A Novel Approach to Categorising Extrinsic Lexical Units in a Corpus of Welsh-Language Tweets

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1. What is an Extrinsic Lexical Unit?
2. Extrinsic Lexical Units in Welsh
3. Pragmatic Markers
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What is an Extrinsic Lexical Unit?

(and why am I calling them that?)

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Terminology

Poplack (2018):
"donor language" → "native language" or "recipient language"

Grosjean (2008):
"base language"
or → "guest language"
"host language"

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NATIVE LANGUAGE

FOREIGN LANGUAGE

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DONOR LANGUAGE

RECIPIENT LANGUAGE

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HOST LANGUAGE

GUEST LANGUAGE

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Intrinsic

Latin *intrinsecus* "internally, from within".

Extrinsic

Latin *intrinsecus* "externally, from outside".

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whole items formed from language-intrinsic morphemes

whole items formed language-extrinsically

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extrinsic-language
morpheme(s)
used to form
longer words

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Whole ELUs

aquarium
eau-de-vie
whisky
feng shui
axolotl

WATER
WATERY
WATERING
WATERED
WATERS

EL morphemes

aqualung
waterable
aquaphobia
vodkas
whiskyish

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extrinsic root + intrinsic root	aqua lung
intrinsic root + extrinsic derivational	water able
extrinsic root + extrinsic root	aqua phobia
extrinsic root + intrinsic derivational	whisky ish
extrinsic root + intrinsic inflectional	vodka s

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extrinsic root + intrinsic root	aqua lung
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Intrinsic Lexical Unit

* developed directly from intrinsic lexical resources

or

* developed from extrinsic unit(s), using intrinsic derivational/compounding processes, to create a unit that dœs not exist in the extrinsic language itself

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Extrinsic Lexical Unit

* has a (near-)identical counterpart in another language with which there is a history of contact (allowing for differences of spelling and inflection)
* has a meaning similar to, or derived from, the meaning of that counterpart

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Extrinsic Lexical Units in Welsh

(borrowings, loanwords, or something else?)

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History of Language Contact

Brythonic: Other Celtic languages; Vulgar Latin

Old Welsh: Other Celtic languages; Old English

Middle Welsh: Middle English; Flemish; Irish; French

Modern Welsh: Modern English; BSL; a growing range of other languages

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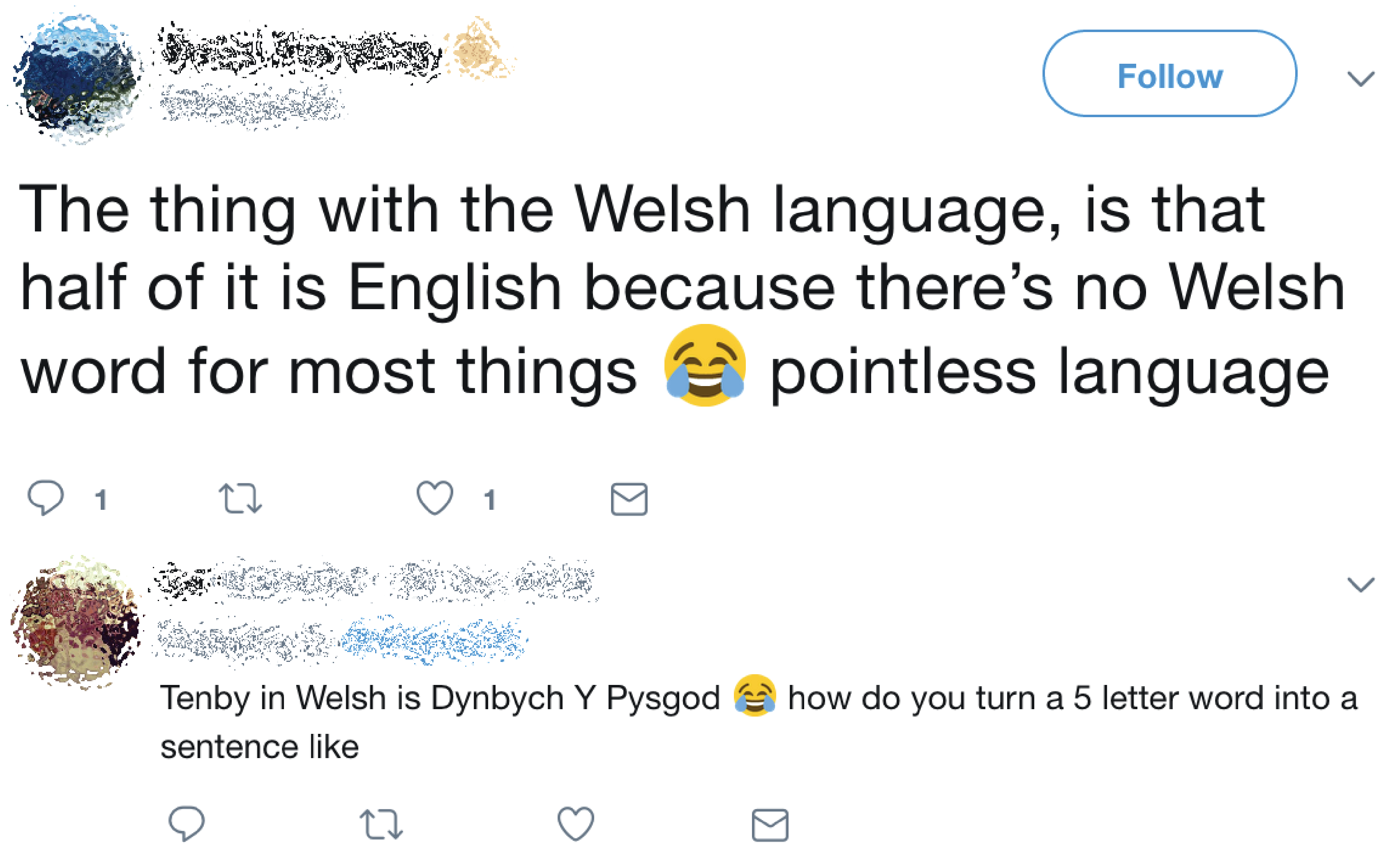
Attitudes towards English Words

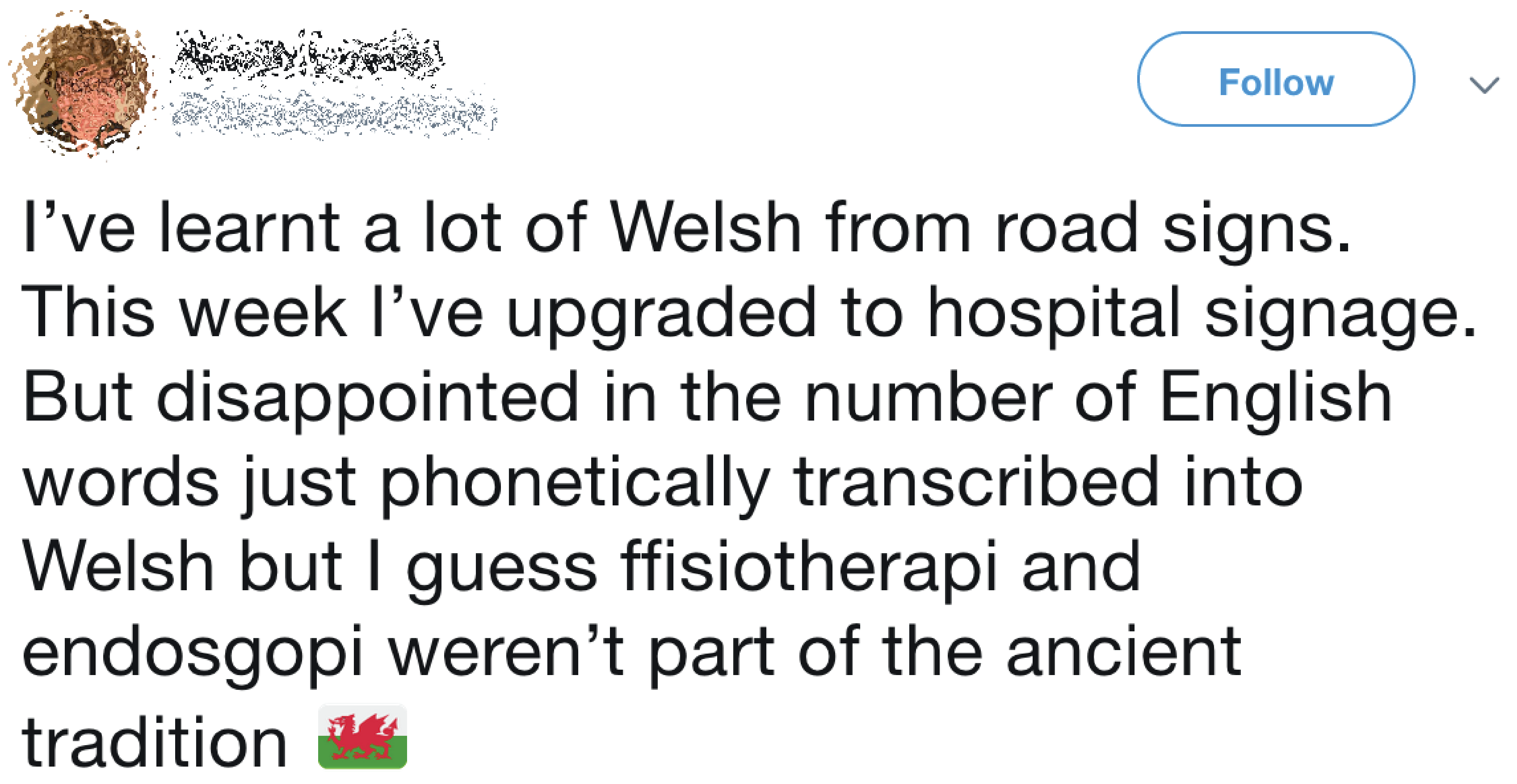


[redacted]

The thing with the Welsh language, is that half of it is English because there's no Welsh word for most things 😂 pointless language

[redacted]

Tenby in Welsh is Dynbych Y Pysgod 😂 how do you turn a 5 letter word into a sentence like



[redacted]

I've learnt a lot of Welsh from road signs. This week I've upgraded to hospital signage. But disappointed in the number of English words just phonetically transcribed into Welsh but I guess ffisiotherapi and endosgopi weren't part of the ancient tradition 🏴󠁧󠁢󠁷󠁬󠁳󠁿

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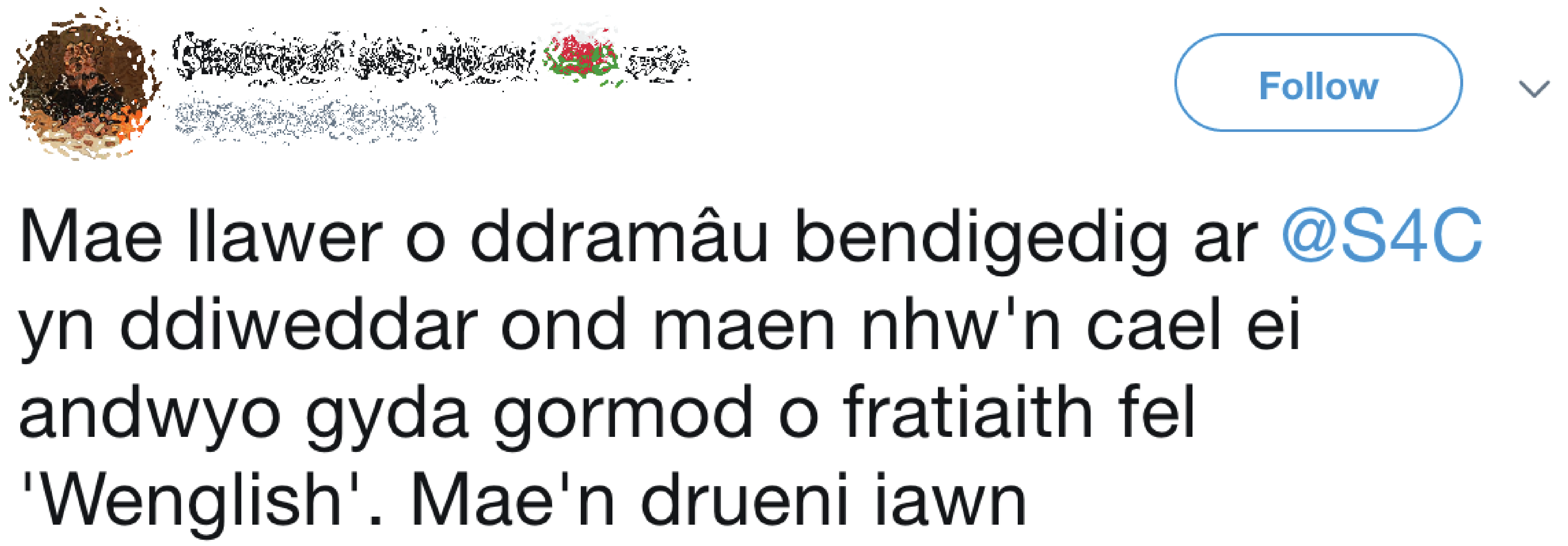
Attitudes towards English Words



[redacted]

Follow

Mae llawer o ddramâu bendigedig ar @S4C yn ddiweddar ond maen nhw'n cael ei andwyo gyda gormod o fratiaith fel 'Wenglish'. Mae'n drueni iawn

"There are lots of fantastic dramas on S4C recently, but they're all ruined with too much slang like 'Wenglish'. It's a real shame."

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Borrowings from English(?)

saim ("grease")
from M.E. "seim" or Old French "saim"

babi ("baby")
from M.E. "baby" - or the other way around?
(Durkin, 2014)

tacsi ("taxi")
from Mod.E. "taxi" - or is it just an internationalism?

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Why Does It matter?

The vocabulary we choose to accept as "Welsh" can influence

* outcomes for children in Welsh-medium education

* interactional competence in Welsh learners

* confidence/willingness to speak Welsh

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Borrowings or Codeswitches?

Poplack and others:

* B and CS are separate categories
* Bs are morphosyntactically and phonologically integrated
* CSs retain extrinsic-langage morphosyntax and phonology (phonological criteria have been modified over time by Poplack)

Myers-Scotton and others:

* B and CS form a continuum
* Bs are frequently-used items
* Both Bs and CSs will be morphosyntactically integrated to some extent
* phonological integration may depend on the social status on the extrinsic language

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Borrowings or Codeswitches?

Deuchar, Webb-Davies and Donnelly (2018):

"Listedness" - is the extrinsic lexical unit in a "community dictionary"?

"Listed" verbs: rate of soft mutation similar to that of intrinsic verbs.

"Unlisted" verbs: lower mutation, less frequent.

∴ Borrowings are items with high or low frequency and high integration

Code-switches are items with low frequency and low integration

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Pragmatic Markers

(and why they're a pain in the behind-head)

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What are Pragmatic Markers?

Characteristics of PMs:

* units of one or more words which carry metalinguistic information

* any propositional meaning relates to text/context construction

* occur at clausal/phonological/discourse boundaries

* can be removed from a sentence without grammatical violation

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What are Pragmatic Markers?

Cytuno! Dim ond y creme de la creme sy'n deall wedyn! Bach o ffrangeg fyna hefyd #deallYCwbwl haha

"Agreed! Only the creme de la creme understand then! A bit of French there too! #understandItAll haha"

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The Problem of Extrinsic PMs

Stammers (2010)
Tests for morphological integration of English verbs into Welsh:

* Do they show soft mutation in the appropriate contexts?

wnes	*i*	*ddjio*	*ar*	*gyfer*	*priodas*	*ffrindiau*
do-PST-1S	I	DJ-VBZ	for		wedding	friend-PL

"I DJed for [my] friends' wedding"

The Problem of Extrinsic PMs

Stammers (2010)
Tests for morphological integration of English verbs into Welsh:

* Do they show soft mutation in the appropriate contexts?
* Do they appear only in periphrastic constructions, or also with synthetic morphology?

nid	fi	dwîtiodd	hwn
not	me	tweet-PST	this-MASC-SG

"I didn't tweet this"

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The Problem of Extrinsic PMs

The formation of adverbs in Welsh:

* Usually accomplished with an adverbializer particle, "yn", + adjective
* This "yn" triggers soft mutation on the relevant consonants

mae	pob	llyfr	ar	gael	yn	ddigidol
be-3SG-PRS	every	book	for	getting	PTCL-ADVZ	digital

"every book is available digitally"

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The Problem of Extrinsic PMs

BUT English PMs in adverbial form are often borrowed whole:

absoliwtly bril
"absolutely bril[liant]"

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The Problem of Extrinsic PMs

Tests for phonological integration of English words into Welsh:

* Almost all Welsh speakers are Welsh-English bilinguals
* Their Welsh-English tends to be pronounced with Welsh phonology
* Extrinsic English-origin items in Welsh largely show no difference from the same items as used in the same speakers' English

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A Potential Alternative?

- Welsh and English orthographic systems are quite different:

cuddle	/ˈkɪðlɛ/ (CY)	/ˈkʌdl/ (EN)
dial	/ˈdiːæl/ (CY)	/ˈdaɪəl/ (EN)
/maɪs/	mice (EN)	maes (CY)

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A Potential Alternative?

* Welsh and English orthographic systems are quite different
* Long-established loanwords are usually orthographically adapted:

sialens	dawns	coffi
"challenge"	"dance"	"coffee"
(1547)	C14	C16
	(from M.E. "daunce")	

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A Potential Alternative?

* Welsh and English orthographic systems are quite different
* Long-established loanwords are usually orthographically adapted
* Orthographic adaptation should affect PMs as much as other words

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Methodology and Data Analysis

(and maybe a few conclusions)

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The Corpus

* Roughly 1m words

* Tweets written from 2007-2018 with Welsh as the main language

* All data anonymized before analysis

* Chosen to reflect spontaneous, spoken Welsh as closely as possible

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The Initial Analysis - DERWen

a.k.a.

Dichell Esboniadol Ramadegol y Wenglish (Wenglish Grammatical-Explanatory Device)

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The Initial Analysis - DERWen

* Part-of-speech tagger for code-mixed Welsh-English bilingual data, including non-standard orthography and dialectal forms

* Uses phonological translation of orthographic forms to find English words in Welsh orthography

* Based on initial work by the CorCenCC team

* Coming to GitHub soon...

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A Closer Look at a Selection of PMs

* 60 initial candidate PMs (e.g. *awesome*, *hooray*, *no way*)

* 33 of these were sufficiently prevalent to make it into the final analysis

* Coded for orthography (Welsh, English, Mixed)

* Coded for presence in two major Welsh dictionaries

* Coded for frequency in a reference corpus of English tweets

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A Closer Look at a Selection of PMs

Welsh = orthography entirely adapted to Welsh:

eniwê siriysli ôsym

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A Closer Look at a Selection of PMs

Welsh = orthography entirely adapted to Welsh

English = orthography entirely unadapted to Welsh:

literally   definately   awsum

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A Closer Look at a Selection of PMs

Welsh = orthography entirely adapted to Welsh

English = orthography entirely unadapted to Welsh

Mixed = features of both orthographies:

tho   oh diar   finali

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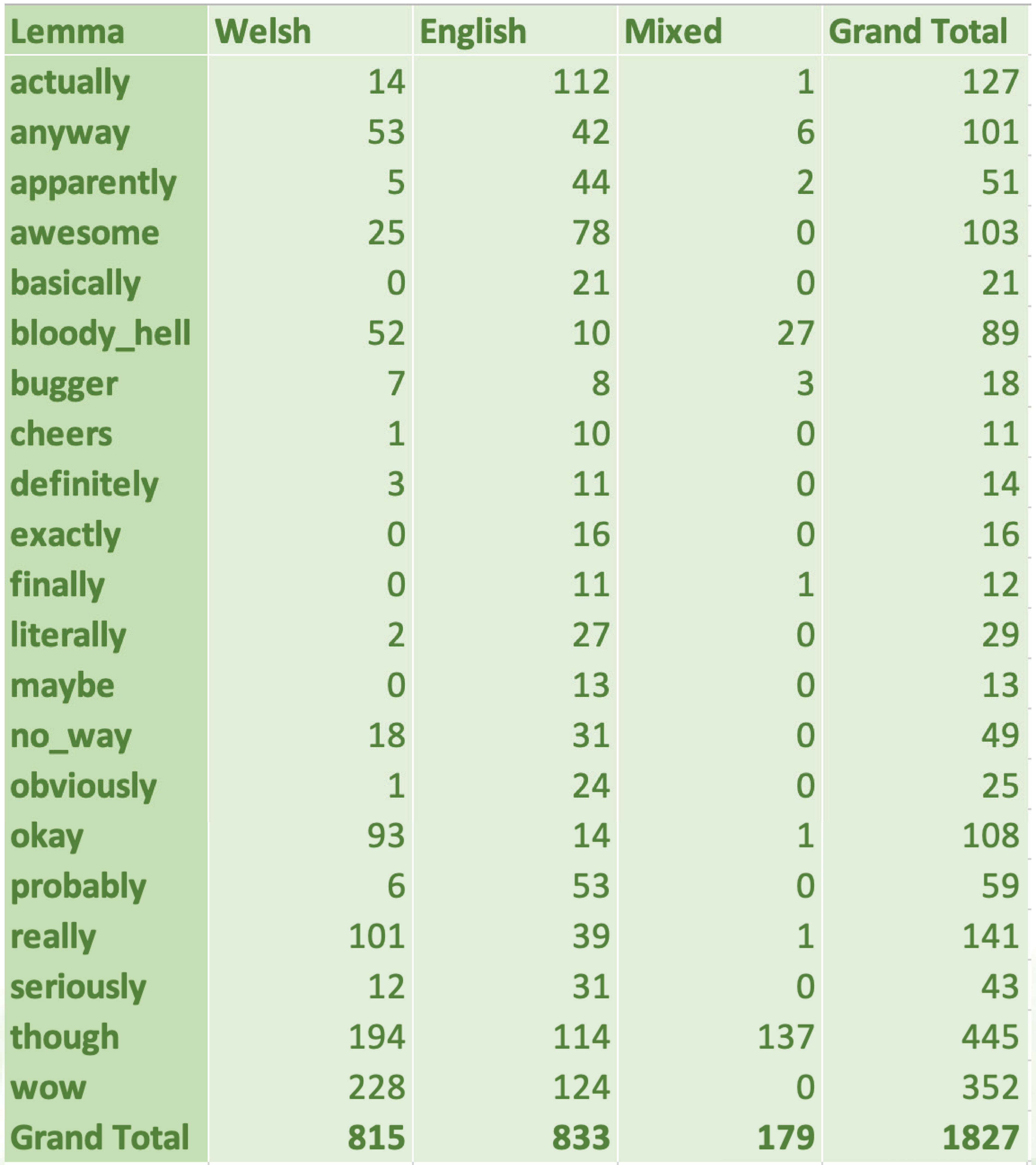
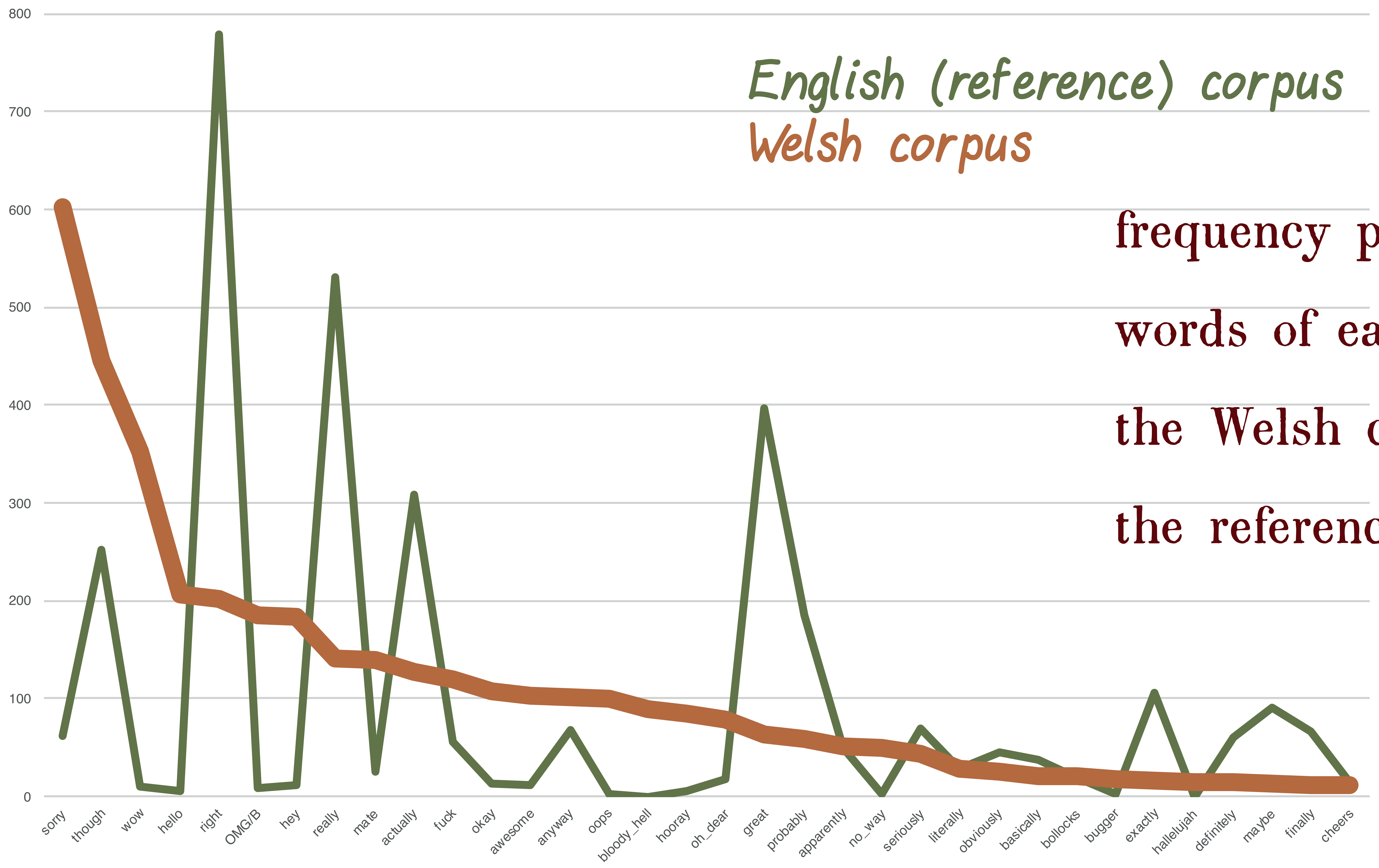


Lemma	Welsh	English	Mixed	Grand Total
actually	14	112	1	127
anyway	53	42	6	101
apparently	5	44	2	51
awesome	25	78	0	103
basically	0	21	0	21
bloody_hell	52	10	27	89
bugger	7	8	3	18
cheers	1	10	0	11
definitely	3	11	0	14
exactly	0	16	0	16
finally	0	11	1	12
literally	2	27	0	29
maybe	0	13	0	13
no_way	18	31	0	49
obviously	1	24	0	25
okay	93	14	1	108
probably	6	53	0	59
really	101	39	1	141
seriously	12	31	0	43
though	194	114	137	445
wow	228	124	0	352
Grand Total	**815**	**833**	**179**	**1827**



frequency per million words of each PM in the Welsh corpus and the reference corpus

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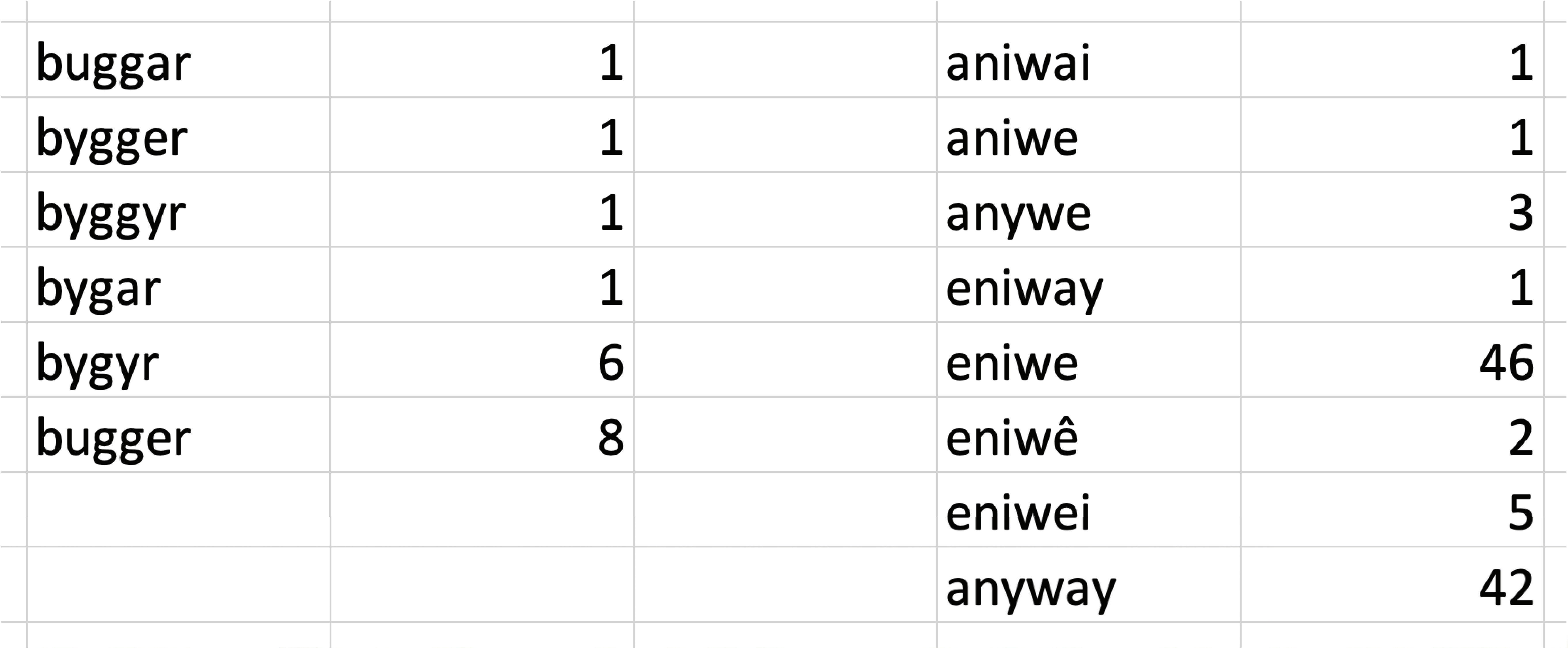

buggar	1		aniwai	1
bygger	1		aniwe	1
byggyr	1		anywe	3
bygar	1		eniway	1
bygyr	6		eniwe	46
bugger	8		eniwê	2
			eniwei	5
			anyway	42

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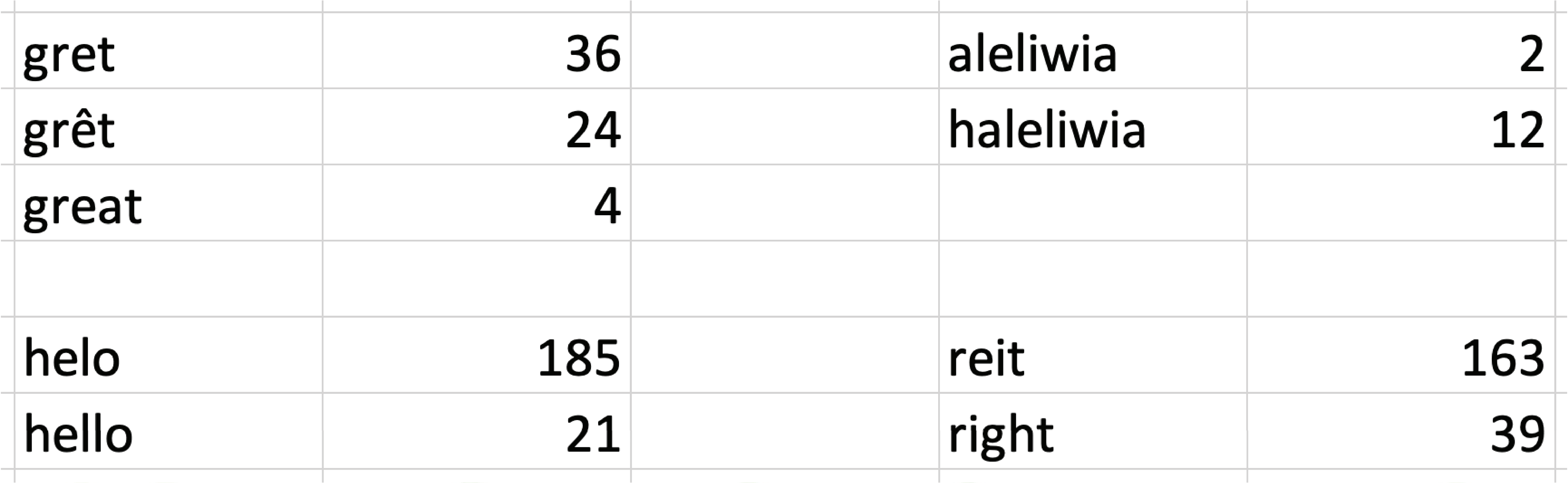
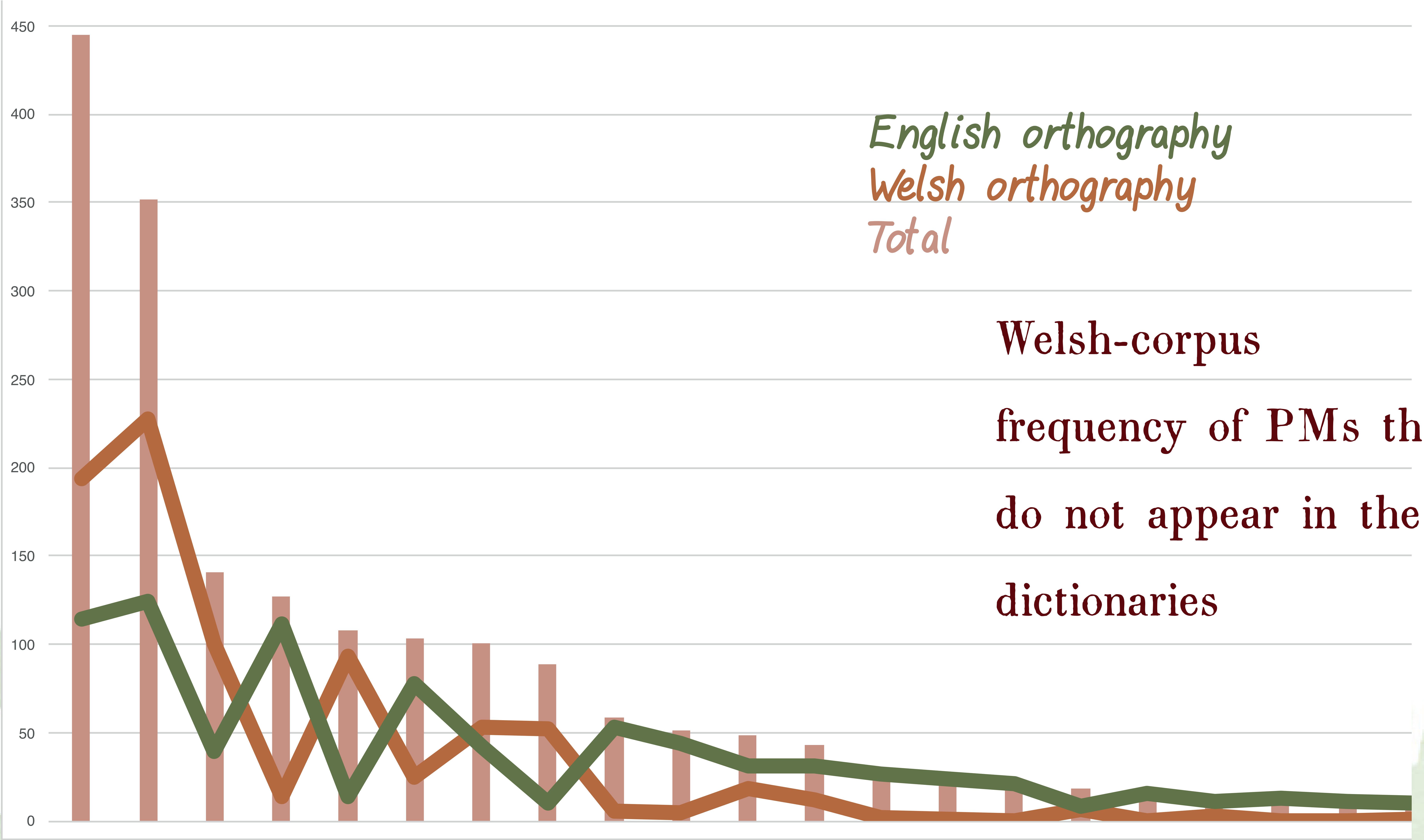


gret	36		aleliwia	2
grêt	24		haleliwia	12
great	4			
helo	185		reit	163
hello	21		right	39



Welsh-corpus frequency of PMs that do not appear in the dictionaries

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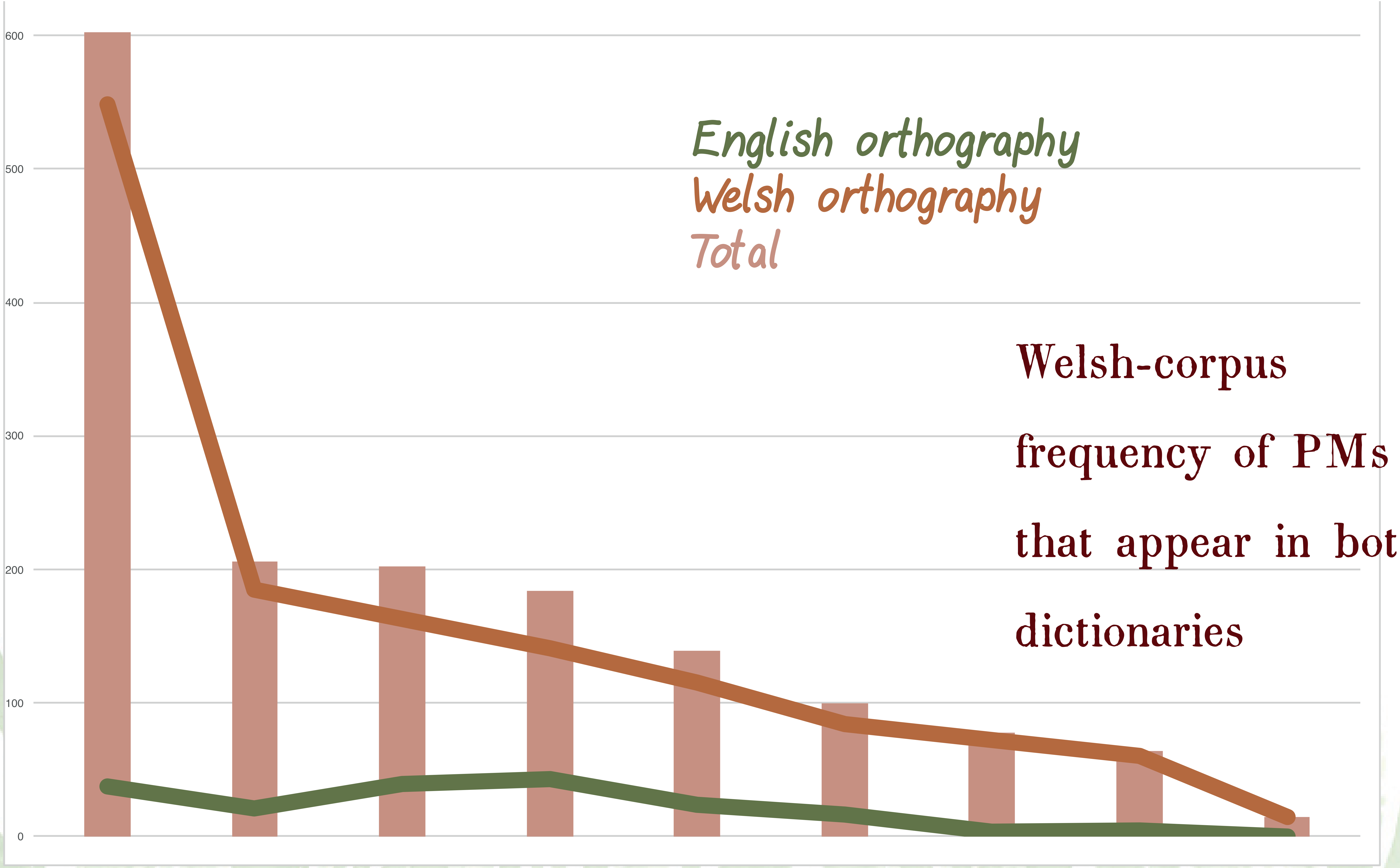

Welsh-corpus frequency of PMs that appear in both dictionaries

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Summation

(and what's next)

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Diolch! Tige tank!

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