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## UNIFORMITARIANISM AND ‘YES’ AND ‘NO’ IN INDO-EUROPEAN LANGUAGE<sup>1</sup>

### *Abstract*

The ‘yes’-‘no’ (Y-N) words do not always exist, and the Celtic languages, for instance, lack them. In other IE languages, the N word etymologically stems from a negative marker, but there are two main sources for the Y word, e.g. the copula and a complementiser or a subordinate clause. Geographically, the copula type is found in northern Europe, whereas the complementiser type, in southern and eastern Europe, except for Greek and dialects of Slovenian. The distributional pattern of the Y-N words is relatively easily formulated, but this paper examines it in terms of uniformitarianism. Due to the colloquial nature of the Y-N words, it is difficult to study them historically; however, examining what is happening now in the Celtic languages enables us to ascertain what must have happened in other branches of the IE languages where historical records are scarce. Celtic languages are developing their own Y-N words, along with a loan from English, representing both gradual changes found in uniformitarianism and abrupt innovations/changes often observable in catastrophism. In addition, some social factors such as shifts in religion, might have affected the development, thus suggesting another example of catastrophism. Therefore, by looking at the Y-N words, it is possible that a new perspective in historical change can be gained.

*Key words:* uniformitarianism, catastrophism, yes, no, language contact, copula, complementiser

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<sup>1</sup> Abbreviations used in this paper are as follows: COP = copula; NEG = negative marker; PRS = present; Q = question marker; SG = singular; VN = verbal noun; 1 = first person.

## INTRODUCTION

‘Yes’ and ‘no’ are normally taken for granted in our daily use of language, and little attention has been given to them in linguistic research; in particular, historical studies. Their etymological sources have not been thoroughly studied, and they are merely mentioned in various dictionaries. The ‘yes’-‘no’ (Y-N) words are not mere replies, and they can provide us with a rich historical perspective into how people communicated in the past, even beyond the recorded history. Thus, research concerning them can give us insights into various areas of linguistic studies. This paper attempts to incorporate uniformitarianism to analyse the evolution of the Y-N words and shed light on various issues in historical changes more comprehensively among the Indo-European (IE) languages in Europe. Uniformitarianism involves both gradual shifts in form and function as well as abrupt changes, i.e. catastrophism. By incorporating both types, it is possible to predict what future changes can occur. Thus, comparative analysis based on uniformitarianism can cover a wide range of changes.

This paper is organised as follows: the nature of uniformitarianism is introduced, describing both gradual and abrupt changes. Followed by this, Y=N words in the Indo-European languages are reviewed, including their etymology. A distributional pattern of the Y-N words is also illustrated. Then the Celtic languages are analysed in detail, including their ongoing changes. Finally, uniformitarianism is reviewed in terms of the Y-N words in the Indo-European languages.

## UNIFORMITARIANISM AND LANGUAGE CHANGE

Uniformitarianism was popularised by Lyell (1830–33) in the 19<sup>th</sup> century in the field of geology, but it was soon applied to other fields of study on historical principle. It refers to an interpretation of changes in the past by means of processes that are currently observable. Gordon (2013: 82), for instance, defines it as follows:

The uniformitarian principle assumes that the behavio[u]r of nature is regular and indicative of an objective causal structure in which presently

operative causes may be projected into the past to explain the historical development of the physical world and projected into the future for the purposes of prediction and control. In short, it involves the process of inferring past causes from presently observable effects under the assumption that the fundamental causal regularities of the world have not changed over time.

Lyell's claim has four main points, i.e. natural laws, process of changes, rate of processes and physical state, and it was claimed that they have been constant across time and space. Thus, changes are considered slow and steady, and the direction of change is not inexorable. However, some of them have been challenged, initially by Gould (1965). As Ager (1993: 81) states, the present may not be long enough to observe intricate mechanisms of changes in the past. Furthermore, the rate of processes is also questioned, claiming that it may not be uniformly gradual through time (cf. Smith & Pun 2006). Catastrophism may be also applicable, i.e. some changes in the past must have been sudden, short-lived and violent, which may not be easily observable now and thus, the process is not always uniformly gradual, but rather, a gradual process punctuated with some sudden changes.

Uniformitarianism has been applied to linguistics (Christy 1983; Walkden 2019), and it is somehow normally assumed in historical linguistics. For instance, Proto-Indo-European, a reconstructed original language of modern Indo-European languages, is known to have the active-stative alignment (cf. Gamkrelidze and Ivanov 1995), which is not found in its modern daughter languages. However, this alignment is commonly found among the Caucasian languages and some of the native languages in North America such as Siouan, Iroquoian and Na-Dene languages. Thus, the presence of this structure among the modern languages ensures applicability of active-stative alignment to the reconstructed Proto-Indo-European.

As for gradualness of changes, a pattern of historical change known as grammaticalisation is commonly assumed to complete its unidirectional cycle of gradual change in 2,000 to 3,000 years. However, some factors can affect the gradualness, or reverse the unidirectionality. For instance, language contacts are known to shorten

the process of grammaticalisation (Heine and Kuteva 2005), and its cycle is reduced to one tenth of its original length, i.e. 200 to 300 years. Thus, the reverse chain of changes known as degrammaticalisation also occurs in a relatively short period of time, i.e. 200-300 years, in comparison with normal grammaticalisation, and some social factors such as social identity or religious beliefs are a driving force behind degrammaticalisation. Burridge (2004), for instance, reports a case of degrammaticalisation in Pennsylvanian German, i.e. a change from a future tense auxiliary *welle* ‘will’ into a lexical verb *wotte* ‘want’, replacing the original lexical verb *winsche* ‘wish’. This change happened because speakers felt that it was blasphemy for common people to talk about the future, since it is believed that only god knows what future may hold for them. Thus, the future tense was purposely avoided, and the same expression was used for a modest wish for the future.

Another case of uneven change is found in the evolution of language. Toyota (2012) argues that there is a drastic change at an earlier stage in evolution of human language, claiming that the emergence of verbs from nouns took much longer, and once the binary pair of noun and verb was firmly established, the normal unidirectional grammaticalisation could take place, and as presented in Heine and Kuteva (2007: 111), the changes after the noun-verb binary pair is predictable. If the age of human language is considered around 100,000 to 150,000, as Toyota (2012: 111) argues, ‘about nine-tenths of the evolution (considering the age of language as 100,000 years) were spent on creating a binary feature [between noun and verb].’ Thus, the gradual change was observable only in the past 10,000 to 12,000 years, and there was a ‘violent’ change that shaped the basic outline of our modern languages.

In the rest of the current paper, this principle is used to analyse how the Y-N words were developed.

## Y-N WORDS IN INDO-EUROPEAN LANGUAGES AND THEIR ETYMOLOGY

The Y-N words are normally believed to exist in every language, but this is not always the case. When it comes to the IE languages, there are different sources for the Y-N words, and some even lack these words. Table 1 illustrates a sample of the Y-N words in the IE languages. Celtic languages lack these words, but they are currently going through radical changes. These languages are analysed in details in a later section.

Table 1. Representatives of Y-N words

	YES	NO
Germanic	<i>yes, ja</i>	<i>no, nein</i>
Slavic	<i>da, tak, ano</i>	<i>ne, nie</i>
Baltic	<i>taip</i>	<i>ne</i>
Romance	<i>si</i>	<i>non</i>
Greek	<i>ne</i>	<i>ochi</i>
Celtic	–	–

Etymologically, N-words are derived from a negative marker in each language. Variations can be found concerning the etymon for Y-words. There are four main sources of the Y-words, which are copula, demonstrative, temporal/conditional phrase and conjunction/complementiser. However, even within a single branch of the IE languages, diversity can be found, as demonstrated in Table 2. For instance, Slavic languages normally take the conjunction/complementiser as a source for the Y words, but the source in Proto-Indo-European (PIE) differs, e.g. *\*doh* ‘thus, like so’ for Bulgarian *da*, but *\*tako* ‘thus, so’ for Polish. It is believed that the choice is related to the choice of religion, i.e. Slavic languages initially used PIE *\*tako* ‘thus, so’ for the Y-word, but with the spread of the Orthodoxy in the

region of East and South Slavic languages, a new form *\*doh* ‘thus, like so’ spread. Thus, the West Slavic languages have a variation in the Y-words. Apart from these, language contact played a role of creating Y-words. Romanian *da*, for instance is a loan from the South Slavic languages. Romanian is a part of the Balkan Sprachbund, sharing the South Slavic grammatical characteristics in general. Romanian *dais* argued as a Romance trait by some, e.g. Massey (2008), claiming that Latin *ita* ‘thus, so’ is the source. However, judging from other common grammatical features within the South Slavic languages, *da* is normally considered as a loan word. Czech and Slovak has their own *ano* ‘yes’, but also use *jo* ‘yes’ in colloquial speech. This is a loan from Hungarian. Likewise, Slovenian uses *ja*, a loan from German, along with *da*.

Table 2. Etymological sources for Y words

a. Temporal, conditional		
	Albanian <i>po</i>	> PIE <i>*h<sub>1</sub>é</i> ‘then, at that time’
b. Conjunction/complementiser		
	Bulgarian <i>da</i>	> PIE <i>*doh</i> ‘thus, like so’
	Slovak <i>áno</i>	> <i>to je ono</i> ‘that is it’
	Polish <i>tak</i>	> PIE <i>*tako</i> ‘thus, so’
	German <i>ja</i>	> Proto-Germanic <i>*jǣ</i> ‘so’
c. Demonstrative		
	Lithuanian <i>taip</i>	> <i>taī</i> ‘that’ + adverbial suffix <i>-aīp</i>
	Italian <i>si</i>	> Latin <i>sice</i> > <i>sī</i> + <i>ce</i> , from PIE <i>*só</i> ‘this, that’ + PIE <i>*h<sub>1</sub>e-</i> ‘demonstrative particle’
	French <i>oui</i>	> Latin <i>hoc ille</i> ‘this he’
d. Copula		
	English <i>yes</i>	> Proto-Germanic <i>*jǣ</i> ‘so’ + <i>*sīe</i> ‘be (it)’ (‘so be it’)
	Greek <i>nei</i>	> <i>einei</i> ‘be’

e. Loan words		
	Romanian <i>da</i>	> South Slavic language <i>da</i>
	Czech, Slovak <i>jo</i>	> Hungarian <i>jo</i>

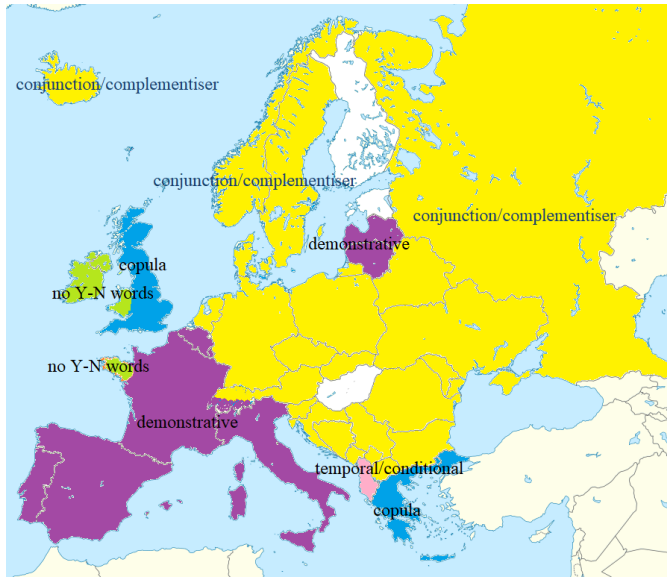


Figure 1. Distribution of Y-N words (keys: blue, copula; yellow, conjunction/ complementiser; purple, demonstrative; pink, temporal/conditional; green, no Y-N words)

As for the distribution of the etymological sources, the Romance languages except Romanian, form one area with the demonstrative source, along with the Baltic states. The rest of mainland Europe has the conjugation/complementiser source. The copula source is found peripherally in Europe. Also note that the Celtic languages without the Y-N words are also found in the peripheral. This language family is examined in detail in the next section.

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 CELTIC LANGUAGES AND ONGOING CHANGES

Celtic languages behave differently in respect to responses and rejoinders among the IE languages, since they do not possess the Y-N words. Without the Y-N words, speakers of the Celtic languages answer a question by repeating a main verb, as exemplified in (1). The main verb *téann* in (1a) is a dependent form of *téigh* ‘go’ in the present tense, and an affirmative reply is made simply by repeating a main verb, i.e. (1b). A negative reply is made with the addition of a negative marker *ní* to the affirmative answer, i.e. (1c). However, some forms of the Y-N words can be found in colloquial speech, and they are currently developing what is going to be ‘yes’ and ‘no’. The current state of the Y-N words is shown in Table 3. What is commonly found among them is the copula phrase ‘it is’, e.g. Irish *is sea* ‘it is’ or its shortened form *seo*, and a loan from English, e.g. *yeah* or *aye* in Scottish Gaelic. Note that even in Breton, a single language not spoken in the British Isles, an influence from English is visible in *ya*. Also, Irish uses a copula phrase even for the negative answer, i.e. *ní hea* ‘it is not’, while ‘no’ is commonly loaned from English *no*.

Irish

- (1) a. *An dtéanntú go dtí an scoil inniu?*  
 Q go to to the school today  
 ‘Do you go to the school today?’
- b. *Téim*  
 go.PRS.1SG  
 ‘Yes.’ (lit. ‘I go.’)
- c. *Ní théim*  
 NEG go.PRS.1SG  
 ‘No.’ (lit. ‘I don’t go.’)



Table 3. Y-N words under development in Celtic languages  
(Toyota 2009: 489)

		YES	NO
Goidelic	Irish	<i>is ea; séo; yeah</i>	<i>ní hea</i>
	Manx	<i>abbyr eh; gyn ourys; seadh</i>	N/A
	Scottish Gaelic	<i>gu deabh; aigh</i>	N/A
Brittonic	Breton	<i>ya; eo</i>	<i>nann; ket</i>
	Cornish	<i>usi; eah; usy; ya</i>	<i>nag eus; na; nag usy</i>
	Welsh	<i>ie; oes</i>	<i>na</i>

The choice of the copula phrase is perhaps due to its frequency. Among the IE languages, the copula as a source for the Y-word is attested, but rather rare. Due to the grammatically unique features, the Celtic languages are dependent on the copula phrases to refer to what is normally expressed by independent lexical verbs in other IE languages, e.g. (2). Thus, the lack of lexical verbs such as *like* (e.g. (2a)) or *have* (e.g. (2b)) is covered by the copula phrases. In addition, various tense and aspectual structures are covered by the verbal conjugation, but additional peripheral constructions are formed with the copula in Irish, e.g. (3). Thus, utility of the copula concerning the tense-aspect is found among the Celtic languages, as also observed in other IE languages, but it also covers the lack of basic lexicons.

Irish

- (2) a. *Tá a fhios agam a hainm*  
 COP its knowledge at.me her name  
 'I know her name.' (lit. 'I have its knowledge her name.')
- b. *Tá leabhar agam.*  
 COP book at.me  
 'I have a book.' (lit. 'a book is at me.')

Irish

- (3) a. *Tá mé ag staidéar Gaeilge*  
 COP I at study.VN Irish  
 'I am studying Irish.' (lit. 'I am at studying.')
- b. *Tá mé tar éis staidéar Gaeilge*  
 COP I after study.VN Irish  
 'I have studied Irish.' (lit. 'I am after studying.')

Due to the intense contacts with English, or French in the case of Breton, the loan of English *yes* and *no* is understandable. Field (2003: 38), for instance, proposes a borrowability hierarchy as shown in (4), stating that the content items are the most likely candidate to be borrowed, and the second likely candidate is function words. Although the Y-N words are not often included in the list of loan words, the Y-word is sometimes borrowed even outside of the Celtic languages, e.g. Czech, Slovak, Slovenian and Romanian as already discussed earlier.

- (4) content item > function word > agglutinating affix > fusional affix

Without the borrowing, the Celtic languages have started developing their own Y-words based on the copula. This is a recent development, and judging from the speed of its evolution, it could be a case of replication (cf. Heine and Kuteva 2005), i.e. using the loan word from English as a stimulus, it is possible to argue that the newly-developed phrases in Table 3 are replicated.

### UNIFORMITARIANISM AND Y-N WORDS IN IE LANGUAGES

What is observable in the Celtic language now can shed light on the past development of the Y-N words in the IE languages. The choice of the copula in the Celtic languages is due to its frequency, and judging from this pattern, the Y-word is derived from a frequently used word or phrase. The use of the demonstrative must have been, thus, frequently used among the Romance languages. Likewise, judging

from the source, subordination and conjunctions were relatively frequent in earlier Slavic and Germanic languages. These changes occurred at their own pace, and it took a couple of millennia to see the change, i.e. the transition was gradual. Due to the lack of colloquial data, restriction to a certain register cannot be tested. However, according to the etymons, the subordination and conjugations must have been frequently used even in the colloquial register a thousand years ago or so.

Contrary to the gradual change, some modifications occurred according to catastrophism. Loan words are one such case, but a note has to be made on *da* in East and South Slavic languages. These languages used to use *tak*, an option still used in Polish and Belarussian, *da* was adopted along with the Cyrillic letters and Orthodox belief. Thus, this change was not expected according to a normal course of changes, but the religion-related factors forced abrupt innovations.

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## PRINCIPE UNIFORMITARISTE ET « OUI » ET « NON » DANS LES LANGUES INDO-EUROPÉENNES

### Résumé

Les mots « oui »-« non » (O-N) n'existent pas toujours, et les langues celtiques, par exemple, en manquent. Dans d'autres langues indo-européennes, le mot N provient étymologiquement d'un marqueur négatif, mais il y a deux sources étymologiques principales pour le mot O, la copule et un complémentateur ou une clause subordonnée. Géographiquement, le type copule se trouve dans le nord de l'Europe, tandis que le type complémentateur, dans le sud et l'est de l'Europe à l'exception du grec et des dialectes du slovène. Le modèle de distribution des mots O-N est relativement facile à formuler, mais cet article l'examine en termes d'uniformitarisme. En raison de la nature colloquiale des mots O-N, il est difficile de les étudier historiquement; cependant, l'analyse de ce qui se passe maintenant dans les langues celtiques nous permet de déterminer ce qui a dû se passer dans d'autres branches des langues indo-européennes où les archives historiques. Les langues celtiques développent leurs propres mots O-N, ainsi qu'un mot emprunté à l'anglais, représentant à la fois des changements graduels trouvés dans l'uniformitarisme et

des changements brusques souvent observables dans le catastrophisme. De plus, certains facteurs sociaux tels que les changements de religion pourraient avoir affecté le développement, suggérant ainsi un autre exemple de catastrophisme. Par conséquent, en examinant les mots O-N, il est possible qu'une nouvelle perspective du changement historique puisse être acquise.

*Mots clés:* uniformitarisme, catastrophisme, oui, non, contact linguistique, copule, complémentateur