

Why a Single Burst or Multiple Scatterings Can Make All the Difference: The Patterns Underlying the Formation of AI and AII Verbs

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Abstract

Old Irish has three categories at its disposal for the formation of secondary verbs: the \bar{a} -verbs, the \bar{i} -verbs and the *-igidir* verbs. In this article, I discuss the possible origins of these formations before moving on to a discussion of the underlying motivation for \bar{a} -verbs and \bar{i} -verbs to be formed as a verb of one class rather than the other. Secondary verbs contain denominatives, deadjectivals and deverbal verbs. There are no deadjectival \bar{i} -verbs and no deverbal \bar{a} -verbs or *igidir*-verbs.¹ The formation of a denominative as an \bar{a} - or an \bar{i} -verb appears to be motivated by its semantic causativity and iterativity and its transitivity. The *-igidir* category, on the other hand, is so productive that it appears to have virtually no restrictions in Old Irish and has been left aside in the discussion.

Introduction

The aim of this paper is to show and discuss the underlying scheme in the formation of secondary verbs, specifically, in the motivation for formation as an AI or an AII verb. Thus far, scholarship has mainly focussed on the primary verbs and their origin and development from Proto-Indo-European. McCone's *The Indo-European Origins of the Old Irish Nasal Presents, Subjunctives and Futures* (1991) and Schumacher's *Die Keltischen Primärverben* (2004) spring to mind. Among the AII verbs, the specific group of the *-igidir* verbs (*cathaigidir* 'fights', *tessaigidir* 'warms' etc.) have been discussed in more detail by for example Joseph (1987), Ó Cruallaóich (1997) and most recently Griffith (paper delivered in Trier 2013). A wider overview of patterns of derivation of the secondary verbs is however lacking. In this paper, I will focus on the motivation for formation as a verb of either the AI or AII class. It forms part of my wider research into secondary verbs in Old Irish. My focus lies on the derivation of a verbal stem from other parts of speech or other verbs. That is, derivation by means of suffixing, rather than prefixing. The

1 The *igidir*-verb *dichsnigidir* 'exists' is, as Thurneysen points out, 'etymologically connected with *do-coissin* 'there is, there are', but is not directly derived from it. I derive it from **dichsain*, possibly the verbal noun of *do-coissin* and not attested. *Dichsnigidir* shows double syncope: First in the verbal noun of *do-coissin*, **dichʰsain*. Then when the **-sag-* suffix was added, it was synchronically syncopated again. Thurneysen GOI §782.

morphology of compounding with one or more preverbs lies outside the scope of the research.

There is a clear divide between the secondary and weak verbs on the one hand and the primary and strong verbs on the other hand. Some primary verbs have through phonological processes become weak over time, but the secondary verbs are all weak. Secondary verbs are derived from other parts of speech, such as nouns, adjectives or other verbs. The verb *marbaid* ‘kills’ (DIL s.v. *marbaid* 60: 81) is derived from the adjective *marb* ‘dead’, the verb *mesraigidir* ‘moderates’ (DIL s.v. *mesraigid* 115: 57) is derived from the noun *mesar* ‘measure’, *rímid* ‘counts’ (DIL s.v. 1. *rímid* 70: 63) is derived from *rím* ‘act of counting’ and so forth. The basic pattern is thus straightforward. There are some verbs for which the derivation is not immediately obvious, for various reasons. For example, the base noun or adjective may not have a clear relationship to the verb, such as *ath-muilnethar* ‘says again’ (DIL s.v. *atmuilniur* 463: 28), which seems to be derived from *muilenn* ‘mill’ (DIL s.v. *muilend* 184: 86) with a sense of grinding things over and over again. Or the base may no longer be extant in the language, such as *berbaid* ‘boils, cooks’ (DIL s.v. *berbaid* 82: 22), which was derived at some point in Celtic from **beruos* ‘boiling’. In a few cases, a derivation cannot be proposed at all, such as for *fo-niti* ‘mocks, derides’ (DIL s.v. *fo-niti* 290: 7).

The weak verbs are thus the productive class, the class that is used to create new verbs. For the formation of such a new verb, a speaker of Old Irish or its precursors at a given point in time had at their disposal the two weak classes AI and AII. AI verbs are originally formed with the suffix **-ā-* and are non-palatal in Old Irish; AII verbs are originally formed with the suffix **-ī-* and are usually palatal in Old Irish.² So far, this is not new research.³

For my research on the formation of the secondary verbs, I created a corpus of all the verbal forms in the Würzburg and Milan glosses as edited in the *Thesaurus Palaeohibernicus* (Stokes and Strachan 1901). This ensured that I not only had Old Irish forms, but also material that was written down in the Old Irish period (as opposed to much of the Old Irish material that is found in Middle Irish manuscripts). The Würzburg Glosses have been dated to 750 AD (Stokes and Strachan 1901, xxiii, Thurneysen 1946 §5) and the Milan Glosses to about 800 AD (Stokes and Strachan 1901, xviii, Thurneysen 1946 §6).⁴ I included verbal nouns in

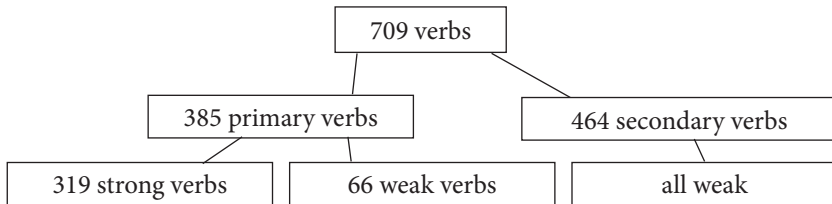
2 Palatalisation was blocked in several environments (for details, see McCone 1996, 116), giving for example AII *fo-lugai* instead of ***fo-luigi*. However, confusion often arose in analogy to the other verbs and in many verbs, a mixture of palatalised and non-palatalised forms can be found already in Würzburg.

3 For the current state of research on the Celtic and Old Irish verb, see e.g. McCone 1997 and Schumacher 2004.

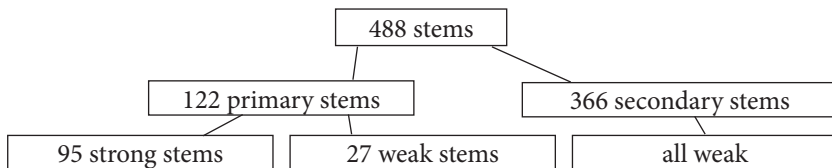
4 Although what we call Middle Irish was likely the spoken language long before it was the written language and has thus influenced the written language of the glossators, as

my collection so as to ensure the greatest possible variety of verbs. There are thus verbs in my corpus which in the Glosses only occur in nominal form. Once I had collected each form and catalogued it under its correct verb, I classified all verbs according to class. I placed the weak primary verbs in a class of their own and developed further subclassifications for the weak verbs. Once the subclassifications were finished, the strong verbs were left aside, as these would not form part of the further research.

The total corpus then contains 709 verbs: 385 primary verbs (319 strong, 66 weak) and 464 secondary verbs.



Since my research focused on secondary verb formation with suffixes, compounding was outside the scope of the work. I thus brought all compounds together under their simplex as headword. For the sake of consistency, verbs were classified under their simplex even when this simplex itself was not attested in the Glosses. Only when a simplex is not attested in Old Irish, is the verb referred to under its compound. There are then 488 headwords: 122 primary (95 strong, 27 weak) and 366 secondary. It is these 366 headwords of secondary verbs (mostly simple verbs and some compounds) that I will discuss in greater detail. In the remainder of this article, when I speak of the number of verbs I have in a certain category, it is understood that ‘verbs’ refers to the headwords.



has been argued by McCone (1985), most of the language in the Würzburg and Milan Glosses is Classical (literary) Old Irish. The occurrence of occasional lapses from the conservative educated literary style of the Glosses does not take away from that fact.

The formation of secondary verbs

The suffix **-ā-* of the AI verbs can be traced back to two possible Proto-Indo-European sources (cf. Schumacher 2000, 75). The first is a continuation of an athematic factitive with suffix containing **e* or **o* plus laryngeal **h₂* or **h₃*. The relationship between verb and base adjective is thus one of causation: if the adjective is ‘soft’, the verb will mean ‘makes soft’. Old Irish *bocaid* ‘softens’ is a factitive formation from *boc* ‘soft’.

The second possible source for the suffix **-ā-* is PIE **-eh₂-je/o-*, originally used for denominatives of all *ā*-stem nouns and some *o*-stem nouns (Sihler 1995, 514).

The suffix **-ī-* of the AII verbs can be traced back to two or perhaps three possible Proto-Indo-European sources. Clearly recognisable in Old Irish are the causatives (causing the object to do the action in the base verb) and iteratives (doing the action of the base verb repeatedly). These verbs were formed in Proto-Indo-European to the *o*-grade of the root with the suffix **-éje-* (Schulze-Thulin 2001, 2-4) and that alternation between the root vowel of the base verb and derived verb can occasionally still be seen in Old Irish, for example in the difference between *reithid* ‘runs, hastens’ (DIL s.v. *reithid* 38: 72) and its causative *roithid* ‘sets in motion, makes run’ (DIL s.v. *roithid* 94: 75). Compare also English ‘lay down’. Laying down a book is causing the book to lie down. The Old Irish cognate is *laigid* ‘lies down’ (DIL s.v. *laigid* 26: 59) with its causative **lugaid*, which is not attested as a simple verb, but extant in the compound *do-lugai* ‘forgives’ (DIL s.v. *do-luigi* 333: 20). Iteratives are rare in Old Irish, but an example is *úaigid* ‘sews’ (Vendryes 1987, 197, DIL s.v. *úaigid* 9: 3). The non-iterative ‘prick, pierce’ is not attested in Old Irish, but can be found in Latin *pungere* ‘prick, puncture’.

The suffix **-ī-* also finds its origin in the essive suffix **-eh₁je/o-* (Schumacher 2004, 41). Five essives can still be found in Common Celtic (CC), but the suffix no longer appears to be productive. In CC **tā-je/o-* > OI *·tá* ‘is’ the suffix has become **-ā-* rather than **-ī-* through colouring by and loss of the laryngeals. CC **klus-ī-* and **tum-ī-* only appear in Brittonic.⁵ OI *ruidid* ‘turns red, flushes’ (DIL s.v. *ruidid* 116: 1) and Mid. Ir. *scibid* ‘moves’ (DIL s.v. *scibid* 93: 30) are not attested in the Glosses and as such formed no part of my corpus, but have been discussed in the literature. For *ruidid*, see Watkins (1969, 169-70), McCone (1991b, 44), Rix et. al. (2001, 508-9) and Schumacher (2004, 552-3). The origin of *scibid* as an essive has been proposed by Schrijver (2003, see also Schumacher 2004, 422-4 and Pokorny 1959, 1041-2).

The *ī*-suffix could also go back to the denominative suffix **-je/o-* added to *i*-stem nouns, giving **-i je/o-* > **-ī-* (Schrijver 2011, 57).

5 CC **klus-ī-* > Middle Welsh clywet ‘hear, feel’, Middle Breton clevet ‘hear’, Middle Cornish klywes ‘hear’ (Schumacher 2004, 415-6) and CC **tum-ī-* > MW tyfu ‘grow, increase’, Modern Breton teñviñ ‘grow, increase’, MC tevi ‘grow’ (Schumacher 2004, 646-7).

A large group of verbs in the AII class are the *-igidir* verbs. These deponent verbs were originally formed with the suffix **-sag-ī-*. For these verbs, a clue as to the motivation for their formation can be seen in their formation. The origin of these verbs has been extensively discussed (see e.g. Joseph 1987 and Ó Crualaoich 1997) and while there are disagreements over not unimportant details, the meaning of the suffix **-sag-* as ‘seeks’ is well established. This meaning becomes bleached and in Old Irish the *-igidir* category becomes very productive and appears to have been used for the formation of any verb from any noun or adjective, regardless of its relationship to its base. There is thus no discernible pattern in their formation. The original reason why a given verb became an *-igidir* verb remains however clearly recognisable in the morphology. The original meaning of *cathaigidir* ‘fights’ probably was ‘seeks battle’. This clarity is not present in the formation of the *ā-* and the *ī-* verbs and in this article I want to discuss the underlying motivation for their formation in their respective classes and I will be leaving the *-igidir* verbs aside.

Types of derivation

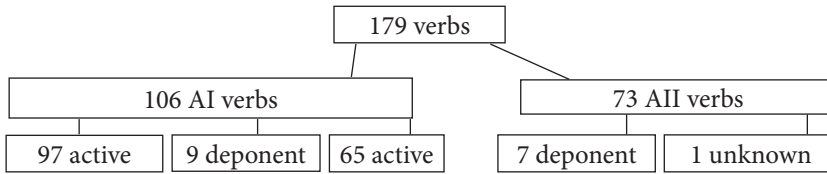
The entire corpus contains 366 secondary verbs, 106 AI verbs and 260 AII verbs. Of the AII verbs, 187 are *-igidir* verbs. Leaving aside the *-igidir* verbs, there are 73 AII verbs left. From here on, both ‘AII’ and ‘deponent’ will refer to non-*-igidir* verbs only, unless otherwise specified. The corpus contains 162 active verbs, 97 in the AI class and 65 in the AII class. There are 16 deponent verbs, 9 in the AI class and 7 in the AII class. One AII verb is *hapax legomenon* and occurs only as pres. subj. pass. sg. *nadcuicsedar* Ml. 36a38. From the form, it cannot be seen whether this is an active or a deponent verb.

Old Irish secondary verbs can be derived from nouns, adjectives and other verbs.⁶ Of the 179 secondary verbs, 82 are denominative, 29 are deadjectival, 27 are deverbal, and 20 are borrowings from Latin. 21 verbs present various problems in their classification. *Caraid* ‘loves’ (DIL s.v. *caraid* 73: 17), for example, could either be deadjectival or primary⁷ and the etymology of *glúasid* ‘moves’ (DIL s.v. *glúasid* 113: 38) is altogether unknown.⁸ All deverbal verbs are AII and all

6 One verb, the *-igidir* verb *ailigidir* ‘changes’ (DIL s.v. *ailigid* 124: 83), is derived from a pronominal, namely *aile* ‘other’.

7 There is no Old Irish base for this verb, but it could be derived from a PIE adj. **kh₂-r-ó-/*kh₂-r-éh₂-* ‘desired, desirable, loved’, giving a verb PIE **kh₂-r-éh₂-ie-ti* > *ĀC *kar-ā-t(-i)* > OI *caraid*, *-cara* (Isaac 1996, 367). Alternatively, two primary origins have been proposed by Watkins and Hamp: Watkins considers this to be ‘a formally grammaticalized borrowing from emotive child language’ (1962, 185) and Hamp suggests either PIE **keH₁r-* or **kerH₁-* (1976, 5-6). Cf. also Beekes 1988, 88 and McCone 1991, 110.

8 There are no Old Irish nominal or adjectival bases that this could conceivably be derived from. OI *glúas* ‘gloss’, while fitting morphologically, has no semantic relationship to this verb. The only remotely possible PIE root would be **g^hleu-* ‘be jolly’ (being moved



deadjektival verbs except one are AI (the exception, *soibid* ‘makes crooked’, will be discussed in greater detail below). The denominatives appear in both classes.

Excluding the *-igidir* verbs, there are sixteen deponent verbs. Two are deverbal, four are deadjectival and ten are denominative. There are 163 active verbs, 25 deverbal, 25 deadjectival and 72 denominative. The formation as deponent verb appears to have a motivation which retains connotation with the PIE middle voice and thus contrasts with formation as an active verb. There is however no distinction between active and deponent verbs when it comes to formation as an AI or AII verb. Since the motivation for formation as a deponent verb falls outside the scope of this article, I will not make any further distinction between active and deponent verbs.

Denominatives

The denominative verbs in my corpus are derived from a variety of nominal stems, although the majority are derived from *o-* or *ā-* stems: In the AI verbs, seventeen verbs are derived from *ā*-stem nouns and fifteen from *o*-stem nouns. Two verbs are derived from a noun that is either an *ā*- or an *o*-stem. Three verbs are derived from *u*-stem nouns, two from *i*-stem nouns and one from an *s*-stem noun. In the AII verbs, five verbs are derived from *ā*-stem nouns and eight verbs are derived from *o*-stem nouns. Three verbs are derived from *iā*-stem nouns, one from an *io*-stem noun and one from a *u*-stem noun. For fourteen *ā*-verbs and nine *ī*-verbs the stem class of the base nouns cannot be ascertained.⁹

The relationship between the verbs and the stem classes of their base noun can thus be represented as follows:

with joy?; Pokorny 1959, 451). It is only attested nominally and would leave the *-s*-unexplained if this were a primary verb (although for other examples of unexplained *-s*-in verbs, cf. *ar-túaisi* and *asa-gúsi*). It would be possible to derive *ghúasid* from a noun **gleu-sto-*, although this is not attested in Old Irish or indeed anywhere else.

9 *-igidir* verbs are derived from a wider range of stems, such as *tairisnigidir* ‘trusts in’, which is derived from the *n*-stem *tairisiu* ‘faith’.

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	\bar{a} -verbs	% of total	\bar{i} -verbs	% of total
< <i>o</i> -stems	15	27.8%	8	29.6%
< \bar{a} -stems	17	31.5%	5	18.5%
< <i>o</i> / \bar{a} -stems	2	3.7%	--	--
total < <i>o</i> / \bar{a} -stems	34	63.0%	13	48.1%
< <i>io</i> -stems	--	--	1	3.7%
< <i>i</i> \bar{a} -stems	--	--	3	11.1%
< <i>u</i> -stems	3	5.6%	1	3.7%
< <i>i</i> -stems	2	3.7%	--	--
< <i>s</i> -stem	1	1.9%	--	--
unknown	14	25.9%	9	33.3%
Total	54	100%	27	100%

The majority, 63%, of the \bar{a} -verbs are derived from an *o*- or an \bar{a} -stem noun. However, 48.1% of the \bar{i} -verbs are also derived from an *o*- or an \bar{a} -stem noun and there are five verbs in each class that are certainly derived from another noun class. Leaving aside the matter of original derivation, in Old Irish it is certainly not the case that the \bar{a} -suffix is used to derive verbs from \bar{a} - or *o*-stem nouns. No correlation at all can be seen between *i*-stem nouns and the \bar{i} -verbs, since the two verbs derived from *i*-stem nouns are both \bar{a} -verbs.

I argue that in Celtic and in Old Irish, the reason why a given denominative verb ends up as an AI or AII verb has to do with its relationship to its base, the noun from which it is derived.

As noted above, the AII verbs contain the iteratives and causatives, verbs meaning causing the object to do something and doing something repeatedly or intensely, respectively. The formation is inherited from Proto-Indo-European and no longer productive in Old Irish. Focussing on semantics rather than formation, however, it becomes clear that the AII verbs contain other verbs with iterative or causative meaning. To distinguish these from the 'real' iterative/causatives, I call these verbs 'semantic iterative/causatives': they are iterative or causative in their *meaning* only, specifically in their relationship to their base. An example is *dálaid* 'portions out' (DIL s.v. *dáilid* 22: 19), derived from *dál* 'a dispensing'. To portion out is to cause a dispensing. Another example is *baitsid* 'baptises' (DIL s.v. *baitsid* 21: 62), derived from *baithis* 'baptism'. To baptise is to cause baptism. On the iterative side there is *ceisid* 'complains' (DIL s.v. *ceisid* 104: 45), which is by its very nature repetitive and intensive. As is smiting, *durnid* (DIL s.v. *durnid* 454: 33), or counting, *rimid* (DIL s.v. 1. *rimid* 70: 63). In cases where the base noun already expresses an action, such as e.g. *áiraid* 'satirises' (DIL s.v. *áiraid* 79: 42), which is derived from *áir* 'a cutting', it is important to make the distinction

between verbs that mean simply doing the action (not causative) and verbs that mean causing the action to be done (causative).

There are however also semantic iteratives or causatives among the AI verbs. Although there are fewer in the AI category, they cannot be ignored. *Crothaid* ‘shakes’ (DIL s.v. *crothaid* 552: 19), for example, is iterative and depending on context also causative, but it is an AI verb. Iterativity and causativity on their own are not sufficient to motivate formation in either verb category.

A pattern begins to emerge when the correlation between causativity and transitivity is taken into account. Causative verbs must be transitive, since the subject is causing the object to do an action: an object is thus required. Transitive verbs are found among both the \bar{a} - and the \bar{i} -verbs. Intransitive and ‘ambitransitive’ (for a definition, see directly below) verbs, on the other hand, are only found in the AI verbs, with two exceptions that I will discuss below.

The definitions of transitive, intransitive and ambitransitive can vary. For the purpose of this article, verbs are considered transitive if the action itself *must* be done to an object. For present purposes, it does not matter whether this object happens to be expressed as a direct object in the accusative, or an indirect object following a preposition. With the verb *at-toibi* ‘adheres to’ (DIL s.v. *at(t)oiibi* 477: 14) for example, the thing adhered to can be expressed directly or with the preposition *do* without changing the semantics of the sentence. Verbs are considered ambitransitive if the action, depending on meaning and context, can have an object (direct or indirect) or not.¹⁰

The table below shows these three categories (transitivity T, with T for ‘transitive’, A for ‘ambitransitive’ and I for ‘intransitive’, causativity C with Y for ‘yes’ and N for ‘no’ and iterativity It with Y for ‘yes’ and N for ‘no’), plus the stem class of the base noun. Statements about transitivity, causativity and iterativity cannot always be made based only on the forms found in the Glosses. I have thus used a wider sample of attestations (based on the forms found in DIL) to ascertain this. As has been pointed out above, the stem class of the base noun is no longer of importance in the formation of the verb. A question mark denotes that no stem is given in DIL and none can be deduced from extant sources. Finally, the base noun and its meaning are given.

10 Labile verbs, where the object of the verb can also appear as the subject of the same verb (such as for example *berbaid* ‘boils’, where the thing that is boiled is also the thing boiling) are mostly ambitransitive in my corpus. In fact, the only possible exception is *crothaid* ‘shakes’, which appears at first sight to be transitive, although this is not certain. I have therefore treated the labile verbs and the ambitransitive verbs together as ambitransitive verbs. The labile verb *emnaid* ‘doubles’, of which medieval attestations appear to be all transitive, will be discussed in more detail below.

AI denominatives vs. AII denominatives

AI	stem	T	C	It	origin	AII	stem	T	C	It	origin
ad:cobra 'desires'	o	T	N	N	accobar 'desire'	airid 'guards'	iā	T	N	Y	áire 'guarding'
afraid 'satirises'	ā	T	N	N	air 'cutting'	airlithir 'advises'	iā	T	N	Y	airle 'advising'
armaid 'arms'	o	T	N	N	arm 'armour'	ath-muilnethar 'says again'	o	T	N	Y	muilend 'mill'
ásaid 'grows'	?	I	N	N	ás 'growth'	at:tofbi 'adheres to'	o	T	N	Y	taeb 'side'
berbaid 'boils'	?	A	N	N	? 'bubbling'	álaid 'requests'	?	T	N	Y	áil 'act of asking'
bertaid 'brandishes'	ā	A	N	N	bert 'load'	bágaid 'declares'	ā	T	N	Y	bág 'boast'
biathaid 'feeds'	o	T	N	N	biad 'food'	baitaid 'baptises'	?	T	Y	N	baithis 'baptism'
brúchtaid 'bursts'	?	I	N	N	brúcht 'burst'	brissid 'breaks'	ā	T	Y	Y	bres 'fight'
ciallathair 'thinks about'	ā	A	N	N	ciall 'sense'	búadraid 'disturbs'	iā	T	Y	Y	búaidre 'confusion'
clannaoid 'plants'	ā	A	N	N	clann 'plant'	caimid 'laments'	?	T	N	Y	caíne 'act of weeping'
cobraithir 'helps'	?	T	N	N	cobair 'help'	caithid 'consumes'	?	T	N	Y	*kat-
con:delea 'compares'	o	T	N	N	coindele 'comparison'	ceisid 'complains'	?	T	N	Y	ces 'debility'
crechaid 'plunders'	ā	T	N	N	crech 'plunder'	cinnid 'defines'	o	T	N	Y	cenn 'end'
crochaid 'crucifies'	ā	T	N	N	croch 'cross'	coillid 'damages'	o	T	Y	Y	coll 'destruction'
crothaid 'shakes'	o/ā	A	Y	Y	CC *krotos 'shaking'	con-ruideathar 'intends'	io	T	Y	N	suide 'act of sitting'
crúachaid 'piles up'	ā	A	N	N	crúach 'stack of corn'	con-terchomraic(i) 'collects'	o	T	Y	N	comrac 'meeting'
dechraid 'marks out'	o	T	N	N	dechor 'difference'	crádaid 'torments'	?	T	Y	Y	crád 'torment'
delbaid 'shapes'	ā	A	N	N	delb 'shape'	cuicsedar 'taxes'	u	T	Y	N	cis 'tax'
do:ecrathar 'covers'	o	T	N	N	téar 'shelter'	dálaid 'portions out'	ā	T	Y	Y	dál 'dispensing'

dlomaid 'announces'	?	A	N	N	N	dlom 'proclamation'	do-scé(u)lai 'finds out'	o	T	Y	Y	scél 'story'
dolbaid 'fashions'	o	T	N	N	N	dolb 'sorcery'	durmid 'smites'	o	T	N	Y	dorn 'fist'
do-molta 'goads'	u	T	N	N	N	molad 'praising'	foirigid 'presses hard'	?	T	Y	N	forrach 'oppressing'
donaid 'consoles'	?	T	N	N	N	*diden 'care'	for-comai 'keeps'	?	T	N	Y	coim 'keeping'
drúbaid 'lingers'	ā	I/A	N	N	N	drúb 'delay'	glædid 'cries out'	ā	I	N	Y	glæd 'shout'
dunaid 'shuts'	o	A	N	N	N	dun 'fort'	rimid 'counts'	ā	T	N	Y	rim 'act of counting'
emnaid 'makes double'	o	A	Y	N	N	emnon 'twin'	scallid 'bursts'	?	A	Y	Y	scail 'scattering'
feraid 'grants'	?	A	N	N	N	PIE *h ₂ uer- 'water'	sroigid 'scourges'	o?	T	N	Y	sroigell 'scourge'
figraid 'prefigures'	ā	?	N	N	N	figair 'figure'	toiddid 'shines'	?	T	Y	N	*to-pid-
fo-botha 'is alarmed'	?	A	N	N	N	*butāt						
for-cenna 'puts an end to'	o	A	N	N	N	forcenn 'end'						
gataid 'takes away'	ā	T	N	N	N	gait 'taking away'						
gellaid 'pledges oneself'	o	A	N	N	N	gell 'pledge'						
gállaid 'gives hostages'	o	A	N	N	N	giall 'hostage'						
iachtaid 'cries out'	?	A	N	N	N	iaacht 'loud cry'						
íccaid 'pays'	ā	A	N	N	N	íce 'paying'						
láthraid 'arranges'	o	T	N	N	N	láthair 'arrangement'						

límaid 'fills'	u	T	N	N	N	lín 'full number'							
lobaid 'decays'	?	A	N	N	N	luib 'herb'							
logaid 'concedes'	s	A	N	N	N	lóg 'value'							
lomnraid 'shears off'	?	T	N	N	N	*lommar							
malairaid 'spoils'	ā	T	Y	Y	Y	malart 'damage'							
messaid 'examines'	u	A	N	N	N	mess 'judging'							
molairthir 'praises'	o	T	N	N	N	mol 'reiterated refrain'							
múchaid 'covers over'	ā	T	N	N	N	múch 'smoke'							
nertaid 'strengthens'	o	T	N	N	N	nert 'strength'							
oímaid 'fasts'	?	A	N	Y	Y	áin 'fast'							
rannaid 'divides'	ā	A	N	N	N	rann 'part'							
rindaid 'cuts'	i	T	N	N	N	rind 'point'							
samlairthir 'compares'	i	T	N	N	N	samail 'likeness'							
sásaid 'satisfies'	o/ā	T	N	N	Y?	sás 'snare'							
selbaid 'possesses'	ā	T	N	N	N	selb 'property'							
techtaid 'has'	?	T	N	N	N	techt 'possessions'							
trebaid 'cultivates'	ā	T	N	N	Y?	treb 'house'							

Verbs in the AII category are all transitive and iterative-causative. Verbs in the AI category can be ambitransitive or intransitive and iterative-causative. They can also be transitive. But they will never show the combination of transitivity and causativity or iterativity.

It thus becomes clear that

A verb is AII if it is transitive and iterative-causative. Otherwise it is AI.

I want to stress again that this semantic causativity and iterativity is in relationship to the bases of the verbs in question. The verb *crúachaid* ‘piles up’ (DIL s.v. *crúachaid* 555: 14), for example, would seem to be iterative, because the action of piling up involves repetition. The noun from which it is derived, *crúach*, is in itself however already a stack (of corn). The verb concerns the end product, not the process.

There are exceptions. There are two non-transitive verbs in the AII verbs: *gláedid* ‘cries out’ (DIL s.v. *gláedid* 89: 32) is intransitive and *scailid* ‘bursts’ (DIL s.v. *scailid* 68: 51) is ambitransitive. There are also two exceptions in the AI category. *Malartaid* ‘spoils’ (DIL s.v. *malartaid* 49: 46) is transitive, causative and iterative and *emnaid* ‘doubles’ (DIL s.v. *emnaid* 121: 13) is causative and appears to be transitive.

Three of these verbs have synonyms which are also denominative verbs. For *gláedid* ‘cries out’ there is a synonym *íachtaid* ‘cries out’ (DIL s.v. *íachtaid* 12:12), for *scailid* ‘bursts’, there is *brúchtaid* ‘bursts’ (DIL s.v. *brúchtaid* 209: 53) and for *malartaid* ‘spoils’ there is *coillid* ‘damages’ (DIL s.v. *coillid* 297: 78). These synonyms all fall into the opposite classes as their counterparts. *Íachtaid* and *brúchtaid* are AI and *coillid* is AII. In my opinion, rather than being exceptions, these verbs, and their counterparts, exemplify the scheme. They show the possibilities a speaker had at hand to create a new verb and the pressures exerted on that new verb. They show the importance of the relationship between verb and base and of the causativity and iterativity expressed in that relationship.

Brúchtaid ‘bursts’ is derived from *brúcht* ‘burst’. The base for *scailid* ‘bursts’, on the other hand, is *scail* ‘scattering’. A burst, *brúcht*, is a sudden, single occurrence. I would therefore suggest that the derived verb *brúchtaid* also expresses a single occurrence. It is thus not iterative and therefore AI. A scattering, *scail*, on the other hand implies repetition: drop a jar and it bursts (singular event), but pieces scatter (multiply) across the floor. This would make the derived verb *scailid* iterative and thus AII. From the basic meaning ‘scatters’ the meaning ‘bursts’ would then have developed quite straightforwardly.

Gláedid ‘cries out’ is derived from *gláed* ‘shout’ and *íachtaid* ‘cries out’ is derived from *íacht* ‘loud cry’, so the base nouns are not directly enlightening in

this case. The usage of these verbs is indicative of a slight difference in meaning. *Íachtaid* is used for lamentations, groans and wailings (cf. DIL s.v. *íachtaid* 12: 12), whereas *gláedid* is used for inarticulate animal noises (cf. DIL s.v. *gláedid* 89: 32¹¹). Whereas it could be argued that both these actions are iterative, I would like to make the case that the animal noises are *more* iterative than the human utterances.

For *malartaid* ‘spoils’ and *coillid* ‘damages’ I refer again to their respective bases. *Malart* means ‘damage’ and *coll* ‘destruction’. Both these verbs mean the *causing* of damage and destruction, respectively, and would therefore be expected to be AII verbs. I argue that *malartaid* is instead AI, because it is *less* iterative than *coillid*. *Malartaid* ‘merely’ means ‘causing damage’. To cause something’s destruction, *coillid*, on the other hand, it needs to be damaged repeatedly or intensively.

I thus argue that the perceived iterativity of a given verb is the driving force behind its formation as an AI or an AII verb, which becomes especially clear in the case of synonyms. There is a marked difference between a single burst, *brúchtaid*, and a scattering, *scailid*, or between the repeated noises of an animal, *gláedid*, and the perhaps perceived to be more dignified utterances of a human, *íachtaid*. The difference between damaging *malartaid* and utter destruction *coillid* is one of iterativity.

Emnaid ‘doubles’ is only ostensibly an exception: medieval attestations appear to be all transitive and it is causative and possibly even iterative. Yet it is AI. It is however likely that this verb is, in fact, ambitransitive. Firstly because it is labile: when you, the subject, double something, that something also doubles. It is thus in effect the subject of its own doubling. Labile verbs tend to be ambitransitive in Old Irish (see also footnote 10 above). The intransitivity of the the modern reflex of *emnaid*, *eamhnaigh*, can be taken as support for the suggested ambitransitivity of *emnaid*.

Deadjectivals

The deadjectivals in Old Irish are mostly factitives, verbs that mean ‘making [object] [base]’. Examples are *berraid* ‘shears’ (DIL s.v. *berraid* 84: 74), derived from *berr* ‘short’ and *derbaid* ‘certifies’ (DIL s.v. *derbaid* 31: 42), derived from *derb* ‘sure, certain’. There are two exceptions: the verb *brénaid* (DIL s.v. *brénaid* 177: 14), derived from *brén* ‘stinking, fetid’, means ‘is rotten’ in the first instance. The meaning ‘putrifies’ (DIL s.v. *brénaid* 177: 24) is a later development. *Fégaid* (DIL s.v. *fégaid* 59: 34), derived from *féig* ‘of sight, seeing, keen-sighted’, means ‘looks at, observes’.

11 The transitive meaning of *gláedid* is late and likely to be a secondary development.

The deadjectivals are AI with only three clearly motivated exceptions, namely *as-rochoíli* ‘defines, determines’, *do-aissilbi* ‘refers, ascribes’ and *soíbid* ‘makes, becomes crooked’.

As-rochoíli (DIL s.v. *as-rochoili* 436: 46) is the compound verb of the AI verb *coilaid* ‘makes thin’ (DIL s.v. *cáelaid* 13: 3). The meaning of the compound ‘defines, determines’ developed as a repeated making thinner, making narrower. This repetition implies iterativity, which in its turn exerts force on the compound to become AII.

Something similar occurs with *do-aissilbi* ‘refers, ascribes’ (DIL s.v. *do-aissilbi* 196: 28), compound of the AI verb *selbaid* ‘possesses, holds’ (DIL s.v. *selbaid* 165: 84). In this case the underlying motivation is acquired causativity: *do-aissilbi* literally means ‘assigns to the possession of’ (DIL s.v. *do-aissilbi* 196: 42).

For *soíbid* ‘makes crooked’ a similar suggestion can be entertained: the semantic field of the verb has a strong slant towards ‘perverts, leads astray, deceives’ (DIL s.v. *saebaid* 7: 51), with both the majority of the attestations and the older ones (Wb. 27a9, Ml. 24d24) having those meanings. Perversion requires repetition; leading astray, especially in the Biblical sense, is done slowly, over time. It can also be argued to be intensive. *Soíbid* is therefore iterative and this iterativity will have been the driving force behind this verb’s formation as an AII verb. Note that its compound *con-soíba* ‘deceives’ (DIL s.v. *con-soíba* 463: 3) is an AI verb. The preverb *con-* indicates completion and thus precludes iterativity.

Although change in verbal class is not unheard of in Old Irish, these are the only three examples of verbs where a compound or a simplex changes verb class on semantic grounds. Primary verbs can change inflection from strong to weak verbs because their origin becomes obscure through phonological changes (cf. e.g. the original nasal present *slucaid* ‘swallows’, Schumacher 2004: 593-4), but as far as I know, it is nowhere else that the semantics motivate a change in verbal class.

Since the majority of the deadjectivals are factitives and thus AI verbs (continuing their Proto-Indo-European formation), the AI class becomes the productive category for new (non-*igidir*) deadjectivals and the few deadjectivals that are not factitives also become AI verbs. The three AII deadjectivals have a clearly defined motivation for their inflection as AII verbs.

Conclusion

In Old Irish, the morphological formation of the Proto-Indo-European iterative/causatives is still clearly recognisable, as is that of the factitives. The motivation for formation as an AII deverbial and an AI deadjectival is thus found in their respective morphologies. Denominative verbs on the other hand, became AI or AII verbs depending on their transitivity and on the semantic relationship they had as iterative-causative to their base noun. The force exerted by iterativity is especially

clear in the case of apparent synonyms, where one verb is AI and the other AII, showing that these verbs are close in meaning, but not identical. If the verb was transitive and semantically iterative-causative, it became an AII verb. If not, it became an AI verb.

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