

Vowel Length in Welsh Monosyllables

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Status Quo

- The number of learners normally outnumbers that of native speakers, in particular in South East Wales
- Adequate language descriptions requested
- The only standard descriptions of Welsh are GPC, a historical one, and *Gramadeg y Gymraeg* (P.W. Thomas 1996), both excluding phonology etc
- Learners of Welsh are faced with inadequate guidelines for its pronunciation in related reference works
- Phonetic transcription is largely absent
- Dictionary producers and other linguists of the 20th century justify this by:
 - (a) Claiming that Welsh has a phonemic orthography (e.g. Bruce Griffith)
 - (b) Reducing dialectal variation to „exceptions“ or „easily memorable regular variation“
- As a result, any transcription attempts are inconsistent
- Pronunciation rules given and linguistic properties are contradictory, e.g. GyrA, Gweiadur etc (cf. sonorants, -ff, -th, -s, clusters), Awbrey on -ll
- Or... rules given are difficult to follow (GyrA, G. Jones 1984: 53ff.) due to their incompatible and varied nature

Transcription methods used

- Explanations in front matter of dictionaries (GyrA)
- Imitated pronunciation

examples	Brake (1994)	Gruffudd (1998)
allan 'out, outside'	al <u>h</u> -an	allan
clywed 'to hear'	kluw-ed	kluhoed
chwech 'six'	<u>ch</u> wech <u>ch</u>	chooech
gweithio 'to work'	gweyth-yoh	gwe-eethyo
gweld 'to see'	gweld	gooeld
gwlyb 'wet'	g(w)leeb	goo'leeb
llaeth 'milk'	<u>l</u> hyeth	llaeth
llygad 'eye'	<u>l</u> huh-gad	lluhgad
myfyriwr 'student'	muh-vurr-wirr ¹	muhvuhryoor
pabell 'tent'	pah-bel <u>h</u>	pabell
rhyw 'some'	rhiw	rhioo
ymwelydd 'visitor'	um-wel- <u>id</u> d	uhmoelidd

⇒ (variety only within Welsh English! - what about the remaining dozens of varieties?)

- Fynes-Clinton (outdated; Northern dialect, 1913)
- IPA - Heinz (reduced lexicon; Southern dialect, 1994)

d, for 'hyd' in *d at*, i.e. hyd at [*hy:d*].
d, for 'nid', e.g. *d un i him* [*nid*].
d, for 'dy', e.g. *dal d aval* [*dy*].
da, adj., comp. *gwel*, eq. *kwelad*, *kwelad*, sup. *gora*, *da*, D., 'good':

against the wind'. (3) 'the part of the top of a hay-stack between the edge and the first rope running lengthwise' (J.J.).

darad, s.m., childish word for 'sweets'.

dad'ad'ynjio, v., 'to disjoint'.

dadl, s.f., *dadl*, D., 'dispute': *tori r dadl*, 'to settle the dispute'.

dadla, *dadly*, v., *dadleu*, D., 'to dispute': *ly:ð ehai on dadla m bocyð am i hennada*, 'some people dispute hotly about their religious denominations'; *dadly dras i blaid*, 'to argue in favour of one's party'; *dadla heru i ffilid* (*dadly m erbyn i ffilid*), 'to dispute with one another, to quarrel'; *dadly am bris p:ð*, 'to haggle about the price of a thing'.

dad'lyrth, v., *dadlwytho*, D., 'to unload'.

ängstlich, bange, unruhig **nofel:** besorgt/66,12
pryfoclyd /prɔv'oklid/ (ans) (cyf mor bryfoclyd, cymh mwy-, eith mwyaf-) provozierend, provokativ **nofel:** herausfordernd/58,23
prynhawn /prin'haun/ (eg) (ll -au) Nachmittag **nofel:** Nachmittag/48,13
prynu /'prɔni/ (be) (1 un Pres Myn prynaf, 3 un Gorff Myn prynodd) (an-, ein-, zurück)kaufen; abzahlen, tilgen **nofel:** ~ t: kaufen für/137,13; ~ gan: kaufen von
pysur /'pɔsɪr/ (ans) (cyf mor brysur, cymh mwy-, eith mwyaf-) beschäftigt, fleißig, belebt, schnell, vor-eilig, hitzig; besetzt (Telefon) **nofel:** beschäftigt/6,17; schnell/89,2
pysuro /'pɔsɪ:ro/ (be) (1 un Pres Myn pysuraf, 3 un Gorff Myn pysurodd) (sich be)eilen, über-, hasten **nofel:** eilen/131,33
pulpud /'pɪlpɪd/ (eg) (ll -au) Kanzel, Gehhilfe, Laufrahmen **nofel:** Gehhilfe/142,24
pum /pɪm/ ---> pump
pump /'pɪmp/ (rhif) flüht **nofel:** flüht/5,2
pur /'pɪr/ (ans) (cyf pured, cymh purach, eith puraf) rein, sauber, makellos, unschuldig, bloß, pur **nofel:** rein, makellos/108,10
pwddin /'pɔdin/ (eg) (ll -au) Pudding, Süßspeise **nofel:** Süßspeise/136,18
pwdr /'pɔdr/ (ans) (cyf pydred, cymh pydrach, eith pydraf, ll pydron) korrupt, verottet
pwdu /'pɔdi/ (be) (1 un Pres Myn pwdaf, 3 un Gorff Myn pwddodd) schmolten, eingeschnappt sein, schlechte Laune haben, grollen Flunsch ziehen **nofel:** ~ eto: grollen/56,30
pwerus /'pu'ɛrɪs/ (ans) (cyf mor bwerus, cymh mwy-, eith mwyaf-) mächtig, stark, gewaltig, kräftig; wirksam, auch übertr **nofel:** mächtig/10,5

pŵl /'pu:l/ (ans) (cyf pwled, cymh pwlach, eith pwlaf, ben pŵl) matt, trübe, stumpf
pwll /'pɔ:l/ (eg) (ll pyllau) Angriff, Attacke; Anfall, Ausbruch **nofel:** Anfall/85,20
pwll /'pu:l/ (eg) (ll pyllau) Grube, Loch, Teich, Tümpel, Pfütze, Lache **nofel:** Lache/100,14
pump /'pɔmp/ (eg) (ll pypmpiau) Pumpe **nofel:** Pumpe/100,2
pwnc /'pɔŋk/ (eg) (ll pynciau) Gegenstand, Thema, Stoff **nofel:** Thema/103,6
pwmpasol /'pɔmp'asɔl/ (ans) (cyf mor bwrpasol, cymh mwy-, eith mwyaf-) passend, geeignet, angemessen, richtig **nofel:** geeignet, passend/92,16
pwyl /'pɔi:l/ (rhag-gof) wer **nofel:** wer/59,9
pwyll /'pɔi:l/ (eg) Verstand **nofel:** ~ pia hi: behutsam/79,4; Verstand/90,12
pwyntio /'pɔi:ntiɔ/ (be) (1 un Pres Myn pwyntiaf, 3 un Gorff Myn pwyntiodd) (mit dem Finger) zeigen, deuten **nofel:** ~ at: zeigen auf/21,25
pwys /'pɔi:s/ (eg) (ll -i, -au) Gewicht, Bedeutung, Last, Pfund **nofel:** Bedeutung/115,6
pwysig /'pɔi:stɪg/ (ans) (cyf pwysiced, cymh pwysicach, eith pwysicaf) wichtig **nofel:** wichtig/18,30
pwyslais /'pɔi:slɪs/ (eg) (ll -leisiau) Emphase, Betonung
pwysol /'pɔi:so:l/ (be) (1 un Pres Myn pwysaf, 3 un Gorff Myn pwysodd) ruhen; wiegen, lasten; neigen, beugen, lehnen, stützen **nofel:** ~ ar: lasten auf/114,2
pydredd /'pɔdrɛd/ (eg) (ll -au) Fäulnis, Verwesung, Fäule; Verderbenheit, Verfall **nofel:** Verwesung/132,13
pylu /'pɔli/ (be) (1 un Pres Myn pylaf, 3 un Gorff Myn pylodd) abstumpfen, schwächen, sich trüben, verdunkeln, -blassen **nofel:** abstumpfen/111,33

pynctiar /'pɔŋktɪər/ (eg) Reifendefekt, Platter **nofel:** Platter/80,11
pys /'pi:s/ (ell) (unigol pysen) Erbsen **nofel:** pisen: eine Erbse/11,15; Erbsen/45,19

pythefnos /'pɔθ'ɛvnɔs/ (egb) (ll -au) 14 Tage **nofel:** zwei Wochen, 14 Tage/26,19

---- R ----

'radeg /'rɑ:deg/ ---> adeg: yr adeg
rasie /'rɑ:jo/ (be) (1 un Pres Myn rasiaf, 3 un Gorff Myn rasiodd) rasen **nofel:** rasen/26,15
reit /'rɔi:l/ (adj) richtig, recht, angemessen; sehr, ganz, völlig **nofel:** recht/84,10
'rioed /'ri:ɔid/ ---> erioed
roedd /'rɔiθ/ ---> bod: yr oedd, 3 un Amh Gorff Myn
'ron /'rɔn/ ---> bod: yr oeddwn, 1 un Amh Myn
rowlio /'rɔuljo/ (be) (1 un Pres Myn rowliaf, 3 un Gorff Myn rowliodd) rollen, wälzen **nofel:** rollen/78,8

rownd /'rɔund/ (ans) rund, herum **nofel:** herum/33,1
'run /'rɪn/ ---> un: yr un
rwan /'rɔ:ən/ (adj) jetzt, nun, gegenwärtig **nofel:** jetzt/105,9
rw bath /'rɔbɑθ/ ---> rhywbeth
rw tsh /'rɔtʃ/ (eg) Müll, Quark (übertr) **nofel:** Müll/44,26
rydw /'rɔdu/ ---> bod: 1 un Pres Myn
rydyn /'rɔdin/ ---> bod: yr rydy, 1 ll Pres Myn

---- Rh ----

rhad /'rɑ:d/ (ans) (cyf rhated, cymh rhatach, eith rhataf) billig
rhacadr /'rɑ:ɪədr/ (eb) (ll -au, rhēydr) Wasserfall **nofel:** Wasserfall/58,22
rhaff /'rɑ:f/ (eb) (ll -au) Seil, Tau, Strick, Strang, Schnur, Kordel **nofel:** Kette/133,28
rhag /'rɑ:g/ (arwd) (rhed --> atodiad) von, gegen, vor **nofel:** ~ ofn: daß (nicht), damit/12,13; ob, falls/97,28
rhagenw /'rɑ:gɛnu/ (eg) (ll -au) Pronomen
Rhagfyr /'rɑ:gɪvɪr/ (eg) Dezember
rhagolwg /'rɑ:gɔlɔg/ (eg) (ll -olygon) Aussicht, Blick

rhagerol /'rɑ:gɔ:rol/ (ans) glänzend, großartig, prächtig, exzellent **nofel:** exzellent/90,30
rhagweld /'rɑ:gwɛld/ (be) (1 un Pres Myn rhagwela, 3 un Gorff Myn rhagwelodd) vorhersehen
rhai /'rɑ:i/ (ans) (irgend)ein, -e; einige, manche-, -i, -s **nofel:** einige/7,17
rhai /'rɑ:i/ (rhag) einige, paar, etwas **nofel:** diejenigen/15,29; welche/15,31; die/16,12; der/19,29; paar/20,24; einige/21,25
rhaid /'rɑ:ɪd/ (eg) (ll rheidiau) Notwendigkeit **nofel:** bod rhaid: müssen/142,8

Some Conventional wisdom

- Long-short vowel distinction in the North
- Long-medium-short in the South
- Long vowels where not expected;
minimal pairs
- Short vowels before clusters

		Gruffudd	/ɸi:n/ IPA
llun 'picture'	[lleen]		/ɸi:n/
llyn 'lake'	[llin]		/ɸɪn/
llinell 'line'	[lleenell]		/ɸi:nɛɸ/
ger 'near'	[ger]		/gɛr/
gêr 'gear'	[ger]		/ge:r/
man 'place'	[man]		/man/
mân 'small'	[man]		/mɑ:n/
math 'kind'	[math]		/mɑ:ə/
mor 'so'	[mor]		/mɔr/
môr 'sea'	[mor]		/mɔ:r/
set 'set'	[set]		/sɛɸ/
sêt 'seat'	[seht]		/se:t/
tan 'until'	[tan]		/tan/
talû 'to pay'	[talee]		/'tɑ·li/
tân 'fire'	[tan]		/'tɑ:n/
ton 'wave'	[ton]		/tɔn/
tôn 'tune'	[ton]		/to:n/

bydd '3P Sg will/is'	/bi:ð/		
byr 'short'	/bɪr/		
bys 'finger'	/bɪs/		
pŵl 'dull'	/pu:l/		
pwl 'attack, fit'	/pɔl/		
pwll 'pool'	/pu ɸ/		

Research approach

- Creation of database of monosyllables
- Search for minimal pairs of native words (ca 80%; problem here: semantic research still in its infancy)
 - complementary reading of Lewis, Fynes-Clinton, Heinz (+ informants)
- Assessed according to various guidelines and rules provided in secondary sources and by informants
- Result: inconsistent explanations
- Conclusion:
 - (a) Welsh phonology is now either developing an overdiversification (cf. Welsh morphology of *bod*); which may lead to the breakdown of the system
 - (b) Or traditional views on the system of pronunciation need to be questioned
- Consequence: focus on native system, excluding synsemantica
- Effects of borrowings on the native system (unstable)

Stops -b, -d, -g ... -p, -t, -c

=> Long vowels before -b, -d, -g

- Common agreement here
- Possible exceptions (GyrA) imposed by English loans seem unstable:
 - dad, ffad, pad, sad, led, cid, nod, rod, hwd
 - bib, cob, lob, slob, ffab, cab, dab, lab, nib, tab, wab
 - bag, fflag, gag, sbrag, slag, tag, wag, ffeg, meg, peg, wig, còg, ffog, grog, jog, hog, log, nog, slog, wog, jwg, mwg, plwg??

=> they have to be unstable by necessity, because

- (a) These loans have mostly phonetically long vowels in the source language
- (b) Some of these loans remain rather casual

=> Sources claim short vowels before -p, -t, -c

- But there are hardly any native examples
- English loans tend to adapt to native phonology over time:
 - *côp* 'cope' -> *cob*, *crŵp* 'croup' -> *crwb*, *crâp* 'crape' -> *crab*, *cŵc* -> *cwg*
 - Alternative spellings show progressive Cymricisation
 - Disturbances by English: *sêt* 'seat' - *set* 'set'

Fricatives -f, -dd, -ff, -th, -ch ... s

- -f, -dd considered to have long preceding vowels
- Unambiguously substantiated by our corpus data

- But, long vowels also before -ff, -th, -ch
- Problematic from phonetic and historical points of view
 - (a) Longer duration of -ff, -th differentiates them from -f, -dd (Ball 1984: 19f.)
 - This is an issue for a phonological account based on v-c complementation (Bannert 1973: 72-83)
 - (b) -ff, -th, -ch develop from geminates into pre-aspirates into fricatives (cf. Cormac Anderson)
 - -ff, -th would be expected to take short preceding vowels (cf. sonorants -rr, -nn)

-s

- Contradictory statements regarding length of vowels before -s
 - Short according to Schrijver (1995: 62f.)
 - Long according to GyrA, with exceptions:
 - pes, bws, clòs, pàs, sws, g(i)as, ffrès, mas, was, bos, gès, ffws
 - The accent grave is an orthographic reflection of the dubious status of vowels before -s (rare 20th century invention)
 - or...??
- Certainly a quality distinction: *gwas* 'servant' - *blas* 'taste'
 - ? *gwas* = *cas* ≠? *câs* 'nasty' in NW; cf. NW *câs*/SW *cês* <- Eng case
- For potentials here, cf. G. Jones (1984: 53f.)
- Jones suggests 11 vowels seeing quality as contrastive
- Disturbances by introducing minimal pairs:
 - *clôs/clos* - *clòs* <- Eng 'close'
(close=near; close=yard; close=dialect clothes; clause)
 - *pas* 'cough' - *pàs* 'pass'

Sonorants *l, (ll), n, r... m, ng*

- Apparent length distinction before -n and -r
- Minimal pairs:
 - *gwên* 'smile' - *gwen* 'white'; *dan* 'under' - *dîn* 'arse'
- Short vowels in words with Irish cognates ending in a geminate -nn, -rr:
 - *pen* - *ceann* 'head' , *ban* - *benn* '(geological) summit'
 - *ber* 'short' - *berr* 'cut'
- Long vowels in words with Irish cognates ending in a singleton
 - *bôn* 'base' - *bun* 'foundation'; *tîn* - *tóin* 'arse'
 - *gôr* - *fear* 'man', *tir* - *tír* 'land'

L - ll

- Most sources describe the vowel before -ll as short except Awbery (1984: 66)
- -ll prefers preceding short vowels
- Words ending in -ll often have Irish cognates ending in a geminate:
coll - *coll* 'hazel', *dall* - OIr *dall* 'blind', *llall* - OIr *alaill* '(the) other',
gall 'foreigner' - *Gall* 'foreigner'
- Vowels before -l are generally long
- However, words with historic -lg, e.g. have a short vowel:
- *bol* - *bolg* 'belly', *col* - *colg* 'awn', *hel* - *selg* 'chase/hunt'
- Potential source of internal development of quantity distinction
- However, basically, -l and -ll act complementary and form quite a stable system

M - ng

- Few examples of native vocabulary before -m
 - *llam* 'leap' - *cam* 'step'
- Expected to be short because:
 - The reduced native vocabulary tends to have Irish cognates ending in geminates (cf. -nn, -rr):
 - *cwm* - *comm* 'valley', *llwm/llom* - OIr *lomm* 'bare'
 - historically the singleton -m -> -μ -> -β -> -v <f>
 - This clearly has a long vowel (cf. -f)
- (English) loans with long vowels cause an imbalance to the system:
 - *bêm, crêm*
- Few examples of native vocabulary with final -ng
 - Take preceding short vowels
 - There are some loans, also with short vowels, e.g.:
 - *bing* 'bin/alley', *bwng* 'bung', *rheng* 'rank'

Conclusion

- Apart from historic -ll, -nn, -rr (surfacing normally as -ll, -n, -r), vowels tend to be phonetically long in native monosyllables
- Short vowels are generally found before codas which are rare in the native system, i.e. -p, -t, -c, -m, -ng
 - Mind that the latter two do not always function as sonorants (cf. Irish)
- Largely complementary system for -l - -ll, despite historical -lg
- Length distinction before -r, -n reflects old geminate - singleton opposition
- -s without clear pattern, minimal pairs arguable though
- English loans may disturb the system in various, but inconsistent, i.e. unstable, ways:
 - Uncommon minimal pairs - *sêt* 'seat' - *set* 'set', *clôs/clos* - *clòs* 'close'
 - Uncommon vowel length - *bêm*
 - Eng. long vowels get sometimes borrowed into Welsh as short in contexts where long vowels are expected
 - Eng *pass* -> W *pàs*; Eng *log* /lɔ:g/ -> /lɔg/?? => quality
 - Varying ways of borrowing - NW – SW: *câs* - *cês*, *jwg* - *jyg*, *ba:g* - *bag*
 - Casual nature (cf. amount of outdated Eng words in GPC)
- Good potential of Welsh system to adjust loan words over time - *cŵc* 'cook' -> *cwg*
- Alternative phonological analyses possible:
 - (a) As to whether the quantity distinction is encoded in the consonant or in the vowel
 - (b) Vowel quality is possibly phonemic; particularly apparent before -s

Desiderata

- Further clarification necessary by:
 - Including cluster analysis: -s for instance resembles -sg:
 - *llusg* 'sledge' - *gwisg* 'dress'
 - *gwasg* 'press' - *mysg* 'mixture'
 - *lles* 'weak' - *llosg/llysg* 'burn(s)'
 - Effect of surrounding consonants should be examined; i.e.
 - Coda analysis may not be sufficient to explain vowel length in Welsh monosyllables
 - cf. *llall* 'other' - *gwall* 'mistake'
 - or *log* 'log' or mutation of *llog* - *llog* 'interest rate'
 - Or length vs quality: *tâl* 'pay' - *tal* 'tall'; *gwas* 'servant' - *blas* 'taste'
 - Systematic study of English loans, which may add to a potential or initiate a new quality distinction
 - More acoustic studies also needed

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Informants

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Diolch i'r bobl i gyd sy'n poeni am eu hiaith!