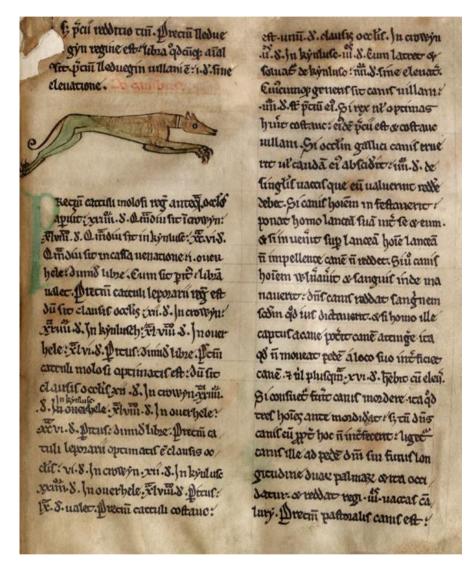
The tail(ed) end of things: a study of suffixation in select mammal and bird names in insular Celtic



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Table of contents

Table of contents
Acknowledgements
Abstract4
Abbreviations5
Introduction 6
Theoretical framework and methodology6
Suffixes8
The velar suffixes
A) Irish -ach, -ech
B) Welsh -og, -iog9
C) Irish -óc, -óg
The nasal suffixes
A) Irish -án
B) Welsh -en, -yn
Discussion
Conclusion
Bibliography27
Appendix A: Consulted collection of animal and bird terms
Irish -ach, -ech
Welsh -og, -iog
Irish - <i>óc</i> , - <i>óg</i>
Irish - <i>án</i>
Welsh - <i>en</i> , - <i>vn</i>

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Abstract

Suffixation is the most common way of word-formation in Indo-European languages, and one of the several ways in which animal terms, lexical items that refer to specific animals, can be formed. In this thesis the process of suffixation will be examined through a corpus of Irish and Welsh mammal and bird names ending in one of the Irish suffixes -ach, -ech; -óc, -óg; -án or Welsh suffixes -og; -en, -yn. This thesis argues that these suffixes are attached to a base with a morphological and semantic motivation. The Irish suffix -ach, -ech and Welsh suffix -og, -iog are adjectival suffixes in origin, but adjectival derivations based on a noun or adjective can be substantivized and become substantival mammal and bird terms. The Irish suffixes -óc, -óg; -án and Welsh suffix -en, -yn do not have a clear morphological function, but they are employed to form substantival derivatives from adjectival or substantival bases. All suffixes are also connected on a semantic level: all examined suffixes correspond to three semantic categories as proposed by Paul Russell.

Abbreviations

adj. Adjective

Bret Breton

CWF Celtic Word-Formation: the Velar Suffixes (Russell 1990)

DIL Dictionary of the Irish Language

E English

eDIL Electronic Dictionary of the Irish Language

GPC Geiriadur Prifysgol Cymru

IE Indo-European

Ir Irish
L Latin

lit. Literally

MidE Middle English

MidIr Middle Irish

ModIr Modern Irish

ModW Modern Welsh

MW Middle Welsh

n. Noun

Olr Old Irish

PC Proto-Celtic

subst. Substantive

TBC Táin Bó Cuailnge

W Welsh

YGM Y Geiriadur Mawr

Introduction

There are several ways in which mammal and bird names are formed in the Insular Celtic languages. A limited number of terms is based on a Proto-Celtic or Indo-European root and a relatively large number of terms are (descriptive) compounds, but another popular way of forming mammal and bird names is through suffixation. This is no surprise, as the most common way of word formation in Indo-European languages – regarding affixation – is derivation through suffixation.¹

Mammal and bird names fall under the grammatical category substantives. The process of forming substantives through suffixation is referred to as nominal suffixation, and they are attached to a derived base.² Suffixed derivatives have several general characteristics: their meaning roughly corresponds to that of the base word, the word can be segmented synchronically and definitely diachronically, and a parallel form occurs in related (proto-)languages.³ There is no set limit to how many suffixes may be attached to a word-stem: the process can be repeated, meaning suffixes can stack, such as in Welsh *llwynoges* 'vixen', consisting of the adjective *llwyn*, nominal suffix *-og* and feminine suffix *-es*.⁴

This BA thesis will attempt to give an overview of the process of nominal suffixation within mammal and bird names found in the several stages of the Irish and Welsh language.

Theoretical framework and methodology

The data for this thesis was gathered by selecting a general (English) mammal or bird term and looking up all entries connected to the term in online dictionaries *Geiridadur Prifysgol Cymru*,⁵ *Electronic Dictionary of the Irish Language*⁶ and *Teanglann*.⁷ The terms were compiled into a list and consequently separated into morphemes. Lastly, they were sorted into categories corresponding to their morphological structure. The derivations are from both the medieval and modern variants of Irish and Welsh.

In order to limit the number of terms, the animals selected belong either to the class of

¹ Patrizia de Bernardo Stempel, *Nominale Wortbildung des älteren Irischen: Stammbildung und Derivation* (Tübingen 1999) 187.

² de Bernardo Stempel, *Nominale Wortbildung*, 187.

³ de Bernardo Stempel, *Nominale Wortbildung*, 187-188.

⁴ Stefan Zimmer, Studies in Welsh Word-formation (Dublin 2000) 271.

⁵ Geiriadur Prifysgol Cymru: : A Dictionary of the Welsh Language. URL: https://welsh-dictionary.ac.uk/gpc/gpc.html, accessed 01-07-2021.

⁶ eDIL 2019: An Electronic Dictionary of the Irish Language, based on the Contributions to a Dictionary of the Irish Language (Dublin 1913-1976). URL: www.dil.ie, accessed 05-07-2021.

⁷ Teanglann. URL: https://www.teanglann.ie/en/, accessed 30-06-2021.

mammals or birds. All mammals are considered native to Ireland and Wales. Bird names were selected based on a list of birds found in Ireland by Birdwatch Ireland⁸ and a list of birds found in Wales by BBC Wales. In order for a term to be added to the list of animal names, they had to consist of a morphological structure with one of the Irish suffixes -ach/-ech, -án, -óc/-óg and -ín, or one of the Welsh suffixes -og or -en/-yn. The selection is limited to velar and nasal suffixes for two reasons: these occurred most often in the search results, and there is a relatively large amount of material written on these suffixes. The final list of consulted animal terms can be found in Appendix A, which can be found from page 30 onwards.

Each of the aforementioned suffixes will be discussed in its own chapter. Each chapter will consist of a description that includes theories on their origin, their morphological applications and their semantics. Naturally, these theories will mainly be based on examples from the selected corpus.

The main sources on theories regarding suffixation and (Old) Irish and (Middle) Welsh word formation are based on Patrizia de Bernardo Stempel's *Nominale Wortbildung des älteren Irischen: Stammbildung und Derivation*, ¹⁰ Paul Russell's *Celtic Word-formation: The Velar Suffixes*¹¹ and Stefan Zimmer's *Studies in Welsh Word-formation*. ¹²

De Bernardo Stempel declares that there are four grades of suffixation in Old Irish: 1) the suffixed derivative has a morphological and semantic motive, 2) the derivative only has a semantic motive, ¹³ 3) the derivative has a morphological motive, ¹⁴ or 4) the derivative shows neither semantic nor morphological motivation. She notes that the assessment of these grades is a difficult matter and heavily dependent on the linguistic competence of the academic consulting the material, as especially the second and fourth category can only be identified diachronically. ¹⁵ This theory will be considered in the discussion.

Paul Russell highlights specific theories and problems with regard to velar suffixes. These will be discussed under the appropriate suffix.

Stefan Zimmer's general theory on suffixation largely corresponds to the information given in the introduction of this work, with the addition that he notes that all grammatical

⁸ BirdWatch Ireland – List of Ireland's Birds. URL: https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/ 30-06-2021.

⁹ BBC – Wales Nature & Outdoors: Birds in Wales.

URL:https://www.bbc.co.uk/wales/nature/sites/species/birds/flickr birds a e.shtml, accessed 18-06-2021.

¹⁰ de Bernardo Stempel, *Nominale Wortbildung*.

¹¹ Paul Russell, Celtic Word-formation: the Velar Suffixes (Dublin 1990).

¹² Zimmer, Studies.

¹³ If the derivatives falls into this grade, the base word cannot easily be segmented.

¹⁴ If the derivative falls into this grade, its semantics have changed considerably from that of the base word.

¹⁵ de Bernardo Stempel, *Nominale Wortbildung*, 187.

elements, including prefixes and suffixes, at some point lose their semantic power and thus their significance to speakers. Other than this, his approach is similar to Russell, as he also highlights specific theories with regard to specific suffixes. Again these will be discussed under the appropriate suffix.

Suffixes

The velar suffixes

A) Irish -ach, -ech

The Irish velar suffix *-ach* or *-ech* (further referred to as *-ach*)¹⁶ is highly productive and regarded to be a continuation of two variants of the Proto-Celtic suffix *-āko- and *-iko-, which can be traced back to IE *-Vko-.¹⁷

First, the morphological function of *-ach* will be examined. Russell states that derivatives in *-ach* are adjectives and substantives, and that the suffix can be attached to non-derived (base word) and derived bases. ¹⁸ Interestingly, its original function is that of an adjectival suffix. ¹⁹ In his work on the Continental Celtic suffixes, Russell mentions that the Gaulish suffix *-*āko is also generally employed as an adjectival suffix. ²⁰ Furthermore, there is evidence for an adjectival function in L *-ĭcus*, another continuation of IE *-Vko-. ²¹ Therefore it is expected that the PC suffix *-āko- was originally also employed with adjectival motivation.

However, mammal and bird terms are considered substantives. Russell gives no mention of this, but the originally adjectival derivatives must have become employed as substantives, after which the suffix became active as a substantival suffix as well. There is no change in the morphological structure between substantival and adjectival derivatives: both are formed by attaching *-ach* to either a noun or an adjective.²² Some of the animal terms

¹⁶ It is unclear whether *-ech* represents a different form of the PC suffix, or whether it is a palatal form of the form *-*ach that came into existence with the general spread of palatalized variants in Irish. Russell dedicates an extensive part of his chapter on *-ach/-ech* in CWF to this phonological problem, but due to scope and the focus on morphology and semantics, this will not be discussed further. Furthermore the form *-ech* occurred only once in the corpus in OIr *cuircech* 'plover', in which it is simply used as the palatal variant of *-ach*, with no semantic difference. For Russell's theory, see pages 97-101 in CWF.

¹⁷ Although the IE development of *-Vko- is interesting, it will not be further considered due to the scope of this work and its irrelevance for the conclusion.

Russell, Celtic Word-formation, 12.

¹⁸ Russell, Celtic Word-formation, 86-89.

¹⁹ Russell, Celtic Word-formation, 89.

²⁰ Russell, 'Suffix -āko-', 170.

²¹ Russell, Celtic Word-formation, 9-10.

²² Russell, Celtic Word-formation, 86.

examined have an orthographically identical, yet grammatically adjectival form: e.g. *bannach*, subst. 'fox' and adj. 'lively'; *cro(t)tach* subst. 'curlew' and adj. 'hump-backed'.

Russell gives a clear account of the semantics of the suffix: in mammal and bird terms, it is used to denote a person or thing that is characterised by the first element (e.g. *bannach* 'fox', literally 'the lively thing'). However, it is not the suffix that denotes the person or thing (further referred to as the subject): its grammatical category does. The substantivization of the adjectival terms causes the slight semantic shift, the referring to a physical subject.²³

The general semantic function of *-ach* is expressing the relationship between the base element (or characteristic) and the subject. Russell lists three categories regarding semantics of substantival common or abstract nouns ending in *-ach*: 1) something which has X, 2) which is like or has much of X, or 3) which is associated with X.²⁴ Mammal and bird terms fit well into these categories: the first element of these derivatives is (seemingly) always descriptive, either of behaviour or of looks (e.g. *bannach* 'fox', from OIr *bann* 'movement; impulse', *sceadach* 'velvet scoter', from ModIr *scead* 'blaze').²⁵

A slight complication with Russell's categories is that they often overlap when applying them to mammal and bird terms: e.g. *sceadach* literally means 'the thing with the blaze', as the velvet scoter physically has a blaze under its eyes (category 1). Due to the prominence of the blaze, the bird may also be particularly associated with it (category 3).²⁶

B) Welsh -og, -iog

Similar to Irish -ach, the origin of the Welsh suffix -og (MW - awc^{27}) lies in the PC suffix *-(i)āko-. Also similarly to Irish, the suffix has two variants: -og and -iog (MW -awc, -iawc). The variant -iog is thought to be a reflexe of the PC variant *iāko-, meaning -og reflects regular PC *- āko-. This alternation is relatively common in Welsh suffixes, but the application of the alternating terms is rather complicated. There is no semantic difference between the variants, and the base on which the applied variant is chosen is often unclear. 28

9

²³ This process also occurs in other languages, e.g. E *royal*, *plastic* and *human* can be used both as an adjective and as a substantive.

²⁴ Russell, Celtic Word-formation, 93.

²⁵ Some terms, such as OIr *sionnach* 'fox', consist of the suffix *-ach* and an unknown element. However, based on the other samples which can be identified, this seems to be a pattern nevertheless. Mícheál Ó Flaithearta ''No fox can foul the lair the badger swept'': aspects of the fox in Irish tradition', *Celebrating sixty years of Celtic studies at Uppsala University*, eds. Ailbhe Ó Corráin and Gordon Ó Riain (Uppsala 2013) 71-72.

²⁶ For more examples, see B) Welsh -og, -iog.

²⁷ The Middle Welsh spelling was not encountered during the collecting of terms, as GPC uses modern spelling for its entries.

²⁸ Russell, Celtic Word-formation, 39-42.

All of the mammal and bird terms in the corpus ended in -og, and the problem is largely a phonological one. Due to scope this alternation will not be considered further here.²⁹

In terms of its morphological function, YGM defines -og as an adjectival ending that can denote a person or agent, as well as a tool or thing. 30 GPC confirms this, but notes that it can also be a nominal suffix, that can be attached to a noun or base of a verb.³¹

Due to their shared origin, Ir-ach and W -og have a nearly identical morphological function and semantics, at least in mammal and bird terms. Both Ir -ach and W -og are attached to substantives or adjectives to derive substantives, and comparable to the Irish suffix, Welsh substantival derivatives in -og may also have a orthographically identical yet grammatically adjectival form, e.g. *llostog*, subst. 'fox' and adj. 'tailed'; barfog, subst. 'whitethroat, woodchat' and adj. 'bearded'. Russell notes that meanings of substantives in -og correspond to the meanings of the adjectives in -og, only they are substantivized, which is identical to the process in Ir -ach.³² Here too the change in grammatical category from adjective to substantive leads to the implication of the physical subject, that is characterized by the base.³³

The semantics of W -og are nearly equal to Irish -ach. Derived mammal and bird terms in W -og denote a person or thing that is characterised by the first element. Russell even lists the same three semantic categories for W -og as for Ir -ach: 1) something which has X, 2) which is like or has much of X, or 3) which is associated with X.34 The first element of derived animal terms is a characteristic (e.g. *llostog* 'fox', from *llost* 'tail', and *draenog* 'bittern; hedgehog', from draen 'thorn(s), prickle(s)'35), which often can be attributed to more than one of Russell's categories. The term *llostog* is again a prime example: the fox has a prominent tail, meaning it possesses a tail, but the prominence of it leads to association as well, and it is the same for the whitethroat, who (even in English!) is known for the colour pattern on its throat.

The Welsh derivatives in -og diverge slightly from the Irish derivatives in -ach, as Welsh derivatives in -og relate to physical appearance more often, rather than to behaviour.³⁶

²⁹ Again, Russell gives an in-depth description of this problem in his work. See pages 39-60 in CWF.

³⁰ H. Meurig Evans and W. O. Thomas, Y Geiriadur Mawr: The Complete Welsh-English English-Welsh Dictionary (Llandysul 2018) 454.

³¹ GPC s. v. -og. -iog.

³² Russell, Celtic Word-formation, 39.

³³ Russell, Celtic Word-formation, 38-39.

³⁴ Russell, Celtic Word-formation, 32-33.

³⁵ GPC s. v. draenog.

³⁶ An exception is the term *sgrechog* 'jay, parrot, which this seems to be a borrowing from Irish *scréchóg* 'owl'. This claim is based on the fact that Old Irish scréchóc (ModIr scréachóg) is attested much earlier than Welsh

Additionally, Welsh derivatives may also refer to the location the creature is associated with, which was not evident in Irish derivatives in *-ach*. This may be the case in the terms *llwynog* 'fox' and *draenog* 'bittern', ³⁷ which are based on the nouns *llwyn* 'bush, shrub; wood, forest' and *draen* 'thorns; brambles'. ³⁸

C) Irish -óc, -óg

The Irish suffix $-\delta g$ (OIr $-\delta c$, which is the conventional spelling that will be used throughout) is perhaps the most complicated. There are two main problems, which will be discussed below. The first problem is the origin of the suffix, the second its semantics, especially in a diminutive context.

First, theories on its origin must be considered. Though used in Irish derivatives (e.g. $gr\'{a}inne\'og$ 'hedgehog', $scr\'{e}ch\'{o}c$ 'owl'), the general consensus regarding the origin of Irish $-\acute{o}c$ is that it is not a native Goidelic Celtic suffix. Both Russell and de Bernardo Stempel take $-\acute{o}c$ to be borrowed; the latter also notes that Rudolf Thurneysen already acknowledged this in $1884.^{39}$

On the contrary side, Heinrich Zimmer (abbreviated H. Zimmer) has proposed a theory that this suffix is a native suffix, but I agree with Russell that this theory is problematic. H. Zimmer argues that the suffix is of native origin and is a form of the OIr adjective δc 'young' (alternate OIr δac , ModIr δg), which at some point started to be used as a suffix. Then this suffix spread into Breton and Welsh as Bret -oc > -ek, W -awc, $-og^{4l}$ with the transmission of saints' names. It became productive in British as it was similar in form and usage to the various other velar suffixes that were already productive in the Brittonic languages. He in this suffixes that were already productive in the Brittonic

This theory would require multiple Irish saints names ending in $-\delta c$ also occurring in

sgrechog (15th century vs. 1803). Adding to this is the fact that W sgrech, ysgrech 'scream, screech' is a loanword from English that is first attested in 1681, while OIr scréch seems to be native and occurs in the Book of Leinster, which dates to mid 12th century. The Welsh may have borrowed the structure of the Irish term rather than the full term, but due its semantic divergence compared to other (native) Welsh terms, I am rather certain this must be borrowed in some way.

eDIL s. v. scréchóc

GPC s. v. sgrechog

³⁷ Draenog can also refer to the hedgehog, however here it probably refers to the spikes on the animal's back.

³⁸ GPC s. v. *llwyn*

GPC s. v. draen

³⁹ Russell, Celtic Word-formation, 112-113.

de Bernardo Stempel, Nominale Wortbildung, 463.

⁴⁰ Russell, Celtic Word-formation, 112-113.

de Bernardo Stempel, Nominale Wortbildung, 463-464.

⁴¹ GPC s. v. -og, -iog.

⁴² Russell, Celtic Word-formation, 112-113.

British with -og, but these occur only rarely, if Russell's example is even considered to fit these criteria. Russell only lists the example *Mo Chorog*, which also appears as *Mogoroc*. This might be a British spelling in which /k/ seemingly has been lenited to a /g/. However, this is not a compelling example. First, the Welsh cognate of Irish *Mo*- would be expected to cause nasalization rather than lenition. Second, Russell's account is rather ambiguous: it is unclear from his description whether this example is truly British in origin. 44

H. Zimmer's theory is also unconvincing when taking historical linguistics into consideration. The long vowel in the suffix $-\delta c$ (which Russell also notes immediately)⁴⁵ does not correspond to the historical phonological development of Irish. It is logical H. Zimmer sees a connection as the adjective and the suffix (δc vs $-\delta c$) share the long vowel, and he may even connect the two due to the fact that the long vowel is not supposed to be in the suffix, but a more logical approach as to why the long vowel remains would be to assume this suffix is borrowed.

If the sound changes occurring from the Primitive Irish to the Old Irish period are taken into consideration, the suffix cannot have been productive before the period of Primitive Irish, as this is the period in which long vowels in unstressed position are shortened. Irish suffixes are always in unstressed position, meaning that if $-\delta c$ is taken to be of native (pre-Primitive Irish) origin, its Old Irish form would have to be *-oc.

The suffix might have been subjected to secondary influence from the adjective δc , but this is questionable at best. De Bernardo Stempel agrees with H. Zimmer that the adjective δc 'young' could have influenced the semantics of the suffix, as speakers of Irish could perhaps have taken the suffix $-\delta c$ to be a homonym of the adjective δc , and Welsh suffix a paretymology. The phonetic similarity of the Irish adjective δc and Welsh suffix $-\delta c$ in loanwords may even have contributed to the fact it was borrowed: perhaps the connection Irish speakers made to the adjective did add to its popularity.

⁴³ This example may still have been nasalized, but this does not always show in orthography.

⁴⁴ Russell, Celtic Word-formation, 114.

⁴⁵ Russell, Celtic Word-formation, 112.

⁴⁶ David Greene, 'The growth of palatalization in Irish', *Transactions of the Philological Society* 72/1 (1973) 129.

⁴⁷ A similar paretymological process would likely not have occurred in Welsh: the Welsh equivalent of δc is *ieuanc* (MW *ifanc*, both from PC *yowanko-), and these forms do not correspond to the suffix (MW *-awc*, W *-og*) as closely as the Irish words.

Ranko Matasović, Etymological Dictionary of Proto-Celtic (Leiden 2009) 436-437.

⁴⁸ de Bernardo Stempel, *Nominale Wortbildung*, 463-464.

Another argument adding to the theory that Irish $-\delta c$ must be borrowed from British, is that Irish $-\delta c$ is a very precise representation of Brittonic * $-\bar{a}ko > *-\bar{\sigma}g$ (> MW -awc, ModW -og): the British form * $\bar{\sigma}g$ would be represented as $-\delta c$ in OIr. This * $-\bar{\sigma}g$ is what Russell calls a 'post-lenition, post apocope form of PC * $-\bar{a}ko$ -,⁴⁹ which signifies that this suffix must have come into Irish in the sixth century or later, as it shows British lenition and the long vowel is preserved.⁵⁰

H. Zimmer's claim that the adjective δc 'young' becomes the hypothetical suffix *- δc , which is then taken into Welsh and represented as -awc, is also unlikely from this linguistic perspective. The adjective δc 'young' (likely originating from PC *-owank-)⁵¹ is still disyllabic in early Old Irish and it may have preserved the glide well into the fifth century.⁵² This might render - δc if the adjective 'young' would be made monosyllabic in unstressed (suffix) position, but it is still rather unlikely.

To conclude this paragraph on the origin of Irish $-\delta c$, it is far more acceptable to see the suffix as a borrowing from British, rather than a native suffix or a borrowing from Old Irish into Middle Welsh. Here it is important to note that the suffix certainly did not enter the Irish language as a suffix alone. Languages rarely borrow independent morphological elements: it is much more common for languages in contact to borrow content words, from which a suffix is derived which subsequently becomes productive. This process must have started with a catalyst, a word or words that were borrowed in their entirety, after which the people of Ireland started to apply the (now) Irish suffix $-\delta c$ and it became productive. The catalyst is unknown, and mammal and bird terms likely did not cause this process. Although there is evidence of the borrowing of mammal and bird terms between Welsh and Irish, this is very limited. The catalyst is unknown, and mammal and bird terms between Welsh and Irish, this is very limited.

Next, the semantics and morphological purpose of the Irish suffix $-\delta c$ will be examined. Russell states that $-\delta c$ is used to form personal names (mainly saint's names) and common nouns in Irish. The Ir suffix $-\delta c$ corresponds to Ir -ach and W -og on a semantic level, but it

⁴⁹ Russell, Celtic Word-formation, 113.

⁵⁰ Russell, Celtic Word-formation, 115-116.

⁵¹ There is no borrowed form of Ir adj. *óc* in Welsh: it has its own term based on PC *-yowanko-, which is W *ifanc* (MW *ieuanc*).

GPC s. v. ieuanc, ieuang, ifanc, iefanc. &c.

⁵² Russell, Celtic Word-formation, 113.

⁵³ Sarah Grey Thomason and Terrence Kaufman, *Language Contact, Creolization, and Genetic Linguistics* (Oxford 1988) 65-76.

⁵⁴ Bernhard Bauer, *Intra-Celtic loanwords* (PhD-thesis, Universität Wien, Vienna 2015) 175-176.

⁵⁵ Russell, Celtic Word-formation, 108.

is not employed as an adjectival suffix. Derivatives in Ir -*óc* are always substantive, though their base can either be adjectival or substantival. Nevertheless, Ir -*óc*'s semantics correspond to the three categories Russell ascribes to W -*og* and Ir -*ach*: 1) something which has X, 2) which is like or has much of X, or 3) which is associated with X. Most mammal and bird terms correspond to this: e.g. *gráinneóg* 'hedgehog', from *gráinne* 'grain', *scréchóg* 'owl', from *scréch* 'scream'. Seream'.

The first element of derived terms with Ir -\(\delta c\) usually refers to the creature's appearance or behaviour, but it may refer to a location the creature is associated with as well (e.g. \(glas\delta c\), from \(glas\delta c\) (green; stream'^{59}), effectively combining the semantics of Ir -\(ach\) and W -\(og\). Some terms do not correspond to this and instead use an already established animal term as their base (e.g. \(luch\delta c\) 'mouse', \(fainle\delta g\) 'swallow'). These will be considered further below.

The Modern Irish suffix is listed as an "often diminutive and feminine suffix". 60 Its feminizing function is reflected in the ModIr pairs luch (m) -luchóg (f), eas (m) -easóg (f) and likely also in OIr iatlu (n) -ialtóc (f) 'bat', as the derivative with -óc is grammatically feminine. It seems that the suffix already influenced grammatical gender in an earlier Irish period (likely in Middle Irish), OIr luch and (n)es(s) are neuter, but luchóc and esóc are feminine. Unfortunately, none of the dictionary entries for these terms state whether they only refer to female animals.

Its diminutive function is even more complicated. Some scholars (including de Bernardo Stempel) argue $-\delta c$ also carries a diminutive meaning, and dictionaries often include this definition. This may partially be connected to H. Zimmer's previously mentioned theory on the connection between δc 'young' and the suffix $-\delta c$.⁶¹

First, De Bernardo Stempel's theory on the function of the suffix $-\delta c$ will be taken into consideration. She defines $-\delta c$ as a velar suffix with a diminutive function and lists the animal term $luch\delta c$ as an example. 62 $Luch\delta c$ is an interesting example. The general Modern Irish term for the animal 'mouse' is the root name $luch^{63}$ (from PC *lukot-), 64 which occurs in the

⁵⁹ Teanglann s. v. *glasóc*.

⁵⁶ Russell, Celtic Word-formation, 108-109.

⁵⁷ Teanglann s. v. *gráinne*.

⁵⁸ eDIL s. v. scréch

⁶⁰ Paul Ó Murchú, A Grammar of Modern Irish (Baile Átha Cliath 2013) 257.

⁶¹ Russell, Celtic Word-formation, 112.

⁶² de Bernardo Stempel, Nominale Wortbildung, 330.

⁶³ Teanglann.ie s. v. *luch*.

⁶⁴ Matasović, Etymological Dictionary, 248-249.

same form in Old Irish.⁶⁵ However, eDIL lists a very similar term: *luchóc*,⁶⁶ obviously consisting of the noun *luch* and suffix *-óc*. As *luch* itself refers to the mouse, and is a much more common term (based on attestations), it would be logical for *-óc* to provide some additional semantics. De Bernardo Stempel lists three more diminutive examples. Her example *ledbóg* (from *ledb*, 'strip of skin or leather') is promising. *Ledbóg* means 'piece, fragment', or literally 'small strip of skin', thus the semantics of this derivative seem to clearly imply something which is small. The connection of smallness and youth is not uncommon: the younger a creature, the smaller it is compared to its adult counterpart.⁶⁷

De Bernardo Stempel's other two examples, *cammóc* and *luirgnechóc*,⁶⁸ are not as convincing. The word *cammóc* means 'baculum' (from *camm* 'crooked, bent, curved'), literally a '(small) curved thing'. The second example *luirgnechóc* is complicated as well. This term is translated as 'little long-legged one' (which seems to be referring to a fawn),⁶⁹ but it is only found in a poetic segment of *Buile Śuibhne*. In reality, there is no clear diminutive function in either of these examples. A baculum is a relatively small bone and fawns are small animals that are generally considered cute, but this is merely context and not necessarily visible in the morphological structure of the word.⁷⁰

There is no real semantic evidence either, as it is often not required in context. In fact, when taking the context and attestations into consideration, even the example *luchóc* is questionable at best. *Luchóc* is first attested in *Foras feasa ar Éirinn*, in the sentence "...agus tug air mír do chroidhe a athar is a sheanathar d'ithe is <u>luchóg</u> go n-a los do shlogadh." This is translated as "...and made him eat a portion of his father's and grandfather's hearts, and to swallow a mouse with its tail." Context tells us that the mouse is to be swallowed by

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⁶⁵ eDIL s. v. luch.

⁶⁶ eDIL s. v. luchóc.

⁶⁷ This is important, especially considering that the majority of the mammal and bird species examined for this thesis are smaller than an adult human, even when fully grown.

⁶⁸ de Bernardo Stempel, *Nominale Wortbildung*, 330.

⁶⁹ The definition is based on that of J. G. O'Keeffe, which is acknowledged by both de Bernardo Stempel and eDIL.

J. G. O'Keeffe, Buile Suibhne: The Frenzy of Suibhne. Being the adventures of Suibhne Geilt: a Middle Irish romance, Irish Texts Society 12 (London 1913).

⁷⁰ It could be that the difference in morphological structures between the examples *luchóc*, *ledbóg* (substantive base) vs. *cammóc*, *luirgnechóc* (adjectival base) has an influence, but this seems unlikely. Mammal and bird terms with the suffix *-óc* can be built on a substantive and adjectival base (e.g. *scréchóc* 'owl', from *scréch* 'scream' and *buideóc* 'bunting', from *buide* 'yellow') but when taking more animal terms in consideration there seems to be no difference regarding the implication of youth.

⁷¹Geoffrey Keating (ed.), *Foras feasa ar Éirinn: The history of Ireland by Geoffrey Keating D. D.*. 4 vols, eds. David Comyn (I) and Patrick S. Dinneen (II-IV), Irish Texts Society 4, 8-9, 15 (London 1902-1914) book I-II 162

⁷² Geoffrey Keating (tr.), *Foras feasa ar Éirinn: The history of Ireland by Geoffrey Keating D. D.*. 4 vols, eds. David Comyn (I) and Patrick S. Dinneen (II-IV), Irish Texts Society 4, 8-9, 15 (London 1902-1914) book I-II 163.

a young lad, so perhaps it would be easier for the lad to swallow it if it were of the smaller variety. However, there is still no hard evidence for a diminutive function here. Furthermore, it is only attested thrice, two of those attestations are in the relatively late *Foras feasa ar Éirinn* and the last is in another text by the same author.⁷³

This is exactly why Russell is sceptical of $-\delta c$'s diminutive function. He states that a large part of animal (and plant) names have unjustly been taken as diminutives. Their poor and relatively late attestations, combined with the fact that the attestations are often concentrated within certain texts (most notably within the previously mentioned *Buile Śuibhne*), further complicate the certainty of $-\delta c$ as a diminutive suffix. Russell's theory on the semantics of $-\delta c$ is that the suffix may have been applied hypocoristically, or perhaps it may simply have become a stylistic feature.⁷⁴

Russell makes a persuasive argument; not all diminutive suffixes also have a hypocoristic function, but it is a general pragmatic connotation in diminutives. Taking a brief detour into Germanic suffixes: the Dutch suffix $-je^{76}$ is a diminutive suffix in origin, but it can also have a pejorative, euphemistic or hypocoristic meaning. Its hypocoristic function has now become so widespread that a sole diminutive function has become rare, and the suffix frequently expresses endearment instead. Suggesting something similar occurred in Irish would not be peculiar, especially since the suffix seems to occur in a poetic context relatively often. This would certainly work in the context of *luirgnechóc*, which can be interpreted as a hypocorism directed at a fawn.

However, interpretation is still a keyword here: there is no definitive answer to what meaning the Old and Middle Irish suffix carries. I agree with Russell that $-\delta c$ is taken to be diminutive far too often, as there are practically no well-attested and concrete examples. Context can offer some more clarity, but the semantic waters remain murky, as a modern reader interprets the medieval text in a different way than a speaker from the time the material is written would. This would be an excellent avenue for further research, as clarity on the matter of modern and medieval interpretation might help in explaining the development of Insular Celtic suffixes.

This also connects to $-\delta c$ as a feminine suffix: context is critical to determine whether

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⁷³ eDIL s. v. luchóc.

⁷⁴ Russell, Celtic Word-formation, 108-109.

⁷⁵ Daniel Jurafsky, "Universal tendencies in the semantics of the diminutive", *Language* 72/3 (1996) 535.

⁷⁶ When referring to the Dutch diminutive suffix -je, this includes the variants -tje, -etje, -pje and -kje.

⁷⁷ William Z. Shetter, 'The Dutch Diminutive', *The Journal of English and Germanic Philology* 58/1 (1959) 76.

⁷⁸ Shetter, 'Dutch Diminutive', 79-80.

the suffix only influences grammatical gender, and unfortunately, there is little context to examine. Again referring to the example of *luchóc* in *Foras feasa ar Éirinn*: there is no clear morphological sign that the mouse would be of the female gender, but at the same time the medieval reader might have interpreted the term *luchóc* as a female mouse.

To summarize: it is uncertain whether or not $-\delta c$ expresses a diminutive or hypocoristic meaning, or even a feminine meaning. The suffix seems to correspond to the same semantic categories Russell provides for Ir -ach and W -og. Additionally, although there are no Irish adjectives in $-\delta c$, the derivatives still contain the same subject-characteristic relation in derivatives as derivatives in Ir -ach and W -og, in which the base element expresses a characteristic of the animal: 79 e.g. ríabóc 'pipit? skylark?', lit. 'the striped thing'; 80 gráinneóg 'hedgehog', lit. 'the grain-like thing, the thing associated with grain'. 81 The process of substantivization does not occur, as there are no adjectives ending in Ir $-\delta c$, this it is unclear whether its employment as a substantive or the attachment of the suffix itself express the subject, a person or thing.

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⁷⁹ The chapters on Ir -ach, -ech and W -og, -iog concluded that the subject is expressed through the grammatical shift from adjective to substantive, which cannot have occurred with Ir - δc , granted that there are no adjectives in - δc . This is likely connected to its origin as a borrowed suffix: the semantic meaning of the subject-characteristic relation was taken over since the suffix must then have become productive from borrowed substantives. Therefore the process of substantivization did not have to occur.

⁸⁰ eDIL s. v. *ríabóc*.

⁸¹ Teanglann s. v. gráinneóg.

The nasal suffixes

A) Irish -án

The Irish suffix $-\acute{a}n$ is a masculine nasal suffix, ⁸² which has several functions. It is described as most commonly being used to form diminutives, but it can also be found in appellatives and in masculine personal names. ⁸³

However, Peter Schrijver already acknowledges that -án often occurs in animal names without a diminutive function. 84 Though he only lists names of fish and a snail, this is likely also the case in bird and mammal names. There is only one example in which -án clearly is diminutive and hypocoristic, which is *corrucán* 'little heron, little crane', from *corr* 'heron, crane'. This occurs as "...ar corrucán cumraide" in an Old Irish poem, where it is used as a term of endearment for a human. 85

Though not used for a human but for a pet animal, the term $tog\acute{a}n$ 'some small animal, sometimes kept as pet; squirrel (?), pine marten', from togmall 'some kind of small animal; squirrel ? marten ?'86 is also defined as a diminutive in DIL. However, its DIL entry also notes the derivative $tog\acute{a}n$ is interchangeable with togmall, so it is difficult to conclude whether this truly is used as a diminutive, as this implies there is little to no semantic difference. This occurs in Aided in togmaill & in pheta $e\acute{o}in$ in TBC: Medb's pet is referred to as both togmall and $tog\acute{a}n$, but there is no real evidence for a diminutive meaning of $tog\acute{a}n$ in the context: " $N\acute{o}$ dano is for $g\acute{u}$ alaind Medba $b\acute{a}$ tar immalle eter $tog\acute{a}n$ & $\acute{e}n$, ...", 87 'Or, according to another version, both marten and bird were on Medb's shoulder and their heads were struck off by the stones cast'. 88 Perhaps - $\acute{a}n$ is simply used to abbreviate the term, as something similar happens in the terms $dobr\acute{a}n$, from dobur 'water' and $odr\acute{a}n$, from odor 'greyish-brown', both meaning 'otter'. 89

A similar process of shortening often occurs in personal names (e. g. Tom < Thomas,

⁸² de Bernardo Stempel, Nominale Wortbildung, 343.

⁸³ Some masculine personal names end in the suffix $-oc\acute{a}n$, $-uc\acute{a}n$, which is taken to be a development of $-\acute{o}c$ by Thurneysen.

Rudolf Thurneysen, *A grammar of Old Irish*, revised and enlarged ed., tr. D.A. Binchy and Osborn Bergin (Dublin 1946) 173.

⁸⁴ Peter Schrijver 'Varia V. Non-Indo-European Surviving in Ireland in the First Millennium AD', *Ériu* 51 (2000) 195.

⁸⁵ The poem is available in Kuno Meyer's *Bruchstücke der älteren Lyrik Irlands*. The poem has not been assigned a title.

eDIL s. v. corrucán.

⁸⁶ eDIL s. v. 2 togán.

eDIL s. v. togmall.

⁸⁷ Cecile O'Rahilly (ed.) Táin bó Cúailnge: Recension I (Dublin 1976) 29.

⁸⁸ Cecile O'Rahilly (tr.) Táin bó Cúailnge: Recension I (Dublin 1976) 151.

⁸⁹ eDIL s. v. dobrán.

eDIL s. v. odrán.

Liz < Elizabeth, etc.). Abbreviated and full forms of personal names may coexist and be considered identical in terms of semantics, 90 which may correspond to the pair togán < togmall.

Lastly, it may also be used in a diminutive manner in bianán 'mouse', which seems to originally mean 'a scrap of sheep's pelt'. This may be similar to appellations given to pets or small animals (e.g. 'fluffball' or 'fluffy' being used to refer to a pet dog or cat). However, bíanán is only attested once and in a poetic environment, 91 which means that this too is not an adequate example for a true diminutive function.

Other examples are ambiguous: there might have been a diminutive meaning, but there is not enough evidence for this function. Therefore, I would suggest that Schrijver's statement that a diminutive function does not always occur also applies to the majority of mammal and bird names, based on the examined corpus. 92 In this regard it is similar to Ir $-\delta c$: neither of the suffixes retain a clear diminutive function. Additionally, the semantics of Ir -óc and -án both correspond to Russell's three semantic categories. Ir -án may or may not express a diminutive meaning, but I would argue that, similar to Ir $-\delta c$, the derivatives do express a subject. The first element again is a characteristic of the mammal or bird that is referred to, either its employment as a substantive or the suffix itself express the subject, a person or thing. Due to its regular usage in appellatives and personal names, the suffix -án could be attached with an appellative motivation, but this is mere interpretation.

Similar to the earlier discussed Irish $-\delta c$, Irish $-\delta a$ contains a long vowel. However, $-\delta a$ has a different origin. De Bernardo Stempel states that long vowels in suffixes are never of native origin, and categorizes -án as a suffix that has been subjected to superstratum influence. 93 However, she does not name this superstratum language, and this is a rather outlandish claim, as the suffix is most definitely native. Its PC form is *-agno- and it is first attested in personal names. These are found in Ogam inscriptions in the earlier form -agni (e.g. Mailagni, Ulccagni), some of which also occur in a later period in a form with -án (e.g. Ulccagni becomes Olcán).⁹⁴

Regarding the long vowel: it is logical de Bernardo Stempel thinks something must

⁹⁰ Anna Morpurgo Davies, 'Greek Personal Names and Linguistic Continuity', *Proceedings of the British* Academy 104 (2000) 17-18.

⁹¹ eDIL s. v. bíanán.

⁹² There may be more evidence in other animal terms, such as fish names (which Schrijver mentions). This would be an interesting approach in further research.

⁹³ de Bernardo Stempel, *Nominale Wortbildung*, 457.

⁹⁴ Thurneysen, *Grammar*, 173.

have influenced the suffix. According to the sound laws, long vowels in unstressed syllables not ending in [h] should be shortened. ⁹⁵ There are a few theories regarding the retaining of the long vowel in $-\acute{a}n$.

Important here is that phonetic laws indeed require the vowel to be shortened. However, suffixation is a morphological process. Morphological processes do not always adhere to historical phonological principles. An example of this can be found in the Irish verbal system. The Irish é-future regularly retains its long vowel in forms where a short vowel is to be expected, such as in the prototonic form *-tibérad* 'would give', from *do-beir*. The long vowel in this form should have been shortened or syncopated, had it followed a regular phonological development. However, there is morphological motivation for the retaining of the long vowel in é-future forms: the long vowel is a morphological marker of the é-future in Irish, thus morphologically invaluable.⁹⁶

Perhaps something similar occurred in -án. The vowel may have remained long due to -án being highly productive before the shortening of unstressed long vowels, thus the long vowel could be a morphological marker of the suffix -án for an Irish speaker. Additionally, it is probable that the long vowel in the suffix -án added to its productivity. The unexpected long vowel indicates a clear boundary between the base and the suffix, thus the suffix can easily be recognized and subsequently applied to other bases. ⁹⁷

The long vowel in $-\acute{a}n$ may even be modelled after the similar Irish suffix $-\acute{o}c$, or vice versa: some words and saint's names in $-\acute{o}c$ occur with a parallel derivative in $-\acute{a}n$: $ball\acute{o}c - ball\acute{a}n$ 'drinking cup'98, $Mo\text{-}Bec\acute{o}c - Do\text{-}Bec\acute{a}n$ 'St. Becán'.99 Based on the used corpus, this does not occur often in animal terms. There is one double term: $breac\acute{a}n - breac\acute{o}c$. However, these refer to different birds: the term in $-\acute{a}n$ refers to the brambling, whereas the term in $-\acute{o}c$ refers to the dunlin.

B) Welsh -en, -yn

The Welsh suffix -en, -yn is defined as a diminutive nasal suffix by both YGM and GPC. YGM only lists -yn as a suffix and does not mention -en, 100 GPC includes them as two separate entries and lists that -yn is a masculine diminutive substantival suffix, whereas -en is

⁹⁵ Greene, 'Growth of palatalization', 129.

⁹⁶ Kim R. McCone, *Towards a relative chronology of ancient and medieval Celtic sound change* (Maynooth 1996) 122-125.

⁹⁷ Unexpected from a phonological perspective.

⁹⁸ Russell, Celtic Word-formation, 108.

⁹⁹ Rudolf Thurneysen, *Handbuch des Alt-Irischen: Grammatik, Texte und Wörterbuch*, 2 vols, vol. 1: *Grammatik* (Heidelberg 1909) 168-169.

¹⁰⁰ YGM, 455.

its feminine counterpart.¹⁰¹ However, some formations have two forms and can end in both - en and -yn (e.g. siglen and siglyn 'wagtail'). It is unclear whether this makes a semantic difference, but based on their GPC entries, siglen seems to be a hyponym of siglyn, as siglyn may also refer to any bird in the genus Motacilla, and possibly the kingfisher as well.¹⁰²

The suffix can be attached to collective nouns, where it has a singulative function. Stefan Zimmer mentions the collective term *llygod* 'mice', which consists of base word *llyg* and plural marker -od.¹⁰³ The term *llygoden* 'mouse' is also attested, even in terms for other animals.¹⁰⁴ However, the term *llyg* used to be the general term for a singular mouse, which now has been replaced by the construction with -en. This is the only clear example of this construction in the consulted collection of mammal and bird names, but it is noteworthy.

The other constructions are similar to the other suffixes: the first element is of descriptive nature, is either an adjective or a verb, and is mainly related to either the appearance or behaviour of the creature (e.g. *cochyn* 'hare', from *coch* 'red-haired', ¹⁰⁵ *siglen*, *siglyn* 'wagtail, kingfisher', from *sigl* 'swing' ¹⁰⁶). Though Russell only explores the velar suffixes in his work, his aforementioned three semantic categories unsurprisingly again correspond to terms ending in this suffix.

Only the term *madyn* 'fox' is deviant. GPC does not list the elements from which the word is made up, but the first element may be the adjective *mad* 'fortunate, lucky'. ¹⁰⁷ This still fits within Russell's categories, but has no relation to appearance or behaviour. Its construction may be rooted in folklore: it seems to relate to a sort of attributed quality or personification. Adding to this, GPC refers to the English term Reynard in the entry for *madyn*, which is a literary name for the fox. ¹⁰⁸ Interpreting *madyn* as a literary, folkloric term may explain this diversion. GPC notes the element *mad*- may also have been based on Ir *madra* 'dog', as this occurs in an Irish term for the fox (*madra rua*, lit. 'red dog'). ¹⁰⁹ If the

¹⁰¹ GPC s. v. 1 -yn.

GPC s. v. -en.

¹⁰² GPC s. v. 1 *siglen*.

GPC s. v. siglyn.

¹⁰³ Zimmer, *Studies*, 415.

¹⁰⁴ Usually in terms for specific species of mice (e.g. llygoden goch 'shrew') but also for other animals (e.g. *llygoden (y) mynydd*, 'cony; ermine, stoat'.

GPC s. v. llygod.

¹⁰⁵ GPC s. v. cochyn.

¹⁰⁶ GPC s. v. siglen.

GPC s. v. siglyn.

¹⁰⁷ GPC s. v. 1 mad.

¹⁰⁸ Lexico s. v. Reynard. URL: https://www.lexico.com/definition/reynard, accessed 23-06-2021.

¹⁰⁹ GPC s. v. *madyn*.

element is of this origin, the term would fit Russell's categories, as the term could plausibly mean 'the dog-like thing'. 110

Practically all mammal and bird terms ending in this diminutive suffix (except *llygoden*) seem to suffer from the same semantic problem as Irish -óc. Two terms take a base noun that occurs separately and refers to the same creature as the derivative: *cornchwigl – cornchwiglen* 'lapwing, peewit, plover'¹¹¹ and *llwynog – llwynogyn* 'fox'.¹¹² GPC lists the former terms as one entry, but does not list any examples of *cornchwiglen* in context. For *llwynogyn*, GPC notes that it is the masculine diminutive form of *llwynog*, but there are no references to the word in context either, so it is unclear whether these terms are truly used diminutively. The rest of the collected terms also do not seem to carry a specific diminutive meaning.

Comparable to Ir $-\delta c$, terms in W -en, -yn are problematic. All of the remaining terms (again except madyn 'fox')¹¹³ are poorly attested or listed as regional terms used in spoken language. The suffix may originally have been applied with a diminutive or hypocoristic meaning, but there is no clear evidence for this, similar to Ir $-\delta c$ and $-\delta n$. Similar to the other examined suffixes, derivatives in W -en, -yn also seem to express a subject-characteristic relation (e.g. cochyn 'hare', lit. 'the red-haired thing'; ¹¹⁴ siglen 'wagtail', lit. 'the thing that is like a swing, the thing associated with a swing'¹¹⁵), despite the fact that W -en, -yn is not employed to form adjectives.

Discussion

The examined suffixes can be divided into two groups. The two categories are Ir -ach, -ech and W -og, which both originate from PC *-āko-, and Ir - $\acute{o}c$, - $\acute{o}g$; - $\acute{a}n$ and W -en, -yn, which are said to historically function as diminutive suffixes.

The velar suffixes Ir *-ach* and W *-og* are used as substantival suffixes in mammal and bird terms, but they originally had an adjectival function, meaning many terms ending in these suffixes have an orthographically identical term that is used as an adjective (e.g. Ir *bannach* 'fox' or 'active, lively, zealous', ¹¹⁶ W *draenog* 'hedgehog, bittern' or 'prickly, thorny', ¹¹⁷).

 $^{^{110}}$ Both theories are valid, and due to scope there will be no further discussion about the term madyn, but its apparent diversion should be mentioned.

¹¹¹ GPC s. v. cornchwigl, cornchwiglen.

¹¹² GPC s. v. *llwynog*.

¹¹³ GPC s. v. *madyn*.

¹¹⁴ GPC s. v. cochyn.

¹¹⁵ GPC s. v. siglen.

¹¹⁶ eDIL s. v. bannach.

¹¹⁷ GPC s. v. draenog.

There is a slight semantic difference between adjectival and substantival terms in Ir -ach and W -og: the base element is always characteristic, the suffix is, in reality, always an adjectival suffix, but the substantivization of the derivative in Ir -ach or W -og causes the implication of a subject, a person or thing. In other words, the grammatical shift is what implies the subject, not the suffix itself: that can be considered adjectival. Derivatives ending in Ir -ach or W -og are grammatically substantive derivatives, but morphologically they are identical to adjectival derivatives in Ir -ach or W -og.

The examined suffixes Ir $-\delta c$, $-\delta g$; $-\delta n$, W $-\epsilon n$, $-\gamma n$ are historically defined as diminutive substantival suffixes, but in the context of mammal and bird terms, they do not provide a visible diminutive meaning. Lack of textual context (partially because of their poor attestation, and the lack of references in modern dictionaries) does contribute to the unclarity of these terms, but this is the conclusion based on the available reference.

Russell suggests a hypocoristic meaning for Ir $-\delta c$, which may well be the case in some (poetic) terms such as $luirgnech\delta c$. It would not be unlikely for its hypocoristic use to have spread into Ir $-\delta n$ and W $-\epsilon n$, $-\gamma n$, but it also does not seem to be the general meaning in mammal and bird names. Russell also suggests that $-\delta c$ may eventually be attached for stylistic reasons, not with morphological or semantic motivation. This seems plausible and would fit within grade four (no morphological or semantic motivation) of de Bernardo Stempel's theory.

Personally, I am inclined to think that the suffix actually fits better in grade one (morphological and semantic motivation). Although Ir $-\delta c$ is different from the other velar suffixes in morphology, due to its employment as a substantival suffix only, its attachment serves a morphological function, even if its original function (assumed to be diminutive) is unknown. Ir $-\delta c$'s semantics correspond to that of the velar suffixes, therefore it serves a semantic function. Ir $-\delta n$ and W $-\epsilon n$, $-\epsilon n$ are similar to Ir $-\epsilon n$ in morphology and semantics: all three suffixes correspond to Russell's semantic categories, and derivatives in any of the three suffixes have the semantic implication of a subject: a person or a thing, the animal that is being referred to. 118

¹¹⁸ It is unclear whether this semantic implication of a person or thing occurs because the derived terms are simply grammatically classified as substantives and this always occurs in substantives, or whether the suffix contains this meaning. Based on the evidence gathered in this work, I am inclined to think that the grammatical function of the derived terms causes this subject-characteristic relation, but further research that considers more suffixes used in mammal and bird terms, along with the inclusion of more types of animal terms (e.g. fish, amphibians, insects, etc.) is required to come to a proper conclusion on this.

Based on the evidence gathered in this thesis, my thought is that all derivatives ending in the velar or nasal suffixes examined in this thesis should be assigned to grade one of de Bernardo Stempel's theory. As previously demonstrated in their respective chapters, the semantics of all suffixes correspond to Russell's three categories, that he originally attributes to Ir -ach, -ech and W -og: 1) something which has X, 2) which is like or has much of X, or 3) which is associated with X). The original morphological motivation for the attachment of the suffixes is uncertain for Ir -óc, -óg; -án, W -en, -yn, but the actual formation of the derivatives is strikingly similar. Compare:

Derivative	Base element	Bird
gablán	n. gabal 'fork'	sand-martin, bank-martin
sceadach	n. scead 'blaze'	velvet scoter
barfog	n. barf 'beard'	whitethroat, woodchat
buideóc	adj. buide 'yellow'	bunting
bronrhuddyn	n. bron 'chest' + adj. rhudd 'red'	robin, chaffinch

Derivative	Base element	Mammal
odrán	n. or adj. odor 'greyish-brown' 120	otter
bannach	adj. bann 'movement'	fox
ysgyfarnog	n. ysgyfar 'ear(s)'	hare
flannóg	n. or adj. flann 'blood; red'	stoat
cochyn	adj. coch 'red-haired'	hare

All examples are made up of a noun or adjective related to different aspects (physical appearance, behaviour, etc.) of the animal it refers to, and the suffix adds the implication of this aspect belonging to something: the related creature, the subject.

It is clear that in the velar suffixes Ir -ach and W -og, this relation is expressed through its grammatical function rather than its morphology. Therefore these suffixes are to be considered adjectival suffixes, rather than substantive.

The velar suffix Ir $-\delta c$ and nasal suffixes are less clear: the motivation for their

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¹¹⁹ I should add that this conclusion is rooted in a modern-day perception, the medieval perception of these terms may have been very different. This would be an excellent subject for further research.

¹²⁰ Colours are an interesting category of words, as they can be used as adjectives and as substantives. It is unclear whether they function as an adjective or a substantive as a base in derived animal terms, but this is not necessarily a problem since an adjectival relationship is always implied.

attachment in mammal and bird terms is unknown. The subject-characteristic relation may then be expressed through the attachment of the suffix, or through its grammatical function. As the suffixes Ir $-\delta c$; $-\delta n$ and W $-\epsilon n$, $-\epsilon n$ are defined as substantive suffixes by Russell (in the case of Ir $-\delta c^{121}$), I am of the opinion that the suffix itself provides these semantics, but I am not very certain, especially considering the origin of Ir $-\delta c$. The scope of this thesis is simply too small to come to an accurate conclusion on this. 122

The question left unanswered is why formations take a specific suffix. ¹²³ Based on the material examined, there is no proper conclusion to be stated. There is no clear pattern in the application of these suffixes: all of them can be attached to a base noun or adjective, and there does not seem to be a significant semantic difference between the suffixes in animal terms (at least not from the point of view of a non-native speaker). The only noticeable differences are that only Ir -*ôc* is attached to onomatopoeic bases (e.g. *caóc* 'jackdaw', *fetóc* 'plover'), and that Ir -*án* may be associated with Russell's third category more often (e.g. *dreán* 'wren', lit. 'the thing associated with a druid'; ¹²⁴ *dobrán* 'otter', lit. 'the thing associated with water' However, these differences are from a modern perspective and a non-native speaker, which may not correspond to the perspective of an earlier native speaker. Therefore this question remains unanswered.

Conclusion

In the formation of mammal and bird terms, the velar suffixes Ir -ach, -ech and W -og, -iog are both adjectival suffixes. Although their morphological function is that of an adjectival suffix, the suffixes occur in substantival derivatives. These substantival derivatives are identical to their adjectival counterparts in their morphological structure: they both consist of an adjectival or substantival base and either Ir -ach or W -og. Semantically, there is a slight shift in meaning between the adjectivally and substantively employed suffixes: the

¹²¹ Russell, *Celtic Word-formation*, 108.

¹²² This could be examined in a project with a larger scope, so that more animal terms from other categories and perhaps more suffixes could be examined.

¹²³ E.g. Ir *breacán* 'brambling' and *breacóg* 'dunlin' have the same base element but they refer to separate species, though there is no distinct semantic difference. W *draenog* refers to both 'hedgehog' and 'bittern'. Ir *gablán* 'sand-martin, bank-martin' is attested, but *gablach and *gablóg are not attested as animal terms.

124 eDIL s. v. *dreán*.

¹²⁵ eDIL s. v. dobrán.

¹²⁶ The scope of this thesis is too small to elaborate on the historical motivations behind the application of the suffixes and their (seemingly subtle) differences in semantics, but this would be a compelling topic for further research.

substantival derivatives have an implied subject, which is not apparent in the morphological structure, but occurs due to the grammatical shift from adjective to substantive.

The velar suffix Ir $-\delta c$, $-\delta g$ and nasal suffixes Ir $-\delta n$ and W $-\epsilon n$, $-\epsilon n$ are considered to be diminutive substantive suffixes in origin, but none of the terms encountered in this thesis clearly express a diminutive meaning. The suffixes may have been applied hypocoristically, especially in the context of poetry, but this is also unclear. Although the original reason for their attachment is obscure, the morphological function of the suffixes in the examined mammal and bird is that of a substantival suffix, forming substantives from adjectival and substantival bases.

All derivatives ending in either of the five examined suffixes fit in one or more of the three categories that Russell originally ascribes to Ir -ach and W -og, namely 1) something which has X, 2) which is like or has much of X, or 3) which is associated with X. These categories may overlap in animal terms, but this is often a matter of interpretation. The base words of the derived mammal and bird terms are characteristics associated with the animal and may be connected to the physical appearance or behaviour of the animal, but it may also be connected to a location associated with the animal or the sound it produces.

The examined suffixes are not the only suffixes used in animal terms, so had the scope allowed this, other suffixes such as W -ydd or Ir -ín would also have been examined. This is important to consider for future research.

The small scope also meant that the corpus had to be select corpus of mammals and birds, but in order to create a more complete image of animal terms other groups of animals (such as fish, reptiles, etc.) would have to be included. This may shed more light on some of the problems encountered and give a more complete image of the naming of animals in Irish and Welsh.

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Appendix A: Consulted collection of animal and bird terms

The collection presented in this appendix is not a complete overview of all animal terms that orthographically end in the examined velar and nasal suffixes. The list does not include names that are full borrowings (e.g. Ir donnóg, 'dunnock', 127 speróc 'spearhawk' from MidE speerhauk¹²⁸), as these tend to end in a suffix for phonological reasons rather than morphological. Names that end in a suffix but occur only in compounds (e.g. petrisen goesgoch 'red-legged partridge', from petris 'partridge', are also excluded.

The list of mammal and bird names ending in the Welsh suffix -en, -yn only includes derivatives that have a specific GPC entry for the form ending in -en, -vn. The suffix is nearly always listed with animal terms as a diminutive, thus including every entry that lists this suffix would yield a long list that would ultimately not be representative. 130

The orthography the terms is based on that of the corresponding dictionary entry. For the Irish terms, the spelling is based on that of the eDIL entry where possible. Some terms were not included in eDIL, therefore their spelling is based on that of the headword in Teanglann. All Welsh terms correspond orthographically to the headword of their entry in GPC.

Irish -ach, -ech

Animal term	Base element	Definition
bannach	n. bann 'movement'	fox
clíabach	n. clíab 'framework of the ribs'	unknown, fox?
closach	clos, unknown	deer
crotach	n. cruit 'hump'	curlew
cuircech	n. curca 'crest, tuft'	plover, eagle?
naoscach	n. naosc 'snipe?'	snipe
rúcach	n. borrowing of E rook	rook
sceadach	n. scead 'blaze'	velvet scoter
sionnach, sinnach	si(o)nn, unknown	fox
traonach	unclear	corncrake

¹²⁷ Teanglann s. v. *donnóg*.

¹²⁸ eDIL s. v. speróc, spiróc.

¹²⁹ GPC s. v. patris.

¹³⁰ E.g. hwyaden '(female) duck', which is listed under hwyad, as hwyad is the term that is normally used to refer to a (female) duck.

Welsh -og, -iog

Animal term	Base element	Definition
ballog, ballasgog	n. ballasg 'shell'	hedgehog
barfog	n. barf 'beard'	whitethroat, woodchat
ceiliog	n. PC *kel- 'call'	cock
draenog	n. draen 'thorn, prickle'	bittern, hedgehog
llostog	n. <i>llost</i> 'tail'	fox
llwynog	n. llwyn 'bush, shrub; forest'	fox
madog	adj. mad 'fortunate, lucky'	fox
rhostog	n. rhost 'roasted, scorched'	plover
sgrechog	n. sgrech 'scream, screech'	jay
ysgyfarnog	n. ysgyfarn 'ear(s)'	hare

Irish -óc, -óg

Animal term	Base element	Definition
áilleóc	n. áille 'beauty'	swallow
breacóg	adj. breac 'speckled, dappled'	dunlin
buideóc, buióg	adj. buide 'yellow'	bunting
caóc	n. các 'bird sound'	jackdaw
corrscredóg	adj. corr 'sharp'; n. scret 'cry, screech'	owl
ésog	n. (n)es(s), eas 'stoat'	stoat, weasel
fáilteóc	n. fáilte 'joy; welcome, greeting'	swallow, gull
fainleóc	n. fannal 'swallow'	swallow
fetóc, feadóg	n. fet 'whistling sound'	plover
flannóg	n. flann, unknown	stoat
geabhróg	n. <i>geamhar</i> 'springing corn or grass; corn in the blade'	tern
glasóc, glaiseóc	adj. or n. glas 'green(ness); stream'	wagtail
gráinneóg	n. gráinne 'grain'	hedgehog
íaltóc, íaltóg	n. <i>íatlu</i> 'bat' ¹³¹	bat
luchóc	n. luch 'mouse'	mouse
ríabóc, ríabhóg	n. ríab(h) 'stripe'	pipit? skylark?

 $^{^{131}}$ *Íaltóg* is based on *íaltu*, but metathesis has caused variation between the consonant clusters found in both terms.

eDIL s. v. íaltóc.

scréchóc	n. scréch 'scream'	owl
spideóg	unclear, possibly OIr n. <i>pít</i> 'small quantity of food'	robin
(f)uiseóg	adj. uis 'gentle'	lark

Irish -án

Animal term	Base element	Definition
bíanán	n. bían 'skin, hide'	mouse
breacán	adj. breac 'speckled, dappled'	brambling
bunnán, bonnán	n. bonn 'tree-foot'	bittern
clamhán	n. clamh 'mange, leper'	buzzard
clochrán	n. cloch 'stone'	wheatear
corrucán	n. corr 'heron, crane'	heron, crane
cremthannán	n. crem 'wild garlic' + unknown	fox
crosán	n. cros 'cross' 132	razorbill
dobrán	n. dobur 'water'	otter
dreán	n. <i>druí</i> 'druid'	wren
dreol(l)án	n. <i>druí</i> 'druid'	wren
fearán	n. fear 'man'	turtledove
gablán	n. gabal 'fork'	sand-martin, bank-martin
lornán	unknown	hare
luathrán	unclear, possibly OIr n. <i>lóthar</i> 'through, vat; boat; fleece'	sanderling
naoscán	n. naosc 'snipe?'	snipe
odrán	adj. or n. odor 'greyish brown'	otter
rufachán	adj. rufach 'ruffled, frilled'	ruff
sacán	n. sac 'sack?'	fieldfare
togán	n. togmall 'small animal; squirrel? marten?'	squirrel? pine marten?
ulcachán, ulcabhán, ulchobchán, ulchubchán	n. <i>ulcha</i> 'beard' + unknown	owl

Welsh -en, -yn

Animal term	Base element	Definition

¹³² This is a borrowing from L crux.

bronrhuddyn	n. bron 'breast' + adj. rhudd 'red'	robin, chaffinch
cocen	n. E cock	hare
cochyn	adj. coch 'red'	hare
copog	n. copa, cop 'tuft'	hoopoe
cornchwiglen	n. corn 'horn' + unknown	lapwing
crogyn	n. crog 'gallows; cross'	thrush
cyffylog	unknown	woodcock
llwynogyn	n. llwynog 'fox' 133	fox
llygoden	n. llygod 'mice'	mouse
madyn	adj. <i>mad</i> 'fortunate, lucky' or n. based on Ir <i>madra</i> (<i>rua</i>)	fox
sgrachen	n. (y)sgrech 'scream'	corncrake
siglen, siglyn	n. sigl 'swing'	wagtail, kingfisher
ysgrechen	n. ysgrech 'scream'	tern

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 $^{^{133}}$ *Llwynog* itself can be divided into the base element *llwyn* and W suffix -og, but is also an established substantival term. The suffix was likely attached to *llwynog* as a whole, therefore *llwynog* is listed as a substantival base.