

# The phonemic aspects of Glossematics in a present-day light

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## Introduction

- Glossematics was the mainstream branch of structural linguistics in Denmark in the early 20th century.
- The glossematic tradition attempted two apparently different phoneme analyses, Uldall (1936) and Hjelmslev (1951).
- Especially Uldall's (1936) influence has persisted into the 21st century (Grønnum 2005, Basbøll 2005, although cf. Horslund et al. 2022).
- Despite the differences, the two glossematic analyses are closely connected. How closely connected they are, was not clear until the recent publication of the letters between Uldall and Hjelmslev.

- Stops, fricatives, and semivowels were asymmetrically distributed at the time:

Strong position	Weak position
[p <sup>h</sup> t <sup>h</sup> k <sup>h</sup> p t k v ɸ]	[p t k γ ð ʊ ɶ]

- [ð γ] have since been fully supplanted by semivowels [ɣ ɶ], complicating the analysis (see Horslund et al. 2022).
- In both analyses ...
  - Weak [ð γ] are derived from /d g/.
  - Strong [p<sup>h</sup> t<sup>h</sup> k<sup>h</sup>] and weak [p t k] are derived from /p t k/.
  - Weak [ɶ] and strong [ɸ] are derived from /r/.
  - Final [ŋ] is derived from /n + g/.
  - [ə] is derived from /ɛ/ under weak stress.

## Changes in the 1951 analysis

### VOWELS

- /u i/ are considered **both central and marginal**, hence subsuming both sets of prephonemes ?u i and ?v j.
- The distinction /ø | œ/ is discarded, with the debatable argument that no context requires more than two rounded front vowels.
- Long vowels are interpreted as *identity diphthongs*.

### PROSODIES

- Stød is derived from syllable structure.
- /h/ is now considered a consonant phoneme. →
- 'Marginal prosodies' eliminated.

### CONSONANTS

- Since glossematics has the debatable restriction that consonants must appear both prevocally and postvocally, phonemic /h/ relies on this analysis:
  - ?ptkbdg = /b d g/ ± /h/.
  - Initial [p<sup>h</sup> t<sup>h</sup> k<sup>h</sup>] derived from /hb hd hg/.
  - Final [p t k] derived from /bh dh gh/.
- This eliminates some problematic elements from the 1936 analysis:
  - Aspiration only distinctive in certain prevocalic contexts.
  - /h/ being analyzed as a 'prosody'.

## Uldall's inventory (1936)

### VOWELS

Front, unrounded	/i i: e e: ɛ ɛ: a a: /
Front, rounded	/y y: ø ø: œ œ: /
Back	/u u: o o: ɔ ɔ: /

### CONSONANTS

Stops	/b d g p t k/
Fricatives	/f s v/
Nasals	/m n/
Approximants	/l j r/

### PROSODIES

Intonations (Marginal)		Accents (Superimposed)	
T1	stød	A1	strong stress
T2	non-stød	A2	half stress
T3	[h]	A3	weak stress
T4	non-[h]		

## Hjelmslev's inventory (1951)

### VOWELS

Unrounded front	/i* e ɛ a/
Rounded front	/y ø/
Rounded back	/u* o ɔ/

### CONSONANTS

Stops	/b d g/
Fricatives	/f s h/
Nasals	/m n/
Approximants	/l r u*/

- It is a **theoretical prerequisite in glossematics** that consonants appear both prevocally and postvocally.

### PROSODIES

Sentence intonation	falling non-falling
Stress	ı o

## Quotes from the correspondence between Hjelmslev and Uldall

### Uldall–Hjelmslev, 12/6/1935, suggesting the reduction to three stop phonemes:

But this does not in my opinion exclude the understanding of [p<sup>h</sup>] as phonemic /bh/ or rather /Bh/. It would be easy to imagine a phoneme /B/ that was realised lenis (voiced or unvoiced) except before /h/ and – in some ways of speaking - after /s/, where the realisation is fortis.

### Uldall–Hjelmslev, 4/7/1935, suggesting that stød is irrelevant as a structural feature:

After having sent the letter, I am seized by a dizzying thought: stød is not at all phonematically relevant in Danish!!! (deep breath) When we leave out imperatives (*tal!* vs. *tal*), stød seems to be distinctive only in single grammemes [ $\approx$  words] in pronouns and a few other minor words (*hun* 'she' : *hund* 'dog'; *ham* 'him' : *ham* 'hide'). [...] I would almost hope that it is possible to refute this heresy - it will not be easy to make our dear colleagues swallow such a pill.

### Hjelmslev–Uldall, 11/7/1935, refuting the idea of the phonematic irrelevance of stød:

Concerning stød, I admit that I have in many a nightly hour full of doubt had the inclination to suppose that it is phonematically irrelevant. [...] But I think that it is a hasty conclusion. Firstly, to argue with the use in itself is untenable. [...] Secondly, the argument that stød is only distinctive in specific word groups does not hold [...] in syntactic constructions [= *multimorphemic constructions*] you will find several commutations: *ænder* 'ducks'; *ender* 'ends'; *vædder* 'ram'; *vædder* 'bets'; *summen* 'the sum'; *summen* 'the buzz'; *roden* 'root'; *roden* 'a mess' etc. etc.

### Hjelmslev–Uldall, 2/4/1940, in a melancholic mood:

Damn, it is still so difficult to use theory you have conceived yourself.

### References

