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# Review

**Theme:** CONSONANT CHANGES IN PRE-  
WRITTEN PERIODS

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# **Plan**

**Introduction.**

**1.Linguistic features of Old English**

**2.Old English phonology system**

**3.Consonant changes in pre-written periods**

**4. Interpretation of the pre-germanic consonant shift**

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## Introduction

At present great importance is attached to the teaching of foreign languages. No doubt, it happens not without purpose. Today the importance of our people's perfect knowledge of foreign languages can scarcely, exaggerated as our country aspires to win a decent place in the world community, because our people see their great future as a life in mutual accord and cooperation with their foreign partners.

However, it is necessary to remember always that the study of foreign should not carry out at the expense of oblivion to the mother tongue.

It is hard to understand and justify a specialist, especially one holding a high post, who is unable choose fine and appropriate words to express his idea, concisely and precisely, in his mother tongue. In our recent past, in most cases the Russian language but not the mother tongue served as mediator in the study of foreign languages. That is why, in particular, until present, English-Uzbek and Uzbek-English dictionaries had not been available.

That is why it is necessary to improve the current situation, to provide students with all the necessary conditions for the access to this amazing world of foreign languages. We should prepare in our country in the shortest time the methods of intensive foreign language learning based on our national peculiarities. The immediate important task is the formation of Institutions of higher education. President thinks that one of poor sides of today's higher education is that we could not conduct the preparation of specialists of higher educational according to beforehand for the changed requirements of science and techniques, economy, production and other fields in conformity with life requirements.

It's becoming clear that the acquired profession and preparation of graduate students and secondary graduates don't answer the requirements of the market economy. We didn't work out the state standards in the educational field on the basis of the

international norms and models and in conformity with it, we didn't provide institutions and schools with modern equipment, didn't create the proper material basis, and the reason in that education programs remained obsolete, they exercise a negative influence on the quality of prepared specialists for today.

In the process of realizing reform in the institutions of higher education, we must pay attention to some faults, proceeding from:

- 1) We must determine what requirements graduate students should answer.
- 2) We must select talented children, who are thirsty for knowledge; set an equitable system and order of entrance to the institutions of higher education; to create all necessary conditions for getting enough knowledge by students.
- 3) It is necessary to determine what professions are most important to prepare for in higher education institutions. Specifically, it should be determined which of the 90-100 acquired professions we need most of all, and which of them we need less and also new professions according to the new time.

The national order for necessary specializations should be set.

At present according to the national order, it is fixed to accept 21,000 students' higher educational institutions. At this point, it's important to think out of the number of national grants and the branches these grants are distributed to. It's also important to define more precisely the intentions of those who are going to receive the knowledge and specialty on the basis of the contract, in other words, at their expense.

- 4) Once we intend to prepare specialists corresponding to the modern requirements we must modernize the uniform, appearance, structure and financial base of our educational institutions, as well as providing a salary to their instructors, teachers and professors.

5) Our education programs must be brought in correspondence with the modern requirements and established in accordance with our future. In this case, the weak points of our educational programmer should be taken into consideration.

For example, such weak points of young specialists and recent graduates as their lack of ability to organize work, little experience in administrative activity, as well as lack of knowledge in marketing and management, social psychology and sociology, require particular attention. As our president said that each foreign faculty's students they are linguist's .They should know all specific sides' English language.

Theme actuality. is based on detailed study of the Old English phonology and consonant changes.

**The aim** of our course paper is to find out the effects and influence of consonant changes in pre-written periods.

**The tasks** of my course work is to investigate and study following:

- 1.Linguistic features of old english.
- 2.Old English phonology system .
- 3.Consonant changes in pre-written periods.
4. Interpretation of the pre-germanic consonant shift.

**The main material** source of this course paper contains different phonetic books, the history of english literature, and lectures on history of english.

**The structure** of this course paper is follows:

Introduction, conclusion and the list of literature.

# LINGUISTIC FEATURES OF OLD ENGLISH.

All the Germanic languages of the past and present have common linguistic features; some of these features are shared by other groups in the IE family, others are specifically Germanic. The Germanic group acquired their specific distinctive features after the separation of the ancient Germanic tribes from other IE tribes prior to their further expansion and disintegration, that is during the period of the PG parent-language. These PG features inherited by the descendant languages, represent the common features of the Germanic group. Other common features developed later, in the course of the individual histories of separate Germanic languages, as a result of similar tendencies arising from PG causes. The history of the English language begins with the invasion of the British Isles by Germanic tribes in the 5<sup>th</sup>. C. of our era. Before describing these events it is essential to recall a few preceding facts of history relevant to the development of English.

Prior to the Germanic invasion the British Isles must have been inhabited for at least fifty thousand years. Archeological research has uncovered many layers of prehistoric population. The earliest inhabitants whose linguistic affiliation has been established are the Celts. The Celts came to Britain in three waves and immediately preceded the Teutons.

Economically and socially the Celts were a tribal society made up of kins, kinship groups, clan and tribes; they practiced a primitive agriculture, and carried on trade with Celtic Gaul.

The first millennium B.C was the period of Celtic migrations and expansion. Traces of their civilization are still found all over Europe. Celtic languages were spoken over extensive parts of Europe language. Before our era; later they were absorbed by other IE languages and left very few vestiges behind.

The Gaelic branch was survived as Irish in Ireland, has extended to Scotland as *Scotch- gaelich* of the Highlands and is still spoken by a few hundred people on the Isle of man. The Brittonic branch is represented by *kumric or welsh* in modern France ; another Brittonic dialect in Great Britain, Cornish was spoken in Cornwall until the end of the 18<sup>th</sup>

The history of the English language is recorded as early as the 7th c. from which the first written monuments had been preserved.

The dialects of Angles, Saxons and Jutes were developing in isolation, i.e. without being influenced by other related languages. However, they developed in close relation to each other that is why their languages gradually became dialects of one common language. The Celtic population of Britain mainly in Scotland and Western coast have preserved their own Celtic languages. The runic written monuments, however, are but very few. The most famous of them is the rhymed inscription on the Ruthwell Cross, the other is the inscription on the box made of whale moustache, which was found in France and then given to the British Museum. Both inscriptions are made in the Northumbrian dialect. The Latin alphabet was introduced together with Christianity, which brought about the development of literacy in general. Beginning with the end of the 7th c. Anglo-Saxons started to write in their native language using Latin letters.

Represented g þ , ð

c k' (palatalized) k (depalatalized)

f - v, f

y - labialized close front

æ - front, open, etc.

Irish monks turned northern British population (Picts) to Christianity, a lot of monasteries were established in the northern part of Britain. In the period of its

flourishment Northumbria was a famous cultural center acknowledged not only in Britain but also in the continent. The most outstanding man of letters of these days was Bede the Venerable (673-735) who had lived in the monastery of Jarrow in Northumbria and had founded a school for 600 monks. He had written about 60 works on theology, physics, philosophy, medicine, etc. The most famous is his work The ecclesiastical history of the English nation which brought him fame among other scientists and scientific world of these days. Another famous figure in the scientific world these times was Alcuin (735-804).

The Monuments of the Old English Language Most Northumbrian monuments were written in Latin, and it is namely the Northumbrian texts that had survived. These are the above mentioned runical inscriptions which most probably date back to the 8th c., as well as a small poem Anthem for Kedmon (the 8th c.), Song of Bede the 9th c., and a translation of the Bible (the 10th c.). Also some of the anthems, sermons and other pieces of church literature translations remained representing other Anlo-Saxon dialects. Among the earliest written monuments which had survived until our days were also Glossaries of the 8th century - they present a translation of separate words for the Latin texts from the epoch of the early Feudalism. The greatest number of the written records go back to the 11th century. King Alfred had been a very educated person. He enthusiastically took to rebuilding churches and monasteries which had been destroyed after the Viking attacks and promoted successful development of science and culture in England of those times. He himself translated Duties of a pastor (Cura Pastoralis written by Pope Gregory I (the 6th c.), Ecclesiastical history of the English nation by Bede ( the 8th c.), World History ( the 5th c.) which was written by the Spanish monarch Orosy, to which king Alfred added a description of the trips of the Norwegian traveller Ochtchere and Dane Wulfstan, Consolation in philosophy (the 6th c), and some other works.

The Anglo-Saxon chronicle represents the Wessex dialect and is the earliest manuscript of the country's history (until 891). Sermons of archbishop Wulfstan (11th c.), works of abbath Elfric, a tallented scientist, and a lot other works of that period of

the English literacy could be enumerated. The language of these works is a mixture of all Anglo-Saxon dialects. The Wessex dialect was the basis on which the literary language was formed, however the works had been written mainly in Northumbria which was the cultural center in the Old English period. The most famous is the poem Beowulf, dating back to the 10th century, which contains 3000 poems. It describes the events of a still earlier period, i.e. before the 5th century, when Angles, Saxons and Jutes were living on the continent. The poem had existed in the oral form long before it was written. The poem consists mainly of 2 parts. All Anglo-Saxon poetry is based on alliteration which is also characteristic for the old Germanic poetry in general. The line has 3 similar sounds in the stressed syllables, however, the rhyme at the end of the lines is absent.

Most of the existing Old English manuscripts were made in the scriptoria of monasteries by members of the clergy. Anyone who has ever visited the remnants of such a monastery can imagine how difficult this must have been, with such little comfort, light and warmth in winter. It only goes to show the skill of monastic scribes in rendering their words so beautifully. Anglo-Saxon manuscripts were written exclusively on parchment or vellum. While in modern times we know these media as semi-transparent writing papers used for tracing and sketching, they were originally made out of calf, goat or pig skins which had been stretched, shaved and treated. The result of this process was a thin membrane with one completely smooth side and another with a thin layer of leftover hair. Hundreds of animal skins were required to make a single book. This meant that the cost of creating literature during the Anglo-Saxon period was staggering - and hence the value of the finished product.

The dominant script of the Old English manuscripts is Anglo-Saxon (also called Insular, a Latin word meaning "island"; in this context, the term means "from England or Ireland"). It stemmed from the Uncial script brought to England by Augustine and his fellow missionaries, and incorporated the initially Irish Roman Half-Uncial. The Anglo-Saxon hand was generally miniscule (a calligraphic term meaning smaller, lower-case letters), reserving majuscule characters (larger, upper-case letters) for the

beginnings of text segments or important words (this developed into the norm for modern writing - beginning sentences and "important" words with capital letters). These fonts are perfect for calligraphers who want to work on their hand or experiment with page layouts before writing. They may also be useful for those who are unfamiliar with the slight variations between the appearances of Old English and modern English characters.

The most popular element of medieval manuscripts in general is illumination - the decoration of text with drawings. Latin texts were more often illuminated than were Old English texts. But there are some spectacular examples of Old English illumination, including the stark line drawings, the biblical illustrations of Cotton Claudius, the mysterious *Sphere of Apuleius* in Cotton Tiberius, the Lindisfarne Gospels (Cotton Nero - one of the few manuscripts that approaches the Book of Kells), and so on.

A couple answers come to mind. First of all, Old English manuscripts are, by and large, beautiful. Second, you never know exactly what you're getting when you read a printed edition (maybe this is a slight exaggeration, but still only a slight one). Some printed texts are "normalized," reducing the natural variation in spelling, conjugation, declension, etc., common in Old English works (most medieval writers were not nearly as concerned with consistency of spelling as modern writers). Furthermore, some printed texts collate or "average" between multiple manuscripts of the same work, offering a composite text which, while perhaps more representative of that work, loses the qualities which make a manuscript unique. Naturally, this process can thwart anyone trying to make deductions about the dialectical, calligraphic or interlinear aspects of a particular manuscript (sometimes the most interesting aspects).

## The system phonology of the Old English

Old English phonology is necessarily somewhat speculative since Old English is preserved only as a written language. Nevertheless, there is a very large corpus of the language, and the orthography apparently indicates phonological alternations quite faithfully, so it is not difficult to draw certain conclusions about the nature of Old English phonology.

Consonant phonemes

Labial Dental Alveolar

Post-

alveolar

Palatal

Velar

Glottal

Nasal ;m n(ŋ) Stop; p b t d k g

Affricate ;tʃ (dʒ )

Fricative ;f (v) θ (ð) s(z) ʃ (ç) (x ɣ ) h

Approximant

(Lateral r [ɹ] j w l

1. ^ The exact nature of Old English r is not known. It may have been an alveolar approximant [ɹ], as in most Modern English accents, an alveolar flap [r], or an alveolar trill [r]. In this article we will use the symbol /r/ indiscriminately to stand for

this phoneme.

### Consonant allophones

The sounds marked in parentheses in the table above are allophones:

- [dʒ ] is an allophone of /j/ occurring after /n/ or when geminated

For example, *sengan* "to singe" is [sendʒ a n] < \*sangijan

- and *bryçg* "bridge" is [bryddʒ ] < /bryjj/ < \*bruggjō < \*bruy jō

- [ŋ] is an allophone of /n/ occurring before /k/ and /g /

For example, *hring* "ring" is [rŋiŋg ]; [ŋ] did not occur alone word-finally in Old English as it does in Standard Modern English. (Some dialectal forms of Modern English, e.g. in Northern England, retain the Old English pattern.)

- [v, ð, z] are allophones of /f, θ, s/ respectively, occurring between vowels or voiced consonants.

For example, *stafas* "letters" is [sta va s] < /sta fa s/, *smiþas* "blacksmiths" is [smiða s] < /smiθa s/, and *hūses* "house (genitive)" is [hu: zes] < /hu: ses/.

[ç, x] are allophones of /h/ occurring in coda position after front and back vowels respectively. The evidence for the allophone [ç] after front vowels is indirect, as it is not indicated in the orthography. Nevertheless, the fact that there was historically a fronting of \*k to /tʃ / and of \*ȝ to /j/ after front vowels makes it very likely.

Moreover, in late Middle English, /x/ sometimes became /f/ (e.g. *tough*, *cough*), but only after back vowels, never after front vowels. This is explained if we assume that the allophone [x] sometimes became [f] but the allophone [ç] never did.

For example, *cniht* "boy" is [kniçt], while *gēþōht* "thought" is [je' θo: xt]

**The sequences /hw, hl, hn, hr/ were realised as [h], [l], [n], [r].**

[ɣ ] is an allophone of /g / occurring after a vowel or liquid. Historically, [ɣ ] is older, and originally appeared in word-initial position as well; for Proto-Germanic (PGmc) and probably the earliest Old English it makes more sense to say that [g ] is an allophone of /ɣ / after a nasal or when geminated. But after [ɣ ] became [g ] word-initially, it makes more sense to treat the stop as the basic form and the fricative as the allophonic variant.

For example, *dagas* "days" is [da ɣ a s] and *burgum* "castles (dative)" is [bury ɣ um]

•/l/ and /r/ apparently had velarized allophones [ɫ ] and [ɭ ], or similar, when followed by another consonant. This conclusion is based on the phenomena of breaking and retraction, which appear to be cases of assimilation to a following velar consonant. The following conventions are used in this article for transcribing Proto-Germanic reconstructed forms:

\\Voiced obstruents appear as b, d, g; this does not imply any particular analysis of the underlying phonemes as plosives /b/, /d/, /g / or fricatives /β/, /ð/, /ɣ /. In otheliterature, they may be written as graphemes with a bar to produce  $\bar{b}$  ,  $\bar{d}$  and  $\bar{g}$  .

•Unvoiced fricatives appear as f, þ, h (perhaps /ϕ/, /θ/, /x/). /x/ may have become /h/ in certain positions at a later stage of Proto-Germanic itself. Similarly for /x<sup>w</sup> /, which later became /h<sup>w</sup> / or /ʁ/ in some environments.

•Labiovelars appear as kw, hw, gw; this does not imply any particular analysis as single sounds (e.g. /k<sup>w</sup> /, /x<sup>w</sup> /, /g<sup>w</sup> /) or clusters (e.g. /kw/, /xw/, /g w/).

•The "yod" sound appears as j /j/. Note that the normal convention for representing this sound in Proto-Indo-European is y; the use of j does not imply any actual change in the pronunciation of the sound.

The consonantal phonemes of Proto-Germanic classified by their reconstructed pronunciation. The slashes around the phonemes are omitted for clarity. When two phonemes appear in the same box, the first of each pair is voiceless, the second is voiced. Phones written in parentheses represent allophones and are not independent phonemes. For descriptions of the sounds and definitions of the terms, follow the links on the headings.

## Proto-Germanic consonants

Bilabial

Dental

Alveolar

Palatal

Velar

Labial-

velar

Nasal m n (ŋ) (ŋ<sup>w</sup>)

Stop p b t d k g k<sup>w</sup> g<sup>w</sup>

Fricative f (β) θ (ð) s z x (ɣ) x<sup>w</sup>

Approximant j w

Lateral

Trill r

Notes:

- 1.[ŋ] was an allophone of /n/ before velar obstruents.
- 2.[ŋ<sup>w</sup>] was an allophone of /n/ before labiovelar obstruents.
- 3.[β], [ð] and [ɣ] were allophones of /b/, /d/ and /g / in certain positions (see below).
- 4.The phoneme written as f was probably still realised as a bilabial fricative (/ϕ/) in Proto-Germanic. Evidence for this is the fact that in Gothic, word-final b (which medially represents a voiced fricative) devoiced to f, and also Old Norse spellings such as aprt [ɑ ϕtr], where the letter p rather than the more usual f was used to denote the bilabial realisation before /t/.

Grimm's and Verner's law

Main articles: Grimm's Law and Verner's law

Grimm's law as applied to pre-proto-Germanic is a chain shift of the original Indo-European plosives. Verner's Law explains a category of exceptions to Grimm's Law, where a voiced fricative appears where Grimm's Law predicts a voiceless fricative. The discrepancy is conditioned by the placement of the original Indo-European word accent.

Labiovelar reduction (near u)      Grimm's law: Voiceless to fricative

Grimm's law: Voiced to voiceless      Grimm's law: Aspirated to voiced

Verner's law      Labiovelar dissolution

labials      p > ϕ   b > p   b<sup>h</sup> > b, β   ϕ > b, β

dentals      t > θ   d > t   d<sup>h</sup> > d, ð   θ > d, ð

velars      k > x   g > k   g<sup>h</sup> > g, γ   x > g, γ

Labiovelars  $k^w > k$

$g^w > g$

$g^{w \text{ ð}} > g^{\text{ ð}}$   $k^w > x^w$   $g^w > k^w$   $g^{w \text{ ð}} > g^w, \gamma^w$   $x^w > g^w, \gamma^w$   $g^w > b$

$\gamma^w > w, \gamma$

p, t, and k did not undergo Grimm's law after a fricative (such as s) or after other plosives (which were shifted to fricatives by the Germanic spirant law); for example, where Latin (with the original t) has stella "star" and octo "eight", Middle Dutch has ster and acht (with unshifted t).[29] This original t merged with the shifted t from the voiced consonant; that is, most of the instances of /t/ came from either the original /t/ or the shifted /t/.

(A similar shift on the consonant inventory of Proto-Germanic later generated High German. McMahon says]"Grimm's and Verner's Laws ... together form the First Germanic Consonant Shift. A second, and chronologically later Second Germanic Consonant Shift ... affected only Proto-Germanic voiceless stops ... and split Germanic into two sets of dialects, Low German in the north ... and High German further south ....")

Verner's law is usually reconstructed as following Grimm's law in time, and states that unvoiced fricatives: /s/, /ϕ/, /θ/, /x/ are voiced when preceded by an unaccented syllable. The accent at the time of the change was the one inherited from Proto-Indo-European, which was free and could occur on any syllable. For example, PIE \*b<sup>h</sup> réh<sub>2</sub>tēr > PGmc. \*brōþēr "brother" but PIE \*meh<sub>2</sub>tér > PGmc. \*mōdēr "mother." The voicing of some /s/ according to Verner's Law produced /z/, a new phoneme. Sometime after Grimm's and Verner's law, Proto-Germanic lost its inherited contrastive accent, and all words became stressed on their root syllable. This was generally the first syllable unless a prefix was attached.

The loss of the Proto-Indo-European contrastive accent got rid of the conditioning environment for the consonant alternations created by Verner's law. Without this conditioning environment, the cause of the alternation was no longer obvious to native speakers. The alternations that had started as mere phonetic variants of sounds became increasingly grammatical in nature, leading to the grammatical alternations of sounds

known as *Grammatischer Wechsel*. For a single word, the grammatical stem could have different consonants depending on its grammatical case or its tense. As a result of the complexity of this system, significant levelling of these sounds occurred throughout the Germanic period as well as in the later daughter languages. Already in Proto-Germanic, most alternations in nouns were levelled to have only one sound or the other consistently throughout all forms of a word, although some alternations were preserved, only to be levelled later in the daughters (but differently in each one). Alternations in noun and verb endings were also levelled, usually in favour of the voiced alternants in nouns, but a split remained in verbs where unsuffixed (strong) verbs received the voiced alternants while suffixed (weak) verbs had the voiceless alternants. Alternation between the present and past of strong verbs remained common and was not levelled in Proto-Germanic, and survives up to the present day in some Germanic languages.

#### Allophones

Some of the consonants that developed from the sound shifts are thought to have been pronounced in different ways (allophones) depending on the sounds around them.

With regard to original /k/ or /k<sup>w</sup>/ Trask says:[31]

"The resulting /x/ or /x<sup>w</sup>/ were reduced to /h/ and /h<sup>w</sup>/ in word-initial position."

Many of the consonants listed in the table could appear lengthened or prolonged under some circumstances, which is inferred from their appearing in some daughter languages as doubled letters. This phenomenon is termed gemination. Kraehenmann says:"Then, Proto-Germanic already had long consonants ... but they contrasted with short ones only word-medially. Moreover, they were not very frequent and occurred only intervocally almost exclusively after short vowels."

The voiced phonemes /b/, /d/, /g/ and /g<sup>w</sup>/ are reconstructed with the pronunciation of stops in some environments and fricatives in others. The pattern of allophony is not completely clear, but generally is similar to the patterns of voiced obstruent allophones in languages such as Spanish. The voiced fricatives of Verner's Law (see above), which only occurred in non-word-initial positions, merged with the fricative allophones of /b/, /d/, /g/ and /g<sup>w</sup>/. Older accounts tended to suggest that the sounds

were originally fricatives and later "hardened" into stops in some circumstances.

However, Ringe notes that this belief was largely due to theory-internal considerations of older phonological theories, and in modern theories it is equally possible that the allophony was present from the beginning.

Each of the three voiced phonemes /b/, /d/, and /g / had a slightly different pattern of allophony from the others, but in general stops occurred in "strong" positions (word-initial and in clusters) while fricatives occurred in "weak" positions (post-vocalic).

More specifically:

- Word-initial /b/ and /d/ were stops [b] and [d].
- A good deal of evidence, however, indicates that word-initial /g / was [ɣ ], subsequently developing to [g ] in a number of languages. This is clearest from developments in Anglo-Frisian and other Ingvaemonic languages. Modern Dutch still preserves the sound of [ɣ ] in this position.
- Plosives appeared after homorganic nasal consonants: [mb], [nd], [ŋg ], [ŋ<sup>w</sup> g<sup>w</sup> ]. This was the only place where a voiced labiovelar [g<sup>w</sup> ] could still occur.
- When geminate, they were pronounced as stops [bb], [dd], [g g ]. This rule continued to apply at least into the early West Germanic languages, since the West Germanic germination produced geminated plosives from earlier voiced fricatives.
- /d/ was [d] after l or z. Evidence for /d/ after /r/ is conflicting: it appears as a plosive in Gothic waurd "word" (not \*waurþ, with devoicing), but as a fricative in Old Norse orð. /d/hardened to [d] in all positions in the West Germanic languages.
- In other positions, fricatives occurred singly after vowels and diphthongs, and after non-nasal consonants in the case of /b/ and /g/.

### Labiovelars

Numerous additional changes affected the labiovelar consonants.

1. Even before the operation of Grimm's law, they were reduced to plain velars next to /u/. This appears to be a sound law that was inherited from PIE and continued to operate as a surface filter, i.e. if a sound change generated a new environment in which a labiovelar occurred near a /u/, it was immediately converted to a plain velar. This caused certain alternations in verb paradigms, such as \*singwana<sub>q</sub> [siŋ□□□n□̃] ('to

sing') versus \*sungun [suŋg un] ('they sang'). Apparently, this delabialization also occurred with labiovelars following /un/, showing that the language possessed a labial allophone [ŋ<sup>w</sup>] as well. In this case the entire clusters [uŋ<sup>w</sup> x<sup>w</sup>], [uŋ<sup>w</sup> k<sup>w</sup>] and [uŋ<sup>w</sup> g<sup>w</sup>] are delabialized to [uŋx], [uŋk] and [uŋg].

2. After the operation of Verner's law, various changes conspired to almost completely eliminate voiced labiovelars. Initially, [g<sup>w</sup>] became [b], e.g. PIE \*g<sup>w</sup> h<sup>h</sup> édh<sup>h</sup> yeti > PGmc. bidīpi "(s)he asks for". The fricative variant [ɣ<sup>w</sup>] (which occurred in most non-initial environments) usually became [w], but sometimes instead turned into [ɣ]. The only environment in which a voiced labiovelar remained was after a nasal, e.g. in \*singwana [siŋ□□□n̄] "to sing". These various changes often led to complex alternations, e.g. \*sehwaną [sex□□n̄] ('to see'), \*sēgun [sɛ : ɣ un] ('they saw', indicative), \*sēwīn [sɛ : wi : n] ('they saw', subjunctive), which were reanalysed and regularised differently in the various daughter languages.

### Consonant gradation

The Proto-Germanic consonant gradation is not directly attested in any of the Germanic dialects, but may nevertheless be reconstructed on the basis of certain dialectal discrepancies in root of the n-stems and the ōn-verbs.

Diachronically, the rise of consonant gradation in Germanic can be explained by Kluge's law, by which geminates arose from stops followed by a nasal in a stressed syllable. Since this sound law only operated in part of the paradigms of the n-stems and ōn-verbs, it gave rise to an alternation of geminated and non-geminated consonants. However, there has been controversy about the validity of this law, with some linguists preferring to explain the development of geminate consonants with the idea of "expressive gemination". The origin of the Germanic geminate consonants is currently a disputed part of historical linguistics with no clear consensus at present.

n-stems	PIE	PGM
nominative	C_́C-ōn	C_C-ō
genitive	C_C-n-ós	C_CC-az
neh2-presents	PIE	PGM
3p. singular	C_C-néh2-ti	C_CC-ōþi

3p. plural            C\_C-nh2-énti    C\_G-unanþi

The reconstruction of grading paradigms in Proto-Germanic explains root alternations such as Old English *steorra* 'star' < \*sterran- vs. Old Frisian *stera* 'id.' < \*steran- and Norwegian (dial.) *guva* 'to swing' < \*gubōn- vs. Middle High German *gupfen* 'id.' < \*guppōn- as generalizations of the original allomorphy. In the cases concerned, this would imply reconstructing ann-stem nom. \*sterō, gen. \*sterraz < PIE \*h<sub>2</sub>stér-ōn, \*h<sub>2</sub>ster-n-ós and an ōn-verb 3sg. \*guppōþi, 3pl. \*gubunanþi < \*ghubh-néh<sub>2</sub>-ti, \*ghubh-nh<sub>2</sub>-énti.

Pre-Proto-Germanic (Pre-PGmc).

This stage began with the separation of a distinct speech, perhaps while still forming part of the Proto-Indo-European dialect continuum. It contained many innovations that were shared with other Indo-European branches to various degrees, probably through areal contacts, and mutual intelligibility with other dialects would have remained for some time. It was nevertheless on its own path, whether dialect or language.

Epenthesis of /u/ before the syllabic sonorants:

- /m̥/ > /um/ — \*m̥m̥tóm "hundred" > \*kumtóm > \*hunda
- /n̥/ > /un/ — \*n̥ntér "inside" > \*untér > \*under "among"
- /l̥/ > /ul/ — \*w<sup>w</sup>l̥k<sup>w</sup> os "wolf" > \*w<sup>w</sup>úlk<sup>w</sup> os > \*wulfaz
- /r̥/ > /ur/ — \*w<sup>w</sup>r̥mis "worm" > \*wurmiz > \*wurmiz

An epenthetic /s/ was inserted already in PIE after dental consonants when followed by a suffix beginning with a dental.

- This sequence now becomes: /TsT/ > /ts/ > /ss/ — \*wid-tós "known" (pronounced \*widstos) > \*witstós > \*wissós > \*wissaz "certain"
- A single example exists where /tt/ was word-internal, in which case it remained (even after Grimm's law below)— \*atta "dad" > \*attô

Geminate consonants are shortened after a consonant or a long vowel — \*káydtis "act of calling" (pronounced \*káydstis) > \*káyssis > \*káyxis > \*haisiz "command"

Word-final long vowels are lengthened to "overlong" vowels — \*séh<sub>1</sub>mō "seeds" > \*séh<sub>1</sub>mô > \*sēmô

Loss of laryngeals, phonemicising the allophones of /e/:

- Word-initial laryngeals are lost before a consonant — \*h<sub>1</sub>dóntm̥ "tooth, acc." > \*dóntum > \*tanþu
- This rule continued to operate into the Proto-Germanic period.

### Early Proto-Germanic

This stage began its evolution as a form of centum PIE that had lost its laryngeals and had five long and six short vowels, as well as one or two overlong vowels. The consonant system was still that of PIE minus palatovelars and laryngeals, but the loss of syllabic resonants already made the language markedly different from PIE proper. Mutual intelligibility might have still existed with other descendants of PIE, but it would have been strained, and this period marked the definitive break of Germanic from the other Indo-European languages and the beginning of Germanic proper, containing most of the sound changes that are now held to define this branch distinctively. This stage contained various consonant and vowel shifts, the loss of the contrastive accent inherited from PIE in favor of a uniform accent on the first syllable of the word root, and the beginnings of the reduction of the resulting unstressed syllables.

Loss of word-final non-high short vowels /e/, /a/, /o/ — \*wóyde "(s)he knows" > \*wóyd > \*wait

- A /j/ or /w/ preceding the vowel is also lost — \*tósyo "of that" > \*tó > \*þas
- Single-syllable words were not affected, but clitics were — \*-k<sup>w</sup>e "and" > \*-k<sup>w</sup> > \*-hw
- When the lost vowel was accented, the accent shifted to the preceding syllable — \*n̥smé "us" > \*n̥swé > \*unswé > \*úns > \*uns (not \*unz, showing that loss occurred before Verner's law)

Grimm's law: Chain shift of the three series of plosives. Note that voiced plosives had already been devoiced before a voiceless obstruent prior to this stage. Labiovelars were delabialised before /t/.

- Voiceless plosives become fricatives, unless preceded by another obstruent. In a sequence of two voiceless obstruents, the second obstruent remains a plosive.

- /p/ > /f/ (f) — \*ph<sub>2</sub>té r "father" > \*fəpé r > \*fadēr
- /t/ > /θ/ (þ) — \*tód "that" > \*þód > \*þat
- /k/ > /x/ (h) — \*kátus "fight" > \*háþus > \*haþuz; \*h<sub>2</sub>ég s- "axle" > (devoicing) \*aks- > \*ahs- > \*ahsō
- /k<sup>w</sup>/ > /x<sup>w</sup>/ (hw) — \*k<sup>w</sup> ód "what" > \*h<sup>w</sup> ód > \*hwat
- Since the second of two obstruents is unaffected, the sequences /sp/, /st/, /sk/, /sk<sup>w</sup>/, /tt/ (only in \*atta "dad") remain.
- The above also forms the Germanic spirant law:
  - /bt/, /b<sup>h</sup> t/, /pt/ > /f t/ — \*kh<sub>2</sub>ptós "grabbed" > \*kəptós > \*həftós > \*haftaz "captive"
  - /gt/, /g<sup>h</sup> t/, /kt/ > /xt/ — \*o<sup>h</sup>k tó w "eight" > \*októ w > \*ohtó w > \*ahtōu
  - /g□t/, /g□□t/, /k□t/ > /xt/ — \*nok□tm□ "night, acc." > \*noktum > \*nohtum > \*nahtu
- Voiced plosives are devoiced:
  - /b/ > /p/ — \*d<sup>h</sup> ewbu- "deep" > \*d<sup>h</sup> ewpu- > \*dewpu- > \*deupaz reformed as a-stem)
  - /d/ > /t/ — \*h<sub>1</sub>dóntm□ "tooth, acc." > \*tónþum > \*tanþu; \*k<sup>w</sup> ód "what" > \*h<sup>w</sup> ód > \*hwat
  - /g/ > /k/ — \*wér<sup>g</sup> om "work" > \*wér<sup>g</sup>om > \*wér<sup>k</sup>om > \*werka
  - /g<sup>w</sup>/ > /k<sup>w</sup>/ — \*g<sup>w</sup> émeti "(s)he will step, subj." > \*k<sup>w</sup> émeþi > \*kwimidi "(s)he comes"
- Aspirated plosives become voiced plosives or fricatives (see below):
  - /b<sup>h</sup>/ > /b/ ([b,β]) — \*b<sup>h</sup> éreti "(s)he is carrying" > \*béreþi > \*biridi
  - /d<sup>h</sup>/ > /d/ ([d,ð]) — \*d<sup>h</sup> óh<sub>1</sub>mos "thing put" > \*dó mos > \*dōmaz "judgement"
  - /g<sup>h</sup>/ > /g/ ([g,ɣ]) — \*g<sup>h</sup> áns "goose" > \*gáns > \*gans
  - /g<sup>w h</sup>/ > /g<sup>w</sup>/ ([g<sup>w</sup>,ɣ<sup>w</sup>]) — \*sóng<sup>w h</sup> os "chant" > \*sóng<sup>w</sup> os > \*sangwaz "song"
- Verner's law: voiceless fricatives are voiced, allophonically at first, when preceded by an unaccented syllable:
  - /f/ > [β] — \*upéri "over" > \*uféri > \*ubéri > \*ubiri
  - /θ/ > [ð] — \*tewtéh<sub>2</sub> "tribe" > \*þewþá > \*þewdá > \*þeudō

•/x/ > [ɣ] — \*h<sub>2</sub>yuHn□k ós "young" > \*yunkós > \*yunhós > \*yungós > \*jungaz  
(with -z by analogy)

•/x<sup>w</sup>/ > [ɣ<sup>w</sup>] — \*k<sup>w</sup> ek<sup>w</sup> léh<sub>2</sub> "wheels (collective)" > \*h□ eh□lá > \*h□ eg□lá >  
\*hweulō

•/s/ > [z] — \*h<sub>1</sub>rég<sup>w</sup> eses "of darkness" > \*rék<sup>w</sup> eses > \*rék<sup>w</sup> ezez > \*rikwiziz;  
\*k<sup>w</sup> ék<sup>w</sup> los "wheel" > \*h<sup>w</sup> éh<sup>w</sup> los > \*h<sup>w</sup> éh<sup>w</sup> loz > \*hwehwłaz

•Some small words which were generally unaccented were also affected — \*h<sub>1</sub>ésmi, unstressed \*h<sub>1</sub>esmi "I am" > \*esmi > \*ezmi > \*immi; \*h<sub>1</sub>sénti, unstressed \*h<sub>1</sub>senti "they are" > \*senþi > \*sendi > \*sindi (the stressed variants, which would have become \*ismi and \*sinþi, were lost)

All words become stressed on their first syllable. The PIE contrastive accent is lost, phonemicising the voicing distinction created by Verner's law.

Word-initial /g<sup>w</sup>/ > /b/ — \*g<sup>w</sup> h éd<sup>h</sup> yeti "(s)he is asking for" > \*g<sup>w</sup> édyedi > \*bédyedi > \*bidīþi "(s)he asks, (s)he prays" (with -þ- by analogy)

Assimilation of sonorants:

•/nw/ > /nn/ — \*ténh<sub>2</sub>us "thin" ~ fem. \*tn□h<sub>2</sub>éwih<sub>2</sub> > \*tn□h<sub>2</sub>ús ~ \*tn□h<sub>2</sub>wih<sub>2</sub> >  
\*þunus ~ \*þunwī > \*þunus ~ \*þunnī > \*þunnuz ~ \*þunnī

•/ln/ > /ll/ — \*pl□h<sub>1</sub>nós "full" > \*fulnos > \*fullos > \*fullaz

•/zm/ > /mm/ — \*h<sub>1</sub>esmi "I am, unstr." > \*ezmi > \*emmi > \*immi

### Late Proto-Germanic

By this stage, Germanic had emerged as a distinctive branch and had undergone many of the sound changes that would make its later descendants recognisable as Germanic languages. It had shifted its consonant inventory from a system rich in plosives to one containing primarily fricatives, had lost the PIE mobile pitch accent in favour of a predictable stress accent, and had merged two of its vowels. The stress accent had already begun to cause the erosion of unstressed syllables, which would continue in its descendants up to the present day. This final stage of the language included the remaining development until the breakup into dialects, and most notably featured the development of nasal vowels and the start of umlaut, another characteristic Germanic feature.

Word-final /m/ > /n/ — \*tóm "that, acc. masc." > \*pam > \*pan "then"; \*-om "a-stem acc. sg." > \*-am > \*-an > \*-a

/m/ > /n/ before dental consonants — \*□m□tóm "hundred" > \*humdan > \*hundan > \*hunda; \*dé□m□d "ten" > \*tehunt > \*tehunt > \*tehun

Word-final /n/ is lost after unstressed syllables, and the preceding vowel is nasalised — \*-om "a-stem acc. sg." > \*-am > \*-an > \*-a; \*-eh<sub>2</sub>m > \*-ān > \*-a□ > \*-□; \*-oHom "genitive plural" > \*-ân > \*-a□ > \*-□□

Nasal /ẽ□/ is lowered to /ĩ: / — \*d<sup>h</sup> éd<sup>h</sup> eh<sub>1</sub>m "I was putting" > \*dedēn > \*dede□ > \*deda□ > \*dedō

Elimination of /ə/:

• Unstressed /ə/ is lost between consonants — \*sámh<sub>2</sub>d<sup>h</sup> os "sand" > \*samədaz > \*samdaz; \*takéh<sub>1</sub>- "to be silent" > (with added suffix) \*takəyónti "they are silent" > \*pagəyanþi > \*pagyanþi > \*pagjanþi

• /ə/ > /a / elsewhere — \*ph<sub>2</sub>té r "father" > \*fədēr > \*fadēr; \*takéh<sub>1</sub>- "to be silent" > (with added suffix) \*takəyéti "(s)he is silent" > \*pagəyiþi > \*pagəþi > \*pagaþi

Loss of word-final /t/ after unstressed syllables — \*dé□m□d "ten" > \*tehunt > \*tehun; \*b<sup>h</sup> éroyd "(s)he would carry, subj." > \*berayt > \*berai; \*mélid ~ \*mélit- "honey" > \*melit ~ \*melid- > \*meli ~ \*melid- > \*mili ~ \*milid-

/γ<sup>w</sup> / > /w/, sometimes /γ / — \*snóyg<sup>w h</sup> os "snow" > \*snayg<sup>w</sup> az > \*snaiwaz; \*k<sup>w</sup> ek<sup>w</sup> léh<sub>2</sub> "wheels (collective)" > \*h<sup>w</sup> eg<sup>w</sup> lā > \*h<sup>w</sup> ewlā > \*hweulō

Early i-mutation: /e/ > /i/ when followed by /i/ or /j/ in the same or next syllable —

\*b<sup>h</sup> éreti "(s)he is carrying" > \*beridi > \*biridi; \*méd<sup>h</sup> yos "middle" > \*medyaz > \*midjaz; \*néwios "new" > \*newyaz > \*niwjaz

• This eliminates the remaining /ei/, changing it to /i: / — \*deywós "god" > \*teywaz > \*Tīwaz "Týr"; \*tréyes "three" > \*preiz > \*prīz

/e/ > /i/ when followed by a syllable-final nasal — \*en "in" > \*in; \*séng<sup>w h</sup> eti "(s)he chants" > \*seng<sup>w</sup> idi > \*singwidi "(s)he sings"

• This followed the earliest contact with Finnic people, since Finnish preserves the older vowel in the loanword rengas "ring" (from early Proto-Germanic \*hrengaz, later \*hringaz).

Long a is raised:

•/ɑ : />/ɔ : / — \*d<sup>h</sup> óh<sub>1</sub>mos "thing put" > \*dāmaz > \*dōmaz "judgement"; \*swáduš "sweet" > \*swātuz > \*swōtuz

•/ɑ : : />/ɔ : : / — \*séh<sub>1</sub>mō "seeds" > \*sēmâ > \*sēmô; \*-eh<sub>2</sub>es "eh<sub>2</sub>-stem nom. pl." > \*-âz > \*-ôz

•This followed the earliest contact with the Romans, since Latin Rōmānī was borrowed as \*Rūmānīz and then shifted to \*Rūmōnīz.

/j/ is lost between vowels except after /i/ and /w/ (but it is lost after syllabic /u/). The two vowels that come to stand in hiatus then contract to long vowels or diphthongs — \*oyh<sub>1</sub>m□ "thematic optative 1sg sg." > \*-oyum > \*-ayu > \*-au; \*áyeri "in the morning" > \*ayiri > \*airi "early"

•This process creates a new /ɑ : / from earlier /ɑ ja / - \*steh<sub>2</sub>- "to stand" > (with suffix added) \*sth<sub>2</sub>yónti "they stand" > \*stayanþi > \*stānþi

/n/ is lost before /x/, causing compensatory lengthening and nasalisation of the preceding vowel — \*□ónketi "(s)he hangs" > \*hanhidi (phonetically [□x□̃: xið̃i])  
Lexical evidence in other language varieties.

Most loans from Celtic appear to have been made before or during the Germanic Sound Shift. For instance, one specimen \*rīks 'ruler' was borrowed from Celtic \*rīxs 'king' (stem \*rīg-), with g → k. [16] It is clearly not native because PIE \*ē → ī is not typical of Germanic but is a feature of Celtic languages. Another is \*walhaz "foreigner; Celt" from the Celtic tribal name Volcae with k → h and o → a. Other likely Celtic loans include \*ambahtaz 'servant', \*brunjō 'mailshirt', \*gīslaz 'hostage', \*īsarṇā 'iron', \*lēkijaz 'healer', \*laudā 'lead', \*Rīnaz 'Rhine', and \*tūnaz, tūṇā 'fortified enclosure'. These loans would likely have been borrowed during the Celtic Hallstatt and early La Tène cultures when the Celts dominated central Europe, although the period spanned several centuries.

From East Iranian came \*hanapiz 'hemp' (cf. Khotanese kaṃhā, Ossetian gæn(æ) 'flax'), \*humalaz, humalō 'hops' (cf. Osset xumællæg), \*keppō ~ skēpā 'sheep' (cf. Pers čapiš 'yearling kid'), \*kurtilaz 'tunic' (cf. Osset kwæræt 'shirt'), \*kutā 'cottage' (cf. Pers kad 'house'), \*paidō 'clo \*paṇaz 'path' (cf. Avestan pantā, g. pathō),

and \*wurstwa 'work' (cf. Avvərəštuaa). These words could have been transmitted directly by the Scythians from the Ukraine plain, groups of whom entered Central Europe via the Danube, and created the Vekeyzug Culture in the Carpathian Basin (6th-5th centuries BC), or by later contact with Sarmatians, who followed the same route.[21] Unsure is \*marhaz 'horse', which was either borrowed directly from Scytho-Sarmatian or through Celtic mediation.

In some non-Germanic languages spoken in areas adjacent to Germanic speaking areas, especially the Finnic languages, there are loanwords believed to have been borrowed from Proto-Germanic.

### **CHANGES CONSONANTS IN PRE-WRITTEN PERIODS**

On the whole, consonants were historically more stable than vowels, though certain changes took place in all historical periods.

It may seem that being a typical OG language OE ought to contain all the consonants that arose in PG under Grimm's and Verner's Law. Yet it appears that very few noise consonants in OE correspond to the same sounds in PG; for in the intervening period most most consonants underwent diverse changes: qualitative and quantitative, independent and positional.

Some of the consonant changes dated in pre-written periods are referred to as "West

Germanic" (WG) as they are shared by all the languages of the WG subgroup; WG changes may have taken place at the transitional stage from PG to Early OE prior to the Germanic settlement of Britain. Other changes are specifically English; they took place in Early OE.

After the changes under Grimm's Law and Verner's Law had PG had the following two sets of fricative consonants: voiceless [f, θ, x, s] and voiced [v, ð, γ, z]. In WG and in Early OE the difference between two groups was supported by new features. PG voiced fricatives tended to be hardened to corresponding plosives while voiceless fricatives, being contrasted to them primarily as fricatives to plosives, developed new voiced allophones.

The PG voiced [ð] (due to Verner's Law) was always hardened to [d] in OE and other WG languages, e.g. Icel, *gōðr* and OE *3ōd*.

#### Treatment of Fricatives. Hardening. Rhotacism. Voicing and Devoicing

After the changes under Grimm's Law and Verner's Law PG had the following two sets of fricative consonants-voiceless [f, θ, x, s] and voiced [v, ð, γ, z].

In WG and in Early OE the difference between the two groups was supported by new features. PG voiced fricatives tended to be hardened to corresponding plosives while voiceless fricatives, being contrasted to them primarily as fricatives to plosives, developed new voiced allophones.

The PG voiced [ð] (due to Verner's Law or to the third act of the shift) was always hardened to [d] in OE and other WG languages, cf., for instance, Gt *goþs*, *godai* [ð], O Icel *goðr* and OE *god* (NE *good*), The two other fricatives, [v] and [γ] were hardened to [b] and [g] initially and after nasals, otherwise they remained fricatives.

PG [z] underwent a phonetic modification through the stage of [ʒ] into [r] and thus became a sonorant, which ultimately merged with the older IE [r]. Cf. Gt. *wasjan*, O Icel *verja* and OE *werian* (NE *wear*). This process, termed rhotacism, is characteristic not only of WG but also of NG. In the meantime or somewhat later the PG set of voiceless fricatives [f, θ, x, s] and also those of the voiced fricatives which had not

turned into plosives, that is, [v] and [y], were subjected to a new process of voicing and devoicing. In Early OE they became or remained voiced intervocally and between vowels, sonorants and voiced consonants; they remained or became voiceless in other environments, namely, initially, finally and next to other voiceless consonants Cf. Gt qīþian, qāþi with [θ] in both forms, and OE cweðan [ð] between vowels and cwæð [θ] at the end of the word (NE arch, quoth 'say').

The mutually exclusive phonetic conditions for voiced and voiceless fricatives prove that in OE they were not phonemes, but allophones.

#### West Germanic Gemination of Consonants

In all WG languages, at an early stage of their independent history, most consonants were lengthened after a short vowel before [j]. This process is known as WG "gemination" or "doubling" of consonants, as the resulting long consonants are indicated by means of double letters, e.g.: \*fuljan > OE fyllan (NE fill); \*sætjan OE > settan (NE set), cf. Gt satjan.

During the process, or some time later, [j] was lost, so that the long consonants ceased to be phonetically conditioned. When the long and short consonants began to occur in identical phonetic conditions, namely between vowels, their distinction became phonemic.

The change did not affect the sonorant [r], e.g. OE werian (NE wear); nor did it operate if the consonant was preceded by a long vowel, e. g. OE demon, metan (NE deem, meet) — the earlier forms of these words contained [j], which had caused palatal mutation but had not led to the lengthening of consonants (the reconstruction of pre-written forms \*motjan and \*domjan is confirmed by OS motion and Gt domjan).

#### Velar Consonants in Early Old English. Growth of New Phonemes

In Early OE velar consonants split into two distinct sets of sounds, which eventually led to the growth of new phonemes.

The velar consonants [k, g, x, y] were palatalised before a front vowel, and sometimes also after a front vowel, unless followed by a back vowel. Thus in OE cild (NE child)

the velar consonant [k] was softened to [k'] as it stood before the front vowel [i]: [\*kild]>[k'ild]; similarly [k] became [k'] in OE spræc (NE speech) after a front vowel but not in OE spreca ("NE speak) where [k] was followed by the back vowel [a]. In the absence of these phonetic conditions the consonants did not change, with the result that lingual consonants split into two sets, palatal and velar. The difference between them became phonemic when, a short time later, velar and palatal consonants began to occur in similar phonetic conditions; cf. OE cild [k'ild], ciest [k'iest] (NE child, chest) with palatal [k'] and ceald, cepan (NE cold, keep) with hard, velar [k] — both before front vowels.

Though the difference between velar and palatal consonants was not shown in the spellings of the OE period, the two sets were undoubtedly differentiated since a very early date. In the course of time the phonetic difference between them grew and towards the end of the period the palatal consonants developed into sibilants and affricates: [k']>[tʃ], [g']>[dʒ]; in ME texts they were indicated by means of special digraphs and letter sequences.

The date of the palatalisation can be fixed with considerable precision in relation to other Early OE sound changes. It must have taken place after the appearance of [æ, æ:] (referred to the 5th c.) but prior to palatal mutation (late 6th or 7th c.); for [æ, æ:] could bring about the palatalisation of consonants (recall OE spræc, NE speech), while the front vowels which arose by palatal mutation could not. In OE cepan. (from \*kopjan) and OE cyning (with [e:] and [y] through palatal mutation) the consonant [k] was not softened, which is confirmed by their modern descendants, keep and king. The front vowels [y] and [e:] in these and similar words must have appeared only when the splitting of velar consonants was well under way. Yet it is their appearance that transformed the two sets of positional allophones into phonemes, for a velar and a palatal consonant could now occur before a front vowel, that is, in identical phonetic conditions: cf. OE cyning and cyse (NE king, cheese).

#### Loss of Consonants in Some Positions

Comparison with other OG languages, especially Gothic and Old Icelandic, has revealed

certain instances of the loss of consonants in WG and Early OE.

Nasal sonorants were regularly lost before fricative consonants; in the process the preceding vowel was probably nasalised and lengthened. Cf.:

Gt fimf, O Icel fim, OHG fimf — OE fif (NE five)

Gt uns, OHG uns — OE ūs (NE us)

Fricative consonants could be dropped between vowels and before some plosive consonants; these losses were accompanied by a compensatory lengthening of the preceding vowel or the fusion of the preceding and succeeding vowel into a diphthong, cf. OE sēon, which corresponds to Gt saihwan, OE slēan (NE slay), Gt slahan, G. schlagen, OE sægde and sæde (NE said).

We should also mention the loss of semi-vowels and consonants in unstressed final syllables, [j] was regularly dropped in suffixes after producing various changes in the root: palatal mutation of vowels, lengthening of consonants after short vowels. The loss of [w] is seen in some case forms of nouns: Norn, treo, Dat. treowe (NE tree); Nom. sæ, Dat. sæwe (NE sea), cf. Gt triwa, saiws.

### PROTO-GERMANIC CONSONANT SHIFT

The specific peculiarities of consonants constitute the most remarkable distinctive feature of the Germanic linguistic group. Comparison with other languages within the IE family reveals regular correspondences between Germanic and non-Germanic consonants. thus we regularly find [f] in Germanic where other IE languages have [p]; cf. e.g. E full, Lith pilnas, Fr plein; wherever Germanic has [p], cognate words in non-Germanic languages have [b] (cf. E pool, Lith bala). The consonants in Germanic look 'shifted' as compared with the consonants of non-Germanic languages. the alterations of the consonants took place in PG and the resulting sounds were inherited by the languages of the Germanic group.

The changes of consonants in PG were first formulated in terms of a phonetic law by Jacob Grimm in the early 19th c. and are often called Grimm's Law. It is also known as the First or Proto-Germanic consonant shift (to be distinguished from the 2nd shift which took place in OHG in the 19th c.) By the terms of Grimm's Law voiceless

plosives developed in PG into voiceless fricatives (Act I); IE voiced plosives were shifted to voiceless plosives (Act II) and IE voiced aspirated plosives were reflected either as voiced fricatives or as pure voiced plosives (Act III).

In Old English geminate consonants were found in many intervocalic positions, e.g. *sellan* 'sell', *puffan* 'puff', *cyssan* 'kiss' where the two letters are taken to indicate phonetically long consonants. There was furthermore a complementary distribution of long and short vowels and consonants in stressed syllable rhymes such that the latter either consisted of a long vowel and a short consonant or a short vowel and a long consonant (essentially the quantity distribution rule which still applies in Swedish, cf. *vit* [vi:t] 'white' and *vitt* [vitt] 'knows').

The coda quantity rule for the rhymes of syllables was disturbed in the late Old English period due to phonetic lengthening of short vowels before a cluster consisting of a nasal and homorganic stop, e.g. *blind* /blind/ F /bli:nd/, *mind* /mind/ F /mi:nd/, leading to so-called 'superheavy' syllables. This development meant that later generations of language learners no longer concluded that there was a complementary.

## **Interpretation of the Proto-Germanic Consonant Shift**

The causes and mechanism of the PG consonant shift have been a matter of discussion ever since the shift was discovered.

When Jacob Grimm first formulated the law of the shift he ascribed it to the allegedly daring spirit of the Germanic tribes which manifested itself both in their great migrations and in radical linguistic innovations. His theory has long been rejected as naive and romantic. Some philologists attributed the shift of the physiological peculiarities of the Teutons, namely the shape of their glottis: it differed from that of other IE tribes, and the pronunciation of consonants was modified. Other scholars maintained that the consonant shift was caused by a more energetic articulation of sounds brought about by the specifically Germanic force word stress. Another theory suggested that the articulation of consonants in Germanic was, on the contrary, marked by lack of energy and tension.

The theory of "linguistic substratum" which was popular with many 20th c. linguists, attributes the PG consonant changes - as well as other Germanic innovations - to the influence of the speech habits of pre-Germanic population in the areas of Germanic settlement. The language of those unknown tribes served as a sort of substratum ('under-layer') for the would-be Germanic tongues; it intermixed with the language of the Teutons and left certain traces in PG. This hypothesis can be neither confirmed nor disproved, since we possess no information about the language of pre-IE inhabitants of Western Europe.

According to recent theories the PG consonant shift could be caused by the internal requirements of the language system: the need for more precise phonemic distinction reliable in all phonetic conditions. Before the shift (according to J. Kurylowicz) the opposition of voiced and voiceless plosives was neutralised (that is, lost) in some positions, namely before the sound [s]; therefore new distinctive features arose in place of or in addition to sonority. [p, t, k] changed into [f, θ, x] and began to be contrasted to [b, d, g] not only through sonority but also through the manner of articulation as fricatives to plosives. This change led to further changes: since [f, θ, x] were now opposed to [b, d, g] through their fricative character, sonority became irrelevant for phonemic distinction and [b, d, g] were devoiced: they changed into [p, t, k],

respectively. That is how the initial step stimulated further changes and the entire system was shifted. It is essential that throughout the shift the original pattern of the consonant system was preserved: three rows of noise consonants were distinguished, though instead of opposition through sonority were opposed as fricatives to plosives. Another explanation based on the structural approach to language interprets the role of the language system from a different angle. Every subsystem in language tends to preserve a balanced, symmetrical arrangement: if the balance is broken, it will soon be restored by means of new changes. After the replacement of [p, t, k] by [f, θ, k] the positions of the voiceless [p, t, k] in the consonant system were left vacant; to fill the vacuums and restore the equilibrium [b, d, g] were devoiced into [p, t, k]. In their turn the vacant positions of [b, d, g] were filled again in the succeeding set of changes, when [bh, dh, gh] lost their aspirated character. This theory, showing the shift as a chain of successive steps, fails to account for the initial push.

The chronology of the shift and the relative order of the changes included in Grimm's Law and Verner's Law, has also aroused much interest and speculation. It is believed that the consonant shift was realised as a series of successive steps; it began first on part of Germanic territory and gradually spread over the whole area. The change of [p, t, k] into fricatives is unanimously regarded as the earliest step - the first act of Grimm's Law; it was followed, or, perhaps, accompanied by the voicing of fricatives (Verner's Law). Linguists in the 19th c. were inclined to refer the voicing of fricatives to a far later date than first act of Grimm's Law.

However, there are no grounds to think that the effect of word stress and intervocal position split into voiced and voiceless sounds soon after they had acquired their fricative character or even during that process.

The order of the other two steps (or acts of Grimm's Law) varies in different descriptions of the shift.

According to the way of articulation IE consonants were divided into sonorants, fricatives and noise (plosives).

Fricatives - s

Sonorants - i(=j) u(=w) m,n,r,l had 2 functions:

- 1) in combination with vowels they acted as consonants
- 2) in the absence of vowels they acted as syllable forming i, u, m, r, l.

In common Germanic sonants i u m, n, r, l remained without changes and syllable forming i u m n r l are exposed to changes: i & u develop to vowels; and m n r l lose their syllable forming capacity and are enforced by the vowels u: um, un, ur, ul:  
e.g. syllable: \*-bnd bund-.

In the system of IE consonants plosive consonants are distinguished: voiceless p t k k  
w ( k w

- labialized, g w

guttural alveolar

backlingual plosives)

and voiced b d g g w and b h d hg h gw

h the development of plosives is connected with the most significant changes in the system of Germanic consonants which are known as the first consonant shift and it will be studied later.

## CONCLUSION

Our beloved independent republic of Uzbekistan is boldly facing any challenges of the time as a sovereign successful state, equal member of the world community, having its own model of economic, political and spiritual development and worthy place on the international arena.

Our republic is developing and prospering in various fields of life, and the educational field is no exception here, for the latter is being paid special attention to by our President and the Government of Uzbekistan in order to successfully meet the requirements of the world standards of teaching various school and university subjects. In this connection, foreign languages, especially English is made a special accent on as a key language to modern science, technology, culture, etc. This is still more accentuated on in the recent decree of historical importance by our President Islam Abduganievich Karimov "On the Measures for Further Improving Learning Foreign Languages"

To sum up, I would like to say that, the most universal distinctive feature in the consonant system was the difference in length. During the entire of OE period old English consonants are believed to have been opposed to short ones on a phonetic level; there were mostly distinguished in intervocal position single and geminated (long) consonants are found in identical phonetic condition. Cf. OE *lade*- 1<sup>st</sup> p. sg Pres of *laden* (NE *lead*) and *lade* (past); OE *stecca* (NE *stick*)- *stica* (Gen. case pl of OE *stice*, NE *stitch*)

The history of Old English phonology system offers a good perspective from which to observe, classify and interpret types of phonological change. The extensive research carried out on the language ensures that the data and its interpretations are well documented and accessible to scholars wishing to advance the insights of this research themselves. Old phonological research appears to involve many features of the letters such as consonants change.

The most important developments in the history of English consonants were the growth of new sets of sounds,- affricates and sibilants, and new phonological treatment of fricatives .Both changes added a number of consonant phonemes to the system.

This approach is frequently synchronic at the outset and extends findings

backwards in time to developments located in history consonants were historically more stable than vowels, though certain changes took place in all historical periods. Jacob Grimm first formulated the law of the shift he ascribed it to the allegedly daring spirit of the Germanic tribes which manifested itself both in their great migrations and in radical linguistic innovations. His theory has long been rejected as naive and romantic. Some philologists attributed the shift of the physiological peculiarities of the Teutons, namely the shape of their glottis: it differed from that of other IE tribes, and the pronunciation of consonants was modified. Other scholars maintained that the consonant shift was caused by a more energetic articulation of sounds brought about by the specifically Germanic force word stress. Another theory suggested that the articulation of consonants in Germanic was, on the contrary, marked by lack of energy and tension. The most significant changes in the system of Old consonants which are known as the first consonant shift. I hope it will be studied later.

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