

1. The basic characteristics of Germanic

a) Phonological changes from PIE to PGmc

List of cognates

IE	IE trad.	OInd	Latin	PGmc	Gothic (etc.)
* <i>pénk^ue</i>	* <i>pénk^ue</i>	<i>pañca</i>	<i>quīnque</i>	* <i>femfi</i> ⁱ	<i>fimf</i>
* <i>k^uétuor-</i>	* <i>k^uétuor-</i>	<i>catvāra</i>	<i>quattuor</i>	* <i>fedwōr</i>	<i>fidwor</i>
* <i>h₁ék_uo-</i>	* <i>ék_uo-</i>	<i>ásva-</i>	<i>equus</i>	* <i>ehwa-</i>	<i>aíhwa-</i>
* <i>ġénh₁ti-</i>	* <i>ġén(ə)ti-</i>	[<i>janitā</i>]	<i>gens</i>	* <i>kendi-</i>	† <i>kind-</i>
* <i>ġ_ṇh₁tó-</i>	* <i>ġ_ṇtó-</i>	<i>jāti-</i>	<i>nātio</i>	* <i>kundā-</i>	<i>kunds-</i>
* <i>g^uéh₃u-</i>	* <i>g^uō_u-</i>	<i>gáv-</i>	<i>bōs</i>	* <i>kō- / kū-</i>	<i>kō</i> (OS)
* <i>h₂ék^ueh₂-</i>	* <i>ák^uá-</i>	- - - -	<i>aqua</i>	* <i>ahwō</i>	<i>aha</i> (OHG)
* <i>h₂uéh₁nt-</i>	* <i>(ə)uént-</i>	<i>vāta-</i>	<i>ventus</i>	<i>wenda-</i>	<i>winds</i>
* <i>h₃ek^u-'</i>	* <i>ok^u-'</i>	<i>akṣán-</i>	<i>oculus</i>	* <i>augōn-</i>	<i>augō</i>

Spontaneous sound change: vowels (Fulk 2018)

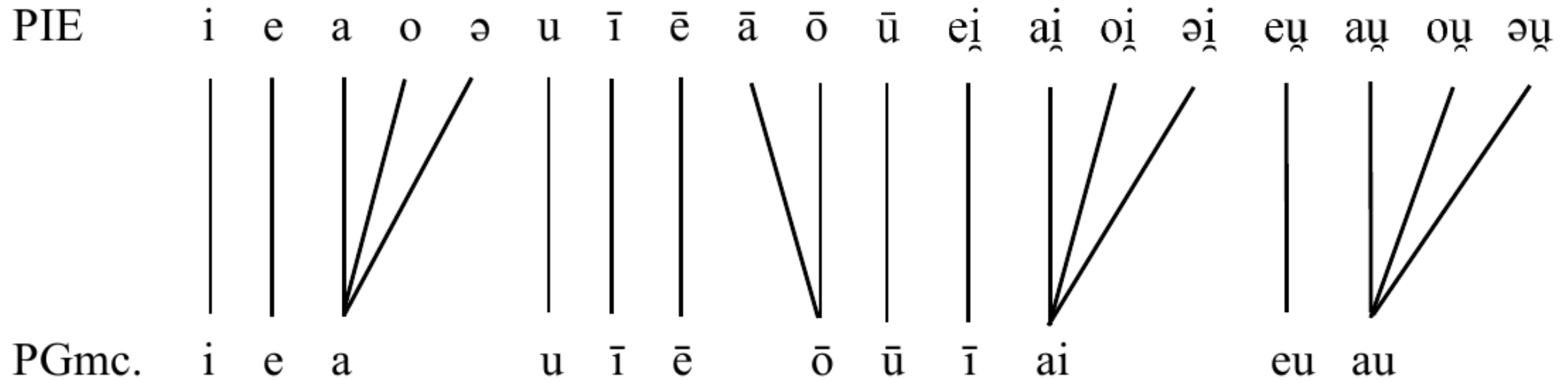


Fig. 4. Reflexes of Proto-Indo-European vowels in Proto-Germanic.

Sound change 1 (mostly spontaneous)

Process	Term and comment	Example
H > V, $\emptyset$ $h_3 > k$ (?) H > VjV	Laryngeals: loss, vocalisation and other changes Most changes predate Proto Germanic	$*h_2ékueh_2-$ > $*ahwō-$ $*g^u ih_3uó-$ > $*kwikwa-$ $*priHó-$ > $*frija-$
$x'_- > x_-$	Accent stabilization (initial stress): The free accent of Proto-Indo-European becomes fixed on the first syllable in Germanic	
separate slides	Grimm's law: systematic consonant shift	separate slides
separate slides	Verner's law: the so-called «exception to Grimm's law»	separate slides
$\hat{k}, k > k > \chi$ $\hat{g}, g > g > k$	Merger of palatal and velar stops Other than $K^w, K : \hat{K}$ merge into K	
$\underset{\circ}{R} > uR$	Svarabhakti (epenthetic vowel): PIE $\underset{\circ}{r}, \underset{\circ}{l}, \underset{\circ}{m}, \underset{\circ}{n} > \text{Germ. } ur, ul, um, un$	$*\underset{\circ}{u}rmis > *wurmiz$ 'Wurm'
$\text{ə}, o, a > a$	Vowel merger (1): PIE $\text{ə}, o, a$ merge into Germ. a (also affects $oi, ou > ai, au$)	$*ph_2tér$ 'Vater', $*Hoinos$ '1', $*h_3ekteHu$ '8' > $*fadēr, *ainaz, *ahtau$
$\bar{a}, \bar{o} > \bar{o}$	Vowel merger (2): PIE $\bar{a}, \bar{o}$ merge into Germ. $\bar{o}$	$*meh_2tér-$ > $*mōder-$

Sound change 2 (conditioned)

Prozess	Bezeichnung und Kommentar	Beispiel
$\bar{o}j > \bar{o}ij$	Siever's law: semivowel j becomes syllabic by adding a full vowel i before (however with many interferences by analogy)	$*\hat{k}erd^hjo-$ > $*herdijaz$ 'herdsman'
$pT > fT$ $kT > hT$ $D+t > ss$	Contact effects (not confined to Gmc): p and k become voiceless fricatives before a tenuis adjacent dental plosives become ss	IE $*k_{\text{ap}}to-$ > NHG $*Haft$ IE $*\text{u}_{\text{id}}-to-$ > NHG (ge-) <i>wiss</i>
$Kn_{\text{--}}' > TT$	Consonant gemination before n: Before a stressed syllable starting with n , any plosive becomes a double tenuis	germ. $*knutan-$ > ahd. <i>knoto</i> 'Knoten' germ. $*knutn-$ > as. <i>knotto</i> 'Knoten'
$Vnh > \bar{V}h$	Loss of nasal with compensatory lengthening: n disappears before Proto-Germ. h , lengthening the preceding vowel	early PGmc. $*\text{panht}\bar{o}$ > late PGmc. $\text{p}\bar{a}\text{ht}\bar{o}$ (Goth. <i>pāhta</i> , ahd. <i>dāhta</i>)

Grimm's law (simplified): before and after

aspirated → *fricative*

→ *voiceless*

→ *fricative*

IE		Gmc		IE		Gmc		IE		Gmc
<i>b^h</i>	>	<i>t̥/b</i>		<i>b</i>	>	<i>p</i>		<i>p</i>	>	<i>f</i>
<i>d^h</i>	>	<i>t̥/d</i>		<i>d</i>	>	<i>t</i>		<i>t</i>	>	<i>þ</i>
<i>g^h</i>	>	<i>g/g</i>		<i>g</i>	>	<i>k</i>		<i>k</i>	>	<i>χ</i>

Voiceless fricatives become voiced after an unaccented syllable and probably in word final position
(Verner's law)*

*the second condition is disputed, but see the next slide

The „exception of Grimm's law“

Skt, Greek	PIE	PGmc	Gmc languages
Oind <i>bhrátar-</i> , Gr φράτηρ	<i>*b^hrátēr</i> < <i>*b^hréh₂tēr</i>	<i>*brōpēr</i>	Goth <i>brōþar</i> , OS <i>brōthar</i>

$t > p$

Skt, Greek	PIE	PGmc	Gmc languages
Oind <i>pitár-</i> , Gr πατήρ	<i>*pátér</i>	<i>*fadēr</i>	Goth <i>fadar</i> , OS <i>fadar</i>

$t > \acute{d}$

⇒ Accent position as one distinctive feature

The conditions for Verner's Law

Traditional formulation: The Germanic reflexes of PIE *p*, *t*, *k*, and *s* always become voiced, except

- 1) word-initially
- 2) immediately following a stressed syllable

Alternative formulation (F = fricative, P = position of the trigger of VL):

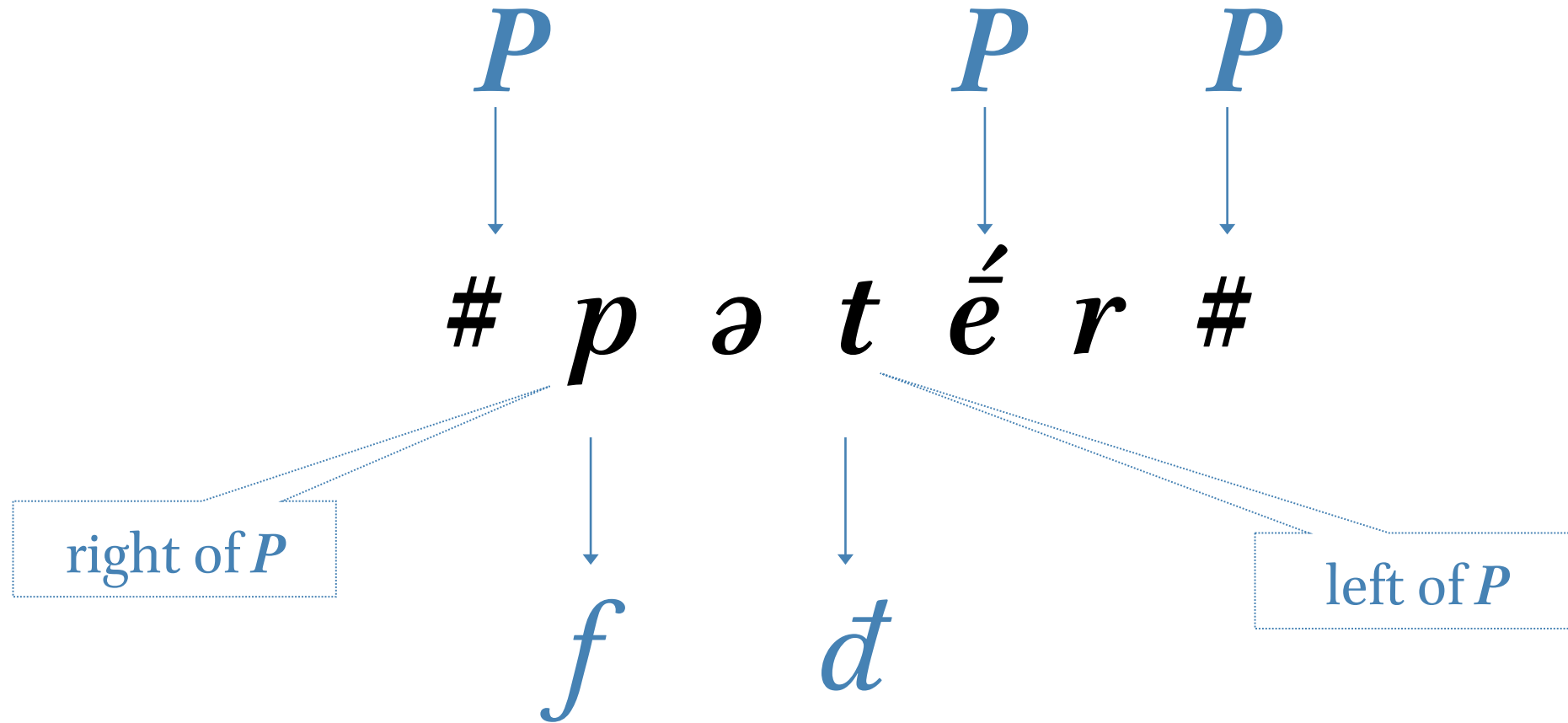
- $F^{[voiced]} P F^{[voiceless]}$ (to the right of P, F remains voiceless; otherwise, F becomes voiced)

The positional conditions P are

- 1) word boundary = #
- 2) stressed syllable = $\acute{\sigma}$

In cases of conflict, the word boundary might even take precedence over accent. Such cases, however, are particularly prone to analogical leveling, which makes the cases hard to judge (inflectional endings!)

The outcome of VL: Pre Gmc **pətēr* > **Pgmc *faðēr*



b) Morphological changes from PIE to PGmc

Proto Germanic: morphological trends

- 1) **Loss of most verbal categories and inflections**
Aspect system transformed into a tempus system with only preterite (← IE perfect) and non-preterite (← IE present)
- 2) **Reorganization of primary verbs depending on their root structure**
«Strong» verbs in 7 classes – Thematic presents with base vowel *e* become the default pattern of main strong verbal classes 1-5
- 3) **New verbal groups**
4 classes of «weak» verbs mostly continue derived verbs, building their preterite with a dental suffix – Preteritopresents organised like strong ablaut classes but with the weak preterite suffix
- 4) **3 modes**
Indicative, imperative and subjunctive (← IE optative)
- 5) **2 grammatical voices: active and (medio)passive**
The passive is lost in most Germanic languages except Gothic
- 6) **3 grammatical numbers: singular, plural and dual**
The dual is lost in most Germanic languages except Gothic
- 7) **Perfect reduplication reorganised and outsourced into a single verbal class**
Even this distinction gets lost in most Germanic languages except Gothic
- 8) **6 grammatical cases: nominative, accusative, genitive, dative, instrumental, vocative**
The locative case might have survived but only leaves few traces

Gothic inflection of strong and weak verbs

Present

Preterite

	stV.	swV. I	swV. II	swV. III	swV. IV	stV.	swV. I	swV. II	swV. III	swV. IV
Aktiv Ind.	1. Sg. nima	<i>nasja</i>	<i>salbo</i>	<i>haba</i>	<i>fullna</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	2. Sg. nimis	<i>nasjis</i>	<i>salbos</i>	<i>habais</i>	<i>fullnis</i>	namt	<i>nasides</i>	<i>salbodes</i>	<i>habaides</i>	<i>fullnodes</i>
	3. Sg. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	1. Du. nimos	<i>nasjos</i>	<i>salbos</i>	<i>habos</i>	<i>fullnos</i>	???	???	???	???	???
	2. Du. nimats	<i>nasjats</i>	<i>salbots</i>	???	<i>fullnats</i>	nemuts	<i>nasideduts</i>	<i>salbodeduts</i>	<i>habaideduts</i>	<i>fullnodeduts</i>
	1. Pl. nimam	<i>nasjam</i>	<i>salbom</i>	<i>habam</i>	<i>fullnam</i>	nemum	<i>nasidedum</i>	<i>salbodedum</i>	<i>habaidedum</i>	<i>fullnodedum</i>
	2. Pl. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nemuþ	<i>nasidedup</i>	<i>salbodedup</i>	<i>habaidedup</i>	<i>fullnodedup</i>
	3. Pl. nimand	<i>nasjand</i>	<i>salbond</i>	<i>haband</i>	<i>fullnand</i>	nemun	<i>nasidedun</i>	<i>salbodedun</i>	<i>habaidedun</i>	<i>fullnodedun</i>
Aktiv Konj.	1. Sg. nimau	<i>nasjau</i>	<i>salbo</i>	<i>habau</i>	<i>fullnau</i>	nemjau	<i>nasidedjau</i>	<i>salbodedjau</i>	<i>habaidedjau</i>	<i>fullnodedjau</i>
	2. Sg. nimais	<i>nasjais</i>	<i>salbos</i>	<i>habais</i>	<i>fullnais</i>	nemeis	<i>nasidedeis</i>	<i>salbodedeis</i>	<i>habaidedeis</i>	<i>fullnodedeis</i>
	3. Sg. nimai	<i>nasjai</i>	<i>salbo</i>	<i>habai</i>	<i>fullnai</i>	nemi	<i>nasidedi</i>	<i>salbodedi</i>	<i>habaidedi</i>	<i>fullnodedi</i>
	1. Du. nimaiwa	<i>nasjaiwa</i>	<i>salbowa</i>	<i>habawa</i>	<i>fullnaiwa</i>	???	???	???	???	???
	2. Du. nimaits	<i>nasjaits</i>	<i>salbots</i>	<i>habaits</i>	<i>fullnait</i>	???	???	???	???	???
	1. Pl. nimaima	<i>nasjaima</i>	<i>salboma</i>	<i>habaima</i>	<i>fullnaima</i>	nemeima	<i>nasidedeima</i>	<i>salbodedeima</i>	<i>habaidedeima</i>	<i>fullnodedeima</i>
	2. Pl. nimaiþ	<i>nasjaiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullnaiþ</i>	nemeiþ	<i>nasidedeip</i>	<i>salbodedeip</i>	<i>habaidedeip</i>	<i>fullnodedeip</i>
	3. Pl. nimaina	<i>nasjaina</i>	<i>salbona</i>	<i>habaina</i>	<i>fullnaina</i>	nemeina	<i>nasidedeina</i>	<i>salbodedeina</i>	<i>habaidedeina</i>	<i>fullnodedeina</i>
Passiv Ind.	1. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>	No passive in this class because of its intransitivity	Gothic does not convey preterital passive forms				No passive in this class because of its intransitivity
	2. Sg. nimaza	<i>nasjaza</i>	<i>salboza</i>	<i>habaiza</i>						
	3. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>						
	1.-3. Pl. nimanda	<i>nasjanda</i>	<i>salbonda</i>	<i>habanda</i>						
Passiv Konj.	1. Sg. nimaidau	<i>nasjaidau</i>	<i>salbo</i>	<i>habaidau</i>	No passive in this class because of its intransitivity	Gothic does not convey preterital passive forms				No passive in this class because of its intransitivity
	2. Sg. nimaizau	<i>nasjaizau</i>	<i>salbos</i>	<i>habaizau</i>						
	3. Sg. nimaidau	<i>nasjaidau</i>	<i>salbop</i>	<i>habaidau</i>						
	1.-3. Pl. nimaindau	<i>nasjaindau</i>	<i>salbond</i>	<i>habaindau</i>						

Gothic inflection of strong and weak verbs

Present

Preterite

	stV.	swV. I	swV. II	swV. III	swV. IV	stV.	swV. I	swV. II	swV. III	swV. IV
Aktiv Ind.	1. Sg. nima	<i>nasja</i>	<i>salbo</i>	<i>haba</i>	<i>fullna</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	2. Sg. nimis	<i>nasjis</i>	<i>salbos</i>	<i>habais</i>	<i>fullnis</i>	namt	<i>nasides</i>	<i>salbodes</i>	<i>habaides</i>	<i>fullnodes</i>
	3. Sg. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	1. Du. nimos	<i>nasjos</i>	<i>salbos</i>	<i>habos</i>	<i>fullnos</i>	???	???	???	???	???
	2. Du. nimats	<i>nasjats</i>	<i>salbots</i>	???	<i>fullnats</i>	nemuts	<i>nasideduts</i>	<i>salbodeduts</i>	<i>habaideduts</i>	<i>fullnodeduts</i>
	1. Pl. nimam	<i>nasjam</i>	<i>salbom</i>	<i>habam</i>	<i>fullnam</i>	nemum	<i>nasidedum</i>	<i>salbodedum</i>	<i>habaidedum</i>	<i>fullnodedum</i>
	2. Pl. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nemuþ	<i>nasidedup</i>	<i>salbodedup</i>	<i>habaidedup</i>	<i>fullnodedup</i>
	3.Pl. nimand	<i>nasjand</i>	<i>salbond</i>	<i>haband</i>	<i>fullnand</i>	nemun	<i>nasidedun</i>	<i>salbodedun</i>	<i>habaidedun</i>	<i>fullnodedun</i>
Aktiv Konj.	1. Sg. nimau	<i>nasjau</i>	<i>salbo</i>	<i>habau</i>	<i>fullnau</i>	nemjau	<i>nasidedjau</i>	<i>salbodedjau</i>	<i>habaidedjau</i>	<i>fullnodedjau</i>
	2. Sg. nimais	<i>nasjais</i>	<i>salbos</i>	<i>habais</i>	<i>fullnais</i>	nemeis	<i>nasidedeis</i>	<i>salbodedeis</i>	<i>habaidedeis</i>	<i>fullnodedeis</i>
	3. Sg. nimai	<i>nasjai</i>	<i>salbo</i>	<i>habai</i>	<i>fullnai</i>	nemi	<i>nasidedi</i>	<i>salbodedi</i>	<i>habaidedi</i>	<i>fullnodedi</i>
	1. Du. nimaiwa	<i>nasjaiwa</i>	<i>salbowa</i>	<i>habawa</i>	<i>fullnaiwa</i>	???	???	???	???	???
	2. Du. nimaits	<i>nasjaits</i>	<i>salbots</i>	<i>habaits</i>	<i>fullnait</i>	???	???	???	???	???
	1. Pl. nimaima	<i>nasjaima</i>	<i>salboma</i>	<i>habaima</i>	<i>fullnaima</i>	nemeima	<i>nasidedeima</i>	<i>salbodedeima</i>	<i>habaidedeima</i>	<i>fullnodedeima</i>
	2. Pl. nimaiþ	<i>nasjaiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullnaiþ</i>	nemeiþ	<i>nasidedeip</i>	<i>salbodedeip</i>	<i>habaidedeip</i>	<i>fullnodedeip</i>
	3.Pl. nimaina	<i>nasjaina</i>	<i>salbona</i>	<i>habaina</i>	<i>fullnaina</i>	nemeina	<i>nasidedeina</i>	<i>salbodedeina</i>	<i>habaidedeina</i>	<i>fullnodedeina</i>
Passiv Ind.	1. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>	No passive in this class because of its intransitivity	Gothic does not convey preterital passive forms				No passive in this class because of its intransitivity
	2. Sg. nimaza	<i>nasjaza</i>	<i>salboza</i>	<i>habaiza</i>						
	3. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>						
	1.-3. Pl. nimanda	<i>nasjanda</i>	<i>salbonda</i>	<i>habanda</i>						
Passiv Konj.	1. Sg. nimaidau	<i>nasjaidau</i>	<i>salbo</i>	<i>habaidau</i>						
	2. Sg. nimaizau	<i>nasjaizau</i>	<i>salbos</i>	<i>habaizau</i>						
	3. Sg. nimaidau	<i>nasjaidau</i>	<i>salbop</i>	<i>habaidau</i>						
	1.-3. Pl. nimaindau	<i>nasjaindau</i>	<i>salbond</i>	<i>habaindau</i>						

Gothic inflection of strong and weak verbs

P r e s e n t						P r e t e r i t e				
	stV.	swV. I	swV. II	swV. III	swV. IV	stV.	swV. I	swV. II	swV. III	swV. IV
Aktiv Ind.	1. Sg. nima	<i>nasja</i>	<i>salbo</i>	<i>haba</i>	<i>fullna</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	2. Sg. nimis	<i>nasjis</i>	<i>salbos</i>	<i>habais</i>	<i>fullnis</i>	namt	<i>nasides</i>	<i>salbodes</i>	<i>habaides</i>	<i>fullnodes</i>
	3. Sg. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	1. Du. nimos	<i>nasjos</i>	<i>salbos</i>	<i>habos</i>	<i>fullnos</i>	???	???	???	???	???
	2. Du. nimats	<i>nasjats</i>	<i>salbots</i>	???	<i>fullnats</i>	nemuts	<i>nasideduts</i>	<i>salbodeduts</i>	<i>habaideduts</i>	<i>fullnodeduts</i>
	1. Pl. nimam	<i>nasjam</i>	<i>salbom</i>	<i>habam</i>	<i>fullnam</i>	nemum	<i>nasidedum</i>	<i>salbodedum</i>	<i>habaidedum</i>	<i>fullnodedum</i>
	2. Pl. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nemuþ	<i>nasidedup</i>	<i>salbodedup</i>	<i>habaidedup</i>	<i>fullnodedup</i>
Aktiv Konj.	3.Pl. nimand	<i>nasjand</i>	<i>salbond</i>	<i>haband</i>	<i>fullnand</i>	nemun	<i>nasidedun</i>	<i>salbodedun</i>	<i>habaidedun</i>	<i>fullnodedun</i>
	1. Sg. nimau	<i>nasjau</i>	<i>salbo</i>	<i>habau</i>	<i>fullnau</i>	nemjau	<i>nasidedjau</i>	<i>salbodedjau</i>	<i>habaidedjau</i>	<i>fullnodedjau</i>
	2. Sg. nimais	<i>nasjais</i>	<i>salbos</i>	<i>habais</i>	<i>fullnais</i>	nemeis	<i>nasidedeis</i>	<i>salbodedeis</i>	<i>habaidedeis</i>	<i>fullnodedeis</i>
	3. Sg. nimai	<i>nasjai</i>	<i>salbo</i>	<i>habai</i>	<i>fullnai</i>	nemi	<i>nasidedi</i>	<i>salbodedi</i>	<i>habaidedi</i>	<i>fullnodedi</i>
	1. Du. nimaiwa	<i>nasjaiwa</i>	<i>salbowa</i>	<i>habawa</i>	<i>fullnaiwa</i>	???	???	???	???	???
	2. Du. nimaits	<i>nasjaits</i>	<i>salbots</i>	<i>habaits</i>	<i>fullnait</i>	???	???	???	???	???
	1. Pl. nimaima	<i>nasjaima</i>	<i>salboma</i>	<i>habaima</i>	<i>fullnaima</i>	nemeima	<i>nasidedeima</i>	<i>salbodedeima</i>	<i>habaidedeima</i>	<i>fullnodedeima</i>
Passiv Ind.	2. Pl. nimaiþ	<i>nasjaiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullnaiþ</i>	nemeiþ	<i>nasidedeip</i>	<i>salbodedeip</i>	<i>habaidedeip</i>	<i>fullnodedeip</i>
	3.Pl. nimaina	<i>nasjaina</i>	<i>salbona</i>	<i>habaina</i>	<i>fullnaina</i>	nemeina	<i>nasidedeina</i>	<i>salbodedeina</i>	<i>habaidedeina</i>	<i>fullnodedeina</i>
	1. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>	No passive in this class because of its intransitivity	Gothic does not convey preterital passive forms				No passive in this class because of its intransitivity
	2. Sg. nimaza	<i>nasjaza</i>	<i>salboza</i>	<i>habaiza</i>						
	3. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>						
	1.-3. Pl. nimanda	<i>nasjanda</i>	<i>salbonda</i>	<i>habanda</i>						
	Passiv Konj.	1. Sg. nimaidau	<i>nasjaidau</i>	<i>salbo</i>	<i>habaidau</i>					
2. Sg. nimaizau		<i>nasjaizau</i>	<i>salbos</i>	<i>habaizau</i>						
3. Sg. nimaidau		<i>nasjaidau</i>	<i>salbop</i>	<i>habaidau</i>						
1.-3. Pl. nimaindau		<i>nasjaindau</i>	<i>salbond</i>	<i>habaindau</i>						

Gothic inflection of strong and weak verbs

Präsens						Präteritum				
	stV.	swV. I	swV. II	swV. III	swV. IV	stV.	swV. I	swV. II	swV. III	swV. IV
Aktiv Ind.	1. Sg. nima	<i>nasja</i>	<i>salbo</i>	<i>haba</i>	<i>fullna</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	2. Sg. nimis	<i>nasjis</i>	<i>salbos</i>	<i>habais</i>	<i>fullnis</i>	namt	<i>nasides</i>	<i>salbodes</i>	<i>habaides</i>	<i>fullnodes</i>
	3. Sg. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nam	<i>nasida</i>	<i>salboda</i>	<i>habaida</i>	<i>fullnoda</i>
	1. Du. nimos	<i>nasjos</i>	<i>salbos</i>	<i>habos</i>	<i>fullnos</i>	???	???	???	???	???
	2. Du. nimats	<i>nasjats</i>	<i>salbots</i>	???	<i>fullnats</i>	nemuts	<i>nasideduts</i>	<i>salbodeduts</i>	<i>habaideduts</i>	<i>fullnodeduts</i>
	1. Pl. nimam	<i>nasjam</i>	<i>salbom</i>	<i>habam</i>	<i>fullnam</i>	nemum	<i>nasidedum</i>	<i>salbodedum</i>	<i>habaidedum</i>	<i>fullnodedum</i>
	2. Pl. nimiþ	<i>nasjiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullniþ</i>	nemuþ	<i>nasideduþ</i>	<i>salbodeduþ</i>	<i>habaideduþ</i>	<i>fullnodeduþ</i>
	3.Pl. nimand	<i>nasjand</i>	<i>salbond</i>	<i>haband</i>	<i>fullnand</i>	nemun	<i>nasidedun</i>	<i>salbodedun</i>	<i>habaidedun</i>	<i>fullnodedun</i>
Aktiv Konj.	1. Sg. nimau	<i>nasjau</i>	<i>salbo</i>	<i>habau</i>	<i>fullnau</i>	nemjau	<i>nasidedjau</i>	<i>salbodedjau</i>	<i>habaidedjau</i>	<i>fullnodedjau</i>
	2. Sg. nimais	<i>nasjais</i>	<i>salbos</i>	<i>habais</i>	<i>fullnais</i>	nemeis	<i>nasidedeis</i>	<i>salbodedeis</i>	<i>habaidedeis</i>	<i>fullnodedeis</i>
	3. Sg. nimai	<i>nasjai</i>	<i>salbo</i>	<i>habai</i>	<i>fullnai</i>	nemi	<i>nasidedi</i>	<i>salbodedi</i>	<i>habaidedi</i>	<i>fullnodedi</i>
	1. Du. nimaiwa	<i>nasjaiwa</i>	<i>salbowa</i>	<i>habawa</i>	<i>fullnaiwa</i>	???	???	???	???	???
	2. Du. nimaits	<i>nasjaits</i>	<i>salbots</i>	<i>habaits</i>	<i>fullnait</i>	???	???	???	???	???
	1. Pl. nimaima	<i>nasjaima</i>	<i>salboma</i>	<i>habaima</i>	<i>fullnaima</i>	nemeima	<i>nasidedeima</i>	<i>salbodedeima</i>	<i>habaidedeima</i>	<i>fullnodedeima</i>
	2. Pl. nimaiþ	<i>nasjaiþ</i>	<i>salbop</i>	<i>habaiþ</i>	<i>fullnaiþ</i>	nemeiþ	<i>nasidedeiþ</i>	<i>salbodedeiþ</i>	<i>habaidedeiþ</i>	<i>fullnodedeiþ</i>
	3.Pl. nimaina	<i>nasjaina</i>	<i>salbona</i>	<i>habaina</i>	<i>fullnaina</i>	nemeina	<i>nasidedeina</i>	<i>salbodedeina</i>	<i>habaidedeina</i>	<i>fullnodedeina</i>
Passiv Ind.	1. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>	No passive in this class because of its intransitivity	Gothic does not convey preterital passive forms				No passive in this class because of its intransitivity
	2. Sg. nimaza	<i>nasjaza</i>	<i>salboza</i>	<i>habaiza</i>						
	3. Sg. nimada	<i>nasjada</i>	<i>salboda</i>	<i>habada</i>						
	1.-3. Pl. nimanda	<i>nasjanda</i>	<i>salbonda</i>	<i>habanda</i>						
Passiv Konj.	1. Sg. nimaidau	<i>nasjaidau</i>	<i>salbo</i>	<i>habaidau</i>						
	2. Sg. nimaizau	<i>nasjaizau</i>	<i>salbos</i>	<i>habaizau</i>						
	3. Sg. nimaidau	<i>nasjaidau</i>	<i>salbop</i>	<i>habaidau</i>						
	1.-3. Pl. nimaindau	<i>nasjaindau</i>	<i>salbond</i>	<i>habaindau</i>						

Athematic presents (mostly discontinued in PGmc.)

	PIE		early PGmc.		late PGmc.		Gothic
1. Sg.	<i>*h₁és-mi</i>	>	<i>*ezmi</i>	>	<i>*immⁱ</i>	>	<i>im</i>
2. Sg.	<i>*h₁és-si</i>	>	<i>*essi</i>	>	<i>*isⁱ</i>	>	<i>is</i>
3. Sg.	<i>*h₁és-ti</i>	>	<i>*esti</i>	>	<i>*istⁱ</i>	>	<i>ist</i>
1. Pl.	<i>*h₁s-més</i>	>	<i>†s^umez</i>	>	<i>*izumⁱ</i>	>	<i>sijum</i>
2. Pl.	<i>*h₁s-té</i>	>	<i>†sti</i>	>	<i>*izudⁱ</i>	>	<i>sijup</i>
3. Pl.	<i>*h₁s-énti</i>	>	<i>*senpi</i>	>	<i>*sindⁱ</i>	>	<i>sind</i>

PIE base for the Germanic strong verbs: thematic presents

⟨ai⟩ = [ɛ]

	PIE		Pgmc		Gothic
1. Sg.	* <i>b^hér-o-h₂</i>	>	* <i>berō</i>	>	<i>baira</i>
2. Sg.	* <i>b^hér-e-si</i>	>	* <i>berizⁱ</i>	>	<i>bairis</i>
3. Sg.	* <i>b^hér-e-ti</i>	>	* <i>beridⁱ</i>	>	<i>bairiþ</i>
1. Du.	* <i>b^hér-o-_ṛos</i>	>	* <i>berawaz</i>	>	<i>bairos</i>
2. Du.	* <i>b^hér-e-tes</i>	>	* <i>beridⁱz</i>	>	<i>bairats</i>
1. Pl.	* <i>b^hér-o-mes</i>	>	* <i>beramⁱz</i>	>	<i>bairam</i>
2. Pl.	* <i>b^hér-e-te</i>	>	* <i>beridⁱ</i>	>	<i>bairiþ</i>
3. Pl.	* <i>b^hér-o-nti</i>	>	* <i>berandⁱ</i>	>	<i>bairand</i>

Examples of ablaut roots with basic vowel *e* (*o* : *∅*)

Proto Indo-European

1. **réid^h-* : **róid^h-* : **rid^h-* ‘ride’
2. **déuk-* : **dóuk-* : **duk-* ‘pull’
3. **_uért-* : **_uórt-* : **_urt-* ‘turn’
4. **mén-* : **món-* : **m_o-* ‘think’
5. **séd-* : **sód-* : **sd-* ‘sit’

Proto Germanic

- > **reid-* : **raid-* : **rid-*
- > **teuh-* : **tau-* : **tug-*
- > **werp-* : **warp-* : **wurd-*
- > **reid-* : **raid-* : **rid-*
- > **set-* : **sat-* : **st-*

Examples of ablaut roots not fitting into the e-scheme

Neogrammarian

Post-neogrammarian

†Proto Germanic

- | | | | | |
|--|---|----------------------------------|---|------------------------------------|
| 1. $*a\hat{g}- : o\hat{g}- : \partial\hat{g}-$ ‘fear’ | : | $*h_2eg^h- : h_2og^h- : h_2g^h-$ | > | † $ag- : ag- : ag-$ |
| 2. $*l\bar{e}d- : l\bar{o}d- : l\partial d-$ ‘let’ | : | $*leh_1d- : loh_1d- : lh_1d-$ | > | † $l\bar{e}t- : l\bar{o}t- : lat-$ |
| 3. $*d^he\bar{e}- : d^ho\bar{e}- : d^h\partial-$ ‘put’ | : | $*d^heh_1- : d^hoh_1- : d^hh_1-$ | > | † $d\bar{e}- : d\bar{o}- : da-$ |
| 4. $*st\bar{a}- : st\bar{o}- : st\partial-$ ‘stand’ | : | $*steh_2- : stoh_2- : sth_2-$ | > | † $st\bar{o}- : st\bar{o}- : sta-$ |

Germanic strong verbs: Ablaut classes

Class	Base structure		Averbo 1	Averbo 1	Averbo 3	Averbo 4
	Nucleus	Coda	<i>e</i>	<i>a</i>	<i>ø/ē</i>	<i>ø/e</i>
1.	<i>e</i>	+ <i>i</i>	<i>ei</i> > <i>ī</i>	<i>ai</i>	<i>i</i>	<i>i</i>
2.		+ <i>u</i>	<i>eu</i>	<i>au</i>	<i>u</i>	<i>u</i>
3.		+ RC	<i>eRC</i>	<i>aRC</i>	<i>uRK</i>	<i>uRC</i>
4.		+ R	<i>eR</i>	<i>aR</i>	<i>ēR</i>	<i>uR</i>
5.		+ C ^[-R]	<i>eC</i>	<i>aC</i>	<i>ēK</i>	<i>eC</i>
6.	<i>a</i>	(+C)	<i>a</i> (C)	<i>ō</i> (C)	<i>ō</i> (C)	<i>a</i> (C)
7.	<i>V</i>	<i>V</i> (+C)	<i>V</i> (C)	Reduplication		<i>V</i> (C)

Possible explanation of the lengthened grade in ablaut classes 4 & 5

IE perfect (base of the Germanic preterite) featured reduplication in the perfect tense. The 3rd stem (pret. pl.) exhibited zero-grade, which in certain instances resulted in phonotactically difficult structures – particularly following the loss of reduplication in Germanic:

Averbo 1 IE	Averbo 3 IE	>	Averbo 3 Gmc.
-------------	-------------	---	---------------

Unproblematic e.g. in ablaut classes 1–3:

* <i>deuk-</i> ‘pull’	* <i>de-duk-</i>	>	* <i>tug-</i>
* <i>uert-</i> ‘turn’	* <i>ue-urt-</i>	>	* <i>wurd-</i>

Problematic in ablaut class 5:

* <i>sed-</i> ‘sit’	* <i>se-sd-</i>	>	† <i>st-</i> → * <i>sēt</i>
* <i>g^heb^h-</i> ‘grab’	* <i>g^he-g^hb^h-</i>	>	† <i>gb-</i> → * <i>gēb-</i>

One possible explanation is provided by roots with initial laryngeals, especially high-frequency roots such as:

* <i>h₁ed-</i> ‘eat’	* <i>h₁e-h₁d-</i>	>	* <i>ēt-</i>
---------------------------------	---	---	--------------

Sound change and class rupture

IE √*	class*	>	Germanic	class	>	Gothic
*tenk- ‘to clot’	s3	>	*penha- > pinha- > pīha- (cf. ME <i>dung</i>)	s1	>	þeihan ‘to þrive’
Weak verbs						
*tong-	w1	>	*þank-ja- : þanh-ta (cf. ME <i>think</i> : <i>thought</i>)	w1c	>	þankjan : þāhta
*b ^h r+h ₂ nek-	s3→w1	>	*brenga- : brang- > branh-ta (cf. ME <i>bring</i> : <i>brought</i>)	w1c	>	bringen : þāhta

Weak verbs as derived verbs: The most most important patterns in Gothic

	1. <i>-ja-</i>			2. <i>-ō-</i>	3. <i>-a/ai-</i>	4. <i>-na/nō-</i>
Base	Strong verb	Strong verb	Noun (subst./adj.)	predominant ly nouns	mostly non- derived	strong verbs, adjectives
Example	<i>drenka-</i> 'to drink'	<i>dreiba-</i> 'to drive'	<i>hails</i> 'healthy'	* <i>salbō</i> 'ointment'		<i>fulls</i> 'full'
Pattern	Averbo 2 + <i>(i)ja</i>	Averbo 2 + <i>(i)ja</i>	Stem + <i>ja</i>	Stem (+ <i>ō</i>)		Stem + <i>na/nō</i>
Semantics	causative	iterative / intensive	factitive	often ornative		inchoative, mediopass.
Example	<i>dragk-ja-</i> 'to soak'	<i>draib-ja-</i> 'to harass'	<i>hail-ja-</i> 'to heal'	<i>salb-ō-</i> 'to anoint'	<i>hab-a/ai-</i>	<i>full-na/nō-</i>

Class 2 weak verb and a possible development of the weak preterite

...using the example of *salbō-* 'to apply ointment, to anoint'

- Many representatives of the Class 2 weak verbs are denominal.
- These denominal verbs mostly have an ornative meaning.

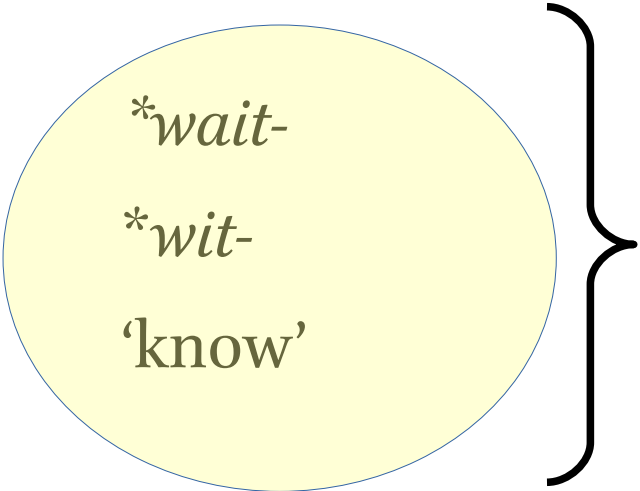
Possible Explanation:

- Paraphrase from PIE instrumental †*salp-ó-h₁* 'with ointment' and **d^heh₁-* 'to put' (→ 'to do')
- Proto-Germanic **salbō-đedē* would therefore be 'did [acted] by means of ointment'
- In the present tense, replacement with the suffix -*jo-* for denominal presents → **salbō-ja-*
- Loss of intervocalic -*j-*; shortening of -*ōa-* > *ō*

Weak verbs: stem formation in Gothic

	Infinitiv	1. Sg. Präs.	2.Sg.Präs.	1.Sg.Prät.	3.Pl.Prät
1.a)	<i>nas-ja-n</i>	<i>nas-ja-</i>	<i>nas-ji-s</i>	<i>nas-i-d-a</i>	<i>nas-i-ded-un</i>
1.b)	<i>sok-ja-n</i>	<i>sok-ja-</i>	<i>sok-ei-s</i>	<i>sok-i-d-a</i>	<i>sok-i-ded-un</i>
1.c)	<i>bug-ja-n</i>	<i>bug-ja-</i>	<i>bug-ji-s</i>	<i>bauh-t-a</i>	<i>bauh-ted-un</i>
2)	<i>salb-ō-n</i>	<i>salb-ō-</i>	<i>salb-ō-s</i>	<i>salb-ō-d-a</i>	<i>salb-ō-ded-un</i>
3)	<i>hab-a-n</i>	<i>hab-a-</i>	<i>hab-ai-s</i>	<i>hab-ai-d-a</i>	<i>hab-ai-ded-un</i>
4)	<i>full-na-n</i>	<i>full-na-</i>	<i>full-ni-s</i>	<i>full-no-d-a</i>	<i>full-no-ded-un</i>

Semantic-functional change in preterite-presents

	Indo-European	Germanic	
Root	<i>*<u>u</u>eid-</i>	<i>*wīt-</i>	
Basic meaning	‘to see’	- - -	
Perfect stem: Singular	<i>*<u>u</u>oid-</i>		
Perfect stem: Plural	<i>*<u>u</u>id-</i>		
Perfect meaning:	‘having realised’		

Present

Preteritopresents in Gothic

Class	1. Sg. Pres.	1. Pl. Pres.	Meaning	1. Sg. Pret.
1.	<i>wait</i>	<i>witum</i>	‘to know’	<i>wis-sa</i>
	<i>lais</i>	<i>*lisum</i>	‘to know’	<i>*lis-ta?</i>
	<i>aih</i>	<i>aigum</i>	‘to possess’	<i>aih-ta</i>
2.	<i>daug</i>	<i>*dugum</i>	‘to suit’	<i>*dauh-ta</i>
3.	<i>kann</i>	<i>kunnum</i>	‘to know, understand’	<i>kun-þa</i>
	<i>þarf</i>	<i>þaurbum</i>	‘to need’	<i>þaurf-ta</i>
	<i>-dars</i>	<i>-daursum</i>	‘to dare’	<i>-daurs-ta</i>
4.	<i>skal</i>	<i>skulum</i>	‘ought’	<i>skul-da</i>
	<i>man</i>	<i>munum</i>	‘to intend, deem’	<i>mun-da</i>
5. ??	<i>mag</i>	<i>magum</i>	‘to be able’	<i>mah-ta</i>
6.	<i>og</i>	<i>*ogum</i>	‘to fear’	<i>oh-ta</i>
	<i>-mot</i>	<i>*-motum</i>	‘to find room, may’	<i>-mos-ta</i>

Problems with ablaut and reduplication in preteritopresents?

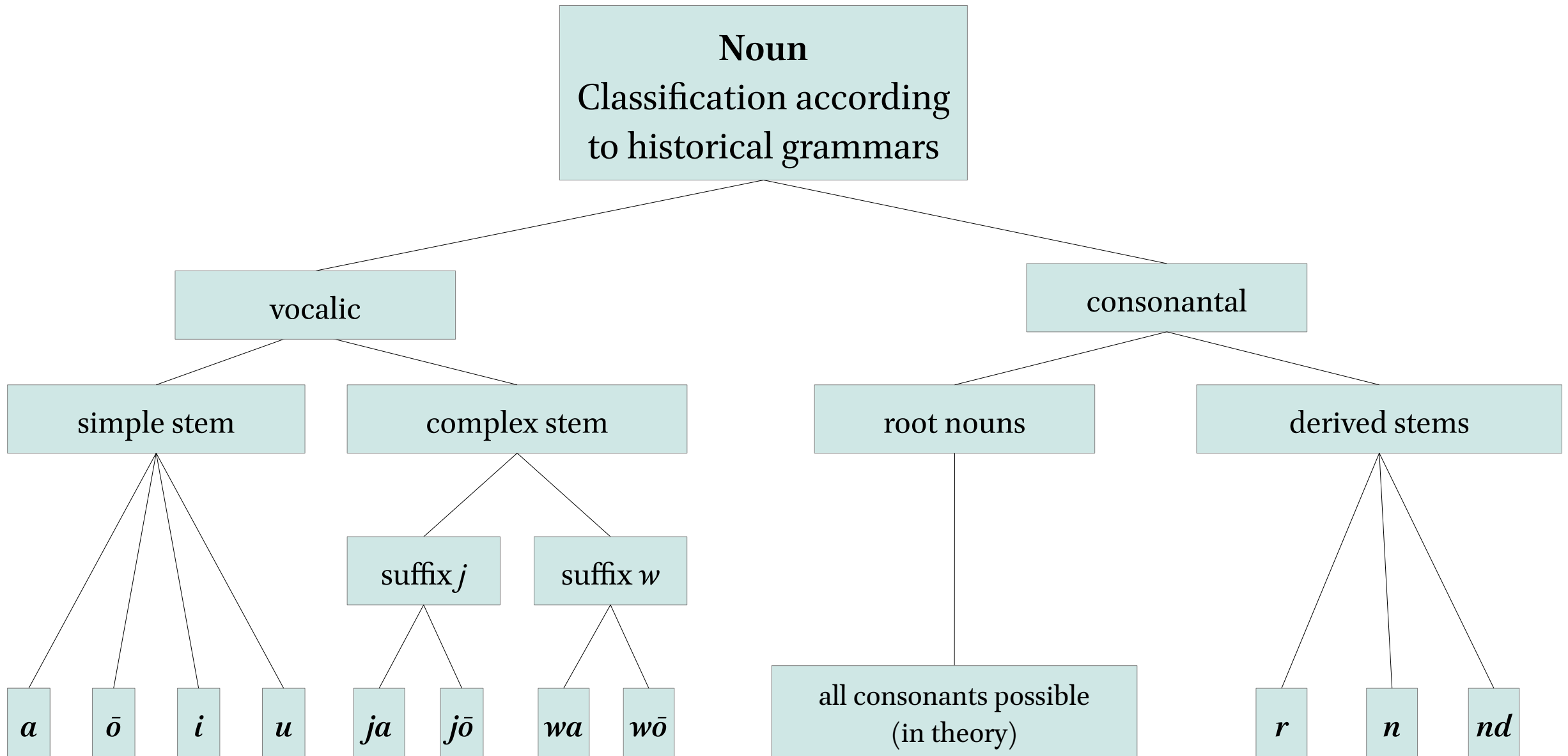
Gmc. Preteritopresent 1. Sg. **aih* : 1. Pl. *aigum* ...

→ IE base **Heik̂-*, probably **h₂eik̂-* ‘take into possession’

→ The expected outcome would be *aih* : *igum* (cf. *wait* : *witum*)

→ **h₂e-h₂oik̂-* : **h₂e-h₂ik̂-*

The Nominal Macrosystem



Beispielparadigma germ. *fōt- 'Fuss' im Vergleich

	ahd.	asächs.	aengl.	anord.	got.	urgerm.
Sg. Nom.	<i>fuoz</i>	<i>fot</i>	<i>fōt</i>	<i>fótr</i>	<i>fōtus</i>	<i>*fō(t)s</i>
Gen.	<i>fuozī</i>	<i>foti</i>	<i>fōtes</i>	<i>fótar</i>	<i>fotaus</i>	<i>*fōtiz</i>
Dat.	<i>fuozī</i>	<i>foti</i>	<i>fēt</i>	<i>fæti</i>	<i>fotau</i>	<i>*fōti</i>
Akk.	<i>fuoz</i>	<i>fot</i>	<i>fōt</i>	<i>fót</i>	<i>fotu</i>	<i>*fōtuⁿ</i>
Pl. Nom.	<i>fuozī</i>	<i>foti</i>	<i>fēt</i>	<i>fætr</i>	<i>fōtjus</i>	<i>*fōtiz</i>
Gen.	<i>fuoz(i)o</i>	<i>fotio</i>	<i>fōta</i>	<i>fóta</i>	<i>fotiwe</i>	<i>*fōtōⁿ</i>
Dat.	<i>fuozim</i>	<i>fotium</i>	<i>fōtum</i>	<i>fótum</i>	<i>fotum</i>	<i>*fōtum^{iz}</i>
Akk.	<i>fuozī</i>	<i>foti</i>	<i>fēt</i>	<i>fætr</i>	<i>fotuns</i>	<i>*fōtunz</i>

Strong and weak formation of adjective stems

New High German ‘fast horse’

ein schnelles Pferd : *das schnelle Pferd*

ein heiliger Geist : *der heilige Geist*

Gothic ‘holy spirit’

ahma weihs : *sa ahma weiha*
ahma sa weiha

Old (West) Norse (clever man)

fróðr maðr : *inn maðr fróði*
maðrinn fróði

Inflection of a suffixated noun with alternating accent

PIE

NSg. **ph₂-tér*
GSg. **ph₂-tr-és / -tr̥s?*
DSg. **ph₂-tr-éj̥*
ASg. **ph₂-tér-m̥*

PGmc.

NSg. **fádēr*
GSg. **fádurz*
DSg. **fádri̯*
ASg. **fáderuⁿ*

Langsilbige *ja*-Stämme und Sievers Gesetz

Sievers law: ein *-ja*-Suffix wird nach langsilbiger Basis lautgesetzlich zu *-ija-*

Example 1: IE **koro-* ‘group’ > ahd. †*har*

Derivation: Gmc. **har-ja-z* ‘army’ > ahd. *heri*

Example 2: PGmc **herdō* ‘flock’ > ahd. *herta*

Derivation: PGmc **herd-ij-az* ‘herdsman’ > ahd. *hirti*

However: PGmc **haffa-* > Goth. *haffa-*

PGmc **haffa-* > Goth. *haffa-*

Aufgabe: Transposition

Transpose the following roots into the 3 ablaut variants und continue diese variants into Gothic.
Which Germanic ablaut class would they fit in?

Normal grade

o-grade

øgrade

**ple*_u*d-* :

**b^he*_u*g^h-* :

**de*_i*k-* :

**sek*(*u*)₋ :

**u*_e*rb-* :

**ke*_h*₂p-* :

Exercise with weak verbs 1 & 4 in Gothic

Base

derived weak verb

wV. 1 with a noun as base:

**fulls* ‘fulls’

**fulls* ‘voll’

wV. 1 with a stV. as base:

nisan ‘get better’

sakan ‘to quarrel’

hneiwān ‘to decline’