Prosodically induced change. Identical evolutionary paths in Western Romance and High German
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Introduction

Can low level segmental changes be the result of higher level prosodic changes instead of the other way round?

- For this, we look at High German and Western Romance.
- There are **remarkable parallels** between the period **750-1750 A.D. in High German** (HG) and the period **0-1000 A.D. in Western Romance** (Latin > Old French): in these respective periods, there are **9 identical processes for both High German and Western Romance** (Latin > Old French, henceforth: L>OF).
- Together, these **processes deteriorate the regularity of syllable structure** and make the **phonological word stand out**.

Periodization of High German

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**

Typological evolutions of HG and L>OF

OHG > NHG

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

Latin > Old French (L>OF)

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

The 9 processes

1. Syncope and apocope

Lg.	change	periode	gloss
HG	ge'mein**i**da > gemeinde	OHG > MHG	'community'
	'mag**a**d > magt	OHG > MHG	'virgin'
	'herz**e** > herz	MHG > later MHG	'heart'
L>OF	'pop(**u**)lus (del. opt.)	Classical Latin	'people'
	libe'rāre > [livrer]	Late Latin > OF	'to liberate'
	'mūr**u** > m[y]r	Late Latin > OF	'wall'

2. Vowel reduction: reduction of unstressed vowels

HG	bi'līb**a**n > b[ə]'līb[ə]n	OHG > MHG	'to stay'
	'zung**ō**n > 'zung[ə]n	OHG > MHG	'tongues'
L>OF	ornā'mentu > orn[ə]ment	Latin > OF	'ornament'
	'gen(e)**re**m > gendr[ə]	Latin > OF	'son-in-law'

(In LOF, vowel reduction takes place at different periods according to vowel quality and phonological context)

3. Diphthongization: diphthongization in stressed syllables

HG	([i:] > [ae] *ei*) rich > r**ei**ch	MHG > NHG	'rich'
	([y:] *iu* > [oi] *eu*) 'h**iu**te > h**eu**te	MHG > NHG	'today'
	[u:] > [ao] *au* h**ū**s > H**au**s	MHG > NHG	'house'
L>OF	'caru > ch**ie**r	Latin > OF	'people'
	'b**o**nu > b**uo**n	Latin > OF	'good'
	me > m**ei**	Latin > OF	'me'

4. Stressed open syllable lengthening

HG	'tage (pl.) > ['ta:gə]	MHG > ENHG	'days'
	'nemen > ['ne:mən]	MHG > ENHG	'to take'
L>OF	'fĕru > 'fēru (> fier)	Cl. Lat.> Late Lat. (> OF)	'proud'
	'cǎsa > 'cāsa (> case)	Cl. Lat. > Late Lat. (> OF)	'house'

Bimoraic Condition: 'a stressed syllable must have exactly two moras'
(Dresher and Lahiri 1991, Riad 1992, Ramers 1999 for Germanic; Loporcaro 2015 for Imperial Late Latin).
Another historical scenario to meet the Bimoraic Condition is ambisyllabification (before *t, m* and MHD geminates; '.' indicates ambisyllabicity):

HG	'komen ['kɔm̩ən] (*kommen*)	MHG > ENHG	'to come'

5. Lenition: voicing and spirantization

HG	bintan > bin**d**en	OHG > MHG	'to tie'
	kna**b**e ~ kna**v**e	MHG dialects	'boys'
L>OF	'rīpa > 'rī**b**a > [rī**β**ə] > rive	Latin > OF	'shore'
	pa'cāre > pa'**g**are > [pa**ɣ**are] > [pa**jj**er]	Latin > OF	'to pay'

6. Intervocalic consonant deletion → vowel contraction

HG	(getragida >) getre**g**ede > getreide	(OHG >) MHG	'grain'
	(gibist >) gi**b**est > gīst	(OHG >) MHG	'give' (2p sg pr)
L>OF	'cu**b**itu > coude	Latin > OF	'elbow'
	nā**v**i'gāre > nagier	Latin > OF	'to sail'

7. Degemination

HG	hlū**tt**ar > lūter	OHG > MHG	'merely, pure'
	mi**tt**i > mitte > Mi[t̩]e	OHG > MHG > ENHG	'centre'
L>OF	'gu**tt**a > gote	Latin > OF	'drop'
	'mi**tt**ere > metre	Latin > OF	'to send'

8. Advent of final devoicing

Lg.	alternation	period of arrival	gloss
HG	ho**v**es – ho**f**	Early MHG	'court'
L>OF	froi**d**e (*fem.*) – froi**t** (*masc.*)	OF	'cold'

Remnants in Mod. Fr.: neu**v**e (*fem.*) – neu**f** (*masc.*) 'new'; gran[d]e amie – gran[t] ami 'big friend'

9. Consonant epenthesis at the right edge of the phonological word

HG	māne > mant/man**d**/mon**d**	MHG > ENHG	'moon'
	nieman > nieman**d**	MHG > ENHG	'nobody'
	eigenlich > [eigent]ω [lich]ω	MHG > ENHG	'real, in reality'
CAT	api ['api] ~ ['api**t**]	PD C. & E. Cat.	'celery'
	tave ['taβə] ~ ['taβə**t**] ~ ['taββə**k**]	PD C. & E. Cat.	'radish'
	mar [mar] ~ [mar**t**]	PD C. & E. Cat.	'sea'

CAT=Catalan.) This consonant epenthesis does not exist in OF (as far as we know) but does exist in Present-day Central and Eastern Catalan, another Western Romance language.

Comparison of the 9 processes

	historical process	OHG → NHG	Cl. Lat. → OF
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 → vowel contraction	+	+
	7. degemination	+	+
	8. advent of final devoicing	+	+
	9. consonant epenthesis at the right word edge	+	–*

* Exists in Present-day Catalan

Question 1

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

Typological Theory

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.

property	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**. *(I conjecture that this is also the case for the evolution: Late Latin > OF.)*
- In OHG, the syllable is the central domain *(relatively speaking)*. *(I conjecture that this is also true for Late Latin.)*
- Since MHG/ENHG, the phonological word is the central domain. *(I conjecture that this is also true for Old French.)*

Motivation of the 9 processes by the SL-WL typology

1. **Syncope and apocope**: <u>syllable structure becomes less regular and less open</u>, but <u>the phonological word is highlighted</u>, by the reduction of the number of feet, and by making stems monosyllabic.
2. **Vowel reduction in unstressed syllables**: <u>makes the stressed syllable stand out</u>. This enhances the recognizability of the prosodic word.
3. **Diphthongization in stressed syllables**: <u>idem</u>.
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: <u>word-internal syllabic borders weaken</u>: less sonority difference between onset and rhyme).
6. **Consonant deletion → vowel contraction**: <u>fewer open syllables, less sonority difference between onset and rhyme, reduction of the number of feet</u>.
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, <u>worsening syllabic structure but highlighting the coherence of the prosodic word</u>.
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), <u>the edges of the phonological word are enhanced</u>.

Question 2

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 second process, typical to the particular place on the SL-WL scale.

- In fact, we can go one step further and make the conjecture: **The 9 processes of High German and Western Romance treated above are by <u>no means primitive changes</u>, but are <u>driven by changes in the prosodic system</u> of the respective languages.**

- **The HG and L>OF cases seem to instantiate a non-trivial evolutionary trajectory which is natural enough to be re-enacted independently in other languages.**

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