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# *The Integration of English-Origin Verbs in Welsh*

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# Acknowledgments



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Siarad corpus: see

<http://talkbank.org/data/BilingBank/Bangor/www.talkbank>

or <http://siarad.org.uk/>

Recordings & transcription done by project team (Elen Robert, Peredur Davies, Jonathan Stammers, Marika Fusser, Sian Lloyd , Margaret Deuchar )

# Summary

- 1) Researchers working on code-switching generally agree there is a distinction between borrowing and code-switching
- 2) Some researchers think there is a third ‘in-between’ category of nonce-borrowings
- 3) This belief is sometimes expressed as the ‘nonce borrowing hypothesis’
- 4) Our data on English-origin verbs do not support the nonce borrowing hypothesis.

# Borrowings vs code switches



Researchers working on code-switching generally agree there is a distinction between borrowing and code-switching

Criteria used:

- Listedness (applied in transcription as dictionary criterion)
- Morphological and syntactic integration (Sankoff et al)
- Frequency of use (Sankoff and Poplack 1984)

# Transcribing English borrowings and code-switches in Welsh



Language markers: @1 = Welsh, @2 = English, @0  
= both.

@1: in Welsh but not English dictionary, e.g.

**merch@1** ('woman')

@2: in English but not Welsh dictionary, e.g.

**birthday@2**

@0: in both dictionaries, e.g. **shop@0** ('shop',  
'siop')

@2 candidates for consideration as switches, @0 as  
borrowings

# Sankoff et al (1990)

Other-language items are

- Borrowings: items from a donor language which are (a) morphologically and syntactically integrated into a host language, and (b) which are also “recurrent and widespread” (Sankoff et al 1990) . E.g. *restaurant* in English.
- Code switches: if morphologically and syntactically NOT integrated

# What are nonce borrowings?

Borrowings: items from a donor language which are  
(a) morphologically and syntactically integrated into a host language, and

(b) which are also “recurrent and widespread”  
(Sankoff et al 1990) . E.g. *restaurant* in English.

**Nonce borrowings:** other-language items which are

(a) morphologically and syntactically integrated into a host language **BUT NOT**

(b) recurrent and widespread

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e8

change?

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# Sankoff et al (1990) at a glance

	<b>Morphological and syntactic integration</b>	<b>Recurrent and widespread</b>
Borrowings	+	+
Switches	-	-
Nonce borrowings	+	-

# The Nonce Borrowing Hypothesis

There is “no difference between nonce borrowings and established loans.....with respect to their morphological and syntactic integration into host language contexts” (Sankoff *et al* 1990:94).

**Reformulated:**

**Grammatical integration of other-language items is categorical and is independent of the frequency of the items.**

# Three groups of verbs compared in this study:



- **Native Welsh:** e.g. *cofio* (remember), *defnyddio* (use), *cwyno* (complain), *pwysu* (weigh), *twtio* (tidy)
- **Listed English:** *trio*, *clirio*, *dreifio*, *clariffeio*, *pinsio*, *bargeinio*, *trotio*, *manejio*, *tsiecio*, *protestio*, *cidnapio*
- **Unlisted English:** *text-io*, *download-io*, *brief-io*, *quote-io*, *bulk-io*, *crush-o*, *trample-o*, *base-io*, *connect-io*, *babysit-io*, *decorate-io*, *concentrate-io*, *mollycoddle-io*, *power-walk-io*

# English-origin verbs inserted in Welsh

Integrated or not?

**maen**

be.3PL.PRES

**nhw 'n**

PRON.3PL PRT

**exfoliate-io**

exfoliate.NONFIN

**chdi**

PRON.2S

**gynta**

first

**ac yn**

and PRT

**spwnjo**

sponge.NONFIN

**chi**

you

**drosodd gynta**

over first

*“they exfoliate you first, and sponge you over first”*

[Fusser30:27]

# English verb insertions (2)



**sut** **mae** **o** **'n** **cope-io** **efo** **hynna i\_gyd?**

how be.3SG.PRES PRON.2SM PRT cope.NONFIN with that all?

*“how is he coping with all that?”* [Fusser29:635]



**pan** **dach** **chi** **'n** **defnyddio** **wide-angle**

when be.3PL.PRES PRON.2PL PRT use.NONFIN wide-angle

**lenses** **dach** **chi** **'n** **emphasize-io** **'r** **foreground.**

lenses be.PRES.3PL PRON.2PL PROG emphasize.NONFIN DET foreground

*“when you use wide-angle lenses, you emphasize the foreground.”*

[Fusser17: 792]



# English verb insertions (3)



**bysai**      **hi**      **'m**      **'di**      **gwisgo**      **helmet**  
be.3S.CONDIT      PRON.3SF NEG      PRT.PAST      wear.NONFIN      helmet

**'sai**      **pen**      **hi**      **'di**      **cael**      **ei**      **crush-o**  
be.3S.CONDIT head      PRON.3SF      PRT.PAST      get.NONFIN      POSS.3S      crush.NONFIN

**to bits**



to bits

*“if she hadn’t worn a helmet, her head would have been crushed to bits.”*

[Robert3: 898]

**a**      **mae**      **'di**      **cael**      **ei**      **’gonnect-io**      **i**      **'r**  
and      be.3SG.PRES      PRT.PAST      get.NONFIN      POSS.3S      connect.NONFIN      to      DET

**printer**      **yr** **computer,**      **de**  
printer      DET computer      TAG



*“and it’s been connected to the computer printer, right.”*

[Roberts2: 627]

# English verb insertions (3)

<b>anyway,</b>	<b>ges</b>	<b>i</b>	<b>'yn</b>
anyway	have.1S.PAST	PRON.1S	POSS.1S

<b>gazump-io</b>	<b>ar hwnna</b> 
gazump.NONFIN	on that

*“anyway, I got gazumped on that one”* [Fusser29:700]

# How to measure integration?

## 1) Derivational morphology?

Do English verbs appear with derivational –o or –io suffix?

Yes: almost without exception

So are all English-origin verbs borrowings?

# How to measure integration?

## 2) Soft mutation in expected environments:

- Following preposition *i* 'to'
- Following an auxiliary based on *gwneud* 'to do'
- Following 3<sup>rd</sup> person singular masculine *ei* 'his'
- Following various other words: *heb, am, cyn, gan, ar, neu; dy* possessive
- Following finite verb + subject

# Soft mutation on verbs: Environments (1)

- After preposition *i* ‘to’

 **well mae mynd i †gostio pres**  
well be.3S.IMP go.NONFIN to cost.NONFIN money

*“It was going to cost money”* [Fusser6:524]

# Soft mutation on verbs: Environments (2) <sup>e7</sup>

- With *gwneud* auxiliary + Subject



e.g.

**wnest**

do.2S.IMP

**ti**

PRON.2S

**°drio?**

try.NONFIN

*“did you try?”* [Stammers5:708]

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**e7**

look at Borsley et al to find better description of environments.

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# Soft mutation on verbs: Environments (2) <sup>e9</sup>

- Following 3<sup>rd</sup> person singular masculine *ei*

 **fyswn i licio ei fenthyg o**  
be.1S.CONDIT PRON.2S like.NONFIN POSS.3SM borrow.NONFIN PRON.2SM

“I’d like to borrow it” [Fusser9: 375]

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**e9**

look at Borsley et al to find better description of environments.

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# Soft Mutation: Variation

E.g. Welsh verb “cerdded” (to walk):



**a maen nhw 'n mynd i ogerdded**

and be.PRES.3PL PRON.3PL PRT go.NONFIN to walk.NONFIN

**am tua dwy, dair milltir**

for around two three miles

*“and they’re going to walk for 2 or 3 miles”* [Roberts2: 32]

**But frequently mutation doesn’t happen where expected (especially in informal spoken Welsh):**



**a does dim\_byd i poeni amdano**

and be.3SG.PRES.NEG nothing to worry.NONFIN about

*“and there’s nothing to worry about”* [Fusser14: 40]

# Three groups of verbs compared in this study:



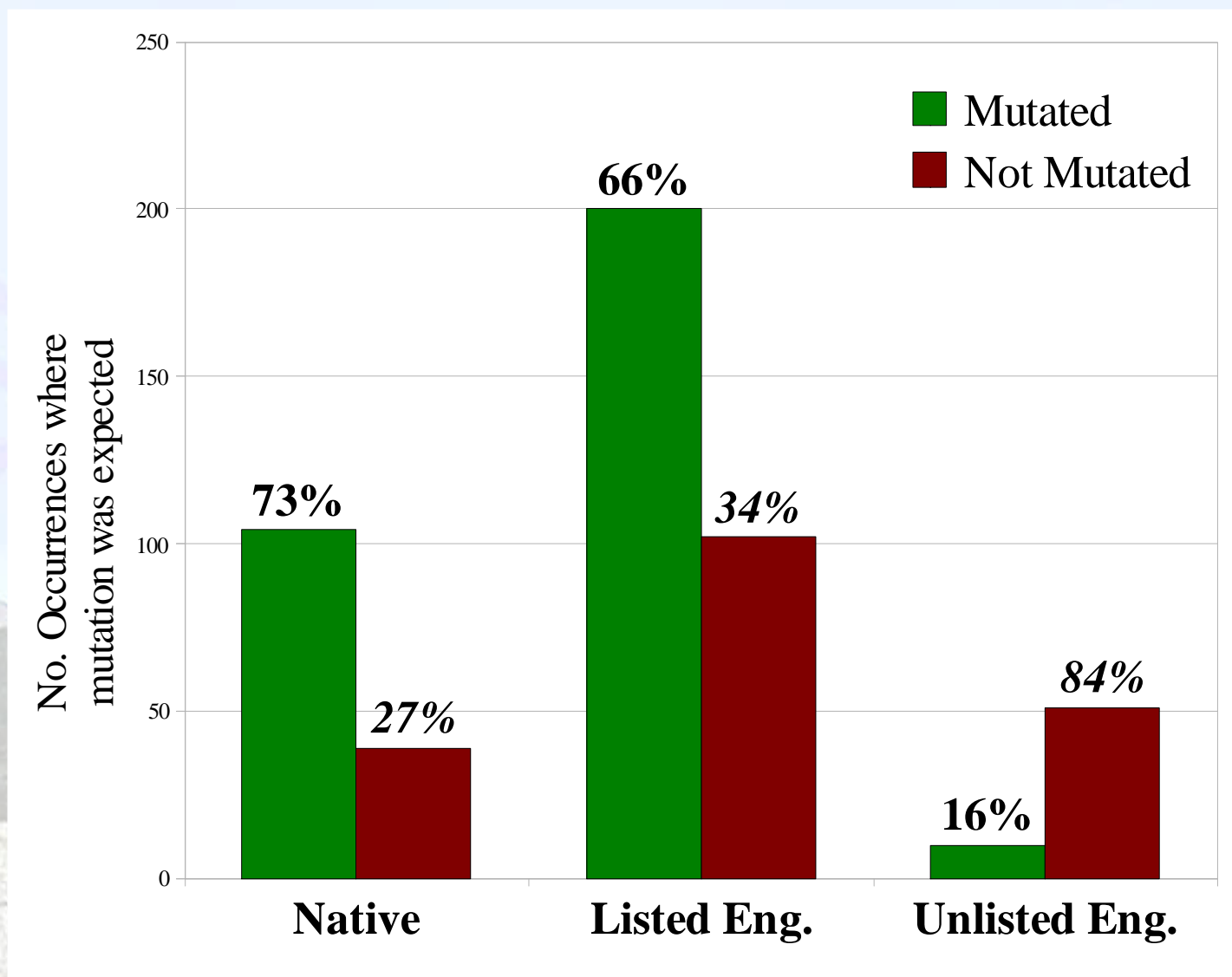
- **Native Welsh:** e.g. *cofio* (remember), *defnyddio* (use), *cwyno* (complain), *pwysu* (weigh), *twtio* (tidy)
- **Listed English:** *trio*, *clirio*, *dreifio*, *clariffeio*, *pinsio*, *bargeinio*, *trotio*, *manejio*, *tsiecio*, *protestio*, *cidnapio*
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# Method

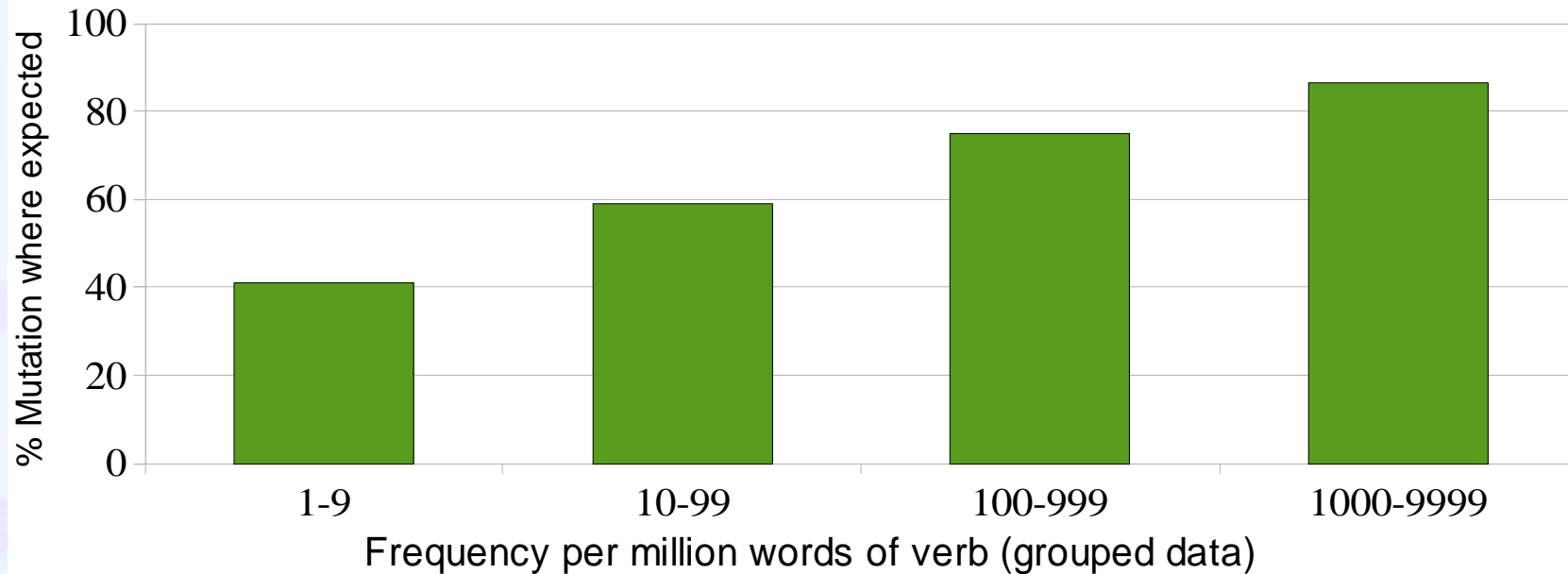
Search for all non-finite tokens of verbs in Siarad corpus that

- (i) end in  $-(i)o$  suffix
  - (ii) begin with a consonant susceptible to soft mutation
  - (iii) occur in environment where soft mutation expected
- Coded each verb as mutated or not
  - 506 tokens altogether (143 native Welsh; 302 listed English; 61 unlisted English)

# Results:

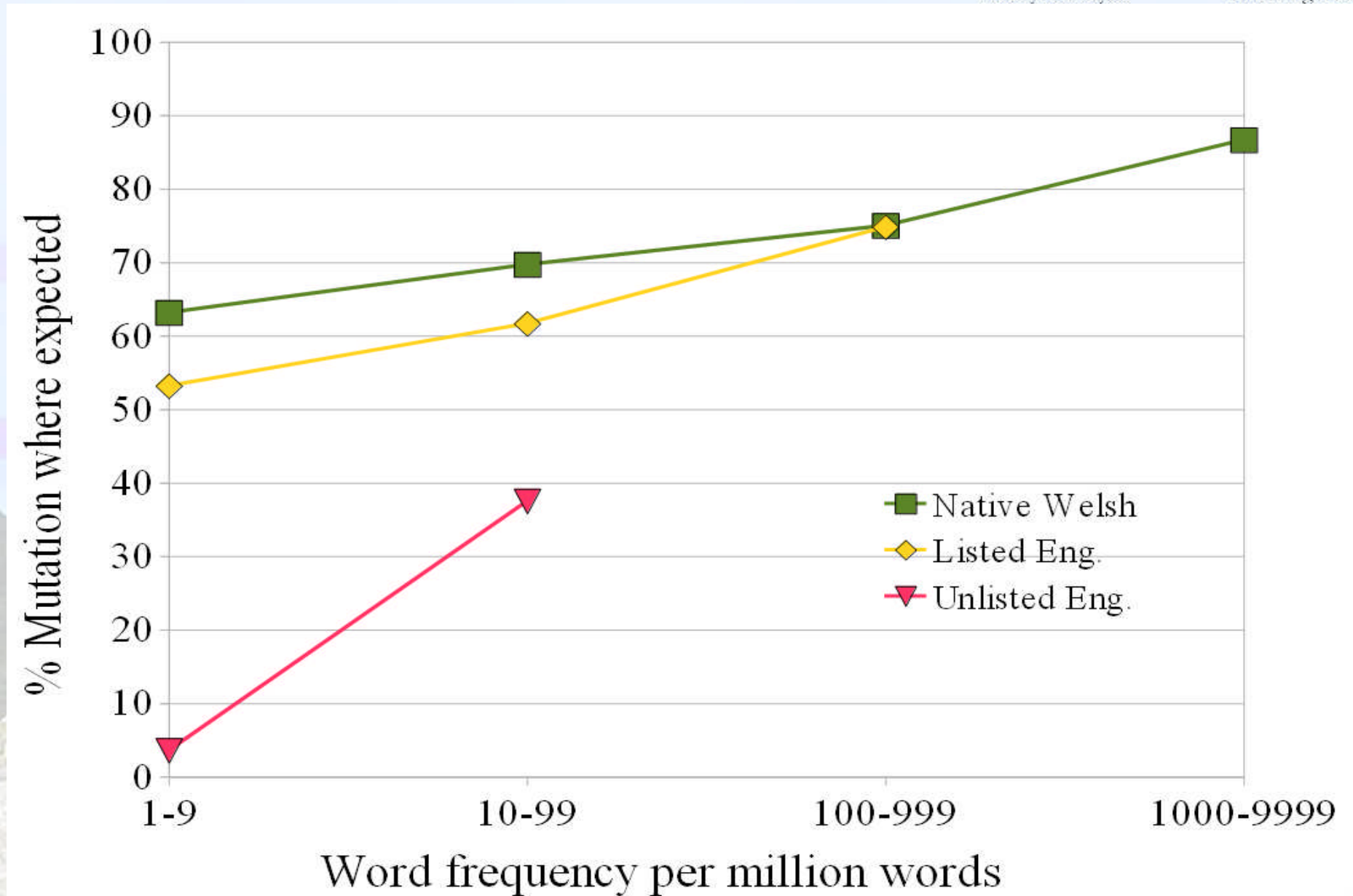


# The role of frequency



Absolute Freq.	Freq./million words	%Mut. Overall	AVG Freq	log(AVG freq)
1-4	1-9	40.86%	2.140	0.33037
5-45	10-99	58.90%	19.890	1.29854
46-450	100-999	74.86%	267.648	2.42756
451-4500	1000-9999	86.67%	649	2.8122
<b>Correlation coefficient with overall % mutation:</b>			<b>0.90175</b>	<b>0.99409</b>

# Results: Frequency vs Verb Categories



# Conclusions

- Integration measured by soft mutation appears not to be categorical but a matter of degree
- Statistical support for distinction between borrowings and switches
- No apparent support for category of nonce borrowings
- Nonce borrowing hypothesis **NOT** supported

# Conclusions & Implications



- English-origin verbs in Welsh would almost certainly be considered a simple case of borrowings according to Poplack (using morphological criterion:  $-(i)o$  suffix)
- Soft mutation evidence goes against Poplack's "Nonce borrowing hypothesis"
- Effects of word frequency should be taken into account in analysis based on morpho-syntactic integration (although this may be difficult)
- "Nonce" items (based on EITHER dictionary criterion OR frequency) pattern significantly differently from "established" items



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