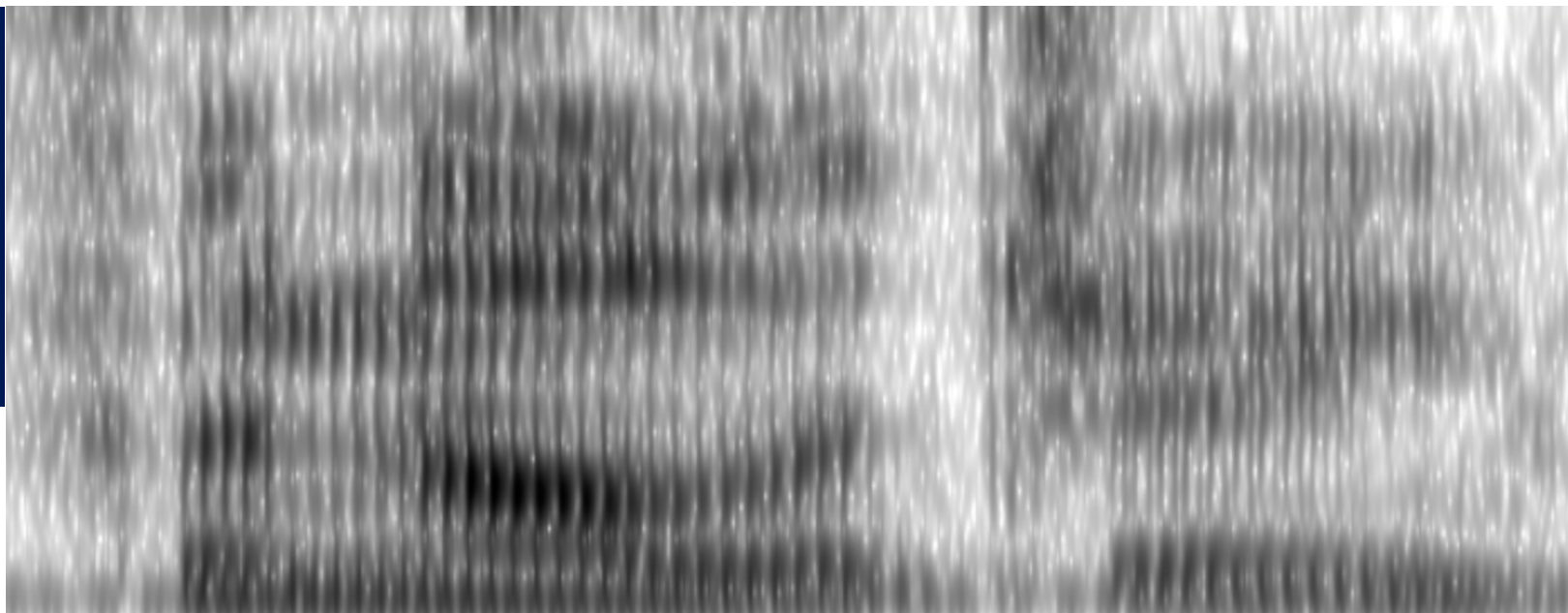




UNIVERSITY OF
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Middle High German: Phonology II

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Language & Brain Laboratory

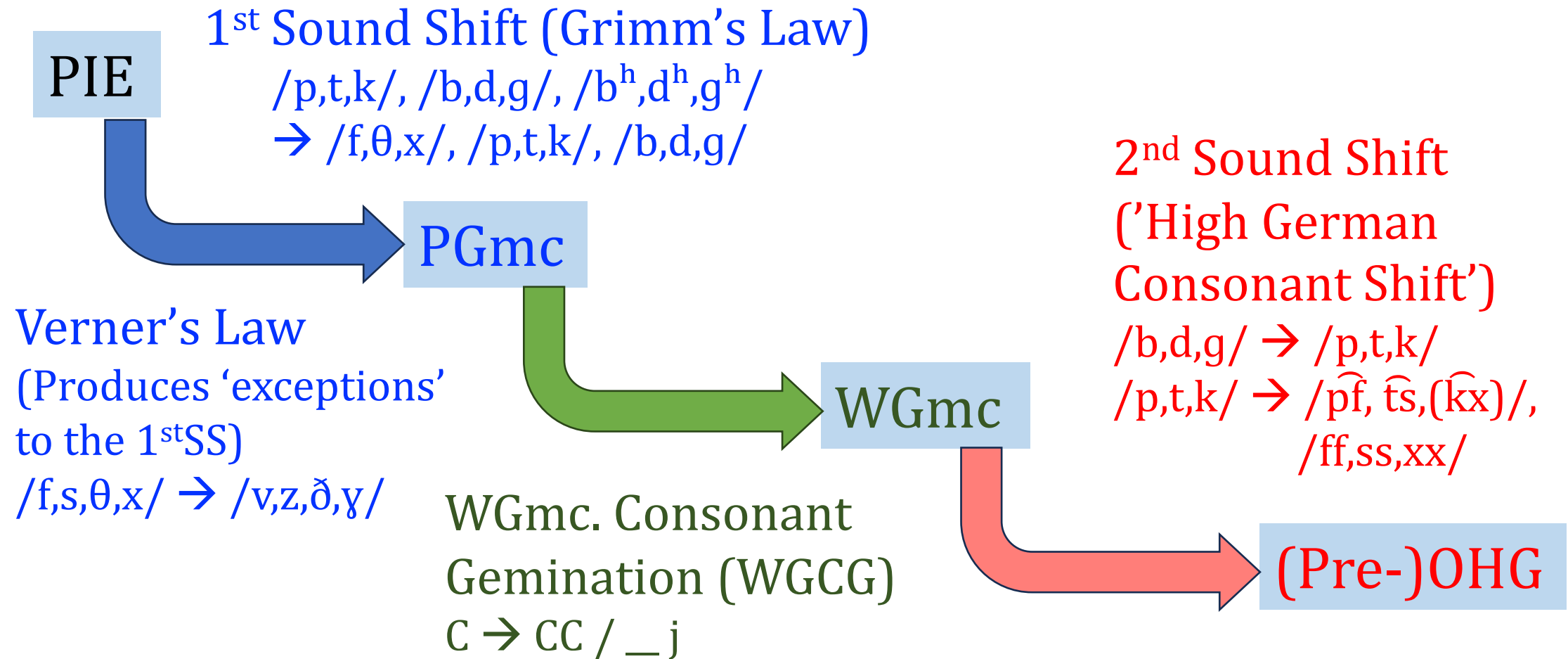
Faculty of Linguistics, Philology & Phonetics

University of Oxford

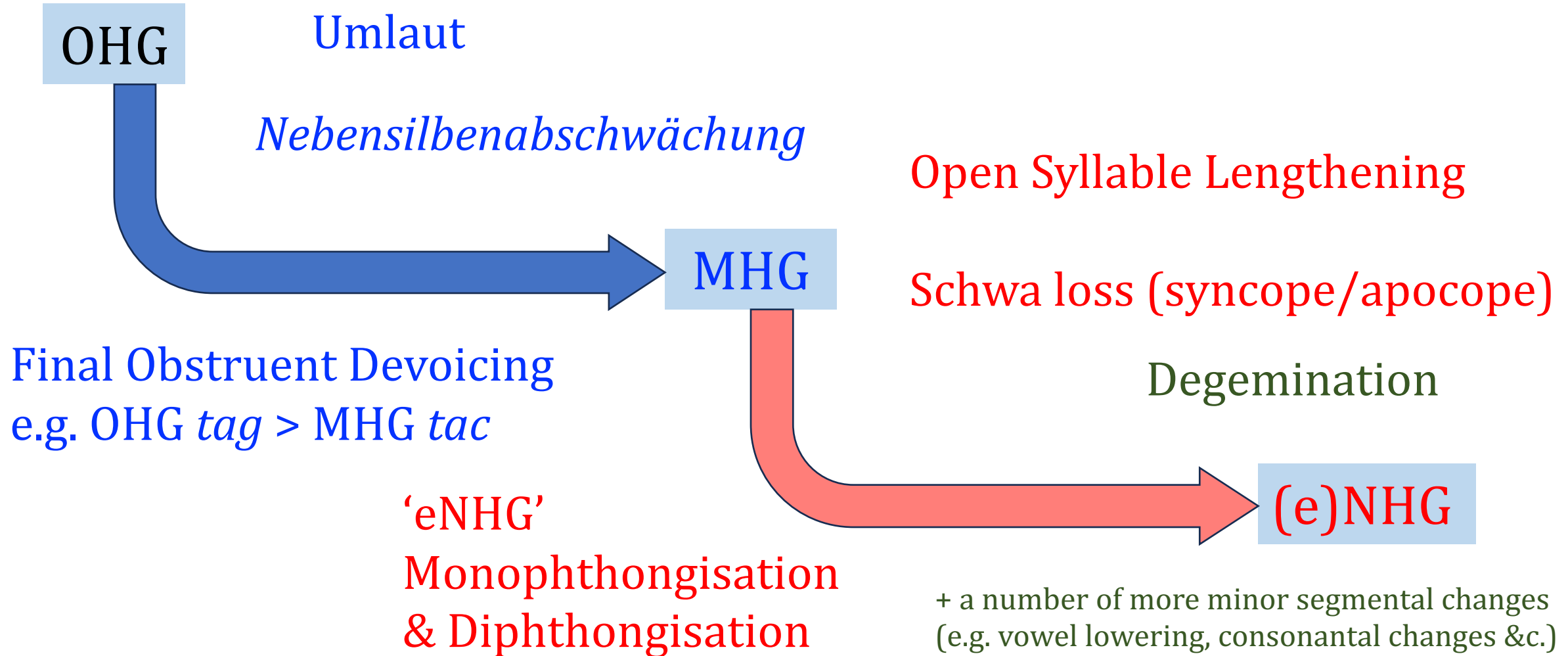
Michaelmas Term 2024

1. Introduction to Historical Linguistics and Middle High German
2. Phonology I
3. Phonology II
4. Morphology I
5. Morphology II
6. Syntax
7. Lexis & Language Contact
8. Phonology III

Pre-OHG Sound Changes



OHG → MHG → (e)NHG

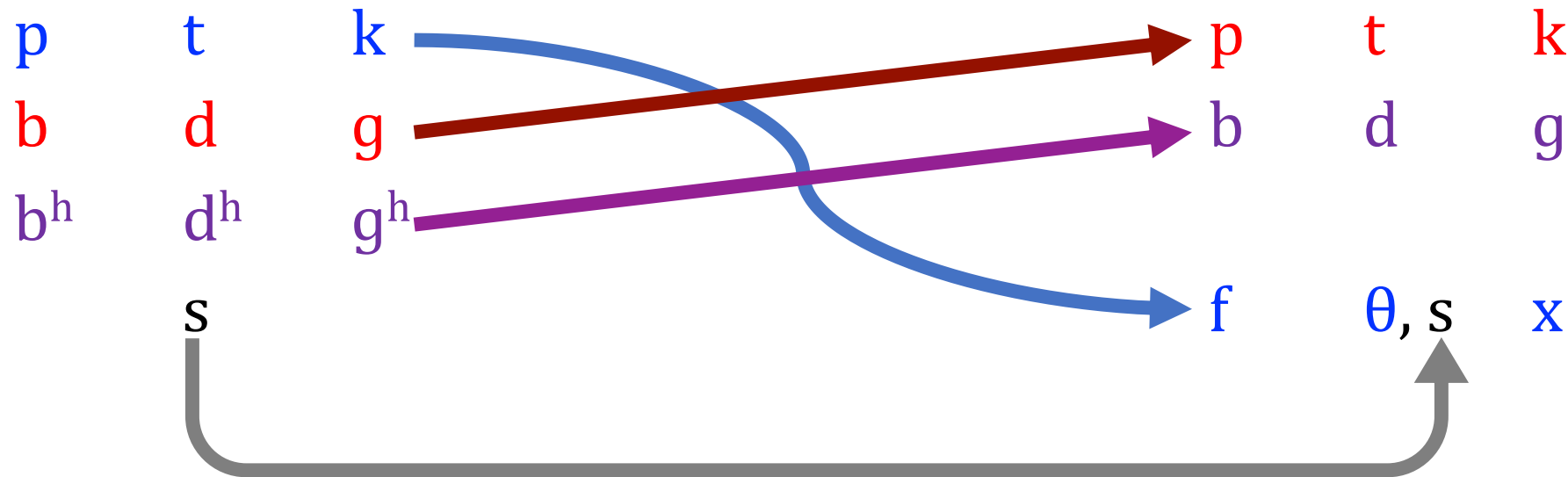


PIE → PGmc.

First Sound Shift/ Grimm's Law / Rask's Rule

PIE obstruents (without the laryngeals)

Proto-Germanic



/θ/ is written <p> in older texts

First Sound Shift

- Voiceless stops became voiceless fricatives when not preceded by /s/
- Voiced unaspirated stops became voiceless
- Voiced aspirated stops lost their aspiration
- /s/ remained unchanged

First Sound Shift

IE p/t/k	Germanic f/θ/x	
prtu	ford	f
pulo-	foal	f
ten-	thin	θ
tonə-	thunder	θ
kʀn-	horn	h/x
kwod	what OE hwæt	h/x

IE b/d/g	Germanic p/t/k	
abel-	apple	p
drew-	tree	t
dent-	teeth	t
grəno	corn	k
agro	acre	k

IE b ^h /d ^h /g ^h	Germanic b/d/g	
bhāgo	beech	b
bhibhru	beaver	b
dhwer	door	d
dheigh	dough	d
ghol-	gall	g
ghaido	goat	g

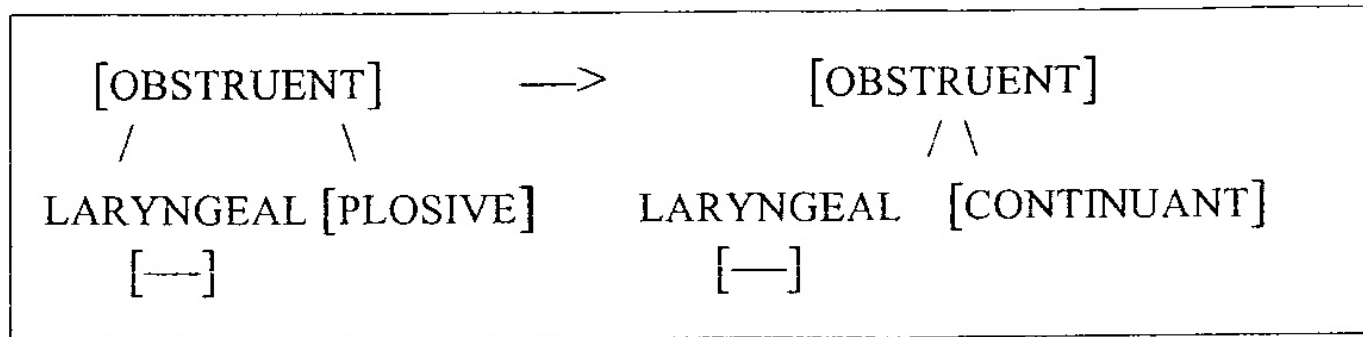
IE	Greek	Latin	Sansk.	O.C. Slav.	OHG	OE	Gothic
*p	poús	pēs	pad-, pāda	pěšǫ	fuoz	fōt	fōtus
	patér	pater	pitár		fater	fæðer	fadar
*t	treis	trēs	trayas		drī	þrī	
	tú	tū	tu-		dū	þū	þu
*k	kúon	canis			hunt	hund	hunds
	èkatón	centun	satem				
		pecu			fihu	feoh	faíhu

IE	Greek	Latin	Sansk.	O.C. Slav.	OHG	OE	Gothic
*b	bel-tiōn		balam				paida
	‘better’		‘strong’				
*d	déka	decem	daśa	slabŭ	slāfan	slæpan	slēpan
	édō	edō			ezzan	etan	itan
	pod-	ped-			fuoz	fōt	fōtus
*g		gelu			kalt	ceald	kalds
	genu	genu	jānu		knio	cnēo	

IE *b ^h , *d ^h , *g ^h					
Greek	Latin	Sanskrit	OHG	OE	Gothic
phráter	frāter	bhrata	bruoder	brōpor	brōþar
phéron	ferō	bhar-	beran	beran	beran
		duhita	tohter	dohtor	daúhtar
		ni-dāghas	tag	dæg	dags
		*ni-dhāghas			
e-thēka-		dhā- ‘to set’	toun	dōn	
		bandhanam	bintan	bindan	bindan
		ni-dāghas	tag	dæg	dags
hosti	hostis		gast	giest	gast

Advanced

i. Voiceless stops become fricatives $p\ t\ k \rightarrow f\ \theta\ x$

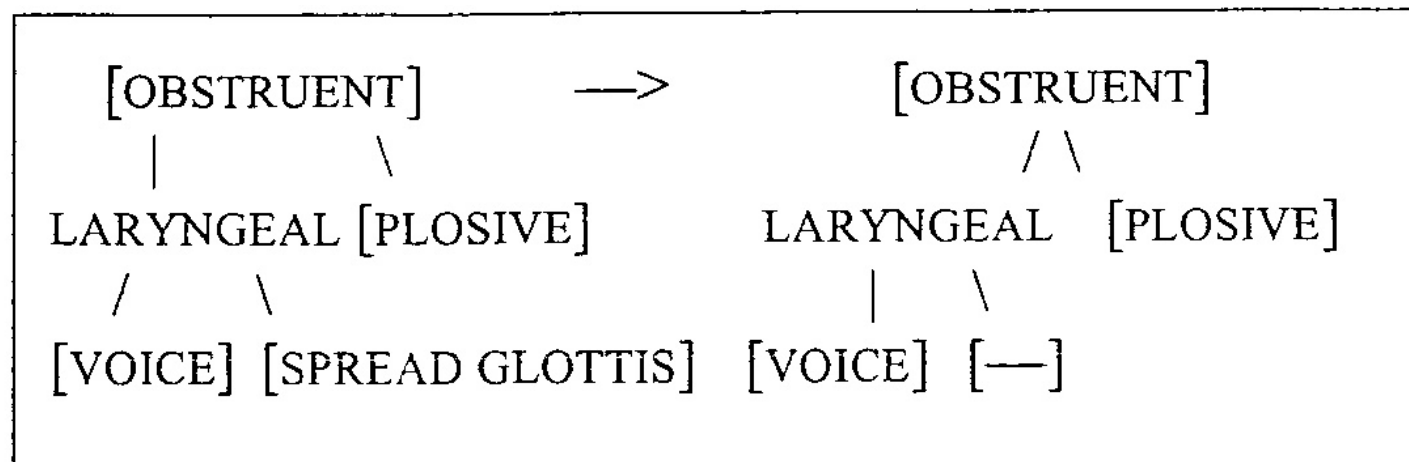
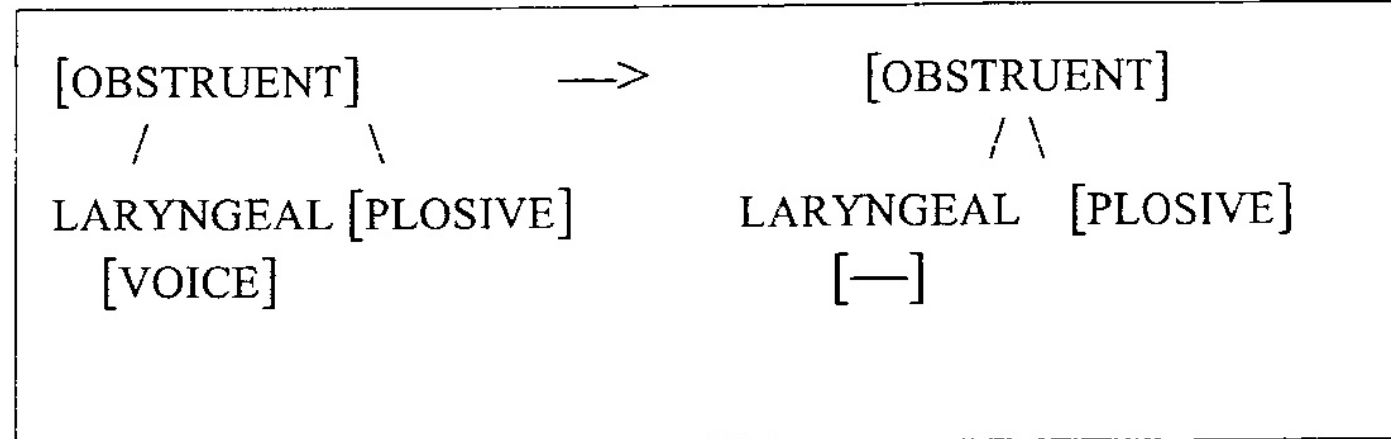


First Sound Shift

ii. Voiced stops become voiceless

$b\ d\ g \rightarrow p\ t\ k$

iii. Voiced aspirated stops lose aspiration $b^h\ d^h\ g^h \rightarrow b\ d\ g$



Ordering has to be i > ii > iii

Changes to the Proto-Germanic Phonological system

[illegible]

PGmc phonemes

p	t	k
b	d	g
f	θ	x
	s	

NB. The voiced aspirates also allophonically became the voiced fricatives [β], [ð], [ɣ]. These can be defined in terms of existing features in the language (i.e. [f], [θ], [x] + [VOICE]).

Proto-Germanic	p	t	k	b	d	g	f	θ	x	s
OBSTRUENT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PLOSIVE	✓	✓	✓	✓	✓	✓				
VOICE				✓	✓	✓				
SPREAD GLOTTIS										
CONTINUANT							✓	✓	✓	✓

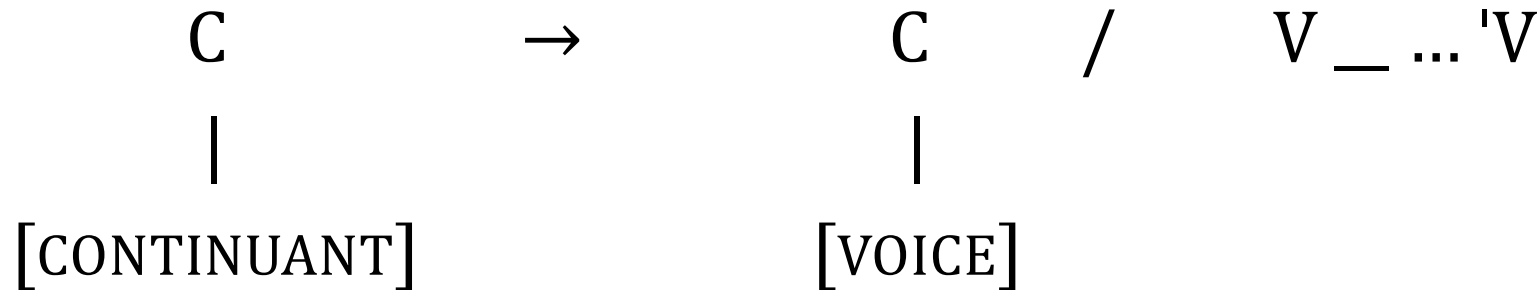
Core

Exceptions to Grimm's Law: Verner's Law

Sometimes when you expect [f θ x s] we “unexpectedly” find [v ð γ z]...

cf. Sanskrit pitár > *father* [faðer] - why not [faθer]?

Voiceless fricatives become voiced when the preceding vowel does not bear main stress.



Verner's Law

In PIE (and earliest Gmc), stress could alternate across word forms (clearest in verbs). Many verbs showed the following pattern after Grimm's Law:

Infinitive	1/3 Past SG	Past PL	Past Participle
'V θ V	'V θ V	V ð 'V	V ð 'V
'V s V	'V s V	V z 'V	V z 'V
'V x V	'V x V	V ȝ 'V	V ȝ 'V

*'snī**p**an

*'snai**p**

*snī'**ð**um

*snī**ð**a'naz

West Germanic Consonant Gemination

$C \rightarrow C: / V_j$

NHG	MHG	OHG	West Germanic	Proto-Germanic
<i>Hahn</i> [ha:n]	<i>hane</i> /ha ⁿ ə/	<i>hano</i> /ha ⁿ o/	* <i>hanō</i> /ha ⁿ o:/	* <i>hanō</i> /hano:/
<i>Henne</i> [hɛnə]	<i>henne</i> /hɛ ⁿ ə/	<i>henna</i> /hɛ ⁿ a/	* <i>hannju</i> /ha ⁿ ju/	* <i>hanjō</i> /han ^j o:/



THE SECOND SOUND SHIFT

(i) Voiceless Stops

In initial position, after a C or if the WGmc stop was geminate (doubled):

$/*p,*t,*k/ \rightarrow /pf,ts,kx/$

Else:

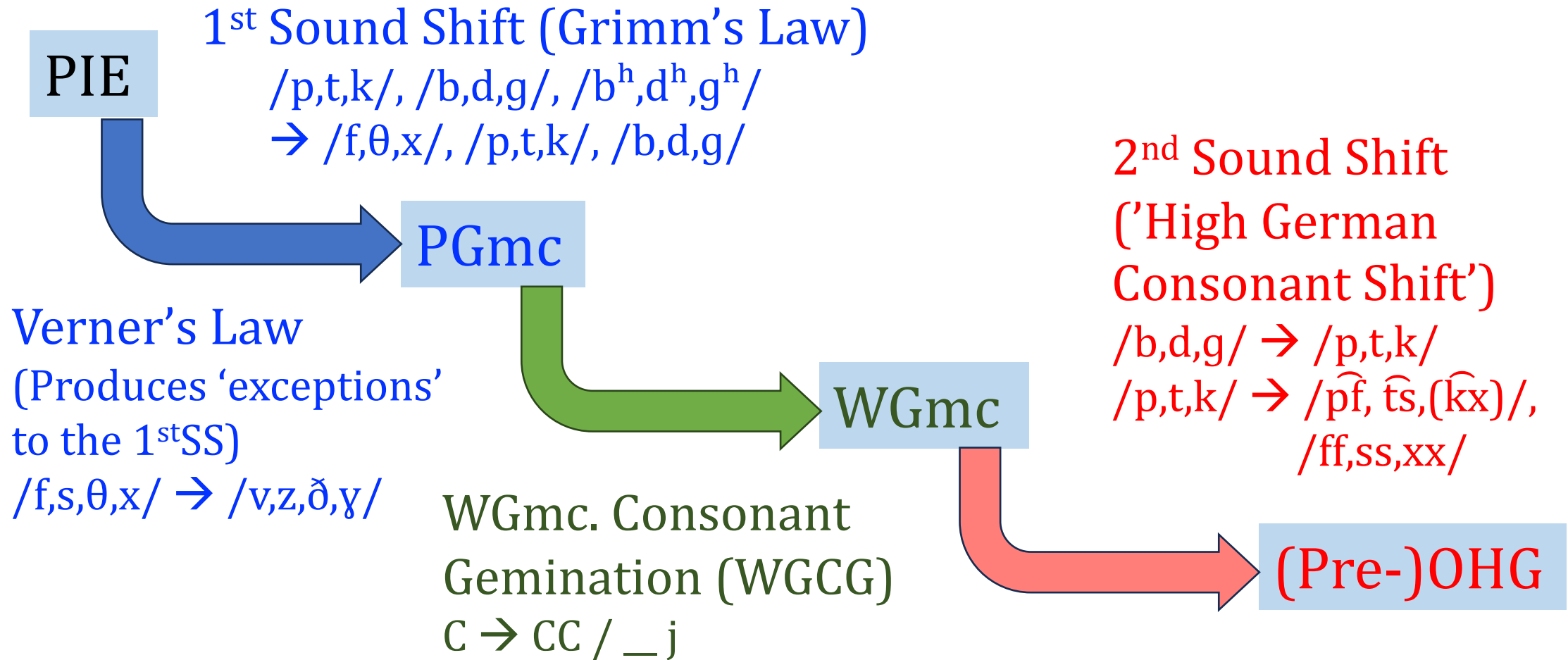
$/*p,*t,*k/ \rightarrow /ff,ss,xx/$

(ii) Voiced Stops

$/*b,*d,*g/ \rightarrow /p,t,k/$

Blocked after /s, f, x/ + /t/; Not shifted before /r/

Pre-OHG Sound Changes



PIE root *sed-

Grimm's
Law

*set-

*sit-jan

WGCG

*sittjan

*sitten

HGCS

sitzen [ts]

NB. *-jan* verbs regularly
end in *-en* in OHG

PIE root *sed-

Grimm's
Law

*set-

*sat, *sētun, *setanaz

*sat, *sātun, *setan

WGCG

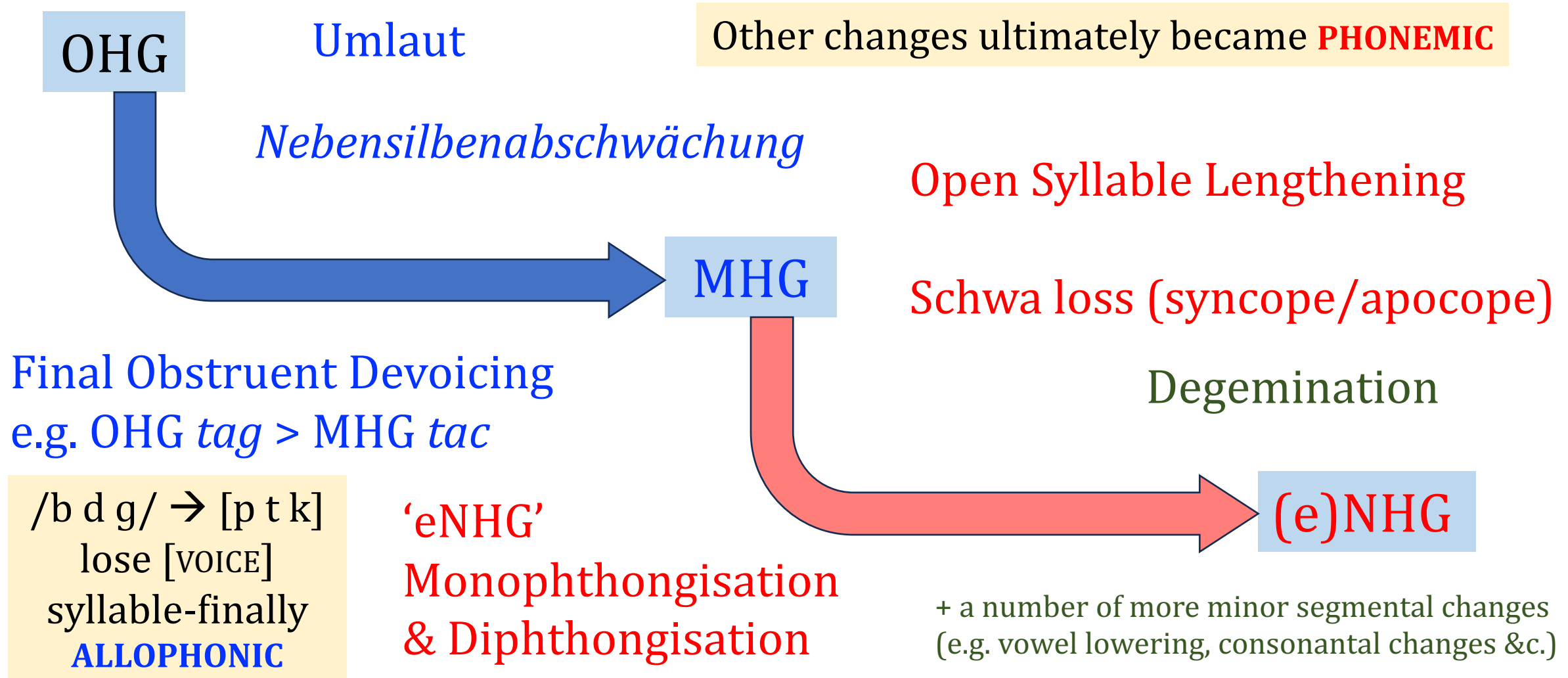
HGCS

*sat, *sātun, *setan

sa₃, sā₃en, gise₃₃an

NB. geminate consonants shortened finally
and after long vowels or another consonant

OHG → MHG → (e)NHG



Reduction of unstressed syllables

Weakening & partial loss of unstressed vowels

Short and long vowels weakened to /ə/ <e>

súozī > súeze

wázzar > wázzar

By OHG **primary stress**
was firmly **stem-initial**

Secondary stress prevented reduction & NHG retains full vowels

mánōd > mânôt / mônôt

lós-ùnga > loesunge / lôsunge

frí-hèit > vrîheit

Secondary stress only
possible on **derivational**
suffixes of certain
phonological shapes,
never inflectional suffixes
(e.g. noun, verb, adjective
agreement endings)

Pronominal/adjectival NOM.SG.FEM &
NOM/ACC.PL.NEUT remained **unweakened** -iu [y:]

OHG *blintiu* > MHG *blindiu*

Neuter *-ja* stem: *betti* ‘bed’

		eOHG	C9 th	MHG
SG	NOM	betti	betti	bette
	ACC	betti	betti	bette
	GEN	bettes	bettes	bettes
	DAT	bettie	bette	bette
	INSTR	bettiu	bettu	—
PL	NOM	betti	betti	bette
	ACC	betti	betti	bette
	GEN	betteo, -io	betto	bette
	DAT	bettum, -un, -on	bettim, -in	betten

Nebensilbenabschwächung

Did not happen overnight

Started early

e.g. *-eo/-io* (older forms of the *i*-declension M.G.PL) already *-o* from C9th:
gesteo, *-io* > *gesto*

Continued into MHG

This is a very old trend in Germanic:

Final long Vs in unstressed syllables inherited from PGmc. were already shortened in Pre-OHG, e.g. *-ō* > *-u* and *ī* > *i*

- *biru* < **berō* 'bear-1SG'
- *tagu* < **dayō* 'day-INST' ('by day')
- *nāmi* 'take-1/3SG.PRET.SUBJ' vs. *nāmīn* 'take-3PL.PRET.SUBJ'

More on this when we discuss morphology...

Umlaut

Origins in a purely allophonic process:

Stem vowel fronted (& *raised*) in the presence of a high front vowel /i/ or glide /j/ in the following syllable.

$/a, \text{ɔ}, u, a:, o:, u:, uə, ou/ \rightarrow /e, \text{æ}, \text{œ}, \text{ʏ}, \text{æ:}, \text{ø:}, \text{y:}, \text{yə}, \text{øʏ}/$

‘*Primärumlaut*’ = $/a/ \rightarrow /e/$

‘*Sekundärumlaut*’

Either **only** $/a/ \rightarrow /æ/$

Or $/a/ \rightarrow /æ/$ **and** $/o, u, uə, ou/ \rightarrow /ø, \text{y}, \text{yə}, \text{øʏ}/$

Grimm ([1819]/1880) only discusses *Primärumlaut*

Umlaut

- Ultimately, the /i/ or /j/ which caused umlaut were lost:
Nebensilbenabschwächung!
- No longer recoverable: productive phonological process impossible
 - Allophone → phoneme
- (Now historical) Umlaut reanalysed as morphological & becomes one of the most important markers of plurality in German (Plank & Lahiri 2015: 12ff.)
- Even extended to words which never historically had umlaut
e.g. *Dorf~Dörfer, Wort~Wörter, Topf~Töpfe*

Umlaut

OHG: Fully active

300–400 years earlier than it appears in writing, in early (Pre-?)OHG

Umlaut of /u/ was first represented later, around 1000 (during OHG period)

Umlaut of /o/ was not really written in OHG

MHG: Orthographic representation remains inconsistent

Umlaut of /u, o, uə/ rarely marked in manuscripts

Only *Primärumlaut* of /a/ represented in writing in OHG

e.g. /a > e/, e.g. betti ‘bed’ (cf. Gothic badi)

Sekundärumlaut of /a/ is only found from early MHG

e.g. /a > æ/ <mahti>~<mehti> ‘strength.NOM/ACC.PL.’

See Braune & Heidermanns 2023: 83ff.; Jones & Jones 2019: 44; Braune & Eggers 1987: 54; Moser 1969: 114; see also Twaddell 1938; Penzl 1949

Advanced

Umlaut

a-stem nouns formed the largest class and did not exhibit umlaut

	OHG		Gothic		NE
	SG	PL	SG	PL	
<i>a</i> -/ <i>o</i> - declension NO UML	stein wunta hunt	steina wunta hunta	stáins wunds hunds	stáinōs wundōs hundōs	stone wound hound
<i>i</i> -declension ALTERNATION	hūt huf(f) stat	h[y]ti h[y]ffi steti	*hūps hups staps	*hūpeis hupeis stapeis	hide hip stead
<i>ja</i> / <i>jō</i> - declension ALL UML	betti ch[y]nni th[y]rsten	betti ch[y]nni	badi kuni þ[ɔ]rsjan	badja kunja	bed kin to thirst

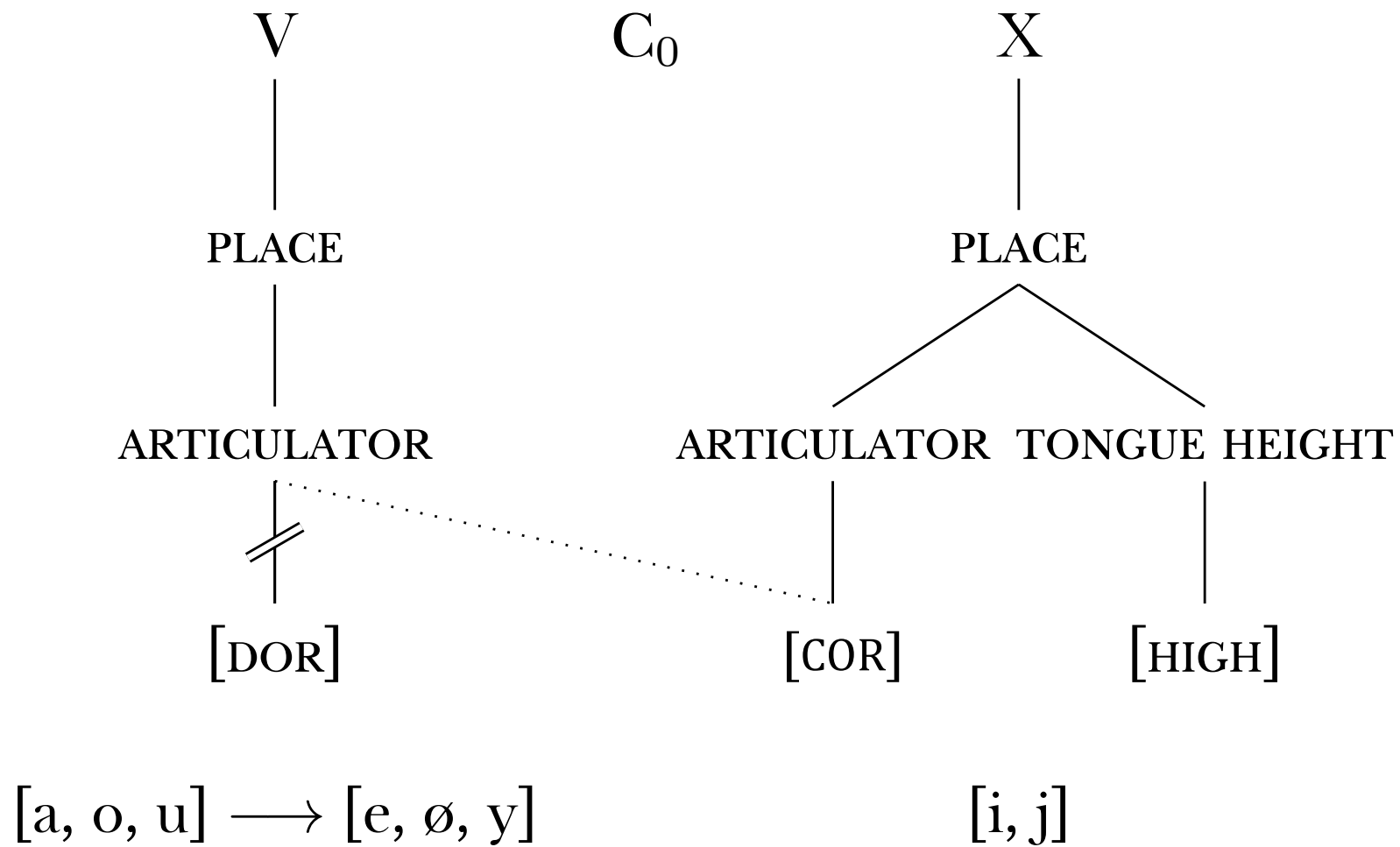
Gothic had
no umlaut

Umlaut

[DORSAL] vowels /a,o,u/ → [CORONAL] /æ,e,ø,y/

	i/j	u → y	o → ø	a → e æ
LABIAL		✓	✓	
CORONAL	✓		✓	✓
DORSAL		✓	✓	✓
HIGH	✓	✓		
LOW				✓

Umlaut



Why wasn't umlaut spelt?

Twadell:

- Whilst it was **allophonic**, it wasn't spelt
- Once it became **phonemicised**, scribes began to represent it
OHG *dunni* [dynni] > MHG *dünne* [dynnə] > NHG *dünn* [dyn]
- The exception, ⟨e⟩ for umlauted /a/, is due to its phonetic similarity to an existing phoneme

Core

hört ouch von Sigvnen sagen.
diu chynde ir leit mit iamer chlagen.
si spëch zem knappen dv hast tvgnit.
geret si din ^eiv iugent.
vñ din antlvze minnechlich.
deiswar dv wirst noch ^eælden rich.
dusen ritter mit dax gabylot.
er lach ze tvstieren tot.

ê sie den Knappen rîten lieze,
sie vrâgte in ê wie er hieze,
und jach er tr^üege den gotes vlîz.
« bon fîz, schier fîz, bêâ fîz,
alsus hat mich genennet
der mich dâ heime erkennet. »

Nu h^œert ouch von Sigûnen sagen:
diu kunde ir leit mit jâmer klagen.
sie sprach zem Knappen « du hâst tugent.
gêret sî dîn s^üeziu jugent
und dîn antlitze minneclîch.
deiswâr du wirst noch s^ælden rîch.
disen rîter mit dez gabylôt:
er lac ze tjostieren tôt.

Ê si den knappen rîten lieze.
si vrâgete in wie er hieze.
vñ lach er tr^üege den gotes vlîz.
bon fîz iera fîz beafîz.
alsus hat mich genennet.
der mich da heime erkennet.

h y hort ōch von Sigenen sagen.
hōrt ōch von Sigenen sagen.

div chynde ir leit m...
si spēch zern knappen
geret si din ^esziv wgent.

vñ din antlvzze minnechlich.
deuswar dy wurst noch ^esalben rich.
dusen ritter mit dax gabylot.
er lach zetivstieren tot.

ē si den knappen riten lieze.
si vragete in wie er hieze.
vñ lach er t^evge den gotes vliż.
han fix 1erz fix heafiv
s i lach er t^evge den gotes vliż.
der mich da heime erchenet.

s i lach er t^evge den gotes vliż.

Translation: ll.139.23–140.08

Now hear tell of Sigune, too:
she knew how to lament her sorrow with grief.
She said to the boy: 'You have noble qualities.
Honoured be your sweet youth
and your charming countenance.
Truly, you will come to be blessed by fortune.
This knight was shunned by the javelin.
He lay dead by jousting.
[You are born of loyalty,
to feel such pity for him.]
Before she let the boy ride on,
she first asked him what he was called,

saying he bore the mark of God's industry.*
'*Bon fîz, scher fîz, bêâ fîz**—
so I was named
by those who knew me back home.'

Translation from:
Wolfram von Eschenbach. [c.1210]/2006.
Parzival and Titurel. Cyril Edwards (trans.).
New York: OUP.

*Motif of God as a creative artist

*Old French: 'Good son, dear son, handsome son'

OSL

Said to have begun in Low Franconian in OHG period

→ WCG C12th

→ all of CG in C13th

→ UG in C14th, never reaching High Alem.

OSL was a process which **increased the uniformity of the weight of stressed syllables** (cf. Prokosch 1939; Lahiri and Dresher 1999)

OSL

Lengthened stressed short vowels in open syllables

- MHG *tage* [t_a.gə] > NHG *Tage* [t_{aː}.gə] ‘day-PL’

Led to alternations within paradigms (since levelled out)

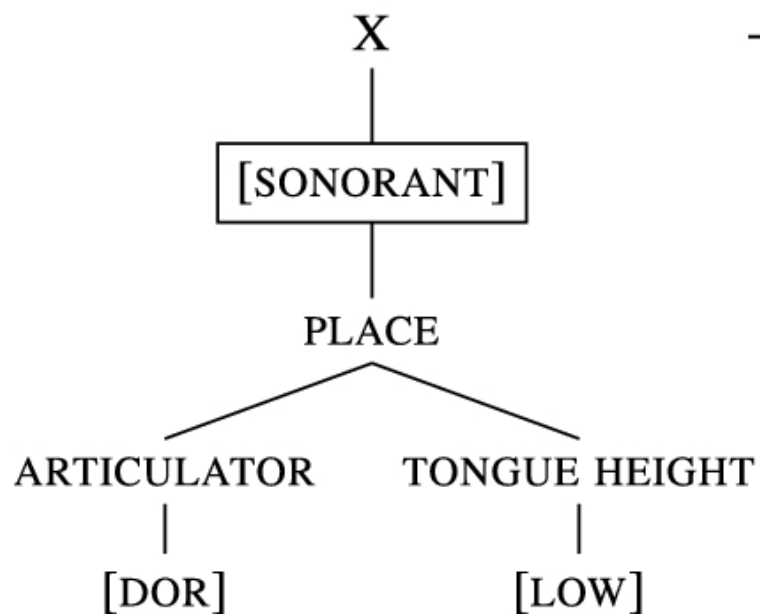
- Only retained in Dutch: [d_ax]~[d_{aː}ɣə] ‘day~day-PL’; [ɣ_af]~[ɣ_{aː}vən] (‘give-3SG.PRET’~‘give-3PL.PRET’)

2ndSS blocked it much more often in G than E or D:

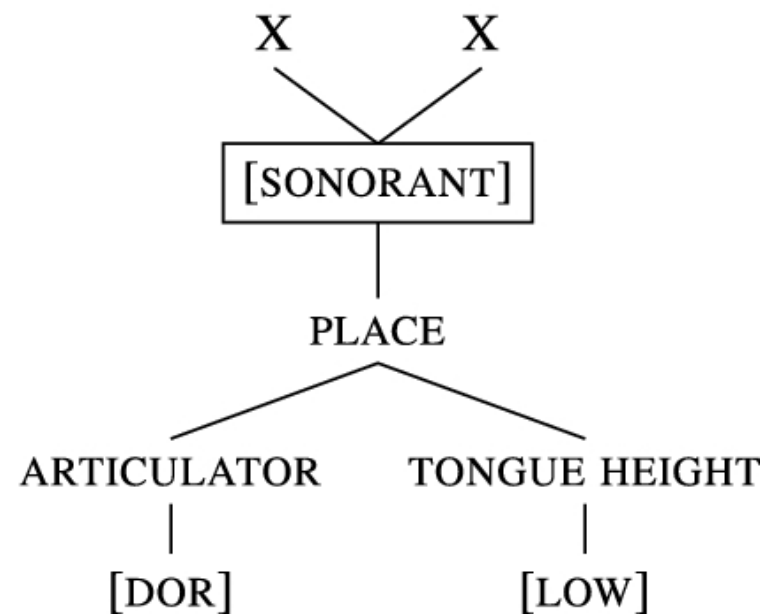
OHG	OE	NHG	NE	
n _a mo	n _a ma	n _{aː} mə	n _{eɪ̯} m	name
b _i bar	b _e ofer	b _{iː} bē	b _{iː} və	beaver
st _ē lan	st _e lan	ʃt _{eː} lən	stiːl	steal
o _{ff} an	o _p en	ɔ _f ən	ə _ʊ pən	open
wa ₃ ar	wa _t er	va _s e	wɔːtə	water

OSL

/a/ → /a:/



→



Hort ouch von Sigvnen **s**agn.
diu chynde ir leit mit iamer **k**lagn.
si spëch zem knappen du hast **t**vgn.
geret si din svziv **v**gent.
vñ din antlvze minnechlich.
deiswar du wirst noch sælden rich.
dusen ritter mit dax gabylot.
er lach ze tivstieren tot.

Nu hoert ouch von Sigûnen **s**agen:
diu kunde ir leit mit jâmer **k**lagen.
sie sprach zem Knappen « du hâst **t**ugent.
gêret sî dîn sûeziu **j**ugent
und dîn antlitze minneclîch.
deiswâr du wirst noch sælden rîch.
disen rîter mit dez gabylôt:
er lac ze tjostieren tôt.

ê sie den Knappen rîten lieze,
sie vrâgte in ê wie er hieze,
und jach er trûege den gotes vlîz.
« bon fîz, schier fîz, bêâ fîz,
alsus hat mich genennet
der mich dâ heime erkennet. »

Ê si den knappen rîten lieze.
si vrâgete in wie er hieze.
vñ lach er trûge den gotes vlîz.
bon fîz iera fîz beafîz.
alsus hat mich genennet.
der mich da heime erkennet.

MHG → (e)NHG

‘eNHG’ Diphthongisation

mî^hn ni^uwēz hû^s

mi:n ny:wəs hu:ç

>

meⁱn ne^ues Ha^us

>

maɪn nɔɪəs haʊs

‘eNHG’ Monophthongisation

lie^ebe mü^ede bru^uder

liəbə myədə bruədər

>

Lie^ebe mü^ede Bru^uder

>

li:bə my:də bʁu:də

Schwa loss (apocope and syncope)

Word-medially: ‘syncope’

MHG *sag^et* > NHG *sagt* ‘says’

Word-finally: ‘apocope’

MHG *vorht^e* > NHG *Furcht* ‘fright’

*N.B. This is a separate process to the reduction of unstressed syllables which began in late OHG and is characteristic of MHG (as opposed to schwa apocope and syncope, which started in late MHG and are characteristic of NHG).

MHG → (e)NHG

‘eNHG’ Diphthongisation

mîn niuweʒ hûs

mi:n ny:wəs hu:ç

>

mein neues Haus

>

maɪn nɔɪəs haʊs

‘eNHG’ Monophthongisation

liebe müede bruoder

liəbə myədə bruədər

Restricted to CG (& East Franconian),
beginning in the West in the C11th/12th

Schwa loss (apocope and syncope)

Word-medially: ‘syncope’

MHG *sag^et* > NHG *sagt* ‘says’

Word-finally: ‘apocope’

MHG *vorht^e* > NHG *Furcht* ‘fright’

*N.B. This is a separate process to the reduction of unstressed syllables which began in late OHG and is characteristic of MHG (as opposed to schwa apocope and syncope, which started in late MHG and are characteristic of NHG).

Hört ouch von Sigvnen sagen.
 diu chynde ir leit mit iamer chlagen.
 si spëch zem knappen du hast tvgnit.
 geret si din v̄iv iugent.
 v̄n din antlvze minnechlich.
 deiswar du wirst noch sælden rich.
 disen ritter mit dax gabylot.
 er lach ze tvstieren tot.

Nu hoert ouch von Sigûnen sagen:
 diu kunde ir leit mit jâmer klagen.
 sie sprach zem Knappen « du hâst tugent.
 gêret sî dîn süeziu jugent
 und dîn antlitze minneclîch.
 deiswâr du wirst noch sælden rîch.
 disen rîter mit dez gabylôt:
 er lac ze tjostieren tôt.

ê sie den Knappen rîten lieze,
 sie vrâgte in ê wie er hieze,
 und jach er trüege den gotes vlîz.
 « bon fîz, schier fîz, bêâ fîz,
 alsus hat mich genennet
 der mich dâ heime erkennet. »

Ê si den knappen riten lieze.
 si vrâgete in wie er hieze.
 v̄n lach er tr̄ege den gotes vlîz.
 bon fîz iera fîz beafîz.
 alsus hat mich genennet
 der mich da heime erchenet.

...guchach dem wibe.
Hort och von Sigynen sagn.
du chynde ir leit mit iamer chlagn.
si spëch zem knappen du hast tvgnit.
geret si din ^eiv ivgent.
vñ ^edin antlvzze minnechlich.
deswar du wirst noch sælden rich.
dusen ritter mit dax gabylot.
er lach zetivstieren tot.

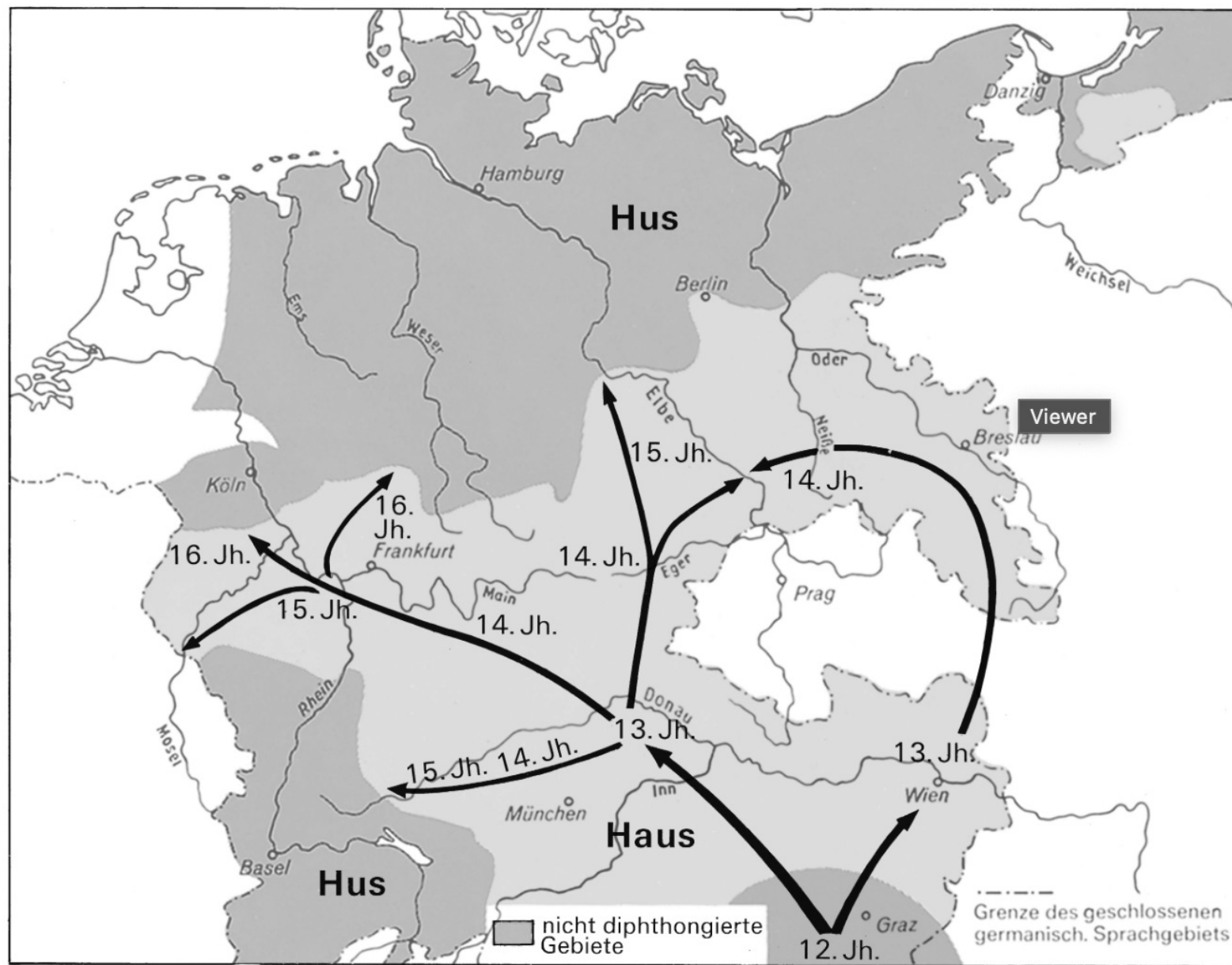
du bist geborn von irwen.
daz er dich sus chan irwen.

si den knappen ritten lieze.
si vragete in wie er lieze.
vñ lach er trvge den gotes vltz.
bon fix iera fix beafix.
also hat much genennet.
der much da heime erchenntet.

Diphthongisation

- Alemannic & Low German dialect areas (& certain Central German dialects) untouched
- Bav. sources earliest evidence (C11th Carinthia)
- Complete in Bav. by the end of C12th and digraphs become more common in writing as C13th progresses
- Old coronal vowel graphemes ⟨î,iu⟩ retained longer than dorsal ⟨û⟩
(see Paul 2007, 74–5)

Tendency to diphthongise long vowels
common across WGmc, e.g. North Bavarian
/iə,yə,uə,a:,o:,e:,æ:/ > [ei,eɪ,ou,ɔʊ,ɔʊ,eɪ,eɪ]
e.g. [blɔʊsɳ] (NHG /bla:sən/)



Ausbreitung der nhd. Diphthongierung (aus: Werner König/Stephan Elspaß/Robert Möller, dtv-Atlas Deutsche Sprache, 18., durchgesehene und korrigierte Auflage. München 2015, S. 146)

Additional changes

Degemination

MHG double consonants were actually long (geminate)

They have been shortened to single consonants in NHG, where the double spelling has been reinterpreted as indicating a preceding short vowel:

OHG	<i>fallan</i> [fal.lan]	<i>offan</i> [ɔf.fan]	<i>zeihhan</i> [tseix.xan]
MHG	<i>fallen</i> [fal.lən]	<i>offen</i> [ɔf.fən]	<i>zeichen</i> [tseix.xən]
NHG	<i>fallen</i> [falən]	<i>offen</i> [ɔfən]	<i>Zeichen</i> [tsaɪçən]

More minor (mostly segmental) changes

These are more restricted and mostly segmental, e.g.: rounding, unrounding or lowering of certain vowels; merger of /æ, ɛ, e/, /s, ʃ/ and /f, v/; /w/ > /v/ etc., but also closed syllable shortening

MHG → (e)NHG

Changes in vowel **quality** & **quantity**

- Net result increase in weight of stressed syllables & reduction of unstressed syllables
- **Stressed** syllables: **all vowels** possible | **Unstressed** syllables: **only /ə/**
- Different origins / spreads, taking many generations to complete
- Such changes must be viewed as part of the **system** as a whole

Changes do not happen in a vacuum!

Suggested further reading

Umlaut

- TWADELL, W. F. 1938. A Note on Old High German Umlaut. *Monatshefte für Deutschen Unterricht* 30: 177–181.

Monophthongisation, Diphthongisation & Open Syllable Lengthening

- BOOTH, JOSHUA. 2023. Open syllable lengthening and diphthongisation in Upper Middle High German: evidence from verse. *The Journal of Comparative Germanic Linguistics* 26: 5. (§1–3 only!)
- LAHIRI, ADITI & B. ELAN DRESHER. 1999. Open syllable lengthening in West Germanic. *Language* 75: 678–719.
- JONES, WILLIAM JERVIS. 1984. The Central German monophthongization in synchronic and diachronic perspective. *Transactions of the Philological Society* 82: 58–116.

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- PENZL, HERBERT. 1949. Umlaut and Secondary Umlaut in Old High German. *Language* 25(3): 223–240.
- PLANK, FRANS & ADITI LAHIRI. 2015. Macrosopic and microscopic typology: Basic Valance Orientation, more pertinacious than meets the naked eye. *Linguistic Typology* 19: 1–54.
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University of Pennsylvania.
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- WRIGHT, JOSEPH. 1906. *An Old High German Primer*. 2nd edn. Oxford: Clarendon Press.