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.
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.

A comprehensive corpus study on OHG/OLG vowel epenthesis by REUTERCRONA (1920)

The OHG vowel epenthesis appears only in between two consonants: C_C

<table>
<thead>
<tr>
<th>C_L/L_C</th>
<th>C_N/N_C</th>
<th>C_w</th>
<th>C_C</th>
<th>WORD-INITIAL</th>
<th>WORD-MEDIAL</th>
<th>WORD-FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>draft &gt; draft</td>
<td>sneipa &gt; sneipa 'snipe'</td>
<td>swarz &gt; swarz 'black'</td>
<td>ahd. psitech 'parakeet' (from lat. psittacus)</td>
<td>chraft &gt; chraft 'power, ability'</td>
<td>malha &gt; malgha 'bag'</td>
<td>durh &gt; durgh 'through'</td>
</tr>
<tr>
<td>senwa &gt; senwa 'sinew'</td>
<td>farwa &gt; farwa 'colour'</td>
<td>ahd. smarage 'emerald' (from lat. smaragdus)</td>
<td>kisiht &gt; kisiht 'face; sight, view'</td>
<td>(not documented)</td>
<td>(not documented)</td>
<td>(not documented)</td>
</tr>
</tbody>
</table>
### 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 > duryft* 'necessary' (REUTERCRONA).

3. Vowel epenthesis is not limited to a specific word position

   Vowel epenthesis tends to appear in complex and articulatorily challenging clusters

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### 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.

<table>
<thead>
<tr>
<th>CVCC</th>
<th>&gt; CV.CVC</th>
<th>CV.CVC &gt; CV.CVC.CVC (knotun - ktnotun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVC.CV</td>
<td>&gt; CV.CV</td>
<td>CV.CV.CV &gt; CV.CV.CV.CV (bifilhu - bifilihu)</td>
</tr>
</tbody>
</table>

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The ENHG vowel epenthesis appears in a very specific context: 

\[ [C(C)V:r]_{OHG} \rightarrow [C(C)V:.\alpha r]_{NHG} \]

\[ _V:.re \rightarrow _V:.r \rightarrow _V:.\alpha r \rightarrow _V:.V\alpha \]

MHG \text{giri} \rightarrow \text{ENHG gier} \rightarrow \text{NHG Geier}

MHG \text{hiure} \rightarrow \text{ENHG hiur} \rightarrow \text{hiuer} \rightarrow \text{NHG heuer}

MHG \text{bui} \rightarrow \text{ENHG buer} \rightarrow \text{NHG Bauer}

MHG \text{muri} \rightarrow \text{ENHG mui} \rightarrow \text{muer} \rightarrow \text{NHG Mauer}

Optimisation of the phonological word through the reduction of word-internal consonant clusters.

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).
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 apirate [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).

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

<table>
<thead>
<tr>
<th>OLD HIGH GERMAN (except Old East Franconian)</th>
<th>OLD EAST FRANCONIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>[−labial]</td>
<td>[− palatal]</td>
</tr>
<tr>
<td>hıen  &gt;  hıjen  'to marry'</td>
<td>sāen  &gt;  sāwen  'to sow'</td>
</tr>
<tr>
<td>sāen  &gt;  sājen, but also sāhen  'to sow'</td>
<td>bluoen  &gt;  bluowen  'to bloom'</td>
</tr>
<tr>
<td>[+ labial]</td>
<td>[+ palatal]</td>
</tr>
<tr>
<td>būan  &gt;  būyan  'to live'</td>
<td>hıen  &gt;  hıjen  'to marry'</td>
</tr>
<tr>
<td>bluoen &gt; bluowen, but also bluoạn 'to bloom'</td>
<td></td>
</tr>
<tr>
<td>but also: hıen &gt; hıwen 'to marry'</td>
<td></td>
</tr>
</tbody>
</table>
HIATUS POSITION IN OLD HIGH GERMAN

- In OHG, hiatus can be found in "verba pura" such as *bluoan > bluo(han)/bluowen 'to bloom'.
- Hiatus also emerges in optative forms in the second weak verb class as in *salbō(h/j)em (1st pl., *salbōn 'anoint'); *r in preterite *scrinun (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)

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.
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 \( \text{thārauf} \) > \( \text{thārf} \) > MHG \( \text{dāruf} \)

Loss of \( r \) before a consonant

OHG \( \text{thārafuri} \) > \( \text{thāfuri} \) > MHG \( \text{dāvür} \)

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**EXTERNAL SANDHI VS. LARYNGEAL EPENTHESIS (ALEMANNIC DIALECTS)**

NHG 'die Achse' ('axis')

- **Insertion of glottal stop**
- **Resyllabification**

**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 (*BROWNMAN/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 *ordenlich > ENHG ordentlıch* 'orderly'
CONSONANT EPENTHESIS
IN EARLY NEW HIGH GERMAN

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MHG *donre/doner* > ENHG [don.\(\text{\text registers}\)]\(\text{\text registers}\)*, 'thunder'
MHG *ordenlîch* > ENHG [ordent]\(\text{\text registers}\),[lich]\(\text{\text registers}\)*, 'orderly'

CONSONANT EPENTHESIS
IN EARLY NEW HIGH GERMAN

- At the right edge of phonological simplexes
  MHG *mâne* > ENHG *mant/mand/mond* 'moon'
  MHG *ieman /nieman* > ENHG *jemand / niemand*

- At the internal phonological word boundary
  MHG *ordenlîch* > ENHG *ordentlîch* 'orderly'
  MHG *eigenlîch* > ENHG *eigentlîch* 'actually'
**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'

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**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:
  1. Reduction of external sandhi phenomena (MHG)
  2. Redistribution of [h] as word-initial (MHG)
  3. Epenthesis of glottal stop (MHG/ENHG)
  4. Epenthesis of word-final plosives (ENHG)
IMPLICATIONS FOR THE TYPOLOGY

the domain of the phonological syllable

an increasing deterioration of the phonological syllable

the domain of the phonological word

- Reduction of external sandhi phenomena
- Redistribution of (I)s in word-initial (MG)
- Epenthesis of (I) in final (MG)
- Epenthesis of (I) in final passives

REFERENCES


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