

# AN ANALYSIS OF THE VITALITY OF THE WELSH LANGUAGE

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## Abstract

This paper discusses the vitality of the Welsh language. English is one major causation for the reduction of Welsh speakers in Wales over the past two centuries. Welsh phonetic mutation, which is a cross-linguistic irregularity, has become undesirable, and is thus becoming a linguistic feature of the past. Metatypy between English and Welsh has begun to influence the morphosyntactic and phonemic features of Welsh. In an effort to revitalize Welsh, the Welsh government implemented a new language policy and plan (LPP) titled "Cymraeg 2050." A proposed differential equation model could be used to forecast the success of Cymraeg 2050 by assuming different social-status values for English and Welsh. Finally, the nine factors developed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the four factors of the Language Endangerment Index (LEI) are calculated to determine that Welsh is classified somewhere between vulnerable and endangered.

Keywords: Welsh, Cymraeg, Cymraeg 2050, metatypy, Welsh mutation, Welsh vitality UNESCO, LEI, language and culture.

## An Analysis of the Vitality of the Welsh Language

Welsh – Cymraeg will be used interchangeably in this paper because Cymraeg is the word for Welsh in the Welsh language – belongs to the Brythonic language branch, along with Breton and Cornish. This language branch belongs to the Indo-European language family, and there are around 570,000 speakers throughout Wales, the United Kingdom, and Y Wladfa, the Welsh settlement in the Chubut Province of Patagonia, Argentina (Eberhard, Simons, and Fennig, 2019). Wales is a bilingual country in which English and Welsh have been declared the official languages. The Welsh language has verb-subject-object (VSO) word-order and undergoes various phonemic mutations. The vitality of Welsh is also jeopardized due to the official language status of English, which has a higher prestige. The battle of prestige of two languages that have come into language contact results in language dominance, which often leads to linguistic metatypy. Because Welsh is jeopardized for these reasons, the UNESCO and LEI assessments are two methods by which Welsh language vitality can be calculated to analyze the affect that English has on Welsh. After the analysis is complete, the reality that Welsh is capable of progressing to a level of safe vitality will be recognized, and the significance that this realization will have with respect to cultural vitality must not be neglected. Therefore, the results of cross-linguistic irregularities, metatypy of Welsh

and English, and the becoming of English as the global language are threatening the vitality of Welsh.

## Literature Review

### Phonemic Mutation and Syntax Analyses

An analysis of the linguistics of the Welsh language substantiates the claim that cross-linguistic irregularities are affecting the vitality. A brief insight into two irregularities, which can be credited with playing a role in the diminishing vitality of Welsh, shows that consonant mutations and verb topicalization are linguistic features that deviate from English in such a way that society appears to be rendered demotivated with respect to Welsh language acquisition.

Cross-linguistically within the Celtic languages, consonant mutation is regular, but with respect to English, consonant mutation is an irregularity. The main forms of consonant mutations can be found in Welsh phonetics, i.e. soft, nasal, and aspirate mutations (BBC Cymru Wales, 2002):

Welsh syntax, specifically verb-topicalization, is also irregular with respect to English, as English has subject-topicalization. The significant difference between VSO and SVO is that about 9.5% of languages are VSO, whereas about 40.3% of languages are (Hammarström, 2016).

How the present tense in Welsh is different from English is that it is formed via periphrastic construction 'be' + yn + verbal noun (Willis, 1988). Essentially, the Welsh present tense and the English present progressive aspect share the same construction. The use of periphrasis is not inherently a cross-linguistic irregularity between Welsh and English, but it is irregular due to tense and aspect.

### Linguistic Metatypy

In a society in which English holds official status alongside another language, English threatens the linguistic uniqueness of the other language, which is called linguistic metatypy. Metatypy is the language contact phenomena associated with two languages that begin to converge (Heine, 2010). In the case where two languages co-exist and are in contact in society, the more dominant language begins to force the inferior language to conform to the linguistic properties of the dominant language, such as in the case of English and Welsh. As a lingua franca, English has the highest prestige amongst all of the world's languages.

For this reason, many languages are threatened and even lost due to English-language dominance (Woodbury, 2012). The younger generations of minority languages often lose the minority language due to prestige and English-acquisition necessity.

### Linguistic Change

English acquisition sometimes begins in a covert manner. The Labovian concept of “change from below” theory describes the phenomenon when language change is unbeknownst to the speakers of a society. Due to the high level of prestige of English, the effects of the change are often remarkable, such as metatypy or the replacement of other phonological or morphosyntactic features. If the minority language does not have contestable strength or significant governmental support, English will most likely influence or replace it. An explanation of the process or the timeline of such language dominance can be found in Paulasto (2006). Therefore, projecting the rate at which language death will occur returns rather volatile results, as the process is both relative to each minority language and also to contending societal opinions and beliefs.

Though English continues to adversely affect Welsh, the Welsh government continues to support the language. In July of 2017, the Welsh government published a new LPP titled *Cymraeg 2050*. The endeavor of this new initiative is to increase the total number of speakers of Welsh in Wales to one-million by the year 2050. The Welsh government released in the *Cymraeg 2050: A million Welsh speakers – Work programme 2017-21* the following statement: “Government support for the language has never been stronger... and the Welsh Language Standards... and a Welsh language Commissioner to oversee the implementation of those rights” (Welsh Government, 2017). The government has released various strategic plans directed to specific target audiences to both effectively communicate the goals of the initiative as well as to attempt to persuade society to adopt the initiative.

Since the government is attempting to implement this intentional LPP, the contrasting theory to “change from below,” which is rightfully named “change from above,” must be understood. The Labovian concept of “change from above” is the phenomenon when a society undergoes an overt, conscious, and intentional language change. The Welsh government is intentionally attempting to increase Welsh language acquisition.

### Differential Equation Model of Language Death

It must mean that for society to desire to adopt the initiative, the social status of Welsh must increase and the social status of English must decrease. The differential equation found in Figure 1 models how speakers of an inferior language begin to transfer to speakers of the dominant language in a bilingual society (Abrams and Strogatz, 2003).

Figure 1

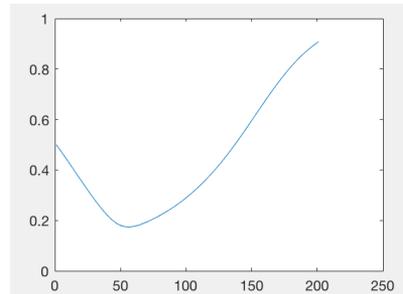
$$dx/dt = yP_{yx}(x,s) - xP_{xy}(x,s)$$

This equation can be used to forecast the rate and amount of expected growth of Welsh speakers over an interval of time, which would be from the present to 2050. Nemeth and Packer (2019) designed the equation found in Figure 2 and the model found in Figure 3 to allow for the manipulation of the  $s$  variable and to show the increase in Welsh acquisition over time, respectively. The  $s$  variable represents the social status of Welsh.

Figure 2

$$(1-x)^{\alpha-1}/x^{\alpha-1} = s/(1-s)$$

Figure 3



This model is designed to reflect the projected language growth of Welsh over time, where the critical point reflects the 19% of Welsh speakers in present day. The upward slope reflects the prediction that the percentage of Welsh speakers will increase if the social status of Welsh were to increase.

### Human Factor

The human factor, which is the primary factor, is the most volatile and powerful element of the *Cymraeg 2050* equation. Both the government and society must willingly choose to accept and support *Cymraeg 2050*, though there is no guarantee that both or either parties will maintain that willingness. Therefore, randomness threatens the success rate of the endeavor and also the precision and accuracy of mathematical and statistical projections of the vitality as well as of any projections in which there exists a primary human-factor wherein the primary human factor is a necessary condition for success and successful calculation. Nonetheless, Welsh appears to remain in a state of growth even with aforementioned threats and constraints.

## Discussion

Now that some necessary context has been discussed and understood, two language vitality endangerment models—namely the UNESCO Nine Factors and the Language Endangerment Index (LEI) as presented in Lee and Van Way (2016)—allow for the calculation, analysis, and understanding of the vitality of Welsh.

### Assessment 1: UNESCO Nine Factors

UNESCO created nine factors for assessing language vitality to help to identify the viability, function in society, and maintenance and revitalization metrics of each language (UNESCO Ad Hoc Expert Group on Endangered Languages, 2017). Many culminating factors must be considered when assigning a grade to each factor. The first six of the nine factors are used to determine language viability. The remaining three factors are used to assess the governmental and institutional as well as societal attitudes and policies of the language and the maintenance of the language.

**Intergenerational Language Transmission.** Welsh is assessed as a grade 2 for endangerment, which means that it is severely endangered. A language is classified grade 2 if the grandparent and older generations are mainly the speakers of the language. The parent generation may understand the language due to the grandparent generation being speakers, but typically the language will not be transmitted to the child generation, which is a major causation of language death.

**Absolute Number of Speakers.** Due to the difficulty and that it is a seemingly impossible feat, defining a definite number of speakers is essentially reduced to a volatile estimate. Currently, the best practice for obtaining this count is a census, from which people could abstain or falsely report. The Welsh government (2015) stated in section 8.8, “For some people, the ability to say a few words in the language is enough for them to say that they speak it” (Welsh Government, 2015). A better evaluation that is related to this factor is found in the third factor, which suggests that this second factor should classify Welsh as being severely endangered.

**Proportion of speakers within the total population.**

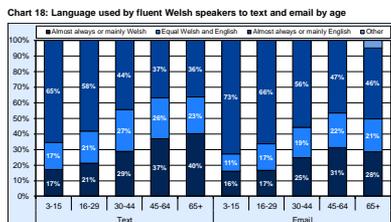
The Welsh government (2015) reported in section 8.3, “The 2011 Census showed that 19.0 per cent of people 3 years old and over living in Wales said they could speak Welsh...,” and since only about 19% of the population of Wales speaks Welsh, the third factor classifies Welsh as being severely endangered.

**Shifts in domains of language use.** Welsh is evaluated at a grade 2.5, which suggests that the domains of use is split between limited/formal domains and dwindling domains. This evaluation and grade may appear unjust at the surface, especially after reviewing section 14 of the Welsh government (2015) report, which provides statistics of language use in various settings, but there are two aspects that must be considered. These two aspects are that section 14 reports the statistics of the surveys conducted for only fluent Welsh speakers—as previously

mentioned, people can falsely report—and not even 100% of the small overall percentage of fluent Welsh speakers speak Welsh all the time. Section 14.10 reads, “Over half (56 per cent) of fluent Welsh speakers said that their most recent conversation was in Welsh” (Welsh Government, 2015). Assuming that 19% of the population of Wales are fluent Welsh speakers, and 56% of 19% is 10.64%, then only 10.64% of Welsh speakers are using the language in interactions outside of the home and school. Part of the Cymraeg 2050 initiative is to encourage society to increase the domains of language use and to encourage people to use Welsh while in social settings.

Response to new domains in media. With respect to texting and e-mailing, chart 18 in section 15, found in figure 4 of this paper, from the Welsh Government (2015) survey shows that English dominates in each age bracket in both texting and e-mailing, expect for texting in the 65+ range. As expected, the usage of Welsh increases as age increases, which evidences that intergenerational language transmission is not strong.

Figure 4



However, Welsh found in the news and media appears to be somewhat high. According to the official Welsh Government website under the “Leisure” section, “Welsh language television channel S4C broadcasts over 100 hours of programmes each week – from sport, drama and music to factual, entertainment and events” (Welsh News and Media, 2017). Welsh News and Media also lists BBC Radio Cymru and various local, community, and online radio stations as sources to find Welsh media. There are a number of sources in the press where Welsh can also be found. Some magazines and newspapers publish only in Welsh, while others publish in both Welsh and English. There are online news outlets and blogs that also publish in Welsh. For these reasons, Welsh is assessed as a grade 3.5, which means that it is robust/active.

**Availability of materials for language education and literacy.** Evaluating Welsh under this factor is simple due to Cymraeg 2050. At a grade 4.5, Welsh is strongest in educational capabilities with respect to the previously mentioned factors. With the recent governmental initiative, educational materials about Welsh language and literacy education as well as content education in Welsh are readily available and accessible. Also, a vast and rich literature exists in Welsh. Centuries-worth of literature can be studied to understand the historical linguistics of Welsh, and the beauty of the language can be observed across various literary genres.

Governmental and institutional language attitudes and policies, including official status and use. In section 3.1 (Welsh Language Standards, 2018), the government reported, “There has also been an increased use of Welsh in corporate communications with staff. This has resulted in the Welsh language being more visible and audible across the Welsh Government estate.” The government is consistently attempting to increase the use of Welsh in interaction, which should help to strengthen the overall usage of the language. In the Welsh Language Act 1993, the Government mandated, “the Welsh and English languages must be treated equally in the conduct of public business in Wales” (Law Wales, 2016). Due to the extent of governmental support mentioned in this section as well as the support through Cymraeg 2050, Welsh is assessed as a grade 4.5 under this factor.

Community member’s attitudes towards their own language. Welsh is assessed as a grade 2, which means that some members value and support language maintenance, but the majority are either indifferent or against language maintenance and preservation. As mentioned earlier, the “change from above,” observed through Cymraeg 2050, is designed to encourage society to actively support the language preservation and revitalization efforts as well as to regard Welsh and English as equals. Various news articles report that parents prefer that their child(ren) only learn English due to it being the global language, while other articles report that parents prefer their child(ren) become bilingual in both Welsh and English. Figure 4 above also reflects the preferred language of communication across the younger to older generations, and it is clear that even though a percentage of people are fluent in Welsh, English remains as the overall preferred language of communication.

Type and quality of documentation. The history of the origin of the Welsh language appears to be disputed, as Dysgu Cymraeg [Learn Welsh] (2018) reported that the language became distinct between 400 and 700 AD, whereas John T. Koch (1998) referred to the view that some Cynfeirdd poems, “cannot possibly have entered the manuscript tradition until the ninth or tenth,” century (Koch, 1998). Regardless of the origin of documentation, the Welsh language has been recorded for over at least one millenium. Due to the amount of language documentation and the amount of time that the language has been documented, Welsh is assessed as a grade 5 in type and quality of documentation.

UNESCO Calculation. The calculation of the language vitality with the nine factors of UNESCO is a rather subjective process, as a calculation rubric does not exist. The researcher must conduct the calculation process by assessing and assigning grades to each factor according to the specific research results of the researcher. The problem with this method is that if another researcher were to calculate the language vitality of the same language using different sources, the classification of the language vitality could contradict that of the first researcher. Using the interactive online edition of the “UNESCO Atlas of World’s Languages in Danger,” the result of the

UNESCO nine factor analysis conducted in this paper is in accordance with that of the online edition, which is that Welsh is a vulnerable language (T. Arwyn Watkins, in Moseley, 2010).

The exact calculation that UNESCO performed to classify Welsh as vulnerable is unknown, though UNESCO has merit and is also trustworthy.

## Assessment 2: Language Endangerment Index

Another method for assessing language vitality is the LEI, which Lee and Van Way designed in 2016. Though the four factors of the LEI share four of the factors presented within the UNESCO method, the LEI assesses these factors differently. Each of the four factors ranges from 0 – 5, though intergenerational transmission requires the researcher to multiply the score by 2. The total points possible is therefore 25. If the LEI is calculated with all four factors, the level of endangerment can be said to have been calculated with 100% certainty, as is the calculation of the below LEI of Welsh.

### Intergenerational transmission.

This factor carries twice the weight because without it, language death is inevitable. Welsh is assessed as a grade 3, which accounts for some speakers in the parent generation but no speakers in the children generation. Though this is not entirely true, the grades do not account for most grandparents/some parents/some children.

### Absolute number of speakers.

This factor assigns essentially arbitrary values to the endangerment categories. For a language to be considered safe under this arbitrary metric, there must be greater than or equal to 100,000 speakers of the language. Since Welsh has about 570,000 speakers, it is assessed as a grade 0.

### Speaker Number Trends.

Since speakers constitute about 19% of the overall population, and, until recently, the speaker trend had been decreasing over time, Welsh is assessed as a grade 4, which suggests that it is severely endangered.

### Domains of use

One major area of focus under the Cymraeg 2050 initiative is to increase the domains of use of Welsh (Welsh Government, 2017). The Welsh Language Act 1993 also required that Welsh and English be treated equally (Law Wales, 2016). Due to the amount of language support across domains as well as statistics that support that presence of Welsh-related social events, found in chart 18 of section 15 (Welsh Government, 2015), Welsh is assessed as a grade 4 under domains of use.

### LEI Calculation.

A calculation of the level of endangerment and the level of certainty of Welsh with respect to the LEI shows that Welsh is considered to be endangered with 100% certainty. The calculation of the LEI can be found below in figure 5.

Figure 5

	Intergenerational Transmission	Absolute Number of Speakers	Speaker Number Trends	Domains of Use	Final Grade
Grade	3 * 2 = 6	0	4	4	(14/25) * 100 = 56% at 100% Certainty

### Conclusion and Recommendations

Now that the Welsh language has been subjected to both the UNESCO and LEI assessments, a comparative analysis of the results is necessary. The language vitality of Welsh appears to be somewhere between endangered and vulnerable. The result of the UNESCO nine factor metric assesses Welsh as a vulnerable language, which is one stage away from safe on the LEI scale. The result of the LEI metric assesses Welsh as an endangered language with 100% certainty, which is three stages away from safe on the LEI scale. There is a slight discrepancy between the results. Since the UNESCO calculation is done rather subjectively and the LEI is done with respect to a calculation rubric, the LEI offers a more reliable and justified vitality assessment. Regardless of this slight discrepancy, Welsh appears to be faring well, and the projection that Welsh can become a safe language is certainly possible and attainable in the near future.

As the status of Welsh increases, the cross-linguistic irregularities should remain, which would allow for the unique linguistic features of Welsh to remain as features of the language. If Cymraeg 2050 continues to successfully develop and encourage society to increase the social status of Welsh, the prevalence and impact of language dominance and linguistic change should decline or cease. Also, the progressive increase in the status of Welsh will further accelerate Welsh language acquisition, and thus education in and of Welsh should dramatically increase. With intentional efforts in Wales, such as the Cymraeg 2050 LPP and legislation like the Welsh Language Act 1993, the threat that English poses to Welsh can be reduced, and a linguistic and social equilibrium point may be found between Welsh and English so that Wales may become equally bilingual.

If the vitality of Welsh is not maintained, it could face language and cultural death. Language is used to create, express, and symbolize experiences of cultural reality, thus creating a sense of a social and cultural bond amongst members of a society (Kramsch, 1998). To allow a language to die is to allow the death of a culture laden with knowledge, wisdom, and experiences of and about the world to die, i.e. the loss of a central component of the history of a civilization.

English has the prestige of being the lingua franca and is considered the universal language for now. However, just as French, which was the lingua franca and global language not long ago, lost prestige, English could also lose prestige. The Welsh language and rich culture should not be sacrificed for the sake of acquiring English, as English could be, like French once was, a merely ephemeral, world-dominating language. While salvation and revitalization is too late for some languages, this is not the case for Welsh.

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## Author Note

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