

VOWEL AND CONSONANT EPENTHESIS IN THE HISTORY OF GERMAN

Renata Szczepaniak
University of Hamburg

*Phonological Typology of Syllable and Word Languages
in Theory and Practice*
International Workshop at the Freiburg Institute for
Advanced Studies (FRIAS)
March 29 – 31, 2010

2

TYPOLICAL APPROACH: SYLLABLE AND WORD LANGUAGES

- ∞ Typological approach of syllable and word languages is oriented prosodically.
- ∞ This typology is based upon the observation that phonological processes optimise different prosodic domains: either the syllable or the phonological word.
- ∞ The typological analysis asks which prosodic domain is central, i.e. which is most frequently used for phonological processes.

3

PROSODIC DOMAIN OF EPENTHESIS

- ∞ 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 adopts the function of the central domain.
- ∞ This talk focuses on (regular and sporadic) epenthesis throughout the history of German.

5

VOWEL EPENTHESIS IN OLD HIGH GERMAN

- ∞ A comprehensive corpus study on OHG/OLG vowel epenthesis by REUTERCRONA (1920)
- ∞ The OHG vowel epenthesis appears only in between two consonants: C_C

| | WORD-INITIAL | WORD-MEDIAL | WORD-FINAL |
|---------|------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------|
| C_L/L_C | <i>chraft</i> > <i>ch<u>a</u>raft</i> 'power, ability' | <i>malha</i> > <i>mal<u>a</u>ha</i> 'bag' | <i>durh</i> > <i>dur<u>u</u>h</i> 'through' |
| C_N/N_C | <i>snepfā</i> > <i>se<u>n</u>epfā</i> 'snipe' | <i>senwa</i> > <i>se<u>n</u>a<u>w</u>a</i> 'sinew' | (not documented) |
| C_w | <i>swarz</i> > <i>so<u>w</u>arz</i> 'black' | <i>farwa</i> > <i>fa<u>r</u>a<u>w</u>a</i> 'colour' | (not documented) |
| C_C | ahd. <i>pīsitech</i> 'parakeet' (from lat. <i>psittacus</i>) | ahd. <i>smarag<u>e</u>de</i> 'emerald' (from lat. <i>smaragdus</i>) | <i>kisiht</i> > <i>kisih<u>i</u>t</i> 'face; sight, view' |

6

SYLLABLE STRUCTURE

- ∞ The OHG vowel epenthesis optimises the syllabic structure by simplifying the consonantal clusters.
 - 1. Interestingly, the homorganic clusters such as *ld*, *rd*, *nd*, or *mb* do not trigger any epenthetic vowels. According to SIEVERS (1901), the epenthesis appears more frequently, if the cluster is articulatorily more challenging.
 - 2. Epenthesis appears more frequently in complex consonant clusters, e.g. *durft* > *duruft* 'necessary' (REUTERCRONA)
 - 3. Vowel epenthesis is not limited to a specific word position
- Vowel epenthesis tends to appear in complex and articulatorily challenging clusters

7

RELEVANCE OF THE PHONOLOGICAL WORD

- ∞ The phonological word has a certain relevance to the OHG vowel epenthesis: It applies only within a phonological word but not at its boundaries.
 - ∞ However, epenthetic vowels also occur within compounds, i.e. at the internal phonological word boundaries, e.g. *urloub* > <hurolob> 'permission' or *urchundi* > <uricundi> 'testimony' (GRÖGER 1911).
- Vowel epenthesis reveals that the category of phonological word is unstable in OHG; its size can be changed easily by adding a vowel/a syllable.
- Vowel epenthesis applies irrespectively of the size of the phonological word.
- CVCC > CV.CVC (*wurm* - wurum) CCV.CVC > CV.CV.CVC (*knotun* - kinotun)
 CVC.CV > CV.CV.CV (*farwa* - farawa) CV.CVC.CV > CV.CV.CV.CV (*bifilhu* - bifilihu)

8

VOWEL EPENTHESIS IN EARLY NEW HIGH GERMAN

∞ The ENHG vowel epenthesis appears in a very specific context: $[C(C)(C)V:r]_{\omega} > [C(C)(C)V:.\text{ər}]_{\omega}$

$_{-}V:.re > _{V}:r > _{V}:\text{.ər} > _{V}\underline{r}$

MHG *gîr* > ENHG *gîr* > NHG *Geier*

MHG *hiure* > ENHG *hiur* > *hiur* > NHG *heuer*

MHG *bûr* > ENHG *bûr* > NHG *Bauer*

MHG *mûre* > ENHG *mûr* > *mûr* > NHG *Mauer*

Optimisation of the phonological word through

9

DIFFERENT KINDS OF EPENTHESES

- ∞ Both language periods exhibit different kinds of epenthesis
- 1. The OHG epenthesis optimises the syllable structure by reducing complex consonant clusters
- 2. The ENHG epenthesis optimises the word structure by creating hiatuses and increasing the word-internal sonority
- 3. Only the OHG epenthetic vowels are subject to vowel harmony (e.g. *wurm* > *wurum*, *perg* > *pereg*) and other kinds of assimilation
- 4. Only the ENHG epenthesis includes the *r*-weakening (see HOWELL 1991)

11

CONSONANT EPENTHESIS IN OLD HIGH GERMAN

- ∞ The OHG consonant epenthesis works very similar to the vowel epenthesis.
- ∞ The weak consonants (semi-vowels) [w, j], *r* and the aspirate [h] are inserted into the hiatus position within a phonological word.
- ∞ The distribution/quality of the epenthetic consonants still partially depends on the immediate context.
- ∞ The transition V-V has been reinterpreted as an intervocalic consonant (glide).

12

QUALITY OF INTERVOKALIC EPENTHETIC CONSONANT

- ∞ According to BLEVINS (2008), only glides [w, j] are potential intervocalic consonants, while the aspirate [h] occurs at a prosodic boundary between words or phrases.
- ∞ Distribution of epenthetic consonants in OHG

| OLD HIGH GERMAN (except Old East Franconian) | OLD EAST FRANCONIAN |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| [-labial] <i>hīen</i> > <i>hījen</i> 'to marry' <i>sāen</i> > <i>sājen</i> , but also <i>sāhen</i> 'to sow' [+ labial] <i>būan</i> > <i>būwan</i> 'to live' <i>bluoan</i> > <i>bluowan</i> , but also <i>bluohan</i> 'to bloom' but also: <i>hīen</i> > <i>hīwen</i> 'to marry' | [- palatal] <i>sāen</i> > <i>sāwen</i> 'to sow' <i>bluoen</i> > <i>bluowen</i> 'to bloom' [+ palatal] <i>hīen</i> > <i>hījen</i> 'to marry' |

13

HIATUS POSITION IN OLD HIGH GERMAN

- ☞ In OHG, hiatus can be found in "verba pura" such as *bluoan* > *bluohan*/*bluowen* 'to bloom'.
- ☞ Hiatus also emerges in optative forms in the second weak verb class as in *salbō(h/i)em* (1st pl., *salbōn* 'anoint'); *r* in preterite *scirun* (3rd pl., *scrīan* 'scream'; see RAUCH 1973)
- ☞ Generally, hiatuses seem to be disfavoured in OHG (cf. the loss of the linking vowel in compounds with vowel-initial second part, e.g. *klasa.ougi* > <klasaugi>, see GRÖGER 1911:64)

14

THE CASE OF LARYNGALS [h] AND [ʔ]

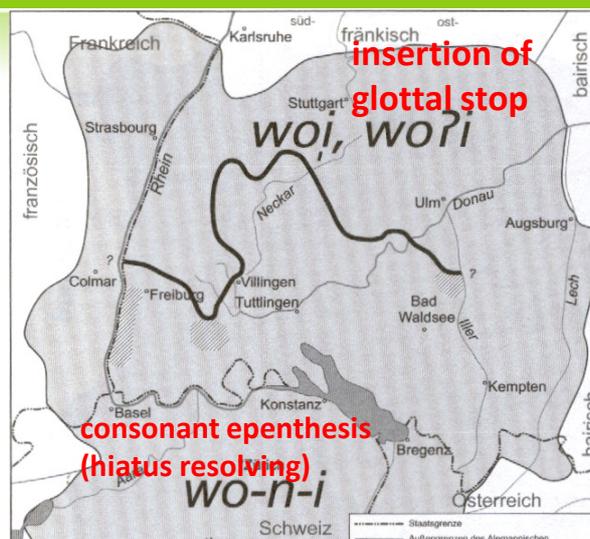
- ☞ BLEVINS (2008) assumes that the laryngeal epenthesis [h, ʔ], which is limited to word or phrase boundaries, must be related to pitch contours. Prosodic boundaries are typically marked by pitch contours initiated by laryngeal mechanisms. This leads to the rise of fixed articulatory laryngeal gestures.
- ☞ The distribution of [h] changed in MHG from syllable-initial to word-initial; the occurrence of [h] has been limited to the domain of the word or the strong foot
- ☞ This shift from syllable to word could indicate a stronger emphasis of the word.
- ☞ The epenthesis of the glottal stop could have begun during this very period of time.

15

MHG LINKING *r*

- ∞ For Late OHG/Early MHG some cases of resyllabification can be attested.
- ∞ The word-initial position was not marked as strongly as in ENHG/NHG.
- ∞ Resyllabification of *r* in pronominal adverbs
OHG *thāraūf* > *thārūf* > MHG *dârûf*
- ∞ Loss of *r* before a consonant
OHG *thārafuri* > *thārfuri* > *thāfuri* > MHG *dâvür*

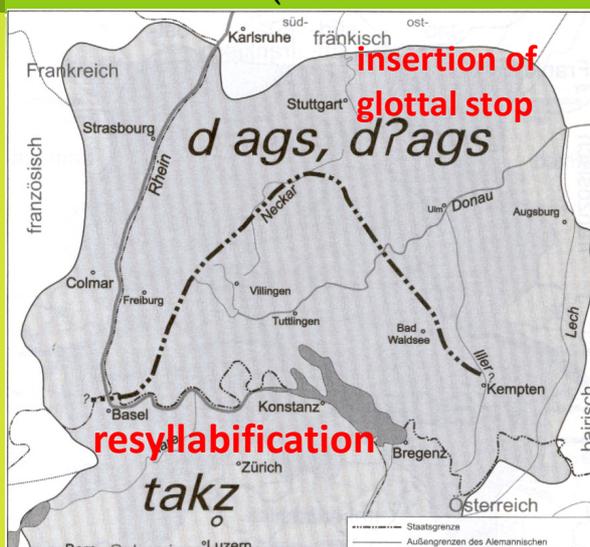
16

EXTERNAL SANDHI VS.
LARYNGEAL EPENTHESIS
(ALEMANNIC DIALECTS)NHG 'wo ich'
('where I')

17

EXTERNAL SANDHI VS. LARYNGEAL EPENTHESIS (ALEMANNIC DIALECTS)

NHG 'die Achse'
('axis')



18

CONSONANT EPENTHESIS IN EARLY NEW HIGH GERMAN

- ∞ In ENHG, there is a strong tendency towards consonant epenthesis after nasals, e.g. *nl* > *ndl*.
- ∞ This kind of consonant epenthesis is based on the organisation of articulatory gestures (BROWNMANN/GOLDSTEIN 1991, PAGE 1997).
- ∞ The percept of insertion occurs because the velic opening precedes the release of the alveolar closure gesture when followed by a liquid.

MHG *donre/doner* > ENHG *don.der* 'thunder'

MHG *ordenlîch* > ENHG *ordent.lich* 'orderly'

19

CONSONANT EPENTHESIS IN EARLY NEW HIGH GERMAN

- ∞ In ENHG, there is a strong tendency towards consonant epenthesis after nasals, e.g. *nl* > *ndl*.
- ∞ This kind of consonant epenthesis is based on the organisation of articulatory gestures (BROWNMANN/GOLDSTEIN 1991, PAGE 1997).
- ∞ The percept of insertion occurs because the velic opening precedes the release of the alveolar closure gesture when followed by a liquid.

MHG *donre/doner* > ENHG [*don.d̥er*]_ω 'thunder'

MHG *ordenlich* > ENHG [*ordent̥l̥iç*].[*lich*]_ω 'orderly'

20

CONSONANT EPENTHESIS IN EARLY NEW HIGH GERMAN

- ∞ At the right edge of phonological simplexes
MHG *mâne* > ENHG [*mant̥/mand̥/mond̥*] 'moon'
MHG *ieman / nieman* > ENHG [*jemand̥ / niemand̥*]
- ∞ At the internal phonological word boundary
MHG *ordenlich* > ENHG [*ordent̥lich*] 'orderly'
MHG *eigenlich* > ENHG [*eigent̥lich*] 'actually'

21

STRENGTHENING BY TOTAL ORAL CLOSURE

- Consonant epenthesis after fricatives

MHG *saf* > ENHG *saft* 'juice' (cf. *sap*)

MHG *obez* > ENHG *obest* > NHG *Obst* 'fruit'

Here, friction gesture has been strengthened towards closure gesture at the right end of the phonological word.

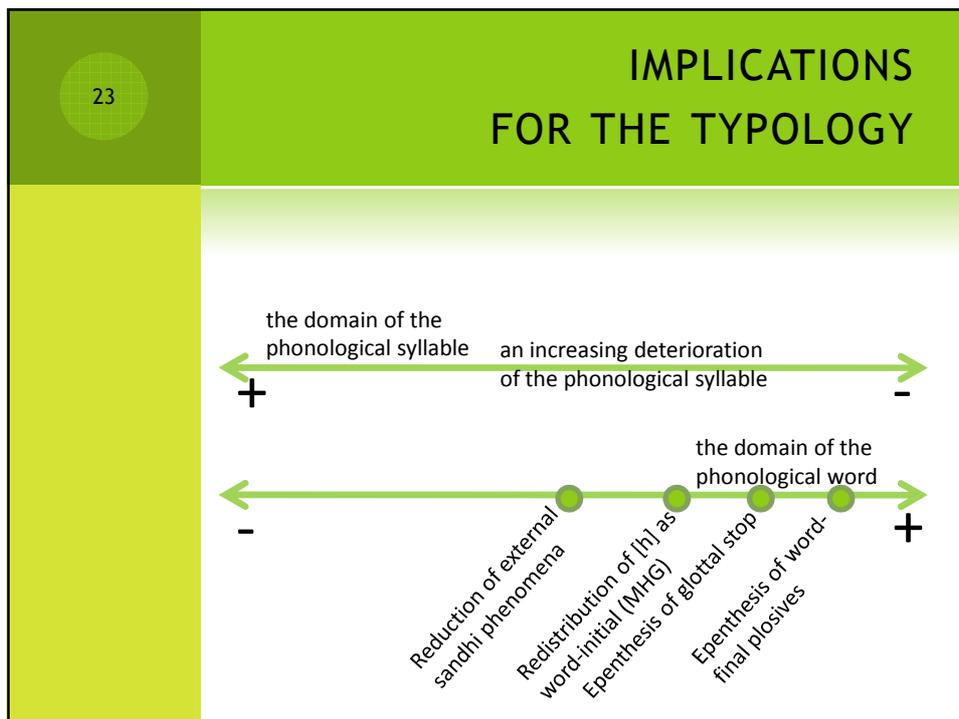
- Consonant epenthesis after plosives

MHG *sippe* > ENHG *sippt* 'clan'

22

SUMMARY

- From the typological perspective, there is a clear shift from syllable to word as the domain of epenthesis in the history of German
- The tendency to emphasise the phonological word increases gradually during the history of German:
 - Reduction of external sandhi phenomena (MHG)
 - Redistribution of [h] as word-initial (MHG)
 - Epenthesis of glottal stop (MHG/ENHG)
 - Epenthesis of word-final plosives (ENHG)



24

REFERENCES

Blevins, J. (2008). "Consonant epenthesis: Natural and unnatural histories." In J. Good (ed.) *Linguistic universals and language change*. Oxford, 79-107.

Brownman, C./Goldstein, L. (1991). "Gestural structures: Distinctiveness, phonological processes, and historical change". In I. G. Mattingly and M. Studdert-Kennedy (eds.) *Modularity and the motor theory of speech perception*. Hillsdale, NJ: 313-338.

Gröger, O. (1911). *Die althochdeutsche und altsächsische Kompositionsfrage mit Verzeichnis der althochdeutschen und altsächsischen Composita*. Zürich.

Howell, R. B. (1991). Modern Evidence for Ancient Sound Changes: Old English Breaking and Old High German Vowel Epenthesis Revisited. In E. H. Antonsen and H. H. HockStæfcræft (eds.) *Studies in Germanic Linguistics. Select Papers from the First and the Second Symposium on Germanic Linguistics. University of Chicago, 24. April 1985, and University of Illinois at Urbana-Champaign, 3-4 October 1986*. Amsterdam, Philadelphia: 103-113.

Itô, J. (1989). "A prosodic theory of epenthesis." In *Natural Language & Linguistics Theory* 7: 217-259.

Murray, R. W. (1989). "On Epenthesis." In *Folia Linguistica* XXIII(3-4): 293-316.

REFERENCES

- Ortmann, A. (1998). Consonant epenthesis: its distribution and phonological specification. In W. Kehrein and R. Wiese (eds.) *Phonology and Morphology of the Germanic Languages*. Tübingen: 51-76.
- Page, R. B. (1997). Articulatory phonology as a tool for explanation in historical phonology: The case of stop epenthesis in Germanic. In I. Rauch and G. F. Carr (eds.) *Insights in Germanic Linguistics. Classic and Contemporary*. Berlin, New York. 2: 175-188.
- Picard, M. (1987). "On the General Properties of Consonant Epenthesis." In *The Canadian Journal of Linguistics* 32(1): 133-142.
- Rauch, I. (1973). "Old High German Vocalic Clusters". In B.B. Kachru et al. (eds.) *Issues in linguistics. Papers in Honor of Henry and Renée Kahane*. Urbana, Chicago, London: 774:779.
- Reuterchrone, H. (1920). *Svarabhakti und Erleichterungsvokal im Altdeutschen bis ca. 1250*. Heidelberg.
- Sievers (1901). *Grundzüge der Phonetik. Zur Einführung in das Studium der Lautlehre der indogermanischen Sprachen*. Leipzig (Nachdruck Hildesheim)
- Uffmann, C. (2006). "Epenthetic vowel quality in loanwords: empirical and formal issues". In *Lingua* 116: 1079-1111.
- Uffmann, C. (2007). "Intrusive [r] and optimal epenthetic consonants." In *Language Sciences* 29: 451-476.