





Conspiracies and typological drift

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N.B.: This presentation can be downloaded:

→ https://rnoske.home.xs4all.nl/typodrift.pdf

Aim of this talk

- comparison of a millennium of the history of High German (750-1750) and of Western Romance, more particularly Classical Latin > Old French (1st millennium AD)
- Explanation of the parallel changes for these periods in German and Western Romance, especially French, from the perspective of prosodic typology
- Resolution of a problem in the history of Early French

Structure of this talk

- I. Historical processes in the history of High German
- II. Motivation of these processes by prosodic phonology
- III. Similar historical processes in the evolution Late Latin > Old French
- IV. Solving a puzzle of two simultaneous competing processes in the evolution Late Latin > Old French

I. Historical processes in High German

Periodization:

period	name	abbreviation
750-1050	Old High German	OHG
1050-1350	Middle High German	MHG
1350-1650	Early New High German	ENHG
1650-	New High German	NHG

We will focus mostly on OHG, MHG and ENHG

History of High German is well-documented compared to that of the 1st millenium of Western Romance

A sample of OHG text

Dat grafregin ih mit firahim firiuuizzo meista, Dat ero ni uuas noh ufhimil, noh paum nog pereg ni uuas, ni nohheinig noh sunna ni scein, noh mano ni liuhta, noh der mareo seo.

(Wessobrunn prayer, 9th century)

"That I have experienced as the biggest miracle: that the earth was not there, and no heaven, there was no tree, neither a mountain, not a single star shone, nor the sun, the moon did not show, and neither the sparkling sea."

(Translated from a Modern German translation of this text.)

Contrary to Modern New High German: many open syllables, no complex codas.

Some opposing characteristics of OHG and NHG

		OHG	NHG
i.	syllable structure	simple: clusters of two consonants at most	complicated
ii.	contrastive vowel length	long and short vowels in all positions (stressed and unstressed syllables)	long vowels only present in stressed positions
iii.	vowel reduction	no	yes
iv.	harmony processes	vowel harmony and phonological umlaut (e.g., gast+i > gesti 'guests')	no vowel harmony, umlaut is morphological
v.	geminates	yes	no (instead, ambisyllabic consonants)
vi.	final devoicing	no	yes

List of relevant processes OHD > NHD

regarding:	historical process
	1. syncope and apocope
	2. vowel reduction
vowels	3. diphthongization
	4. stressed open syllable lengthening
	5. intervocalic lenition (voicing and spirantization)
	6. intervocalic consonant deletion → contraction
consonants	7. degemination
	8. advent of final devoicing
	9. consonant epenthesis at the right word edge

1. MHG syncope and apocope

- syncope affecting a nonfinal syllable:

OHG	MHG	
frew+ida	vröu+de	'happiness'
gemein+ida	gemeinde	'community'
ner+ita	ner+te	'fed'
off <mark>a</mark> n+unga	(ENHD/NHD) Öffn+ung	'opening'

- syncope affecting a final syllable:

OHG	MHG	
(MHG) abent+es	abents	'evening' (gen. sg.)
felis	vels	'rock'
miluh	milch	'milk'
magad	magt	'virgin'

1. MHG syncope and apocope (subject to metrical conditions)

- apocope

MHG	later MHG	
hine	hin	'to'
dane	dan	'then'
vone	von	'of, from'
ab e	ab	'but' (Mod. Ger. aber)
unde	und	'and'
frouwe	frouw	'woman, lady'
hirte	hirt	'herdsman, sheperd'
herze	herz	'heart'

- reduction of unstressed vowels

OHG	MHG	
'sunn <mark>a</mark>	'sunn[ə]	'sun'
'him <mark>i</mark> l	'him[ə]l	'heaven'
b i 'līb a n	b[ə]ˈlīb[ə]n	'to stay' (Mod. Ger. bleiben)
'bot <mark>a</mark> ,scaf	bot[ə],schaft	'message' (Mod. Ger. Botschaft)
'zung <mark>ō</mark> no (gen.)	(LATE OHG) 'zungon > 'zung[ə]n	'tongues'
'bein i +hh ī n	'bein([ə])+ch[ə]n	'little leg'

3. Diphthongization

(Common Germanic already had diphthongs: ai, au, eu. Additional diphthongizations, 8th-9th century: $\bar{e} > ia > ie$; $\bar{o} > uo > ue$. This was undone by the so-called ENHG monophthongization)

Late MHG and ENHG diphthongization:

ix > [ae] ei, yx > [oi] eu, ux > [ao] au

change	MHG	NHG	
iː > [ae] <i>ei</i>	mīn, 'sīte, 'schrīben, wīt, rīch	mein, Seite, schreiben, weit, reich	'my, page, (to) write, far, rich'
yː > [oi] <i>eu</i>	'liute, 'hiute, 'hiuser (iu = [yː])	L eu te, h eu te, H äu ser	'people, today, houses'
uː > [ao] <i>au</i>	h ū s, s ū , ū f, r ū ch, 's ū fen	Haus, Sau, auf, rau, saufen	'house, sow, on, rough, drink'

4. Stressed open syllable lengthening in ENHG

Open syllable lengthening in stressed syllables only:

MHG	ENHG	
'tage (pl.)	[ˈt <mark>aː</mark> gə]	'days'
'n e men	[ˈn <mark>eː</mark> mən]	'to take'
'h a se	[ˈh <mark>aː</mark> se]	'hare'

Bimoraic Condition: 'a stressed syllable must have exactly two moras' (Dresher and Lahiri 1991, Riad 1992, Ramers 1999).

4. Stressed open syllable lengthening in ENHG

Another historical scenario to meet the Bimoraic Condition is ambisyllabification (before t, m and MHD geminates):

MHG ENHG

'komen ['kɔm̞ən] (kommen) 'to come' ('.' indicates ambisyllabicity)

Present Day German:

- Ambisyllabicity: stressed short vowels in polysyllables are always followed by an ambisyllabic consonant (unless there a more consonants following the vowel in question)
- Absence of monosyllabic words with an open syllable containing a short vowel (CV) (eg. *ba).

Therefore: ambisyllabicity can be taken as underlying. Then, vowel length is predictable by the Bimoraic Constraint (and ambisyllabicity) and is therefore not contrastive in NHG.

5. MHG lenition (subject to metrical conditions)

'Voicing' (~ lenition)

OHG	MHG	
ri pp a	(> rippe >ripe >) ri <mark>b</mark> e	ʻrib'
bintan	bin <mark>d</mark> en	'(to) tie'
bru <mark>kk</mark> on (verb)	bru ck e > bru[g]e	'bridge'
briefes (gen. sg.)	brieves	'letter'

5. MHG lenition - Spirantization

(Very early on, intervocalic spirantization (of singletons only) had already applied to voiceless stops in Old High German Consonant Shift. This is immaterial to the present argument.

Proto-Germanic	OHG		
*slē p an-	slā f an	'sleep'	
*e t an-	e[s]an	'eat'	
*ma <mark>k</mark> an	ma h an	'make'	

However, later, in MHG dialects occurrences of spirantization of 'voiced' (lenis) stops can be found (Weinhold 1883; Moser 1951, Goblirsch 2018:145-147)

MHG knabe ~ knave haben ~ haven '(to) 'have' sagen ~ saghen (gh = [γ]) '(to) say'

6. MHG intervocalic consonant deletion \rightarrow contraction

This affects voiced obstruents

sound	contraction	OHG	MHG		
g	ege > ei	getragida	getr ege de > g	getr ei de	'grain'
d	ade > ā	badōt	badet > b	o ā t	'bath' (pres. 3rd pers. sg.)
b	ibe > ī	gibist	g ibe st > g	g <mark>ī</mark> st	'give' (pres. 2nd pers. sg.)
h	ahe > ā	slahan	sl ahe n > s	sl ā n	'(to) beat'

7. MHG and ENHG degemination

(Geminates are the result of the so-called West Germanic gemination, which took place in the 3rd-4th cent. AD)

After long vowels:

OHG	MHG	
hlū tt ar	lū t er	'merely, pure'
rū zz an	rū z en	'snore'

Later also after short vowels:

(However, in the orthograpy the double consonants remained, with a new function, i.e. to indicate that the preceding vowel is short.)

The consonant in question became ambisyllabic, hence blocking Stressed Open Vowel Lengthening.

OHG	MHG	NHG	
mitti	mi tt e	Mi[ţ]e	'centre'
offan	offen	o[f]en	ʻopen'

8. Advent of final devoicing

Advent of final devoicing in MHG, from the XIIth century onwards

orthographic a word medially	Iternation word finally	examples (genitive – nom.; –es = gen. ending)	
b	р	lobes – lop	'praise'
V	f	hoves – hof	'court'
g	c (=[k])	slages – slac [k]	'punch, stroke'
h	ch (=[χ])	hō h es – hō ch [χ]	'high'
d	t	eides – eit	'oath'

In contrast to a wide-spread idea, final devoicing takes place at the right edge of a phonological word, not of a syllable, cf. re[d]lich 'honest' (Auer 1994).

9. ENHG Consonant epenthesis at the right word edge

Mostly *d*, *t*

MHG	ENHG	
māne	mant/mand/mond	'moon'
nieman	nieman <mark>d</mark>	'nobody'
saf	saft	'juice'
(vin) sec > sek	sekt	'sparkling wine'
obez	obst	'fruit'
nimest	nim p st	'take' (2nd pers. sg. pres.)
eigenlich	$[eigent]_{\omega}$ $[lich]_{\omega}$	'real, in reality'
heimlich	$[heim_{\mathbf{b}}]_{\omega}$ $[lich]_{\omega}$	'hidden'

II Motivation of the processes by prosodic phonology

Typology: the *phonetic* **dichotomy** of *syllable-timed vs. stress-timed languages* has been **disproved** at numerous occasions.

Instead: a *phonological*, *scalar* typology based on *prosodic categories*: the syllable and the prosodic word.

The **syllable** vs. the **phonological word** as the most prominent/relevant prosodic unit.

Continuum: Syllable languages — Word languages

Litt.: Auer 1994, Szczepaniak 2007, Nübling et al. 2008, Reina & Szczepaniak (eds.) 2014.

	prototypical syllable language	prototypical word language
syllable structure	simple, clear-cut syllable boundaries, high sonority difference between onset and rhyme	complex, syllable boundaries can be blurred
quantity distinction (if it exists)	uniform (in all syllables)	stress-sensitive or word-related (distinctive only in stressed syllables)
vocalism	little or no discrepancy between stressed and unstressed vowels	strong discrepancy between stressed and unstressed vowels; centralizations
geminates	possible	generally do not exist, only possible when created by morphology (compounds)
phonological processes	syllable-related (ex.: resyllabification across word boundaries); external sandhi	word-related (ex. word-medial allophones, invulnerable word boundaries); internal sandhi
epenthesis (Cs and Vs)	for syllable structure optimization	for enhancement of morphological structure

- Szczepaniak 2007: In the history of German, there is a typological shift from the syllable towards the phonological word.
- In OHG, the syllable is the central domain.
- Since MHG/ENHG, the phonological word is the central domain.
- 1. Syncope and apocope: syllable structure becomes less regular and less open, but the phonological word is highlighted, by the reduction the number of feet, and by making stems monosyllabic.
- 2. **Vowel reduction in unstressed syllables**: makes the stressed syllable stand out. This enhances the recognizability of the prosodic word.
- 3. Diphthongization in stressed syllables: Idem.
- 4. **Stressed open syllable lengthening**: In ENHG, a stressed vowel in open syllables is lengthened because of the arrival of the **Bimoraic Condition** (stressed syllables should contain exactly two moras).
- 5. Intervocalic lenition/voicing: syllable structure becomes less well clear-cut: word-internal syllabic borders weaken: less sonority difference between onset and rhyme).

- 6. Consonant deletion → word contraction: fewer open syllables, less sonority difference between onset and rhyme.
- 7. **Degemination**: after long vowels degemination is needed to reduce trimoraic syllables to bisyllabic ones because of the newly arrived Bimoraic Condition.
 - After short vowels: degemination happens in a later stage (ENHG) and ambisyllabification sets in, worsening syllabic structure but highlighting the coherence of the prosodic word.
- **8. Advent of Final devoicing: as it stands in** ENHG and NHG, final devoicing is a process **enhancing the right edge of a phonological word** (after having existed in certain OHG dialects as a syllable-determined process and in MHG as a syllable- and foot-determined process).
- 9. **Consonant epenthesis at the right word edge**: by the insertion of a plosive at the end of a phonological word (often with a sonority hierarchy violation), **the edges of the phonological word are enhanced**.

III. Romance: some opposing characteristics of Classical Latin, Western Late Latin and Proto-French

		Classical Imperial Latin	Western Late Latin	Proto-French (end of 9th century)
i.	syllable	more closed syllable	more open syllable structure	more closed syllable
	structure	structure		structure
ii.	contrastive vowel length	in stressed syllables; on the way out in unstressed syllables	disappearing altogether	no
iii.	vowel reduction	NO (but existed in a limited way in Pre-Classical Latin)	no	extensive: omni- presence of schwas
iv.	diphthongs	yes (traditional, according to Cser 2020: no)	Disappeared. Later: 'Romance' diphthongization (4th century)	omnipresence of diph- thongs; triphthongs
V.	geminates	yes	loss of geminates (in Gallo- Roman: after 7th century)	no
vi.	final devoicing	no	no	yes

A Sample of a Proto-French text

Text	Reconstructed pronunciation	Translation
Buona pulcella fut eulalia.	bwɔnə p <u>yl</u> tsεlə f <u>yθ</u> əyl <u>al</u> jə	Eulalia was a good girl,
Bel auret corps bellezour	b <u>εl</u> avr <u>əθ</u> k <u>ɔrps</u> bεlədz <u>our</u>	She had a beautiful body, a
anima	anəmə	soul more beautiful still.
Voldrent la veintre li deo	<u>vɔl</u> dr <u>ənt</u> la v <u>ei̯n</u> trə li dεə enəmi	The enemies of God wanted
Inimi.		to overcome her,
Voldrent la faire diaule	vəldr <u>ənt</u> la fa <u>i</u> rə di <u>av</u> lə sɛrvir	they wanted to make her
seruir		serve the devil.
Elle no'nt eskoltet les mals	elə n <u>ɔnt</u> εsk <u>ol</u> təθ les m <u>als</u>	She does not listen to the evil
conselliers.	k <u>on</u> seΛ <u>εrs</u>	counsellors,
Qu'elle deo raneiet chi	kelə dεə rəne <u>iəθ</u> ki m <u>ænt</u> s <u>ys</u>	(who want her) to deny God,
maent sus en ciel.	<u>en</u> ts <u>jεl</u>	who lives up in heaven.

From the *Séquence de Sainte Eulalie*, ± 880

Existence of complex codas, many closed syllables.

Let us recall the list of relevant processes in the evolution OHG > NHG Typologically: syllable language > word language.

regarding:	historical process
	1. syncope and apocope
	2. vowel reduction
vowels	3. diphthongization
	4. stressed open syllable lengthening
	5. intervocalic lenition (voicing and spirantization)
	6. intervocalic consonant deletion → contraction
consonants	7. degemination
	8. advent of final devoicing
	9. consonant epenthesis at the right word edge

Do we find these processes also in the evolution from Latin to Old French?

→ Let us find out!

1. Syncope and apocope

Syncope: already starting in Classical Latin (where it was optional), leading to

complex onsets	heterosyllabic sonorant + obstruent clusters	heterosyllabic obstruent- obstruent clusters	heterosyllabic sonorant+ sonorant clusters
pop(u)lus	'cal <mark>(i)</mark> dus	'nep <mark>(o)</mark> te	'cal <mark>(a)</mark> mus
oc <mark>(u)</mark> lum	'vir <mark>(i)</mark> de	'pos <mark>(i)</mark> tu	'hom <mark>(i)</mark> nem
'reg <mark>(u)</mark> la	['] jur <mark>(i)</mark> go	¹av <mark>(i)</mark> ca	'pir <mark>(u)</mark> la

Later: Gallo-Roman syncope, (i) affecting a non-final syllable

Late Latin	Old French	
* ¹ turb u lat	trouble	'trouble'
'tab u la	table	'table'
lib e 'rāre	[livrer]	'to liberate'

1. Syncope and apocope

(ii) affecting a final syllable:

Late Latin	Old French	
^l mūr o s	m[y]rs	'walls'
'dēb e t	deift	'should, must'

Apocope:

Late Latin	Old French	
'mūr <mark>u</mark>	m[y]r	'wall'
'her <mark>ī</mark>	hier	'yesterday'
'porto	(je) port	'(I) carry'

(examples mainly from Fouché 1958)

All unstressed vowels of Late Latin (a, e, o, au) can be reduced to schwa. The process takes place over an extended period of time, often followed by complete deletion.

Appearances of vowels reduced to a, chronology (according to GGHF: 324):

	starting from		non-initial position	initial position
a.	3rd century	e, o, au	> ə	
b.	7th century	а	> ə	
c.	11th century	е		> 9

According to the handbooks (a.o., GGHF):

- schwas originating from e, o, au in non-initial position are later subsequently deleted,
- except when preceded by TR (muta cum liquida) or, in final position, when preceded by certain heterosyllabic clusters like in *ponte*.
- Alternative scenario: they were syncopated before reduction to schwa became applicable (Fabian Zuk, this conference on Thursday).

Examples of attested schwas in Old French originating from full vowels in Latin:

Latin	Old French	
orn <mark>ā</mark> 'mentu	orn[ə]ment	'ornament'
'port <mark>a</mark>	port[ə]	'door'
*quadri furcu (reconstr.)	carr[a]for	'road crossing'
intro (1st pers. sg.)	(je) entr[<mark>ə</mark>]	'(I) enter'
'gen(e)rem	gendr[ə]	'son-in-law'

→ Vowel reduction is productive in Present-day Catalan.

2. Vowel reduction scenario in time (GGHF: 345)

	initiale			pré	prétonique posttonique					finale							
lt	a	e	0	э	a	e	0	э	(a)	e	0	3	a	e	0	э	Ø
prfr						1	1	ΓR			t ə¹				† e	,	/ cc
	C_{pal}				↓ ə²	Ø		∂^2			Ø		↓ ə²	,	Ø	í	p ²
AF	ø/ y	> < L e ²	_Co ↓ u	V													
	a	Э	u	э	Э			ә					Э				ə
						.	Roma		,			,		'			

3. Diphthongization

Diphthongization in stressed open syllables ('spontaneous diphthongizations')

'Roman' and 'French' diphthongizations (resp. beginning of our era and from the 6th century onwards):

Latin	Old French	
'c a ru	chier	'dear'
'p e dem	p ie d	'foot'
'b o nu	b uo n	'good'
me	m ei	'me'

4. Stressed open syllable lengthening

Occurred in Late Latin. Vowels in stressed open syllables were lengthened.

Classical Latin	Late Latin	Old French	
'f ĕ ru	'f ē ru	fier	'proud'
c <mark>ă</mark> sa	'c ā sa	case	'house'

Loporcaro 2015: Open Syllable Lengthening (OSL), starting in Late Imperial Latin: a stressed syllable requires two moras. OSL supplants Contrastive Vowel Length (CVL). (But CVL is maintained for some time in Northern varieties.)

Cf. the Bimoraic Condition (Ramers 1999) for MHG!

5. Lenition: voicing + spirantization

Latin	voicing	spiranti- zation	γ > jj β > v	result	Old French	
'rī p a	'r <u>i</u> ba	ri <mark>β</mark> ə	ri v e	V	rive	'bank, shore'
'fa b a		faβə	fe v e	V	feve	'bean'
la' <mark>v</mark> āre		laβare	laver	V	laver	'(to) wash'
'ra <mark>ph</mark> anu		ravanu		V	ravene	'radish'
'vī t a	'vi d a	vi ð ə		ð	vide	'life'
lau ^l dāre		lau ð are		ð	lauder	'(to) praise'
pa' c āre	pa'gare	pa y are	pajjer	jj	paiier	'(to) pay'
ne <mark>g</mark> āre		ne <mark>y</mark> are	nejjer	jj	neiier	'(to) deny, (to) refuse'

(Adapted from GGHF:410)

6. Word internal consonant deletion \rightarrow contraction

Latin	Old French	
't epi du	t ie de	'lukewarm'
'c ubi tu	c ou de	'elbow'
n <mark>āvi</mark> 'gāre	n <mark>a</mark> gier	'(to) sail, (to) navigate'
r otu lu	rolle	'little wheel'
*rādī¹cīna (< radix)	r <mark>a</mark> cine	'root'

(adapted from GGHF:400)

7. Degemination

Degemination of heterosyllabic geminates: 7th century or later.

(Exception: rr is degeminated only from the 12th cent. onwards.)

Latin	Old French	
'gu tt a	gote	'drop'
'bu ll a	bole	'bubble'
'a bb as	abes	'abbot'
'mi tt ere	me t re	'(to) send'

III. Romance 37

8. Advent of final devoicing (FD)

FD in Proto- and Old French:

Old Fr. froit (masc.) - froide (fem.) 'cold'

There are remnants of this process in contemporary French:

Latin Mod. French (fem.)		Mod. French (masc.)	
novus	neu v e	neuf	'new'
gran <mark>d</mark> is	gran[d]e amie (liaison context)	gran[t] ami (liaison context)	'big friend'

→ FD exists also in other Western Romance languages: it is productive in contemporary Catalan, Occitan, Friulian and Rhaeto-Romansh.

III. Romance

9. Consonant epenthesis at the right word edge.

Does not exist in Old French (as far as we know), but does exist in present-day Central and Eastern Catalan (Reina 2014: 379):

Present-day Central and Eastern Catalan			
api	[ˈapi] ~ [ˈapi <mark>t</mark>]	'celery'	
collegi	[kulˈlɛʒi] ~ [kulˈlɛʒi t]	'school'	
tave	[ˈtaβə] ~ [ˈtaβət] ~ [ˈtaβək]	'horsefly'	
rave	[ˈraβə] ~ [ˈraβət] ~ [ˈraβək]	'radish'	
cor	[kɔr] ~ [kɔr t]	'heart'	
mar	[mar] ~ [mart]	'sea'	

III. Romance 39

Comparison

	historical process	OHG→ NHG	Cl. Lat. → Old Fr.
vowels	1. syncope and apocope	+	+
	2. vowel reduction	+	+
	3. diphthongization	+	+
	4. stressed open syllable lengthening	+	+
consonants	5. intervocalic lenition (voicing and spirantization)	+	+
	6. intervocalic consonant deletion \rightarrow contraction	+	+
	7. degemination	+	+
	8. advent of final devoicing	+	+
Ö	9. consonant epenthesis at the right word edge	+	_*

^{*}Exists in Present-day Catalan

Question:

Is it a **coincidence**, that we find this many parallels between the evolutions OHG > NHG and Cl.L > OF? Why and how do these changes **conspire**?

• The evolution Cl.L > OF is just like OHG > NHG a change from a (relative) Syllable Language (SL) to a (relative) Word Language (WL).

Question:

Is the change SL > WL in High German and in Western Romance just the **result** of these 8 or 9 processes, or is there an **original force** behind these processes?

• We can assume that this is at least partially the case: a given process may change the place of the language in question on the SL-WL scale and thus setting in motion a second process, typical to the particular place on the SL-WL scale. We can go one step further and conjecture:

The 9 processes of High German and Western Romance treated above are by no means primitive changes, but are driven by changes in the prosodic system of the respective languages.

E.g.: by the loss of Contrastive Vowel length (CVL) in unstressed syllables (or the loss of CVL altogether), or, more broadly, by the change from a syllable language to a word language.

(For an overview of the change from CVL to Open Syllable Lengthening (OSL): see Riad 1992 for Germanic, Loporcaro 2015 for Romance).

Sometimes syncope bleeds intervocalic voicing (noted by Scheer 2021).

VC(V)tV

Latin	syncope	intervocalic voicing	Old French
com(i)te	applies	does not apply	comte
male-hab(i) t u	applies	applies	malehabdu > mala <mark>d</mark> e

It seems that Syncope sometimes applies chronologically before Intervocalic Voicing, hence bleeding it, sometimes after.

The chronological order of application of Syncope en Intervocalic Voicing seems random. As a result, there a many doublets:

	Latin	Old French Old French		Modern
		> T	> D	French
p	*¹col(a) p u	colp	cobe	coup
t	'cub(i) t u	cote	code	coude
k+a	*¹gran(i) c a	gran <mark>ch</mark> e	grange	grange
k+u	'clēr(i) <mark>c</mark> u	clerc	cler g e	clerc

This was a great problem for the Neogrammarians. Today, we know that there is **lexical diffusion** (Chen), **spreading of changes through the population** (Labov), which may explain the variation. This is what I term here the 'Labovian' solution to this problem.

Assumption: Intervocalic voicing and Syncope in the evolution WLL > OF are not primitive changes but derive from a change in the prosodic system.

"Unlike Neogrammarian sound change, prosodic change may be **irregular** in its **implementation on the segmental level**. Prosodic requirements may often be satisfied in more than one way and therefore do not wholly determine phonetic shape." (Page 2007:348, in a discussion of the irregularity of Open Syllable Lengthening in German dialects).

"A bimoraic requirement for stressed syllables can be met through either OSL or gemination of intervocalic consonants."

(or possibly, through ambisyllabification. Ex. /aba/ with initial stress \rightarrow ['abba], or ['azba], or ['aba])

→ This explains the variability and the existence of doublets!

Scenario for Latin > Proto-French:

- A change in the prosodic organization of the language (here a movement away from a syllable language towards a word language) exerts pressure on the system which **both Intervocalic Voicing and Syncope** (e.g. in 'comite') can alleviate.
- If Syncope happens to apply first (recall that it applied optionally in Classical Latin!), a new base form will have been created ('comte) to which Intervocalic Voicing simply will not be able to apply.

General conclusions:

- 1. There is a remarkable similarity between the history of High German from 750 to 1750 and that of Latin \rightarrow Old French from 0 to 1000.
- 2. For both languages, the changes are based on a similar change in prosodic organization, i.e. away from a syllable language towards a word language.
- 3. The variability we find with respect to the application of Intervocalic Voicing and Syncope in Old French is due to the fact that both processes are induced by a change of the prosodic system, hence they are not mechanically ordered with respect to each other.
- 4. When studying language change, one should focus more on prosodic change with its consequences for segmental structure rather than on isolated segmental changes.

Thank you! Merci! Obrigado!

Recall: This presentation can be downloaded:

→ https://rnoske.home.xs4all.nl/typodrift.pdf

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