PRES
"he sues"

d. ní·**ac**cair
NEG·sues.3S.PRES
"he does not sue"

e. do·**ac**cair
PRV·declares.3S.PRES
"he declares"

f. ní·**tac**cair
NEG·declares.3S.PRES
"he does not declare"

Example (4a) shows the absolute ending of the singular present, *-id*, while the remaining examples in (4) show that the conjunct ending for this verbal class, -Ø plus palatalization of the root-final consonant. This difference in endings runs throughout the Old Irish verbal system, and explaining it has been the focus of an extraordinary amount of literature, not only within the historical-comparative tradition (see Schumacher 2004 and McCone 2006 for recent positions and a full bibliography of the problem), but also within the generative tradition (McCloskey 1978; Doherty 1999, 2000; Carnie, Harley, and Pyatt 2000; Adger 2006; Newton 2006). It is not the aim of this paper to add to that vein of literature, but the verbal system must be discussed here because it is important for an understanding of the pronominal system of Old Irish.

2.2 Pronouns

Old Irish marks person and number agreement on finite verbs, noun phrases, and prepositions. Subject agreement on the Old Irish verb is achieved solely via the verbal endings. Freestanding pronouns are not licit in subject position (5). Old Irish verbs are thus quite similar to synthetic forms of Modern Irish, the major difference being that synthetic subject agreement is mandatory for all verbal forms of Old Irish.[3] An interesting side effect of this restriction is that the language appears to have no subject pronouns. Freestanding pronouns appear only as the predicate of cleft sentences and in verbless sentences (6-7 below):

5) ní·bir (*tú)
NEG·carries.2SG (2SG)
"you (sg) do not carry"

[3] One possible point on which this statement could be challenged is with passive verbs, where non-third person subjects are realized as surface objects (*GOI* 255-6). The exact interpretation of passive verbs is open to discussion. See Graver (this volume) for a full discussion of such forms and how they should be interpreted.

6) nī=mé as=beo
NEG.COP.3S.PRES=1SG COP.3S.PRES.REL=alive.NOM.SG
"it is not I who am alive" Wb. 19[a]18

7) apstil i=tossug si=ssi íarum
apostle.NOM.PL in=beginning.DAT.SG you.PL=you.PL after.3SM/N
"apostles first, you (pl) afterwards" Wb. 27[a]5

Not only are free-standing pronouns illicit in subject position, they are illicit in all positions where there is person and number agreement in Old Irish: as subjects, as objects of verbs, as objects of prepositions, and as possessors. In each of these cases, person and number is marked on the head itself. Determining the nature of this marking (clitic vs. affix; argument vs. non-argument) occupies a large part of this paper. The verbal object markers in particular have a very complex interaction with the verb. As a result, a major part of any account of the Old Irish verb is occupied with how to explain the placement and mutation effects of these pronouns.

To express a pronominal direct object, object pronouns are either infixed or suffixed to the verb. There is one set of suffixed pronouns (8) and three sets of infixed pronouns (9). Which of these various forms is to be used depends on the presence of a preverb or conjunct particle, the phonological shape of that preverb or conjunct particle, the syntax of the construction (relative or not), the person and number of the subject and object of the verb, and the mood of the verb.

8) *Suffixed pronouns*

	singular	plural
1st	*-um*	*-unn*
2nd	*-ut*	*-uib*
3rd M/N	*-i*	*-us*
3rd F	*-us*	

9) *Infixed Pronouns*

	Class A		Class B		Class C	
	sing.	pl.	sing.	pl.	sing.	pl.
1st	*m*^{L}	*n*	*tam*^{L}	*tan*	*dam*^{L}	*dan*
2nd	*t*^{L}	*b*	*tat*^{L}	*tab*	*dat*^{L}	*dab*
3rd M	*a*^{N}		*t*^{N}		*(d)id*^{N}, *(d)*^{N}	
3rd F	*s*$^{(N)}$	*s*$^{(N)}$	*ta*^{H}	*ta*^{H}	*da*^{H}	*da*^{H}
3rd N	*(a)*^{L}		*t*^{L}		*(d)id*^{L}, *(d)*^{L}	

More specifically, infixed pronouns are placed after a conjunct particle or preverb, if one is present (10). This means that the infixed pronouns appear before the accent (shown in bold). In non-relative verbs, Class A pronouns are found after preverbs ending underlyingly in a vowel, while Class B pronouns are used with preverbs ending in an underlying consonant. In relative construction as well as after certain complementizers and conjunctions, Class C pronouns are generally used, though only regularly with the 3rd person (*GOI* 258). When there is no preverb or conjunct particle (i.e. where absolute inflection would be expected), there are two treatments. In a small number of cases, mostly limited to verbs with 3rd person subjects, the object pronoun is suffixed to the verb, causing syncope of the verb form (11b).[4] In all other cases, a semantically empty preverb *no* (*n-* before vowel-initial infixed pronouns) is provided for the pronoun to attach to (12).

10) do-s·biur (=1b)
PRV-3PL.OBJ·gives.1SG.PRES
"I give them"

11) a. beirid / beirith
carries.3S.PRES.
"he carries"

b. beirth-i
carries.3S.PRES-3S.M/N.OBJ
"he carries him/it"

12) n-a·m-biur
PRV-3SM.OBJ·NAS-carries.1SG.PRES
"I carry him"

The historical explanation for this distribution of infixed and suffixed object pronouns is relatively straightforward, but the synchronic explanation is not. The use of the empty preverb *no* to infix pronouns (with a syntax much like that of English *do*-support, see Newton 2006: 60ff.) was introduced to simplify highly opaque synchronic combinations of verb + suffixed direct

[4] Cowgill (1987) gives the precise distribution of the suffixed pronouns, and he points out that suffixed pronouns are basically in complementary distribution with infixed ones. He notes (1987: 2, 4-5) that the one exception to this complementary distribution appears to be 3s. verb with a 3s. fem. or 3pl. object pronoun, where both suffixed and infixed pronouns occur, with the diachronic development pointing towards less suffixation in later texts.

object (McCone 2006: 143). The side-by-side existence of these two means of affixing object pronouns defies easy description.

Before turning to an analysis, however, two further groups of pronominals must be introduced. *Notae augentes* are the set of clitics whose Modern Irish correspondents seem to impart contrastive stress. Though it is generally assumed that the *notae* are emphatics of some sort (Zeuss 1871: 324, *GOI* 252-3, VKG II: 137), this conclusion is suspect. It has been suggested (Greene 1973) that they are the true pronouns of Old Irish, with a function somewhat similar to that found in Spanish or Italian overt subject pronouns. Alternatively, it has been suggested, at least in the case of the 3rd person forms, that they can be used to mark a discourse topic (Griffith 2008b). The forms are given in (13).

13) The *notae augentes*

	singular	plural
1st	*-sa / -se*	*-nai / -ni*
2nd	*-so, -su / -siu*	*-si*
3rd M/N	*-som, -sum / -seom, -sium*	*-som, -sum*
3rd F	*-si*	

The alternations (e.g. *-sa* beside *-se*) arise via assimilation of consonant and sometimes vowel quality of the clitic to that of the final consonant or vowel of the host. There is no distinction of case in this pronoun set.

Beside the *notae augentes* are found a further set of clitics that will be referred to here as the deictic clitic set. This set of pronouns, which has no modern correspondent, is third person only:

14) The deictic clitic set

	nominative	accusative	genitive
3SM	*-side*	*-adi*	*-sidi / -ade*
3SF	*-ade*	*-sidi / -ade*	*-ade / -adi*
3S	*són / ón*	*són / ón*	*-sidi / -(a)de*
3PL	*-(s)idi / -ade*	*-(s)idi*	*-adi / -ade*

The alternations in this clitic set do not appear to follow any particular distribution within an individual table cell (though see Schrijver 1997: 31-2 for nom./acc. nt. sg.). It will be assumed here that their distribution is random.

The two clitic sets have an almost identical distribution. They may appear in the following contexts:

- after an NP, agreeing with a preceding possessive pronoun
- after a personal pronoun or a preposition

- after a predicate in a copular sentence, serving as the subject
- after a verb, agreeing with either the subject or the infixed/suffixed object

It is only after a preposition that the distribution of the two clitic sets differs. The *notae augentes* must follow a conjugated preposition, while the deictic clitic set has fully accented forms that follow the bare preposition.[5] This is the only position in which fully accented forms of the deictic clitic set are found and the only place where the usage of the two pronominal clitics sets differs.

Several further facts should be noted here. The *notae augentes* and deictic clitic set appear in the position where a full NP would appear (though see note 7 and below). This is clearest when nouns modified by adjectives are possessed or serve as predicates in copular sentences. (15a) and (16a) show the case of full NPs in possessive and copular constructions, while (15b) and (15b) show the same with the *notae augentes* (the facts are the same for the deictic clitic set). It is to be noted that the *notae* replace the noun phrase and occupy the same position as that noun phrase.[6]

[5] The deictic set does occasionally occur after a conjugated preposition (Sg 199^{a}5 *fuiri=sidi* "on it" for expected *for suidi*), but this is a rare occurrence.

[6] A slight twist on this situation occurs when a *nota* is the subject and an NP with a dependent genitive serves as the predicate. Here, the clitic pronoun stands between the noun and its possessor, as seen in (i):

(i) rombo-descipul=som apstal
COP.3S.PERF-disciple.NOM.SG=3SM/N apostle.GEN.PL
"that he was a disciple of apostles" Wb 18^{d}1

Anticipating the argument for object clitics below, we can argue that the pronominal clitics attach as close as possible to the left edge of the element containing agreement, but they may not interrupt a tight constituent. A noun and its adjective can be argued to form a tight constituent, while a noun and its dependent genitive (as well as a verb and its subject) do not. This contention finds some support in mutation effects: nasalization (*GOI* 148), though curiously not lenition (*GOI* 142), is regularly marked on an attributive adjective. Mutation effects are not, however, regularly marked on dependent genitives (*GOI* 142, 148), which is indicative of a looser constituent status. What exactly a "tight constituent" means cannot be rigorously explored here. It might be primarily a phonological unit (an accentual unit), a syntactic unit (a constituent of some sort) or some sort of interface between different modules of the grammar. The term "tight constituent" is sometimes used to explain the difference between a tonic or post-tonic preverb, which forms a tight constituent with the verb and causes various mutations on it, and a pretonic preverb, which does not form a tight constituent with the verb and causes no mutations. Interestingly, the

Furthermore, both sets of clitics appear in complementary distribution with full NPs,[7] and they may not coindex an argument marked on the verb via relative marking (17-18).

15) a. tech mór Con Culainn
house.NOM.SG big.NOM.SG PN.GEN.SG PN.GEN.SG
"Cú Chulainn's big house"

b. a=gnímai sainemlai=som
3S.GEN=works.NOM.PL wonderful.NOM.PL=3SM/N
"his wonderful works" Ml 23^{c}15

16) a. is=fer mór Cú Chulainn
COP.3S.PRES=man.NOM.SG big.NOM.SG PN.NOM.SG
"Cú Chulainn is a big man"

b. ba=imchomarc n-espach=som
COP.3S.SBJV=question.NOM.SG NAS.idle.NOM.SG=3S
"it would be an idle question" Ml 35^{c}26

17) *ad·cí=som$_i$ in=fer$_i$ día
PRV·see.3S.PRES=3S DET.NOM.S=man.NOM.SG God.ACC.S
"the man sees God"

18) *is=in=ben$_i$
COP.3S.PRES=DET.NOM.S=woman$_i$.NOM.S

ad·chí$_i$=si$_i$ día
PRV·see.3S.PRES.REL$_i$=3SF$_i$ God.ACC.S
"it is the woman who sees God"

Finally, as noted above, the form of the *notae augentes* is fixed: there are no case forms. The initial consonant usually assimilates in quality (palatalized or neutral) to that of the final consonant of the host, but otherwise there is no change.

---

pretonic preverb also serves as a host for infixed pronouns, much like the first noun in Noun + Noun$_{GEN}$ constructions serves as a host for *notae augentes* in copular sentences.

[7] The one place where there is a difference in distribution between NPs and the *notae augentes* is after prepositions: NPs only appear after bare prepositions, while the *notae* only appear after conjugated prepositions. We will return to this distributional difference below.

3. Eska's Analysis

Now with these preliminaries out of the way, we can turn to a discussion of the function and status of these various pronoun sets. An overriding assumption in historical and generative analyses of Old Irish is that the infixed and suffixed pronouns are clitic pronouns. That is, they are pronominal arguments and are clitics. While certainly true historically, these assumptions have not been demonstrated synchronically. Eska (1996 and forthcoming), however, has argued that the pronouns are affixes and that they are not arguments. From this he concludes that they are inflection/agreement. The primary evidence for this position comes from two different facts. First, infixed and suffixed pronouns are not in complementary distribution with noun phrases, since they can appear together in the same sentence. Second, the infixed pronoun is frequently a 3 singular neuter, even with a non-neuter or non-singular NP. See the following examples (taken from the full collection found in Lucht 1994):[8]

19) at·roilli dia a=aigsin
PRV.3S.OBJ·deserves.3S.PRES God.NOM.S 3S.GEN=fear.ACC.SF
"God deserves to be feared" Ml 51[d]7

20) at·indided moisi… inna=retu…
PRV.3S.OBJ·declares.3S.PERF Moses D.ACC.PL=thing.ACC.PL.M
"Moses used to declare… the things…" Ml 115[b]2

Eska assumes that the presence of an infixed pronoun with an overt NP in the accusative shows the non-referential nature of the pronoun. Along the same lines, he assumes for sentences with an infixed pronoun but no overt NP that the argument is *pro*.

Unfortunately, the NP doubling construction is not particularly common. Eska claims that about 10% of cases with an NP object contain an infixed

[8] A reviewer points out that analysis of *at* in *at·roilli* and *at·indided* as "PRV.3S.OBJ" is slightly prejudiced, since it implies that the object elements are not separate from the verb/preverb, i.e. that the object elements are affixes. This objection is correct, but the analysis as given here is probably unavoidable. The affixed pronouns (especially Class B infixed pronouns, see Table 2) coalesce to some degree with the preverb to which they attach: *con* "PRV" + *-t-* "3S.OBJ" = *cot-*; and *as*, *in*, *ad*, "PRV" + *-t-* "3S.OBJ" = *at*. While the *-t-* belongs to the pronominal element, it cannot be totally separated from the preverb. Since a non-biased presentation is not necessarily possible here, I will simply note that the analysis of *at* is not intended to prejudice the analysis, but reflects a real difficulty in teasing apart the morphemes.

pronoun. This is somewhat misleading. While up to 10.7% of sentences with a following NP object may have an infixed pronoun, only about 2% of the total cases of an NP object must have an infixed pronoun (figures from Lucht 1994: 88). The phenomenon is not highly productive in Old Irish. Even if the NP doubling is robust enough to draw the conclusions that Eska draws, there are other possible objections.

As mentioned above, there is a mismatch in gender between the infixed pronoun and the doubling NP in a number of cases. A neuter infixed pronoun doubles a non-neuter NP in 40% (eight of twenty) of the cases where the gender of the infixed pronoun is certain. Eska assumes that this non-agreement shows that the infixed pronouns are non-referential, i.e. that they are agreement affixes. The conclusion is, however, a bit premature. Although nouns have a three-fold distinction of grammatical gender, the language makes frequent use of natural gender, that is animate (or human) male and female vs. inanimate (or non-human). Inanimates can be expressed by neuter pronouns, regardless of the grammatical gender of the noun being referred to. For example, drawing on Kavanagh's (2001) lexicon of the Würzburg glosses, the oldest significant body of Old Irish material in a contemporary manuscript, McCone (2006: 261) examined all instances of *í*, an indeclinable deictic pronoun, and concluded that *int í* and *ind í* (deictic *í* preceded by the masculine and feminine article) regularly refer to persons, while the neuter *a n-í* regularly refers to non-humans, regardless of their grammatical gender. The same observation holds in part for the infixed pronouns (21), though the gender of the referent is also very frequently found, as in (22):

21) is=dō d-a·airilbset
COP.3S.PRES=to.3S.M/NT PRV-3S.OBJ·ascribes.3PL.PRES
"it is to him that they ascribe it (the deed = *gním* masc.) Ml 53^{b}11

22) nī·n-ārraim ar=chairi
NEG.3SM.OBJ·NAS-reckons.PERF.3S for=reproach.DAT.SG
"he has not reckoned it (the sin = *peccad* masc.) for a reproach" Ml 49^{c}9

It thus appears that in Old Irish the neuter can be a catch-all for non-humans. There are 28 examples from the Old Irish glosses in Lucht's (1994) collection of sentences with infixed and suffixed pronouns doubling NPs.[9]

[9] Lucht actually lists 30 such examples with doubled NPs: her examples (2) through (31). Her examples (14) and (29) have been excluded, however, because they do not actually possess an infixed pronoun.

Of these 28 examples, only two have a human referent (and both of these are doubled by a non-neuter infixed pronoun). It is therefore difficult to argue that a neuter infixed pronoun doubling a non-neuter NP indicates the non-referentiality of the infixed pronoun. Rather, the use of a neuter infixed pronoun may simply reflect a tendency in Old Irish to mark non-humans with neuter pronouns.

Also relevant for the question of whether the doubled NP is an argument is Lucht's (1994: 91) contention that the doubled NP is a "nachträgliche Hinzufügung" (roughly what Givón 1976 refers to as "after-thought topic shift", see also Jelinek 1984's Pronominal Argument hypothesis.). If this is true, the doubled NP functions rather like an adjunct, and the infixed pronoun need not be a non-argument. Unfortunately, it is difficult to prove that the doubled NPs are "nachträgliche Hinzufügungen", since it is nearly impossible to obtain information about the intonational contours of Old Irish sentences. A pause surrounding the NP, indicating its parenthetical nature, could be such a cue. Lucht does note that in sentences with doubled NPs, the doubled NPs are almost exclusively definite and that they show a different word order tendency from other sentences with transitive verbs. She shows that sentences with doubled NPs frequently (about 60% of the time, 17 of 28 examples) have the object separated from the verb (what she dubs V…O order), while sentences with non-doubled NPs show a very pronounced affinity for the object to follow the verb directly (her VO order, found about 82% of the time, 101 of 123 examples in her sample). The correlation is interesting, but it is not immediately clear if it indicates something about the status of the object. The material intervening between verb and object could be anything: an adverb, a prepositional phrase or simply the subject. In an attempt to tease apart at least some of the more basic questions concerning the VO vs. V…O difference, her collection of sentences with pronoun doubling was reexamined.

Over a third (9 of 26) of the sentences with a pronoun-doubled NP in her collection show the unusual word order mentioned above: V(S)XO. The usual order, V(S)O(X), makes up almost the entire balance of the occurrences: 7 of 26 attestations are V(S)OX, 7 of 26 are VO, and 2 of 26 are VSO. One example is VOS.[10] It does seem that the doubling NP object may well be an afterthought in those sentences with V(S)XO order (9 of 26

[10] The 26 sentences counted here are the 28 examples with a doubled NP (see previous note), minus examples (5) and (24), which may show heavy-NP shift, rendering them unreliable indicators of normal word order. In the interest of reproducibility, the classification of the sentences is given here (the numbers refer to Lucht's 1994 examples): V(S)XO: 2, 4, 7, 8, 11, 13, 16, 18, and 21; V(S)OX: 3, 6, 12, 17, 23, 26, and 28; VO: 10, 15, 19, 20, 22, 25, and 27; VSO: 9 and 31; VOS: 30.

examples). The word order is unusual and is correlated with the presence of a doubling clitic. This fact weakens Eska's argument that the infixed pronoun must be an agreement affix. In these sentences, the infixed pronoun could well be the argument, while the full NP in such sentences could simply be tacked onto the end of the sentence as an afterthought. It should be noted, however, that this afterthought type encompasses only one third of the data. The remaining sentence-types are inconclusive. They conform to the normal word order patters of Old Irish, and without intonational clues or other evidence, we cannot interpret them as either adjuncts or arguments with any certainty.

From the analysis undertaken here, it appears that Eska's analysis of the infixed and suffixed pronouns as agreement markers is not particularly confirmed by the data. He does not address the question of whether the pronouns are affixes or clitics, while his arguments for their non-argument status can be relativized. To maintain his claim requires further support.

4. In Support of an Agreement Analysis

Traditionally, the infixed and suffixed pronouns are considered to be clitic arguments. Rarely is the term argument used, but it appears to be implied whenever the object pronouns are discussed. In this section, it will be argued explicitly that the object pronouns are neither clitics nor arguments. Instead, the *notae augentes* will be argued to be arguments in Old Irish. Once it is noted that *notae* in object function always appear with a coindexed infixed or suffixed pronoun, it becomes clear that if the *notae* are arguments, the infixed and suffixed pronouns are not.[11]

4.1 Clitics or affixes?

Since clitics and syntactic affixes behave in different ways, it is possible to test the behavior of the infixed and suffixed pronouns to see which category they more closely reflect. Zwicky and Pullum (1983), Borsley and Roberts (1996), and Sportiche (1998: 310) list several criteria for distinguishing

[11] Alternately, one could argue that the infixed and suffixed pronouns are ambiguous markers (in the sense used in LFG analyses, see Bresnan and Mchombo 1987 for an example of ambiguous markers in Chichewa). It is assumed here that markers should have a unitary analysis throughout, unless such an analysis is ruled out.

clitics from syntactic affixes (Zwicky and Pullum's term is variously inflection or inflectional affixes). Among their criteria are the following:

- Clitics tend to have a lower degree of host selection than affixes.
- Morphophonological idiosyncrasies are more characteristic of affixes.
- Semantic idiosyncrasies are more common with affixes than with clitics.
- Agreement marking is obligatory, but clitics are not.
- Agreement nearly always allows doubling, while clitics often prevent it
- Clitics may not be modified by an adjacent modifier.[12]

For each of these, the infixed and suffixed pronouns are more like affixes than clitics. To see this most clearly, it will help to contrast these forms with those of the *notae augentes* and the deictic clitic set.

First, the *notae augentes* and deictic clitic set have a wide range of environments in which they can appear: after verbs, after conjugated prepositions, after independent pronouns, after possessed nouns, and in copular sentences as the subject of the sentence. In short, these two clitic classes can appear on any lexical head with the appropriate person and number marking. In contrast, the infixed and suffixed pronouns attach only to verbs and express only the direct object[13]. One might argue that the infixed and suffixed pronouns form a paradigm together with the independent pronouns, the pronominal forms in the conjugated prepositions, and clitic possessors. In this case their distribution would be as broad as that of the *notae augentes* and deictic clitics. It is a stretch, however, to argue that these various paradigms together form a single, larger paradigm. Comparing the forms of the infixed and suffixed pronouns (9) with those of the independent pronouns (23) as well as clitic possessors and the pronominal part of conjugated prepositions (24 and 25), one can see some similarities in the forms, especially in the first and second persons, but to claim they are a paradigm seems to be a stretch. Also from a syntactic point of view there is reason to question whether these forms make up a paradigm. If this analysis is correct, the infixed pronouns are not part of a broader paradigm and they thus have a higher degree of selectivity than either the *notae augentes* or the deictic clitic set.

[12] Not all these criteria are equally useful as tests, and some of them have indeed been questioned, but on the whole they offer a reasonable means of testing for affix- and clitic-hood.

[13] I ignore here their use with the substantive verb to express possession and with the copula to express possessor and experiencer roles.

23) *Independent pronouns*

	singular	plural
1st	*mé*	*sní*
2nd	*tú*	*sí*
3rd M	*é*	
3rd F	*sí*	*é*
3rd N	*ed*	

24) *Possessive pronouns*

	singular	plural
1st	$m(o)^{L}$	ar^{N}
2nd	t^{L}/do^{L}	for^{N}
3rd M/N	a^{L}	a^{N}
3rd F	a^{H}	

25) Conjugated prepositions

		singular	plural
1st		*-m*	*-nn*
2nd		*-t*	*-ib*
3rd M/N	Acc.	*irregular*	*-u*
3rd F			
3rd M/N	Dat.		*-ib*
3rd F			

Second, morphophonological idiosyncrasies abound with the infixed and suffixed pronouns. The infixed pronouns condition mutations on the immediately following (pre)verb (see (9) and (12) above, where the infixed pronoun nasalizes the initial of the following verb), and verbs undergo syncope when suffixed pronouns are attached to them (see (11) above). The *notae* never condition such changes on the verbs to which they attach. Thus, *beirid(-som)* "he carries" (not *beirid* beside **bertsom* or **berthsom* parallel to *beirid* and *beirthi*).

In addition, the forms of infixed pronouns themselves show a high degree of idiosyncrasy, depending both on the underlying form of the hosts to which they are attached (i.e. whether that host ends in an underlying vowel or consonant) as well as the syntactic environment (i.e. in a relative clause or following certain complementizers like the interrogative particle). This behavior contrasts strikingly with that of the *notae augentes*, which are invariant in form and never condition morphophonological changes in their host (see *GOI* 88 on some very low-level phonological assimilation).

Third, there are a few semantic idiosyncrasies at play with the infixed pronouns. That is, there are verbs that lexically require an infixed pronoun

devoid of meaning: *at·baill* "dies" (etymologically "kicks it") or *ara·chrin* "perishes". Interesting to note here is that although the pronouns are lexically required, they are not syntactically inert, since they still alternate in relative construction with Class C infixed pronouns: *asind·baill* "who dies" and *arind·chrin* "who perishes" (both Ml 57[a]10). Further semantic idiosyncrasy can be seen in the conjunctions *ma* "if" and *cía* "although", which require a meaningless infixed pronoun Class C 3s. nt., but only when they are construed with the indicative mood. With the subjunctive, the infixed pronoun is absent. There are no such idiosyncrasies associated with either the *notae augentes* or the deictic clitic set.[14]

Criteria four and five are somewhat less clear-cut. The *notae augentes* never appear with a coindexed NP in the same clause (see 17) and are never required to appear (the 1sg and 2sg preterite and perfect of the copula *basa* / *-bsa* is a historical relic and not an exception; see *GOI* 491). The infixed pronouns, however, do allow doubling (see 18 and 19) and are required when the object is pronominal. The *notae* thus appear to be behaving like clitics and the infixed pronouns like affixes. Still, however, the optionality of the infixed pronouns with a full NP object is difficult to interpret. While there are some restrictions on what sort of NPs are doubled (see below), there appears to be no absolute requirement that an infixed pronoun double an NP object. This optionality might favor a clitic analysis of the infixed pronouns. At this point, criteria four and five allow no certain decision on the affixal nature of the infixed and suffixed pronouns, but they are more compatible with the *notae* as clitics and the infixed pronouns as affixes.

The final criterion mentioned above is the impossibility of modifying clitics with an adjacent modifier. It is certainly true that the *notae augentes* and deictic clitic set never occur with modifiers of any kind. For the infixed and suffixed pronouns, however, modification is possible with *uile* "all, entire", as seen in the following examples:[15]

---

[14] Given Marantz' (1984) observation that idioms formation is available with inner arguments, i.e. direct objects, but not outer ones, i.e. subjects, one might argue that the presence of semantic idiosyncrasies with the infixed pronouns is unsurprising and cannot be given too much importance. The lack of idioms dependent on *notae augentes* , even when used as direct objects, still would remain unexplained, however.

[15] The article is required when *uile* is substantivized, optional when it modifies a noun, and prohibited when it modifies a pronoun. Only when *uile* appears in subject position does this observation appear not to hold, since the article is optional there:

i) rethait (ind=)uili
runs.3PL.PRES. (DET.NOM.PL=)all.NOM.PL
"all (things) run"

26) do-s·n-aidlibea uili
PRV-3PL.OBJ.·NAS-visits.3S.FUT all.ACC.PL
"He will visit them all" Wb 25[d]14

27) no-b·cara huili
PRV-2PL.OBJ·loves.3S.PRES all.ACC.PL
"he loves you (pl) all" Wb 27[d]9

If this criterion is an accurate way to distinguish clitic from non-clitic, then it seems that the infixed and suffixed pronouns are not clitics.

Most of the criteria examined in this section indicate clearly that the infixed and suffixed pronouns behave like affixes and not clitics. On the other hand, the *notae augentes* and deictic pronominal set, as expected, behave as clitics.

4.2 Arguments or Not?

Now we may turn to determining the argument status of these various pronouns. Above, it was seen that Eska's contention that the infixed and suffixed pronouns are not arguments is not secure. His evidence is compatible with an agreement analysis of the forms, but it does not force such an analysis. Here, the problem will be approached from the other direction; it will be suggested that the pronominal arguments in Old Irish are

---

ii) ho·n-arroet doinacht *(a=)n-uile
from.REL·NAS-receives.3S.PERF humanity.NOM.SG (det.ACC.SG.N=)NAS-all.ACC.S.N
"from which humanity has received everything" Ml 25[d]11

iii) a. do-naib hulib b. i-ndib huilib
for-DET.DAT.PL all.DAT.PL in-DAT.PL all.DAT.PL
"for all" Ml 51[a]19 "in them all" Sg 161[b]3

Both treatments are available in subject position because two analyses are available: a null *pro* may be present which bare *uile* can modify; or substantivized *uile* (with the article) can be the subject. The observation concerning pronominal modification can be differently expressed: arguments expressed by bare *uile* must have agreement morphology on their governing head. This covers bare *uile* as subject (i), as well as *uili* as direct object and prepositional object. These facts seem to fall in line with the fact that "all" must be clitic doubled when it instantiates the direct object in Albanian, Modern Greek, Argentinian Spanish, and Romanian (Kallulli and Tasmowski 2008: 17).

actually the *notae augentes*. If this is true, then it is reasonable (or necessary, depending on one's theoretical approach) to conclude that the infixed and suffixed pronouns are not arguments.

The argument is for the most part quite simple, and the basic facts have already been mentioned: the *notae augentes* are in large part (with one exception to be discussed below) in complementary distribution with full NPs and the *wh*-relative marking on verbs.[16] An obvious conclusion from this is that the *notae augentes* are pronouns. It is true that the *notae* are not required when no NP is present, but that need only indicate that Old Irish is a *pro*-drop language. Furthermore, assuming a *pro* in the absence of an overt NP or *nota augens* is appealing for other reasons as well, since it is not particularly satisfying to argue, for instance, that the verbal ending marking the subject is an argument when an NP or *nota augens* is lacking, but is not an argument when they are present. That the subject marking is true agreement is surely the correct analysis. The same can be said for object marking on the verb, possessor pronouns, and conjugated pronouns. The situations are not all precisely parallel, but the basic argument is the same in each case, meaning that the *notae augentes* can be interpreted as arguments in all cases.

As mentioned in the previous paragraph and in note 7, there is one exception to the statement that the *notae* are in complementary distribution with NPs. The *notae augentes* can only appear after conjugated prepositions, that is, prepositions inflected for person and number. NPs, however, cannot appear after conjugated prepositions, but only after simple prepositions. This lack of complementarity disturbs an otherwise neat picture of the *notae*. The cause lies with prepositions, since it is only with prepositions where agreement and full NPs are incompatible. That is, full NPs are compatible with subject marking and object marking on the verb and with possessive marking on NPs, but not with person and number marking on prepositions. I do not at present have an explanation for the incompatibility of conjugated prepositions and full NP objects, but the

[16] I have noted a single exception, i.e. a *nota augens* with coreferent NP:

i) a=chiche=som fergusa
3SM/N.GEN=breast.ACC.PL=3SM/N Fergus.GEN.SG
"his, Fergus', breasts" FML §5

As Stefan Schumacher has suggested to me, this exception is the result of a copying error whereby a later copyist mistakenly incorporated extraneous gloss material (*fergusa*) into the text he was copying; that is, the exception is a later interpolation and does not disturb the complementarity.

phenomenon seems to be barred at all stages of the language. The upshot of this discussion is that we can regard the complementary distribution of NPs and the *notae augentes* as an established fact, and the one place where it fails, after prepositions, is due to a restriction on the interaction of NPs and agreement-marked prepositions.

Returning to the discussion of the *notae* as arguments, we may note a further relevant datum involving the quantifier *uile* "all, entire", which can modify infixed pronouns as well as the possessive pronouns and conjugated prepositions. In the case of the possessive pronouns, however, there is an interesting complication, since *uile* is one of the few adjectives in Old Irish that may either precede or follow its noun:

28) ind={uili} fir {uili}
DET.NOM.PL=all.NOM.PL man.NOM.PL all.NOM.PL
"all the men"

In the case of a noun with a pronominal possessor, the *uile* may modify either the noun or the possessor. If it modifies the noun, it can precede or follow that noun (29-30), but if it modifies the possessor, it must come at the end of the phrase (31-32):

29) far=n-uili baullu
you.PL.GEN=NAS-all.ACC.Pl member.ACC.PL
"all your (pl) members" = "all the members of you (pl)" Wb $3^{b}26$

30) a=senud uille
3PL.GEN=synod.NOM.SG all.NOM.SG
their whole synod" = "the whole synod of theirs" Wb $9^{c}28$

31) a=corp uile
3PL.GEN=body.NOM.SG all.NOM.SG
"all their body" = "the body of all of them" Wb $11^{d}10$

32) a=m-muntar huile
3PL.GEN=NAS-household.NOM.SG all.NOM.SG
"all their household" = "the household of all of them" Wb $27^{d}12$

The interesting point here is the placement of *uile*. The question is why it cannot appear before the possessum and modify the possessor:

33) a=n-uile corp
3PL.GEN=NAS-all.NOM.SG body.NOM.SG
"*all their body" = "*the body of them all"; only "their entire body"

If the possessive pronoun were an argument, it is not clear why the *uile* quantifying it could not raise and appear with the possessive clitic before the noun. If, on the other hand, the possessive pronoun is an agreement affix and *pro* follows the noun, the impossibility of raising *uile* would be explicable. That is, *uile* could be raised above the possessor *pro* or not, but it could never raise above the possessum. The location of *pro* corresponds to the location of the *notae augentes* with possessed nouns:

34) a_i=corp {uile} {*pro*$_i$} {uile} = (26)
3PL.GEN=body.NOM.SG all.GEN.PL 3PL.GEN all.GEN.PL
"all their body" = "the body of all of them" Wb 11^{d}10

35) a_i=corp=som$_i$
3PL.GEN=body.NOM.SG=3PL
"their body"

There is an interesting complication here that should be mentioned in this context. As can be seen in the following example, when *uile* modifies the possessor, it can appear in the nominative case (not the formally identical accusative *pace GOI* 161):

36) a=ta[d]chur uili
3S.GEN.PL=return.ACC.SG all.NOM.PL
"the return of them all" Ml 34^{d}20

In this example, *uili* agrees with neither the possessive pronoun *a* nor the noun *tadchur*. It is assumed here that *uili* is an adjunct taking default case, which is the nominative in Old Irish (McCloskey 1991). Interestingly, the same phenomenon is found with prepositions, where *uile* may occur after a conjugated preposition either in the case normally required by the preposition or in the default, nominative case.

37) a. doib huili b. i-ndib huilib
to.DAT.PL all.NOM.PL in-DAT.PL all.DAT.PL
"to them all" Wb 25^{c}31 "in them all" Sg 161^{b}3

Assuming that the adjunct analysis is correct has an interesting consequence for the analysis of clitic doubled NP objects: since NP objects doubled by infixed pronouns have accusative and not nominative case, they cannot be adjuncts, but must be arguments. The infixed pronouns are therefore inflectional agreement. In this way, we have adduced additional evidence to support the contention that the genitive possessor prefixes, and by

implication the infixed and suffixed pronouns, are not pronominal arguments, and that the *notae augentes* are.

4.3 Head-marking and dependent-marking

If an agreement affix analysis is correct for the infixed and suffixed pronouns and the pronominal possessors, it allows for a convenient typological description of Old Irish: Old Irish is a split head-marking language (in the sense of Nichols 1986). When the argument is pronominal, the language is head-marking; when the argument is nominal, the language is dependent marking (see Griffith 2008a).[17] It should be noted, however, that Old Irish has a tendency to over-mark the head in some cases with overt NPs, i.e. where dependent marking is present. The clitic doubling of object NPs (see 19 and 20 above) and possessor NPs (38) are such cases:

38) nertit a=dénum
encourage.3PL.PRES 3SM/N=doing.ACC.SG

in=maid=sin
DET.GEN.SG=good.GEN.SG=that
"they encourage the doing of that good" Wb 1^{d}7

Another case of over-marking the head occurs with 3 plural verbs and overt plural NP subjects, where a strict split head-marking language would have a 3 singular verb with an overt plural NP subject. All the same, however, since redundant marking is not uncommon, the generalization that Old Irish is a split head-marking language appears to be accurate.

All the above considerations point to the plausibility of an analysis of the infixed and suffixed pronouns as agreement affixes. The *notae augentes* can then take their place in the analysis as the pronominal arguments of Old Irish (with the deictic clitic set in the same syntactic position but with a deictic function). The optionality of the *notae* means that Old Irish is a *pro*-drop language (Greene 1973).

---

[17] Some examples of head marking of possessed nouns and of prepositions have been seen above in (2b) *a n-athair* "their father" and (3b) *fiado* "in his presence". One potential complication for the head-marking argument comes from possessed nouns. Since cardinal and ordinal numbers, as well as a small group of adjectives (mostly quantifiers) can intervene between the noun and possessive pronoun clitic (see (24) for an example), it is not possible to argue that the person and number of the possessor is marked on the noun itself. Such examples suggest that DPs are head-marked rather than NPs.

5. Pronoun typology and the *notae augentes*

If the *notae augentes* are indeed pronouns, it makes sense to ask what sort of pronouns they are. Cardinaletti and Starke's (1999) typology of pronouns offers a useful means of framing the question, though the Old Irish facts do not fit easily into their typology.

Cardinaletti and Starke define three classes of pronouns: strong, weak, and clitic, the latter two of which can be grouped together as deficient. These three classes differ across a broad range of features. Strong pronouns can be differentiated from deficient ones by the fact that strong pronouns necessarily have a human referent, can be coordinated, and may be the referent of a relative clause. Furthermore, they may occur in clefts and may bear contrastive focus. Deficient pronouns have none of these features: they cannot be coordinated, may not be the referent of a relative clause, may not occur in clefts or bear contrastive focus, and they need not necessarily refer to humans. Deficient pronouns for their part belong to two classes: weak and clitic. Clitic pronouns may not have word-stress and must appear in X° in the syntax. Weak pronouns can be stressed and must appear in a checking position in the syntax.

Not all of these properties are easily testable in Old Irish, but some can be checked straightforwardly Consistent with the behavior of strong pronouns is the fact that the *notae* may be coordinated with other nouns: [18]

---

[18] Old Irish has a second means of coordinating pronouns, which makes use of an inclusory pronoun (Lichtenberk 2000) or plural pronoun construction (Schwartz 1988, Aissen 1989, McNally 1993). For Old Irish that means that the coordinated pronoun may be plural, since it can include the second coordinand:

i)	dún=ni	ocus	Barnaip
	to.1PL =1PL	and	PN.NOM.SG
	"to me (lit. to us) and Barnabas"		Wb $10^{d}1$

While this type of coordination is less common in languages of the world and thus has received more attention in the literature on Old Irish (*GOI* 251, Meid 1968, Ködderitzsch 1997, McCloskey 1986: 270ff., 1991), the pattern of pronoun coordination as found in (33) through 0 above is unexceptional in Old Irish (see Griffith forthcoming), though its validity has sometimes been questioned (Thurneysen 1925: 83, under 2. *la*). For the present purposes, either construction will do. All that is at stake is that the *notae augentes* can be coordinated with an NP, and that is true of both types of coordination.

39) a=chomraic=som 7 saul
3SM/N.GEN=encounter.GEN.SG=3SM/N and PN
"of Saul's and his encounter" Ml 75[a]6a

40) thorom=sa 7 Chonchobar
across.1SG=1SG and PN.NOM.SG
"across me and Conchobar" TBC I 436

41) con·érgim=se 7 Conchobar
PRV·rises.1SG.PERF=1SG and PN.NOM.SG
I and Conchobar rose up" TBC I 476

As of yet, no examples with a *nota augens* as referent of a relative clause have been found. All possible examples are inconclusive, since they occur with an independent pronoun in a copular sentence:

42) is=me=se nad·frithchomart nech
COP.3S.PRES=1SG=1SG REL-NEG·injures.PERF.3S anyone.ACC.SG
"it is I who have not injured anyone" Ml 47[a]2

The example could also be translated "(the one) who has not injured anyone is me" (see Schrijver 1997: 93-4 on such sentences). While coordination seems to support a strong pronoun interpretation of the *notae augentes*, other evidence runs against this conclusion. First of all, as has been established, the *notae* are always phonologically clitic. Second, although there is a very strong preference for their referent to be human, it is not a requirement (see Griffith 2008a: 62ff.). These two restrictions suggest that the pronouns cannot be strong.[19] Therefore, they must be in some way deficient. It has been suggested (Roberts and Shlonsky 1996) that weak pronouns are not possible in VSO configurations. Deficient pronouns must therefore be clitics and appear on the Agr-head.

There appears initially to be some support for this claim. The *notae augentes* follow most of the generalizations Roberts and Shlonsky make about clitics in Welsh and Arabic (1996: 177, 183):

a. They occur on the right of the host.
b. They attach to the nearest c-commanding head.
c. They attach to more than just V.

[19] It is quite possible, and perhaps even likely, that the *notae augentes* were strong pronouns until very late in the pre-Old Irish period, but the same is not true for the historical period.

d. They do not manifest case distinctions, despite the fact that verbal agreement goes with a nominative DP and prepositional agreement with a non-nominative.
e. They never cluster.
f. They bear no morphological resemblance to determiners.

The most interesting feature is the fact that the *notae augentes*, like the clitics Roberts and Shlonsky discuss, do not cluster. It might in principle be possible for two different *notae* to appear on a verb with an object pronoun: one *nota* could be the subject pronoun and one the object pronoun. As it happens, however, this is disallowed, since only one *nota* may appear.[20] Interestingly, however, two clitics may appear on such verbs under very specific conditions: the subject must be represented by a *nota augens* and the object by a member of the deictic clitic set, which further requires that the object be a 3rd person infixed pronoun (examples with suffixed pronouns happen not to be attested):[21]

43) do-s·ratsat=som=adi
PRV-3PL.OBJ·applies.3PL.PERF=3PL.SUBJ=3PL.OBJ
"they have applied them" Ml 44[a]14

Now, the restriction on clitic clustering as discussed in Roberts and Shlonsky refers more properly to double object constructions, so the fact that one of the clitics in Old Irish examples like (43) must be a subject clitic could be argued to mitigate the problem. Such examples are still difficult, however, for any explanation that holds that the clitics are Agr-heads, because the presence of a subject clitic on the verb would mean that the verb had moved overtly to AgrS to adjoin to the subject clitic residing there. There is to my knowledge no independent evidence for this movement (a structure like [$_{CP}$ [$_{AgrSP}$ [$_{TP}$…]]] is assumed here). An additional problem is found in the order of the morphemes: the object clitic lies outside the subject clitic. In head movement of the verb through AgrO, v, etc., and given the principle of left-adjunction of heads (Kayne 1994), object clitics should lie inside subject clitics. As (43) shows, the object clitics lie outside the subject clitics in Old Irish. The same problem arises in Arabic examples considered by Roberts and Shlonsky, but in that case they argued that the

[20] Which *nota* may appear follows a strict hierarchy: the argument highest on the scale 1st person > 2nd person > 3rd person animate > inanimate may be expressed as a *nota* (Griffith 2008a). Accounting for this hierarchy will not be attempted here.
[21] Note that the requirement that the object be 3rd person bears a certain resemblance to the Basque restriction by which three arguments can be marked on the verb only if the absolutive argument is 3rd person (Albizu 1998).

subject markers were base-generated and were not syntactic affixes (1996: 178). That argument is unattractive for the Old Irish data.

We now have a paradox. The *notae augentes* and deictic clitic set are deficient pronouns, as argued above. Since Old Irish is a VSO language, it cannot have weak pronouns, as argued by Roberts and Shlonsky (1996), so the *notae augentes* and deictic clitics must be clitics found on Agr-heads. However, these clitics cannot be Agr-heads given the arguments of the preceding paragraph. Despite the claims of Roberts and Shlonsky, it seems that weak pronouns are indeed possible in VSO languages and that the *notae augentes* and the deictic clitic set in Old Irish are such pronouns.

It is quite difficult to prove this point via positive arguments, but several facts are suggestive. The following are standard Old Irish sentences:[22]

44) ad·cí in=fer
PRV·sees.3S.PRES DET.NOM.SG=man.NOM.SG

in=mnaí
DET.ACC.SG= woman.ACC.SG
"the man sees the woman"

45) ad·cí(=som) in=mnaí
PRV·sees.3S.PRES(=3SM/N) DET.ACC.SG-woman.ACC.SG
"he sees the woman"

46) ata·cí(=si) in=fer
PRV.3SF.OBJ·sees.3S.PRES(=3SF.OBJ) DET.NOM.SG=man.NOM.SG
"the man sees her"

47) ata·cí(=som)(=sidi)
PRV.3SF.OBJ·sees.3S.PRES (=3SM.SUBJ)(=3SF.OBJ)
"he sees her"

The standard VSO word order appears when both subject and object are NPs (44), when the subject is a clitic (45), and when both are clitics (46). However, when the object is a clitic and the subject is an NP (47), the observed word order is VOS. The most straightforward explanation for this

[22] Parenthetic material is optional, but including it allows us to see where pronominal arguments appear. This is, of course, assuming that the *notae* and deictic clitics are arguments, as argued above. One could argue, as McCloskey and Hale (1984) do for Modern Irish, that the *notae* are clitic to *pro*, but this will not end up making any difference for the matter at hand: if the *notae* are clitic to *pro*, their presence still indicates the location of *pro*.

fact is that the pronoun shifts due to the same weak pronoun shift observed in English:

48) a. he picked {John} up {John}.
b. he picked {it} up {*it}.

If this pronoun shift is the result of syntactic movement, we have to assume that since the pronominal object clitic is on the left of the subject NP, it must be in some functional projection above vP. A likely candidate would be that the clitic object raises to the specifier of AgrO, which will derive the correct word order if subject and object NPs remain in-situ in Old Irish. However, if AgrO is actually located within vP (as proposed by Koizumi 1993), this explanation fails. Even if AgrO is above vP, examples with both subject and object clitic pronouns require that both subject and object clitics shift to functional projections above vP but below the verb. In all theoretical accounts of the Old Irish verbal complex, the verb remains in T either for most sentences (Carnie, Harley, and Pyatt (2000) and Doherty (1999, 2000)) or all sentences (Adger 2006, Newton 2006). If this is so, and if both subject and object clitics must shift to functional projections above vP but below T, there must be two functional projections between T and vP to host these shifted pronouns.[23] While this is possible, it seems that a simpler solution can be found: a post-syntactic shift.

Note that the *notae augentes* and the deictic clitic set, in their function as subject and object pronouns, both occur in the standard Wackernagel position, i.e. after the first accented element of the sentence: the verb.

[23] A further issue is whether subject and object NPs are truly in-situ. If they are not, then the number of functional projections between vP and T will increase further. The question is a difficult one. It is not clear if generalizing from non-finite clauses to finite clauses (as Bobaljik and Carnie 1996 do) will yield results in Old Irish. It appears, contrary to what is sometimes stated, that the language does have an infinitive (see Stüber 2009 for an extensive argument in favor of the "*do*-infinitive"), and it is clear that there is OV order in this infinitive at least some of the time. This would suggest that the object is not in-situ in non-finite clauses, and, by the logic in Bobaljik and Carnie 1996, that the object is also not in-situ in finite clauses. If the object is not in-situ, then VSO word order shows that the subject is also not in-situ. The foundation of this whole line of reasoning, however, is uncertain. It appears quite likely that the syntactic change of the that yielded the *do*-infinitive (from an earlier nominal category) took place within Old Irish (Lash forthcoming), meaning that two analyses would be required: one for Early Old Irish, pre-syntactic change, and one for later Old Irish, post-change. There is simply not enough space here to give even a minimally adequate discussion of the problem. Fortunately, however, it seems possible to offer a reasonable solution (see main text) that can side-step these issues.

Assuming the framework of Distributed Morphology (Halle and Marantz 1993), it is possible to argue that the object shift takes place via some version of either local displacement (Embick and Noyer 2001) or prosodic inversion (Halpern 1995), either of which can take place late in the derivation and move the clitic leftward to the right of the agreement-bearing head: the accented verb (see also note 6). The advantage of assuming this explanation is that it does not require the positing of extra functional projections to account for object shift in Old Irish.

The immediately preceding discussion shows if the *notae augentes* are weak pronouns, a straightforward account of the word order facts obtains. Assigning the *notae* to the weak pronoun class is not entirely straightforward, since they exhibit features of both strong and clitic pronouns. Nevertheless, the best fit of the *notae* is as weak pronouns.

6. Pronouns and the Old Irish verb

All previous analyses of the verb (with the exception of Carnie, Harley, and Pyatt (2000: 59 note 24) who are agnostic) assume that the infixed and suffixed pronouns are pronouns. These analyses also generally attempt to explain the distribution of the infixed and suffixed pronouns and their mutation effects via some sort of Wackernagel-position analysis. As noted above, however, the Wackernagel position of the infixed and suffixed pronouns is only valid in pre-Old Irish, not in Classical Old Irish. Alternately, one could argue that it is true at a more abstract level of analysis, but various facts, especially the use of a semantically empty preverb *no* to infix pronouns in many cases, make such an analysis difficult. When one considers that the *notae augentes* and deictic clitics behave as true Wackernagel clitics when marking the subject or object of the verb, it is clear that the infixed and suffixed pronouns cannot be Wackernagel particles.

These considerations make it desirable to reexamine the question of the Old Irish verb and its synchronic analysis. While a new analysis is beyond the scope of the present paper, a few brief comments can be made. A number of previous analyses of the Old Irish verb attempted to derive the complicated structures syntactically (Doherty 1999, 2000; Carnie, Harley, and Pyatt 2000). The two most recent analyses (Adger 2006 and Newton 2006), however, have both concluded that a purely syntactic analysis of the Old Irish verb is not possible, and that post-syntactic processes are necessary. Of these two more recent analyses, that of Newton seems more

promising in light of the claims made here about the infixed and suffixed pronouns.

Newton (2006: 60ff.) suggests that Old Irish verbs end up in T in the overt syntax. Cases of simple verbs that require a semantically empty *no* to infix object pronouns or mark relative construction are roughly parallel to English *do*-support. On the other hand, to derive deuterotonic verb forms like *do·beir* "he gives", with a pretonic preverb that appears to be located in C, Newton assumes that the first preverb, if one is present, is realized in C (and deleted from T) when C contains no other default values. This is possible because an Agree relation obtains between C and light v (the location of preverbs). In this she follows Chomsky's (2007, 2008) suggestion that C is the locus of tense and agreement features. C probes v and an agreement relation is established between them. If this explanation is on the right track, we might assume that a feature for object agreement can also be valued in C as part of this agreement relation. This would then explain why the suffixed and infixed object pronouns appear to occur after C. This account is necessarily schematic in nature, but it seems to offer a possible account compatible with an agreement-affix-analysis of the infixed and suffixed pronouns. If Newton's particular explanation should prove untenable, then a new one will have to be found. Any new analysis, however, should take into consideration the central tenet argued for here: the infixed and suffixed pronouns are verbal agreement rather than true pronouns.

7. Conclusion

The basic argument of this paper is quite simple. Although the infixed and suffixed pronouns of Old Irish are traditionally taken to be clitic pronouns and arguments, an interpretation that is certainly true at some not-so-distant stage of Pre-Irish, several factors point suggest that their correct synchronic analysis is as agreement affixes. We may first summarize the arguments in favor of analyzing the pronouns as affixes. When attached to verbs, they frequently induce morphophonological changes on those verbs or they undergo such processes themselves. The infixed and suffixed pronouns sometimes take part in semantic idiosyncrasies. In addition, they are quite restricted in their distribution and their paradigm is rather irregular, especially in the 3rd person. Furthermore, the use of infixed and suffixed pronouns is obligatory with pronominal objects and optional with overt NPs. That is, an NP may appear with an infixed or suffixed pronoun. Also allowed is a limited amount of modification of an infixed pronoun, in this

case by *uile* “all”. These feature are all more fitting for affixes than for clitics.

A second strand of the argument here is that the *notae augentes* should be interpreted as the true pronouns of Old Irish, and that the infixed and suffixed pronouns consequently are agreement. The *notae* appear exactly where pronouns should, and they are in complementary distribution with full NPs and with *wh*-relatives marked on the verb. Furthermore, the behavior of *uile* “all” with pronominal possessors also supports the analysis of the *notae* as pronouns. There are, however, some difficulties in determining exactly what type of pronouns they are. Phonologically, they are clearly clitic, but they cannot be Agr-heads, since the order of morphemes on the verb is incorrect. An analysis as weak pronouns seems to make the most sense, though this conflicts with both the clitic nature of the *notae* and the fact that they also bear some features of strong pronouns, such as the ability to coordinate. While solving this paradox will be left for later work, it is hoped that this analysis of the Old Irish pronouns shows that there are interesting, if challenging, features in the language’s pronominal system that deserve further attention.

Aaron Griffith
University of Vienna
aaron.griffith@univie.ac.at