## VARIA II

## A rule for $z$-deletion in Irish?*

Common Celtic *z $b, * z d$ and *zg gave $d b / \delta \mathrm{b} /, t / \mathrm{d} /<* \delta d$ and $d g, d c / \delta \mathrm{g} /$ in Old Irish (e.g., McCone 1996, 98; Watkins 1999, 540-3). The standard examples are:

> the personal name Tadg vs. Gaul. Tasgillus, medg 'whey' vs. MLat. mesgus (from Gaulish),
> odb 'knob, lump' vs. Gr. óopv́g 'hip',
> net 'nest' < PIE *nizdos 'id.',
> tris.gata 'to transfix' vs. Goth. gazds 'spike' (GOI 133-4).

This means that $* z$ before a voiced stop developed into a voiced dental fricative originally. The early Ogam-Irish name TASEGAGNI (M 28, Church Clara, Co. Kilkenny; =/tazgaүn̄̄/ with anaptyctic vowel; see Ziegler 1994, 234), a diminutive formation from the later name Tadg, indicates that the change $* z>* \delta$ must have occurred relatively late in the prehistory of Irish and cannot have been an early Insular Celtic innovation (pace Watkins 1999, 540-3). The Proto-Irish cluster of a voiced dental fricative and a voiced dental was, in a further step, delenited to a single voiced dental stop, obeying a general Irish rule of delenition of homorganic sounds. Thurneysen ( $G O I$ 134) implies that the rule ${ }^{*} z>\delta$ was restricted to stressed syliables only. According to him. $* z$ showed a different outcome after unstressed vowels: before $* g$, $\approx z$ supposedly became * $r$; before $* d$, it was dropped altogether. The remaining single * $d$ was then affected by lenition in the normal way. Thurneysen cites no example for $* z b$ in this position (in all likelihood there are none). In this article it will be shown that Thurneysen's examples for this minor Irish sound change, which I will call $z$-deletion in unstressed syllables, ${ }^{1}$ are not conclusive; and a further possible instance not mentioned by Thurneysen will be discussed.

The idea of a change of unstressed $* z g>r g$ was without doubt suggested by the rhotacism of $* z>r$ in the prehistories of Latin and the Germanic languages, but rhotacism is otherwise unknown in the phonological systems of the old and medieval Celtic languages (for sporadic rhotacism in Breton see Jackson 1967, 534, 663-4; late Cornish also shows rare instances of it, according to Anders Jørgensen, pers. comm.). Thurneysen has only a single example for $* z g>r g$. The weak i-verb do bidci 'to shoot, cast, hurl' < *di-be/izgT- and the o-stem noun bedg 'start, spring, leap, bound' are derived

[^0]from a base *bezg- or *bizg- without further etymology. ${ }^{2}$ The prototonic stem allomorph of the verb is dibairg-, also found in the verbal noun dibairciud. Instead of taking this as a phonological alternation $\delta \sim r<* z$, this verb is widely and convincingly regarded as displaying stem suppletion (VKG I 88; LEIA B-26; Schrijver 1995, 55-6; Schumacher 2000, 158; Schulze-Thulin 2001, 120; Veselinović 2003: 167; also noted as an alternative in GOI 134), the prototonic stem being provided by the root ${ }^{*}$ berg. $<$ PIE $* b^{h} e^{\prime} g^{h}$ 'high". This root is attested in the required meaning in Welsh bwrw' 10 throw, cast' < causative stem *borgeie/o- 'to raise, make high'. The different quality of the $b$ in, for example, 2 sg. impv. dibairg < causative * dïborgı̀ against do bidci with either radical $e$ or $i$ (which would entail palatalisation of the $b$ ), proves that we are looking at a different stem formation altogether and that this cannot be an instance of simple *zg>*rg in an underlying root *be/izg. The early spelling of the verbal noun dibbirciud (M1. 58c6, 99d1) with medial $i$ against later dibairciud, dibraiciud, etc. with ai is not necessarily indicative of a different ablaut grade *-berg-, but may represent non-palatalised $b$, i.e. $<$ *ïborgetus, since word-internally $i$ may stand after a non-palatalised consonant ( $G O I 64 \S 102.5$ ). Finally, deuterotonic verbal forms where the root *be/izg- has been moved out of the stressed position without being replaced by *borg-, such as dormbidc (M1.40d9) and darobidc (Ml. 58c3), are not valid counter-examples against Thurneysen's formulation of the rule, because these forms could conceivably be due 10 inner-paradigmatic levelling.

For $* z d>* d$ in unstressed syllables Thurneysen offers two examples. One is the 1 pl . form do•n-infedam ( Wb .14 d 32 ) of the verb do-infet 'to inspire', and its verbal-noun forms tinfed, tinphed, tinfeth 'inspiration, aspiration', a compound of Proto-Celtic *suizd-e/o- 'to blow' (Schumacher 2004, 611-2), viz. *tu-ande-sui $(z) d$-. Thurneysen does not mention that 3 sg . forms with the expected unlenited voiced dental are actually attested, viz. tinfet-som (Wb. 4b4), do-n-infet (Wb. 4b3), dund-infet (Ml. 41d17); as well as fris tinfet 'he blows against' (M1. 28b8). In the 3pl. do-infidet (Eriu 2, 110 §29) and in the 3sg. preterite dorinfid (Meyer 1894, 6.173, IT i 169.18), du•rinfid (Ml. 96c7) and do•rinfith (Trip. ${ }^{2} 7$ ), Thurneysen's predicted fricative is found. Other attested forms of the paradigm (subjunctive, preterite passive) are not probative. With its alternation, 3 sg . ind. pres. $-1 / \mathrm{d} / \mathrm{vs} .-d,-t h$ $/ \delta \theta /$ everywhere else, do infet conforms fully to the pattern of a small group of strong verbs in Old Irish with roots ending in a dental, like do-adbat 'to show, display' < *ueid-'to relate', do'immthiret 'to serve' < *ret- 'to run', etc. (class S1b in McCone 1997, 29-30).

[^1]These owe their extraordinary pattern to a Primitive Irish sound change, whereby the vowel of the final syilable between two identical consonants was syncopated if the syllable was at least two positions removed from the stress (McCone 1996, 105-6). The two identical consonants then merged in a geminate sound that was not liable to be affected by lenition or loss of final consonants. While the final sound of the 3 sg . in this class of verbs must originally have been a voiceless stop, e.g. *tu•ambi-di-re $\theta e \theta>* t u \cdot a m b i$ $\delta \bar{l}-r e \theta \theta>{ }^{*} t u \cdot a m b i-\delta \bar{\imath}-r e t>{ }^{*} t o-i m m ' \delta ' i r ' e t$, it eventually became voiced, shortly before the Old Irish period, by the extensive voicing of voiceless consonants at the unstressed word boundary (McCone 1996, 132-4). This resulted in do•immthiret/do•im' $\theta^{\prime} \partial r^{\prime} \partial \mathrm{d} /{ }^{\prime}$ (s) he serves'. ${ }^{3}$ The 3 sg . do•infet with final /d/may, thus, have served as a pivot for drawing the whole verb into the pattern of class S1b. Of course, the reverse is also true. If the verb had root-final $/ \delta /$ from $z$-deletion to start with, it would inflect as $S 1 b$ in any case. It is not possible to determine which of the two scenarios is correct. It should also be noted that the W2 verb ar-peiti, airfiti, verbal noun airfitiud 'to entertain, play music', a compound of séitid 'to blow' from the same root *sueizd-e/o-with full grade, shows no sign of $z$-deletion.

Thurneysen's other example for ${ }^{*} z d>* d$ is sochuide 'multitude, crowd, host', which he analyses as a compound of so- 'good' and cuit 'share, part, portion', the latter going back to * $k^{4} e z d i-, \mathrm{cp}$. W peth, Bret. pezh 'thing', Gall-Lat. petia 'piece of land". The suggestion is semantically attractive, but the derivation raises some questions that need to be addressed. Compounds with so- as the first member and a disyllabic base as second member fall into two formal groups. A few compounds regularly syncopate the first vowel of the second compound member, e.g. soithnge 'eloquent' <so- + tengae 'tongue', or sothcad'good luck, fortune' < so- + tocad 'fortune, chance'. This is the expected and unmarked behaviour. Nothing prevents us from regarding these formations as old. Most of these compounds, however, do not show the expected syncope, e.g, sochenéoil 'well-born, of good family' < so- + cenél 'family', or somilis 'very sweet' < so- + milis 'sweet'. This behaviour can be explained in two different ways, both of which cast doubt on the derivation of sochuide from cuit.

One explanation is that they are old, i.e. pre-syncope, compounds, in which the full form of the second member was re-introduced by analogy with the uncompounded base word after syncope had taken place regularly. In order for this explanation to work with sochuide, this would mean that the relationship between the base, which at that time must have been $k^{(t /} u d(d)$, and the derivative ${ }^{*}-\chi^{(t / j} u \delta^{\prime} e$ was still felt, which seems unlikely in view of the absence of a regular alternation rule between $* d(d)$ and $* \delta$ in nominal morphology. If, on the other hand, as the second explanation would have it, sochuide is a post-syncope compound, then we are confronted with a similar problem. The corrollary would be that there existed at that
${ }^{3}$ The voiceless word-internal th is unclear. Damian Mchanus (pers. comm.) suggests inthcnce of imintet, imthet, VN inthecht to go around. ete:.
time in the language an active rule of $* d(d)>* \delta$ after unstressed vowels a possibility that is positively disproved by numerous words with retained $t<$ * $d(d)<$ *nt in that position, e.g. sochraite 'the state of having good friends', argat ‘silver', námat 'enemies (gen. pl.)", etc. An alternative explanation could be to assume that in post-syncope Irish $* \delta d$ had not yet been delenited to $* d(d)$, or that $* z d$ as such was still retained, and that the first element of these clusters was deleted. Neither of these possibilities is in any way attractive or plausible. The only way to salvage an etymological relationship between sochuide and cuit is to assume an early adjectival compound *so-kuezdi- "having or consisting of a good portion = many, numerous" with $z$-deletion > *so-k"edi-. This would have developed regularly to *sochuid, without being affected by syncope. It must then be assumed that in postsyncope Irish, an abstract sochuide was derived from this adjective, after the pattern of sogar 'profitable, fruitful' $\rightarrow$ sogaire 'dutifulness, respect', or sonairt 'strong' $\rightarrow$ sonairte 'strength'. The chief drawback of this explanation is that an adjective *sochuid is not attested in our sources.

Clearly, an alternative etymology needs to be considered. LELA S-159 does not even mention Thurneysen's suggestion, but cites Pedersen (VKG Il 205), who proposed a compound *so-k"otia, the second element of which he compares with Bret. pet 'how much, how many?' < *k $k^{4}$ otio-, Gr. nóбos. Lat. quot, etc. This explanation runs up against the same difficulties as the derivation from cuit: if it were an old compound syncope would be expected; if it were a recent formation the derivational base is synchronically lacking in Old Irish. Therefore I would propose as a third etymology a compound of so- + cuäd 'vessel, cup, mug' < Pre-Celtic *kaputo- (cf. Schrijver 1997, 294-5 for related forms) + abstract suffix *-i $\bar{a}$. The apparent non-syncope of sochuide would be regular in that case, given that cuäd was disyllabic. Semantically, the compound would have referred to 'a good cupful of'. A comparable development from an expression for an undefined mass of things to a group of people, although not an exact parallel, is found in Germ Haufen, which can have the double meaning of 'heap' and 'host'.

In addition to Thurneysen's three examples for z-deletion, a possible fourth instance has been brought to my attention by Anders Jørgensen (pers. comm.). Bret. evezh 'attention, heed' can be compared with Lat.
 PIE compound *hzeuis-d'h,- 'to render clearly', cp. Ved. āvís, Avest. āuuiš 'evidently' $<$ *h $h_{2}$ ouís. The intermediate Celtic verbal stem *auizd-(iie/o)'to pay attention', with the application of Thurneysen's $z$-deletion rule, would yield an Old Irish W2 verb *aidid (or perhaps *uidid with u-infection before the bilabial glide?). From this, a deverbal noun *aid (uid?) could be derived. It is not possible to derive the noun directly from a pre-form like *auizdi-; instead a form like *uïd with hiatus would be expected. Indeed, in Middle Irish the noun oíd, aíd, ofid, uid 'heed, attention, observation' is found, continued in Modern Irish by aoidh, óidh, úidh. Beside this, remnants of a verb *oídid are attested, a verb which DIL O 118.23 in turn analyses as denominal from *oíd. LEIA O-16 knows no etymology for
oid. Aside from aoidh, etc., McManus $(1994,349)$ mentions three other classical Modern Irish words that show the remarkable triple alternation ói~iúi~aoi:taoiseach/túiseach/tóiseach'leading, leader', cruoiseach/crüiseach/ cróiseach 'javelin, spear', faoigfidh/fúigfidh/fóigfidh 'will leave'. Of these, the first two directly continue words with an original $i$-diphthong (toísech $<{ }^{*}$ tuuedtāko-, croísech $\left.<{ }^{*} k r u u e s t i k a ̄\right)$; faoigfidh, etc. is a relatively late formation and is therefore irrelevant here. The pattern of the Modern Irish reflexes of toísech and croísech renders it virtually certain that óidh, tuidh, aoidh continue an Old Irish noun with $i$-diphthong.

It is noteworthy that both toisech and croisech ultimately continue formations that at some stage must have contained a sequence *-uui/e-. This could be coincidence, but the observation may merit further investigation. It may, in fact, be the case that there was no general merger of the diphthongs $u i$, , of and aí. Be that as it may, this question is not fully relevant for the present etymology since it is also possible to derive the Celtic and the Latin words from o-grade $* h_{2}$ oul $i s-d^{h} h_{L^{-}}$, which would yield an erstwhile diphthong * $u i$ in Early Old Irish in any case. The Greek verb would then only be a distant cognate. Returning to the question of the reflex of *zd in Irish, however, we may note that this example is not absolutely probative either, because theoretically the Celtic and Latin words could also be derived from a pre-form *he/oui-dh$h_{r^{\prime}}$ - with the plain stem of the first compound member without $s$ (again, the Greek word would then be a more distant relative). Bret. evezh could then owe its $z h$ to the analogy of the frequent denominal hay-verb eveshat 'to observe'. However, a unitary pre-form * $h_{2}$ euis- $d^{h} h_{1}$ - for all three language groups is preferable. In any case, the comparison of Bret. evezh with Irish ofd is semantically satisfying, but it requires a series of additional assumptions and intermediate steps for which no unequivocal support exists in the sources.

We may now conclude that of the four possible examples for a special treatment of $*_{z}$ in unstressed syllables, the only example for $* z g$, viz. do-bidci vs. dibairciud, has been wrongly assessed and has to be omitted. All other examples involve *zd, which, according to Thurneysen's idea, via * $\delta d$ would have given $* \delta$ by a special dissimilation rule rather than by a general loss of $* z$ in the position before a voiced stop. Of these examples, one, viz. tinfed, etc., is inconclusive, as it may have been influenced by a class of formally similar verbs, and in the case of the other two, sochuide and oid, the proposed etymologies with *zd are not certain. In both cases, the etymologies involving *zd are semantically attractive, but face more or less grave formal problems. With the available material, Thurneysen's rule for the treatment of $z$ in unstressed syllables can therefore neither be proved nor disproved. Perhaps some day another lexical item can be identified that will settle the question one way or the other.


[^0]:    I would like to thank Anders Jørgensen, Aarun Griffith, Stefan Schumacher and the editors of Friu for helpful suggestions on matters relevant to this paper.
    ${ }^{1}$ The term 'z-deletion' does not cover the alleged development $* z g>r g$, but, as will be shown below, Thurneysen's single example for it is to be explained differently anyway.

[^1]:    ${ }^{2}$ Perhaps related to PC *bisti- finger" and derived via the addition of a suffix or second compound member, i.c. *bistg-, then simplification of complex clusters, i.e. *bisg-, and finally voicing assimilation, i.e. *bizg-? For the process, compare Old Irish odb 'knot $\mathrm{k}^{*}$ *ozbo-<*osbo-<*ost-bo-, related to PIE *hest- 'bone'. Be that as it may, pace LELA B-26, it is quite likely that beiddio 'to venture, dare, presume, defy' is the Welsh cognate of Old Irish bedg. The semantic motivation for the Welsh verb may be: 'to start up' $\rightarrow$ 'to make a start at something' $\rightarrow$ 'to venture, dare'. For the phonological development. compare MW meidd whey" $<*$ me $\delta \delta$ - *medyo < *medgo- < *mezgo-, with Old Irish medg, Gallo-Lat. mesgus.

