HISTORICAL GERMANIC PHONOLOGY & MORPHOLOGY

Aditi Lahiri & Joshua Booth

aditi.lahiri@ling-phil.ox.ac.uk

joshua.booth@ling-phil.ox.ac.uk

OUTLINE

Paul, Hermann. 2007. *Mittelhochdeutsche Grammatik*. Berlin: De Gruyter.

IE LANGUAGE FAMILY

Hittite	
Celtic	Breton, Irish, Celtic
Indo Aryan	Sanskrit, Prakrit; Assamese, Bengali, Gujarathi, Hindi, Marathi, Punjabi
Iranian	Old Persian, Avestan; Persian
Greek	Homeric Greek, Classical Greek; Greek
Italo-Romance	Latin, Gallo-Romance, Ibero-Romance etc; French, Italian, Portuguese, Romanian, Spanish
Balto-Slavonic	Old Church Slavonic
Germanic	Gothic, Old English, Old High German, Old Saxon, Old Norse etc.
Tocharian	
Armenian	
Albanian	

IE → PROTO-GERMANIC

Grimm's Law

Indo-European obstruents (without the laryngeals)   Proto-Germanic phonemes

p	t	k		f	θ, s	x
b	d	g		p	t	k
b^h	d^h	g^h		b	d	g
	s					

/θ/ is written <þ> in older texts

IE → PROTO-GERMANIC

IE features	p	t	k	b	d	g	bʰ	dʰ	gʰ	s
OBSTRUENT	√	√	√	√	√	√	√	√	√	√
PLOSIVE	√	√	√	√	√	√	√	√	√	
VOICE				√	√	√	√	√	√	
SPREAD GLOTTIS							√	√	√	
CONTINUANT										√

IE	Greek	Latin	Sansk.	Slav. OB	OHG	OE	Gothic
*p	poús	pēs	pad-, pāda	pěšĭ	fuoz̧	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		hunt	hund	hund
		pecu			fihu	feoh	faíhu

IE	Greek	Latin	Sansk.	Slav. OB	OHG	OE	Gothic
*b	bel-tiōn 'better'	balam 'strong'					paida
				slabŭ	slāfan	slæpan	slēpan
*d	déka	decem	dasá		zehan	tien	taíhun
	édō	edō			ezz̧an	etan	itan
	pod-	ped-			fuoz̧	fōt	fōtus
*g		gelu			kalt	ceald	kalds
	genu	genu	jānu		knio	cnēo	fōtus

IE *bʰ , *dʰ , *gʰ					
Greek	Latin	Sanskrit	OHG	OE	Gothic
phráter	fráter	bhrata	bruoder	brōþor	brōþar
phéron	ferō	bhar-	beran	beran	beran
		duhita	tohter	dohtor	daúhtar
		ni-dāghas *ni-dhāghas	tag	dæg	dags
e-thēka-		dhā- 'to set'	toun	dōn	
		bandhanam	bintan	bindan	bindan
okhos		vah-			gavigan 'to pull'
		ni-dāghas	tag	dæg	dags
hosti	hostis		gast	giest	gast

GRIMM'S LAW

IE p/t/k	Germanic f/θ/x	
prtu	ford	f
pulo-	foal	f
ten-	thin	θ
tonə-	thunder	θ
krn-	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

DESCRIPTION OF 'GRIMM'S LAW'

- Voiceless stops became voiceless fricatives when not preceded by /s/

- Voiced unaspirated stops became voiceless

- Voiced aspirated stops lost their aspiration

- /s/ remained unchanged

i. Voiceless stops become fricatives

[OBSTRUENT]   —>   [OBSTRUENT]
   /   \   / \
LARYNGEAL [PLOSIVE]   LARYNGEAL [CONTINUANT]
    [—]   [—]
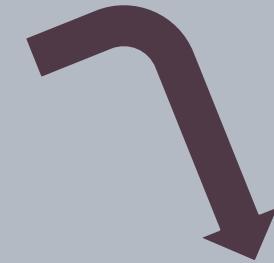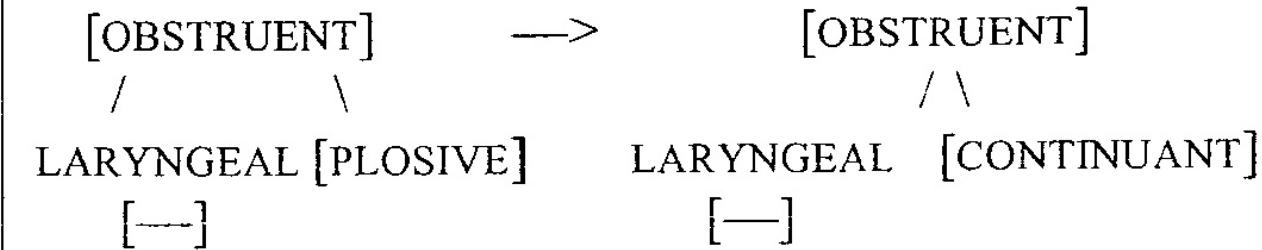
ii. Voiced stops become voiceless

[OBSTRUENT]   —>   [OBSTRUENT]
   /   \   / \
LARYNGEAL [PLOSIVE]   LARYNGEAL [PLOSIVE]
   [VOICE]   [—]
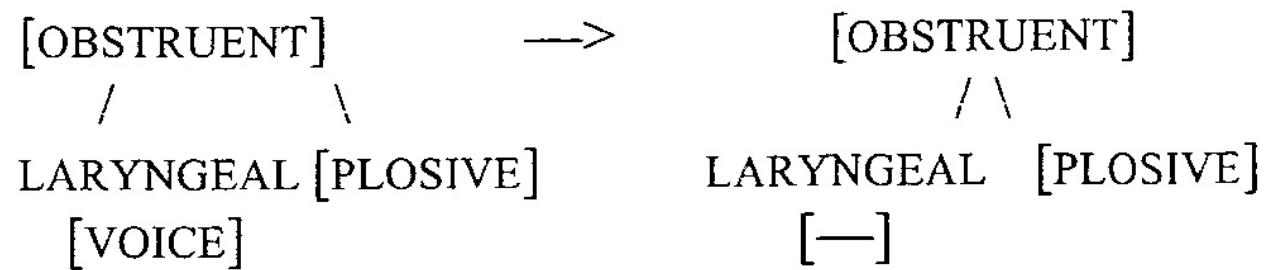
iii. Voiced aspirated stops lose aspiration

[OBSTRUENT]   —>   [OBSTRUENT]
   | \   / \
LARYNGEAL [PLOSIVE]   LARYNGEAL [PLOSIVE]
  /   \ | \
[VOICE] [SPREAD GLOTTIS] [VOICE] [—]
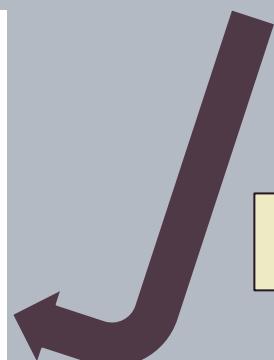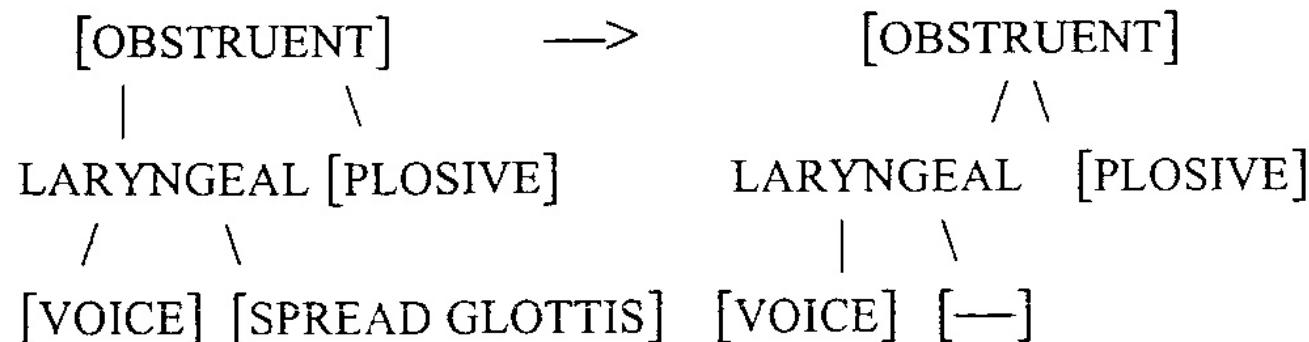
Ordering has to be i > ii > iii

CHANGES TO THE PROTO-GERMANIC PHONOLOGICAL SYSTEM

IE	p	t	k	b	d	g	bʰ	dʰ	gʰ	s
OBSTRUENT	√	√	√	√	√	√	√	√	√	√
PLOSIVE	√	√	√	√	√	√	√	√	√	
VOICE				√	√	√	√	√	√	
SPREAD GLOTTIS							√	√	√	
CONTINUANT										√

PGmc phonemes

p t k
b d g
f θ x
s

Proto-Germanic	p	t	k	b	d	g	f	θ	x	s	β	ð	ɣ
OBSTRUENT	√	√	√	√	√	√	√	√	√	√	√	√	√
PLOSIVE	√	√	√	√	√	√	√						
VOICE				√	√	√					√	√	√
~~SPREAD GLOTTIS~~													
CONTINUANT							√	√	√	√	√	√	√

EXCEPTIONS TO GRIMM'S LAW

Sometimes when you expect [f θ x s] we "unexpectedly" find [v ð ɣ z]…

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

ABLAUT "STRONG" VERBS

In Germanic the stress alternation, clearest in verbs, was as follows:

Infinitive	1/3 Past sg	Past plural	Past Participle
'V C V	'V CV	V C 'V	V C 'V

A large number of verbs showed the following pattern after Grimm's Law

Infinitive	1/3 Past sg	Past plural	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 ɣ 'V	V ɣ 'V

VERNER'S LAW

Voiceless fricatives become voiced when the preceding vowel <u>does not</u> bear main stress.

$$C \rightarrow C \quad / \quad V \underline{} (V)\,'V$$
$$[CONT] \qquad\qquad [VOICE]$$

VERNER'S LAW

	Inf	Past Sg	Past Pl	Past Part
IE	'dewkono	'dowke	dwk'n̩t	dw'kono
PGmc I (GL)	'tewxana	'tawxe	tu'xunþ	tu'xana
PGmc II (VL)	'tewxana	'tawxe	tu'ɣunþ	tu'ɣana
PGmc II (Stress shift)	'tewxana	'tawxe	'tuɣunþ	'tuɣana

IE *sneyt- 'cut'

	Inf	Past Sg	Past Pl	Past Part
IE	' –t–	' –t–	–t– '	–t– '
PGmc I (GL)	*sn'īþan	*sn'aiþ	*snīþ'um	*snīþan'az
PGmc II (VL)	*sn'īþan	*sn'aiþ	*snīð'um	*snīðan'az
PGmc II (Stress shift)	*sn'īþan	*sn'aiþ	*sn'īdum	*sn'īdanaz
Pre-OHG	*snīþan	*sneiþ	*snitum	*gisnitan
OHG	snīdan	sneid	snitum	gisnitan
MHG	snîden	sneit	sniten	gesniten

WEST GERMANIC CONSONANT GEMINATION

C → CC / V___ j

sitzen [ts]	saz [s]	sâzen [s]	gesezzen [ss]	*sittjan (< *sit-jan)	sit
schepfen	schuof	schuofen	geschaffen	*skapjan	create
wachen [xx]			*wakēn		be awake
wecken (UG [kx])			*wakkjan (< *wak-jan)		wake up, awaken
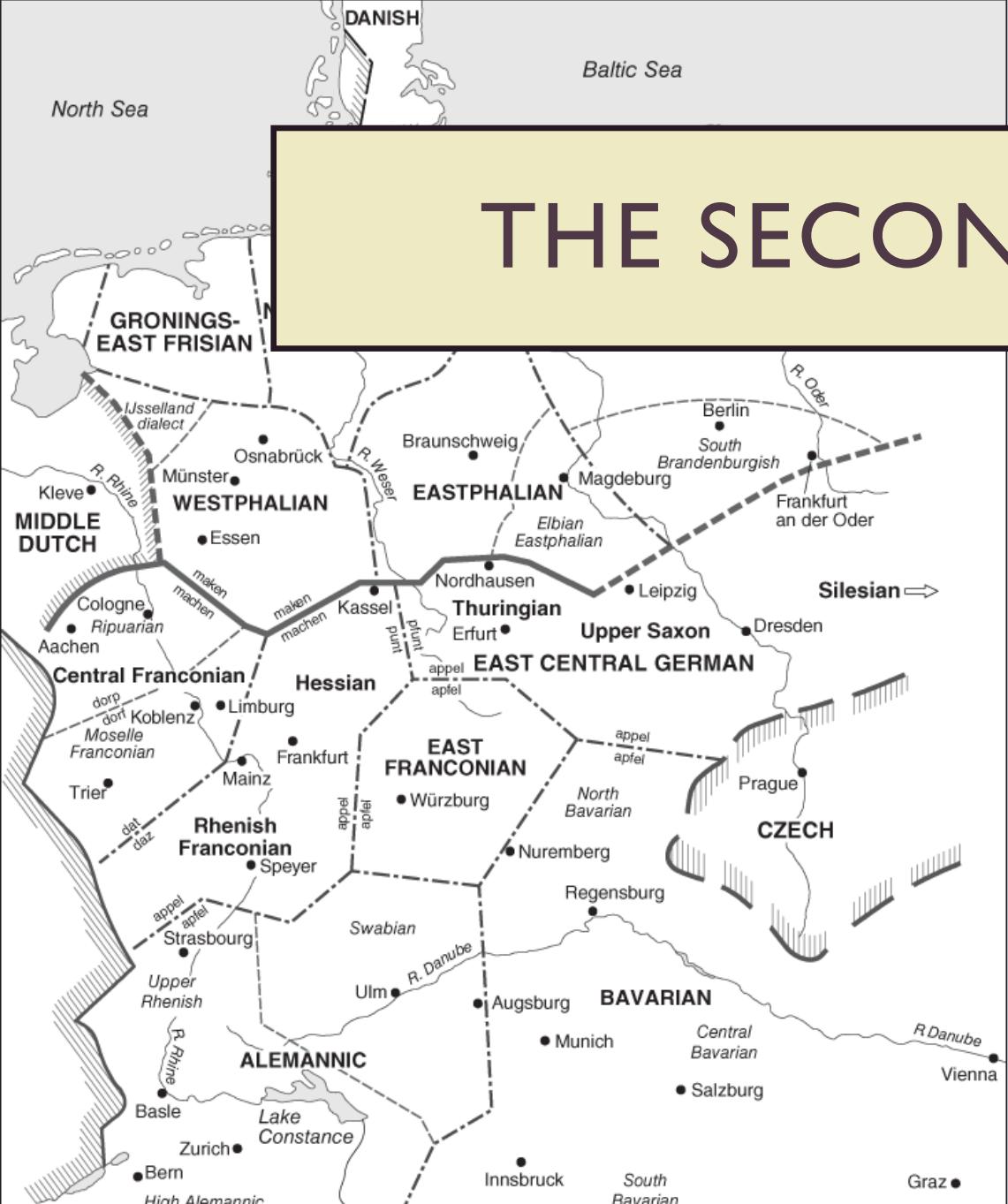
THE SECOND SOUND SHIFT

(i) Voiceless Stops

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

/*p,*t,*k/ → /pf,ts,kx/

Else:

/*p,*t,*k/ → /ff,ss,xx/

(ii) Voiced Stops

/*b,*d,*g/ → /p,t,k/

/*p,*t,*k/

OS	plegan	giskapan	tiohan	gisetan	korn	wakôn
	kamp	skôpun	herta	sâtun	werk	têkan
	skeppian	skôp	sittian	sat	wekkian	ik
OHG (Bav./Alem.)	pflegen	giskaffan	ziohan	gisezzan	khorn	wahhên
	kampf	skuof(f)um	herza	sâz(z)um	werch	zeih(h)an
	schepfen	skuof	sitzen	saz	wecchen	ih

N.B. /*p/ > /pf/ only UG, /*k/ > /kx/ only Bav. & Alem.

/*b,*d,*g/

OS	beran	dohtar	gast	sibbia	biddian	hruggi
	ge[β]an	bindan	ôga			
OHG (Bav./Alem.)	peran	tohter	kast	sippa	pitten	rukki
	kepan	pintan	ouca			
MHG	bern	tohter	gast	sippe	bitten	rucke
	geben	binden	ouge			

WGmc	*/d/		*/b/		*/g/	
Pre-OHG	*/d/		*/b/		*/g/	
OUG	/t/		/p/		/k/	
MUG	/t/		/b/ (also initial /p/)		/k/	

IE > Gmc > WGmc > OHG (simplified)

IE	Latin	A. Greek	Gmc	Gothic	OE	OHG (UG)
p	p	p	f	f	f	f
t	t	t	θ	θ	θ	d
k	k	k	x	x	x	x
b	b	b	p	p	p	pf, ff
d	d	d	t	t	t	ts, ss
g	g	g	k	k	k	k(kx), xx
b^h	p^h > f, b	p^h	b	b	b	b(p)
d^h	t^h > f, b, d	t^h	d	d	d	t
g^h	k^h > h, g, f	k^h	g	g	g	g(k)

SOUND CHANGE AND PHONOLOGICAL CHANGE

(a) What can phonological rules/constraints do?

- Addition (essenitally sound change)

- Loss

- Reordering

(b) What units are involved in phonological rules which may undergo change?

- Features

- Moras

- Syllables

- Feet – involving metrical stress

All of the above can lead to **reanalysis or restructuring of the stem**

Zeit	Affrikaten			Plosive										Frikative							Sonore			
				Tenues			Mediae			Mediae aspiratae				(einschließlich h)							Liquidae		Nasale	

Vorgermanisch — p t k b d g bʰ dʰ gʰ s r l m n

1. Lautverschiebung (und Verners Gesetz)

Verners Gesetz

Germanisch — p t k f þ x s b đ g z r l m n

Rhotazismus

p t k b d g f þ x s r l m n

2. Lautverschiebung (ca. 6.-8. Jh. n. Chr.)

Ahd. — pf z [ts] (k)ch [kx] p/pp t/tt k/kk b d,th g ff/f zz/z ch h s/ss s+k r l m n

Mhd. — pf z [ts] kch,ch *(nur obd.)* p/pp t/tt k/kk b d g ff/f zz/z ch h s/ss sch r l m n

Nhd. — pf z [ts] p t k b d g f ch h s [z] sch r l m n

Paul, Hermann. 2007. *Mittelhochdeutsche Grammatik*. Berlin: De Gruyter.

SUGGESTED READING

Anttila, R. (1989). Historical and comparative linguistics (Vol. 6). John Benjamins Publishing.

Bowern, Claire (2019). The Routledge Handbook of Historical Linguistics. Routledge.

Hock, H. H. (1991). Principles of historical linguistics. Walter de Gruyter.

Hock, H. H., & Joseph, B. D. (2009). Language history, language change, and language relationship: An introduction to historical and comparative linguistics (Vol. 218). Walter de Gruyter.

Honeybone, P., & Salmons, J. (eds.). (2015). The Oxford handbook of historical phonology. Oxford University Press.

Joseph, Brian & Richard Janda (eds.) (2003) The handbook of historical linguistics. Blackwell.

Joseph, Brian , Richard Janda, Barbara Vance (eds.) (2020) The handbook of historical linguistics Vol 2. Wiley - Blackwell.

Jeffers, R. J., & Lehiste, I. (1979). Principles and methods for historical linguistics. MIT press

Millar, R. M., & Trask, L. (2015). Trask's historical linguistics. Routledge.

Ringe, D., & Eska, J. F. (2013). Historical linguistics: Toward a twenty-first century reintegration. Cambridge University Press.