CONSONANT MUTATIONS
IN CONCEPTUAL EVOLUTION OF NOLDORIN/SINDARIN PHONOLOGY

by Ryszard Derdzinski

ABSTRACT: Consonant mutations were characteristic for all stages of conceptual evolution of J.R.R. Tolkien's Welsh-sounding language which evolved from early Goldogrin to Sindarin. In my essay I want to compare the consonant mutations in Welsh and the consonant mutations in early stages of conceptual evolution of Welsh-sounding language of J.R.R. Tolkien's legendarium.

KEYWORDS: soft mutation (lenition), hard mutation ('stop mutation'), nasal mutation, phonetic and grammatical mutation, Goldogrin, Noldorin, Sindarin

INTRODUCTION

In 1955 in his letter to the Houghton Mifflin Co. J.R.R. Tolkien wrote: The 'Sindarin', a Grey-elven language, is in fact constructed deliberately to resemble Welsh phonologically and to have a relation to High-elven (i.e. Quenya) similar to that existing between British (properly so-called, sc. the Celtic languages spoken in this island at the time of the Roman Invasion) and Latin.¹ His special interest in - and true love of - Cymraeg² began in Tolkien's childhood in early 1900s when for the first time he saw Welsh place-names on the coal-trucks near his home in Moseley, then odd and curious to the boy, but also very beautiful and mysterious.³

Celtic-sounding language of Tolkien's legendarium emerged in the very beginnings of his sub-creation.⁴ Around 1914 to 1917 young Tolkien began to devise two related, though unlike languages which were called Goldogrin and Qenya, "Gnome-speech and Elfin of the Eldar", as he wrote in the Book of Lost Tales (I, 48),⁵ were constructed to resemble two real languages: Welsh and Finnish.⁶ Tolkien's legendarium - stories from the Book of Lost Tales - were meant to provide a historical context for newly devised languages. In conceptual evolution of Tolkien's languages Goldogrin became Noldorin in 1920s (which evolved through 1930s and 1940s becoming language of most names and place-names in The Lord of the Rings) and Sindarin in the beginning of 1950s (which emerged during the final writing of Appendices for The Lord of the Rings).

In my analysis I will compare Welsh consonant mutations with mutations in Tolkien's Celtic-sounding language which evolved from Goldogrin to Sindarin.

I. CONSONANT MUTATIONS IN WELSH

Welsh, like other Celtic languages (e.g. Breton, Cornish, Manx, Irish) is characterized by CONSONANT MUTATIONS. It has three types of consonant mutations: SOFT (LENITION), NASAL (NASALIZATION) AND SPIRANT.⁷

---

² i.e. Welsh.
⁴ Sub-creation is a term from Tolkien's theory of literature. God is the Creator of His Creation and a writer, as a person created by God as his likeness, is sub-creator or his sub-creation. For details see J.R.R. Tolkien's On Fairy Stories [in:] J.R.R. Tolkien, The Monsters and the Critics and Other Essays, pp. 109-161.
⁵ I use bibliographical abbreviations devised by Christopher Tolkien for his Index to The History of Middle-earth published in 2002. I-XII are twelve parts of The History of Middle-earth.
⁶ For information about similarities between Goldogrin/Noldorin/Sindarin and Welsh see Sindarin Grammar and Dictionary by Jim Allan [in:] An Introduction to Elvish by Jim Allan, pp. 49-62.
SOFT MUTATION (LENITION)

Soft mutation (lenition) is a remarkable phonological and morphonological innovation of Celtic language-family. *Lenition* means “softening”.\(^8\) This name reflects a phonetic mutation in which “hard” or unvoiced consonants like \(p\) or \(t\) change to “softened” (lenited) or voiced \(b\), \(d\), while original \(b\), \(d\) are further “softened” to spirants: \(v\), \(dh\). In other words - using definition of Jim Allan - lenition refers to the loosening and slackening of the pronunciation of a consonant, so that it becomes more vocalic. Voiceless consonants may be “softened” to voiced consonants, stops may be “softened” to spirants and spirants may be “softened” to approximants.\(^9\)

Lenition occurs when the mutating consonant is intervocalic - it is placed between two vowels - or when it lies between a vowel and a sonant (a syllabic consonant). In Celtic family lenition (in phonological meaning) took place before the disappearance of unaccented vowels, reduction of final sounds and simplification of consonant clusters. Disappearance, reduction and simplification mentioned above did not affect *lenition*, but they suppressed its phonetic requirements. However in anlaut (in initial consonants) lenition has been determined by the morphosyntactical context, i.e. it has occurred (and still occurs) only after particular parts of speech (e.g. lenition of initial consonant in a noun following its adjective in Welsh, like in *hen delyn* ‘old man’: *dyn man* > *delyn*). This restriction must have occurred in the time when the phonetic requirements of lenition still existed. Consequently lenition of initial consonants must have had three phases: (1) phonological phase - lenition determined by the phonetic context (intervocalic consonants), (2) morphonological phase - lenition determined by both phonetic and morphosyntactic context, (3) morphosyntactic phase - after the reduction of final sounds lenition is determined only by the morphosyntactic context. J.R.R. Tolkien in his writings uses two terms describing these two types of lenition: *PHONETIC LENITION* (lenition in phonological meaning) and *GRAMMATICAL LENITION* (lenition in morphosyntactic meaning).\(^10\) According to Leszek Bednarczuk phase (2) took place in Proto-Celtic period.\(^11\) Welsh lenition patterns can be seen below:

<table>
<thead>
<tr>
<th></th>
<th>limited to contexts</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic</td>
<td>p t c b d g gw m rh ll</td>
</tr>
<tr>
<td>mutated</td>
<td>b d g f dd - w f r l</td>
</tr>
</tbody>
</table>

NASAL MUTATION (NASALIZATION)

Nasal mutation is typical for all Celtic languages. Final nasal consonant affects initial \(p\), \(t\), \(k\), \(b\), \(d\), \(g\) of the next word. Similarly as in lenition of anlaut, nasal mutation of the initial consonant in Celtic family has been determined by the morphosyntactical context, i.e. it has occurred (and still occurs) only after particular parts of speech (e.g. nasal mutation of initial consonant in a noun which follows preposition *yn* ‘in’ in Welsh, like in *yn nhŷ* ‘in house’, *yng Nghymru* ‘in Wales’). Welsh nasal mutation patterns are as follows:

<table>
<thead>
<tr>
<th></th>
<th>basic</th>
<th>mutated</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic</td>
<td>p t c b d g</td>
<td></td>
</tr>
<tr>
<td>mutated</td>
<td>mh nh ngh m n ng</td>
<td></td>
</tr>
</tbody>
</table>

SPIRANT MUTATION

Origin of spirant mutation in Welsh is gemination of initial voiceless consonants. Similarly as lenition and nasal mutation it has been determined by the morphosyntactical context, i.e. it has occurred (and still occurs) only after particular parts of speech (e.g. spirant mutation of initial consonant in a

---

\(^8\) Word *lenition* comes from Latin *lenire* ‘to soften, alleviate’ and was first recorded in English in 1910-1915, few years before Tolkien began to devise his Goldogrin.

\(^9\) Cf. Jim Allan’s *Sindarin Grammar and Dictionary*, p. 57.

\(^10\) Cf. *The Letters*, p. 426, note ‡ which reads: *though of phonetic origin, they are used grammatically, and so may occur or be absent in cases where this is not phonetically justified by descent. In his text from c. 1917 Lam na nGoldathon (Parma Eldalamberon XI, p.7): This […] may be referred to under head of ‘grammatical mutation’ for it was generalized to a rule and is now used in many cases not justified purely on phonological grounds.*

noun following its possessive in *ci chi 'her dog'). Below I present patterns of spirant mutation in Welsh:

<table>
<thead>
<tr>
<th>basic</th>
<th>p</th>
<th>t</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>ph</td>
<td>th</td>
<td>ch</td>
</tr>
</tbody>
</table>

My short overview of Welsh consonant mutations in the general Celtic background is not sufficient for serious linguistic research, but it has given us a couple of terms and ideas necessary in analysis of consonant mutations in Celtic-sounding language of Tolkien's Middle-earth.

II. CONSONANT MUTATIONS IN GOLDOGRIN (c. 1917)

First known linguistic description of Gnomish, on that time known as Goldogrin, is a lexicon from c. 1917. The first mentioned text is a lexicon of Goldogrin entitled *I Lam na nGoldathon* ('The Tongue of the Gnomes', known also as the Gnomish Lexicon - GL) and accompanying grammar referred to as Gnomish Grammar (GG). Both texts were published in 1995 in Parma Eldalamberon Number XI. 12 Both are contemporary with The Book of Lost Tales (part I and II of The History of Middle-earth). 13

SOFT MUTATION (LENITION)

Tolkien created several grammatical mutations in his new language. Lexemes collected in GL prove that phonological lenition didn't occur in early phases of evolution of Gnomish (no mutation of intervocalic consonants before reduction of final vowels in ancient Goldogrin period. An example can be Goldogrin *ram* 'wing, pinion' (PE 11:64), Qenya *rāma* 'wing' (GL 12:97) - in Noldorin/Sindarin it would have been **rauf** ['rauβ] (in fact Noldorin form of 'wing' is *rafn* < *ramna*).

Goldogrin lenition has morphonological context. In GG it is named "interior changes" (PE 11:7) - in 1917 new phonological term *lenition* was almost unknown (see note 8). Sometimes Tolkien uses the term "softening" (cf. entry *i* in PE 11:50). 14 Tolkien wrote that "interior change" or "softening" might be referred to as "grammatical mutation" for it was generalized to a rule and is now used in many cases not justified purely on phonological grounds. It is used in a good many other cases besides that of the article [i · 'the']. Goldogrin lenition is probably identical to soft mutation (lenition) in Early Noldorin (see below). GG is accompanied by the table of "interior changes":

<table>
<thead>
<tr>
<th>basic</th>
<th>c</th>
<th>cr</th>
<th>cl</th>
<th>cw</th>
<th>t</th>
<th>tr</th>
<th>p</th>
<th>pr</th>
<th>pl</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·g</td>
<td>·gr</td>
<td>·gl</td>
<td>·gw</td>
<td>·d</td>
<td>·dr</td>
<td>·b</td>
<td>·br</td>
<td>·bl</td>
<td>·dh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>basic</th>
<th>dr</th>
<th>g</th>
<th>gw</th>
<th>gl</th>
<th>gr</th>
<th>b</th>
<th>br</th>
<th>bl</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·dhr</td>
<td>·'</td>
<td>·'w</td>
<td>·'l</td>
<td>·'r</td>
<td>·'v</td>
<td>·'vr</td>
<td>·'vl</td>
<td>·'ch</td>
</tr>
</tbody>
</table>

Note: Sign ' signifies the lenition product of initial *g* - a vanishing sound. In Noldorin it is represented in writing by the *gasdil* 'stopgap' (V:298, 354, 357). In GG is called by Tolkien Vau. Vau (or Wāv, Vav) means 'hook' and is the sixth letter of Hebrew alphabet.

The exceptions in Goldogrin grammatical lenition are:

---


13 Similarities and differences between this early Goldogrin and later Sindarin were described in an interesting text by Christopher Gilson, Gnomish is Sindarin. The Conceptual Evolution of an Elvish Language. [in:] Tolkien's Legendarium. Essays on Tolkien's Middle-earth edited by Verlyn Flieger and Carl F. Hostetter, Greenwood Press 2000.

14 J.R.R. Tolkien used to mark the mutation by placing the symbol · between active and passive element of mutation, e.g. na-Ngoldathon.
(1) initial d-, b- and g- which come from original *
\text{-nd}, *\text{-mb} and *\text{-ng} like in Goldogrin \text{dor} 'land': \text{i·ndor} 'the land' (and not **i·dhor), \text{Belca} 'Melko': \text{i·Mbelca} 'Melko' (and not **i·Velca), \text{golda} 'gnome': \text{i·ngolda} 'the gnome' (and not **i·'olda);

(2) all words beginning in gl- (by generalization irrespective of the ultimate etymology after i·n. or D.) like in Goldogrin \text{gilim} 'winter': \text{i·ngilim} 'the winter';

(3) many words in go-, ga- (unaccented).15

Interesting is that Goldogrin adjectives in singular follow nouns without mutation (unlike in Sindarin where adjectives following nouns undergo lenition).

\text{STOP MUTATION (HARD MUTATION)}

Stop mutation (so named in Tolkien) occurs after a(d) 'into' (PE 11:17). It belongs to grammatical mutations too. It is probably identical with hard mutation in Early Noldorin (see below).

\text{NASAL MUTATION}

Nasal mutation is in Tolkien's \text{Gnomish Grammar} referred to as "n-mutation" (PE 11:12, 17). It is an "initial grammatical mutation" (PE 11:12). According to PE 11:17 this "n-mutation" occurs in genitival expressions - with or without a-, an- which is 'genitive prefix'. We can also add here na'(1), pl. nan- 'genitive sg. & pl. of i(n) (PE 11:7, 59), which is exemplified in the expression: \text{fós a·Ngalmir} 'bath of Sun' and \text{i·fós na·Ngalmir} 'the bath of the Sun' (Goldogrin \text{Galmir} is 'Sun') (PE 11:12) in contrast to lenition in \text{fós 'Almir} 'bath of Sun' which is a genitive without prefixal flexion (PE 11:12). Goldogrin nasal mutation probably agrees exactly with nasal mutation of Early Noldorin (see below).

\text{LIQUID ASSIMILATION}

Assimilation is any process in which a vowel of consonant becomes phonetically similar or identical to another in its vicinity.16 Following the liquids I, r, Goldogrin changed plosives to spirants. J.R.R. Tolkien wrote about this phenomenon describing Sindarin phonology: \text{The much-changed Sindarin of Middle-earth turned the stops to spirants after l and r}.17 Comparing Goldogrin with every phase of the evolution of Tolkien's Welsh-sounding language, we can see that this \text{LIQUID ASSIMILATION} is a constant feature of its phonological system.

\section*{III. CONSONANT MUTATIONS IN 'EARLY' NOLDORIN (C. 1920)}

'Early' Noldorin is a term introduced by J.R.R. Tolkien (probably in 1950s) for a his Welsh-sounding language from the period after compiling the \text{Gnomish Lexicon} and \text{Gnomish Grammar}.18 The representative phonological and grammatical description of this language is a text entitled \text{Early Noldorin Grammar} (under this title from 1948 and referred here to as ENG)19 or \text{Lam na·Ngoluiθ 'Language of the Gnomes'}. This text is written on Leeds University candidates' examination paper. Internal evidence indicates that it must have come from c. 1920. Tolkien planned to write an appendix to ENG which was to explain the sound laws of Noldorin, but it was never completed. Happily the next conceptual phase of the grammar of Noldorin written in the 1930s would begin with a comprehensive treatment of the historical phonology of the language.20 Probably it will be published in the next issue of \text{Parma Eldalamberon}.

First part of ENG is devoted to consonant mutations.21 It was the first time when Tolkien presented all consonant mutations in one complete table. 'Early' Noldorin had three kinds of consonant mutations: (1) \text{SOFT (i.e. lenition)}, (2) \text{HARD (i.e. STOP)}, (3) \text{NASAL}. They were described in detail in the previous chapter. Below I present tables with all sound-changes included in Tolkien's

---

15 Details can be found in GG on p. 8.
17 UT:265, footnote.
18 Cf. PE 13:119.
19 Ibidem.
20 Ibidem, p. 120, footnote 1.
21 Ibidem, p. 120.
original text, but I rearrange the order of consonants following the table of soft mutations in GG (see above) and I add consonant clusters (like cr, cl, tr, pr, dr, gl, br, bl) which were presented in that table:

**SOFT MUTATION (LENITION)**

<table>
<thead>
<tr>
<th>basic</th>
<th>c</th>
<th>cr</th>
<th>cl</th>
<th>cw</th>
<th>t</th>
<th>tr</th>
<th>p</th>
<th>pr</th>
<th>pl</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·g</td>
<td>·gr</td>
<td>·gl</td>
<td>·gw</td>
<td>·d</td>
<td>·dr</td>
<td>·b</td>
<td>·br</td>
<td>·bl</td>
<td>·dh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>basic</th>
<th>dr</th>
<th>g</th>
<th>gw</th>
<th>gl</th>
<th>gr</th>
<th>b</th>
<th>br</th>
<th>bl</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·dhr</td>
<td>·‘</td>
<td>·’w</td>
<td>22</td>
<td>·‘l</td>
<td>·’r</td>
<td>·’v</td>
<td>23</td>
<td>·vr</td>
</tr>
</tbody>
</table>

**HARD MUTATION (STOP)**

<table>
<thead>
<tr>
<th>basic</th>
<th>c</th>
<th>cr</th>
<th>cl</th>
<th>cw</th>
<th>t</th>
<th>tr</th>
<th>p</th>
<th>pr</th>
<th>pl</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·ch</td>
<td>·chr</td>
<td>·chl</td>
<td>·chw</td>
<td>·th</td>
<td>·thr</td>
<td>·f</td>
<td>·fr</td>
<td>·fl</td>
<td>·d</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>basic</th>
<th>dr</th>
<th>g</th>
<th>gw</th>
<th>gl</th>
<th>gr</th>
<th>b</th>
<th>br</th>
<th>bl</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·dr</td>
<td>·g</td>
<td>·gw</td>
<td>·gl</td>
<td>·gr</td>
<td>·b</td>
<td>·br</td>
<td>·bl</td>
<td>·h</td>
</tr>
</tbody>
</table>

**NASAL MUTATION**

<table>
<thead>
<tr>
<th>basic</th>
<th>c</th>
<th>cr</th>
<th>cl</th>
<th>cw</th>
<th>t</th>
<th>tr</th>
<th>p</th>
<th>pr</th>
<th>pl</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·ch</td>
<td>·chr</td>
<td>·chl</td>
<td>·chw</td>
<td>·th</td>
<td>·thr</td>
<td>·f</td>
<td>·fr</td>
<td>·fl</td>
<td>·n</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>basic</th>
<th>dr</th>
<th>g</th>
<th>gw</th>
<th>gl</th>
<th>gr</th>
<th>b</th>
<th>br</th>
<th>bl</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutated</td>
<td>·nr</td>
<td>·ng</td>
<td>·ngw</td>
<td>·nlg</td>
<td>·ngr</td>
<td>·m</td>
<td>·mr</td>
<td>·ml</td>
<td>·h</td>
</tr>
</tbody>
</table>

**IV. CONSONANT MUTATIONS IN LATE NOLDORIN (1930s – 1940s)**

We know little about this period of the Welsh-sounding language of Tolkien’s *legendarium*. The only phonological evidence of that “Late Noldorin” can be found in loose notes and one longer text entitled *The Etymologies*. We can also trace the evolution of the Noldorin phonology in the sketches of the most important work-in-progress of that period which was *The Lord of the Rings*. There exists “a comprehensive treatment of the historical phonology of the language” from 1930s, but it still waits for publication. Fortunately the editors of the *Parma Eldalamberon* promise that the next

22 Tolkien adds here ngw.
23 In Tolkien’s spelling occurring in ENG bh which in fact is [v].
24 Lenition of h > ch, does not occur in this table.
issue of this periodical will contain the linguistic materials from the 1930s. It is possible we will soon know much more about Tolkien’s conception of the consonant mutations in those years.

All we can say now about consonant mutations in Late Noldorin of 1930s and 1940s is that the phonological rules did not alter, and we can apply here the rules from 1920s described above. There is no need to present any tables here.

V. CONSONANT MUTATIONS IN SINDARIN (from 1950s)

Unfortunately Tolkien did not publish any phonological description of the “mature” stage of his Sindarin. In 1972 in a letter to Richard Jeffery he wrote: I have not bothered to explain the S. (i.e. Sindarin) lenitions in the Appendices, already overloaded, because I am afraid they would have been passed over, or have been felt unintelligible and tiresome, by practically all readers, since that is the normal attitude of the English to Welsh.26

The most interesting description of the consonant mutations in Sindarin is the text by Helge K. Fauskanger Sindarin - The Noble Tongue27. As Fauskanger writes: We will attempt to describe the various mutations, as well as they can be reconstructed. The actual evidence being scanty, we must in many cases fall back on our general understanding of Sindarin phonology to fill the gaps. What follows is based on a thorough analysis (mainly conducted by eminent Sindarist David Salo), but future publications may well prove it wrong in some respects. However, the most frequent mutations (soft and nasal) are relatively well attested, so that we can reconstruct the rules with some confidence. Fauskanger (after David Salo) adds two additional mutation rules called Mixed Mutation and Liquid Mutation.

Fauskanger’s Liquid Mutation is reconstructed following the rules of the liquid assimilation described above (chapter II). We can read in Fauskanger’s text: This mutation represents a leap of faith. It is not mentioned, alluded to or directly exemplified anywhere in the published material; yet our general understanding of Sindarin phonology seems to demand it. Examples given by the author of the Sindarin - The Noble Tongue have no evidence in Tolkien’s published papers and seem to be improbable. Tolkien never wrote about such grammatical mutation in his works, letters etc. Welsh - the main inspiration of Sindarin - does not contain such a mutation too. All we can do is to wait for the publication of the Noldorin materials from 1930s. They should explain this question.

Mixed Mutation of Fauskanger is also a phenomenon with no evidence in Tolkien’s papers. The only examples of the mutating consonants in the way which is described as the "mixed" mutation come from a very problematic text which belongs to the liquid period of the very "late" Noldorin or very "early" Sindarin (the specialists are not sure if we can call this stage of the Welsh-sounding tongue Noldorin or Sindarin) - The King’s Letter28.

The complete analysis of the consonant mutations in Sindarin will be possible after the further publication of the "Late" Noldorin and Sindarin materials found in Tolkien’s papers. I hope the next years will provide us with plenty of the new and interesting information about Tolkien’s languages.

Copyright ©2004 Ryszard Derdzinski

Quotations from the works of J.R.R. or Christopher Tolkien are the copyright of their publishers and/or the Tolkien Estate, and are used here with their kind permission. The word TOLKIEN is a registered trademark of The J.R.R. Tolkien Estate Limited. The characters and scripts of Tolkien’s invented languages and works in those languages are the copyright of the Tolkien Estate.

First published as PDF on April 14th, 2004

26 The Letters..., p. 426.
27 http://www.uib.no/People/hnohf/sindarin.htm#mutations
28 IX:128,129.