

File 10.13

Germanic Consonant Shifts

Proto-Indo-European had three series of stop consonants: a voiceless series, **p, *t, *k*; a voiced series, **b, *d, *g*; and a series of (so-called) voiced aspirates written **b^h, *d^h, *g^h*. In the transition from Proto-Indo-European to Proto-Germanic, these series of consonants underwent an organized set of changes, or **shifts**, as follows:

Proto-Indo-European:	<i>*p</i>	<i>*t</i>	<i>*k</i>	<i>*b</i>	<i>*d</i>	<i>*g</i>	<i>*b^h</i>	<i>*d^h</i>	<i>*g^h</i>
	↓	↓	↓	↓	↓	↓	↓	↓	↓
Germanic:	f	θ	x	p	t	k	b	d	g

This change is known as **Grimm's Law** and is one of the changes that distinguishes the languages of the Germanic subgroup from all other Indo-European language groups. That is to say, every Germanic language will show a different set of developments in the Proto-Indo-European (PIE) sounds. Examples of words affected by Grimm's Law are listed below.

<i>PIE</i>	<i>Non-Germanic</i>	<i>Germanic (English)</i>
<i>*pāter</i>	<i>pater</i> (Latin)	<i>father</i>
<i>*trei-</i>	<i>tres</i> (Latin)	<i>three</i>
<i>*kerd</i>	<i>kardia</i> (Greek)	<i>heart</i>
<i>*leb-</i>	<i>labium</i> (Latin)	<i>lip</i>
<i>*dekm</i>	<i>decem</i> (Latin)	<i>ten</i>
<i>*g^wena</i>	<i>gyne</i> (Greek)	<i>queen</i>
<i>*bhratēr</i>	<i>bhratar</i> (Sanskrit)	<i>brother</i>
<i>*dhē</i>	<i>facere</i> (Latin)	<i>do</i>
<i>*ghos-ti</i>	<i>hostis</i> (Latin)	<i>guest</i>

Modern High German has undergone a second consonant shift similar to the first in nature; this **second Germanic consonant shift** differentiates the High German dialects from other Germanic dialects and languages. Thus, only High German will exhibit evidence of the shift.

The second consonant shift was a rather complicated change. The figures below captures the major changes but omits certain details.

1. Each of the pairs of words exemplify one or more of the following concepts we have studied this term. Identify which concept(s) apply to each word pair:

Cognates	Loanwords/derivatives	Grimm's Law
i-mutation	Strong Verb	Weak Verb
a. walk / walked		_____
b. two [English] / zwei [German]		_____
c. frater [Latin] / fraternal [English]		_____
d. run / ran		_____
e. foot / feet		_____
f. pater [Latin] / father [English]		_____
g. food / to feed		_____
h. decem [Latin] / ten [English]		_____
i. full / to fill		_____
j. cordis [Latin] / heart [English]		_____
k. fly / flew		_____
l. strong / strength		_____
m. vivus [Latin] / quick ["alive" English]		_____
n. buy / bought		_____
o. balteus [Latin] / belt [English]		_____

the first is the basic uninflected form and the second is the form to which the English word is more closely related.⁴ To complete the last column, see exercise 4 below.

Indo-European ⁵	Germanic	Old English	Modern English	Borrowing from Latin
*pisk-	*__iska-	__isc	__ish	_____
*ter-, *ter-sk- 'to rub, thresh'	*__ersk-	__erscan	__resh	_____
*kerd-, *kerd-en-	*__ertōn	__eorte	__eart	_____
*beu- 'to swell'	*__uk-	__yffan	__uff	_____
*dent-, *dont-	*__anthus	__ōþ	__ooth	_____
*gel- 'cold; to freeze'	*__ōl-	__ōl	__ool	_____
*bhreg-	*__rekan	__rekan	__reak	_____
*dhē, *dhō- 'to set, put'	*__ōn	__ōn	__o	_____
*ghos-ti-	*__astiz	__estr ⁶	__uest	_____
*ters-, *tr̥s-t- 'to dry'	*__urs-tu-	__urst	__irst	_____
*dhwer-, *dhur-	*__uram	__or	__oor	_____
*ker-, *k̥r-n-	*__urnaz	__orn	__orn	_____
*grə-no- 'grain'	*__ornam	__orn	__orn	_____
*kaput	*__aubidam	__ēafod	__ead	_____
*bher- 'to carry; to bear children'	*__eran	__eran	__ear	_____
*pleus- 'to pluck; feather, fleece'	*__liusaz	__lēos	__leece	_____
*bhedh- 'to dig'	*__adjam 'garden plot'	__edd	__ed	_____
*dek̥m̥	*__ehun	__īen	__en	_____
*ger- 'to cry hoarsely'	*__rē	__rāwe	__row	_____
*trei-	*__rijiz	__rīe	__ree	_____

⁴The source for the items in this exercise is the appendix entitled "Indo-European Roots" of *The American Heritage Dictionary of the English Language*, 4th ed. (New York: American Heritage Publishing Co. and Houghton Mifflin, 2000).

⁵The Indo-European roots given here without a gloss have at least one meaning the same as that of the Modern English form.

⁶This word is not a native Old English word but an Old Norse borrowing in Middle English.

Indo-European	Germanic	Old English	Modern English	Borrowing from Latin
*genə, *gŋ-yo- 'to give birth'	*__unjam 'family'	__ynn	__in	_____
*deik-, *deig- 'to show, pronounce'	*__aikjan	__æcan	__each	_____
*kel-, *k -ni-	*__ulni-	__yll	__ill	_____
*teuə-, *tum- 'to swell'	*__ūmōn	__ūma 'thick finger'	__umb	_____
*pau-	*__awaz	__ēawe	__ew	_____
*bhlē-	*__lē-w	__lāwan	__low	_____
*ten-, *tŋ-u- 'stretched, thin'	*__unniz	__ynne	__in	_____
*ped-, *pōd	*__ōt-	__ōt	__oot	_____
*genu-, *gneu-	*__niwam	__nēo	__nee	_____

4. Although the Germanic part of what eventually became the English vocabulary underwent the First Sound Shift, thousands of words have entered the English language in the centuries afterwards. Borrowings from Latin illustrate clearly the effects of Grimm's Law by the changes that did *not* happen to them. Many of the Latin borrowings retain the original Indo-European consonants: [p], [t], and [k], for example, remained [p], [t], and [k] in Latin ([k] being spelled *c*), and [b], [d], and [g] remained [b], [d], and [g]. Indo-European [bh] and [dh] became Latin [f], and [gh] became [h]. The Latin words listed below are given with a gloss and, in boldface type, an English borrowing based on the Latin, either directly or through Romance languages. Match the borrowed words with the English words that derive ultimately from the same Indo-European root by writing the boldfaced Modern English borrowings in the last column of question 3, above.

dēns 'tooth': **dental**
caput 'head': **capital**
piscis 'fish': **Pisces**
facere 'to do, make': **fashion**
glaciēs 'ice': **glacial**
torrēre 'to dry, parch, burn':
torrid
bucca '(inflated) cheek': **buccal**
frangere 'to break': **fracture**
pēs (stem *ped-*) 'foot': **pedal**
culmen 'top, summit': **culminate**
grāculus 'jackdaw': **grackle**
forās 'out of doors': **foreign**
tendere 'to stretch, extend':
extend
plūma 'a feather': **plume**

grānum: **grain**
paucus 'little, few': **paucity**
dīcere 'to say, tell': **dictate**
cor 'heart': **cordial**
fodere 'to dig': **fossil**
trēs 'three': **trio**
genu 'knee': **genuflect**
terere 'to rub away, wear out':
trite
decem 'ten': **decimal**
flare 'to blow': **inflate**
tumēre 'to swell': **tumescant**
cornū 'horn': **cornet**
genus 'race, kind': **genus**
ferre 'to carry': **fertile**
hostis 'enemy': **host**