

# Change in progress leading to atypical asymmetries in the vowel system

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## Introduction

From a synchronic point of view, the present-day dialect of Zutendaal, a village in the Belgian province of Limburg, shows a rather atypical difference in the degree of openness between the descendants of West Germanic *ō* and its umlaut, e.g.

[vu:t] 'foot'      [ve:t] 'feet'  
[bu:k] 'book'     [be:k] 'books'

In order to explain this difference, it is necessary to take a closer look at the whole system of (long) vowels in the dialect of Zutendaal. Whereas historic data enable a reconstruction of the different stages in the development, some interesting questions arise with respect to natural tendencies in or universal principles of linguistic change.

## Why is this opposition atypical?

### a) Symmetrical patterning

Diachronic linguistics has shown that vowels of the same height tend to cluster and behave in a remarkable similar way. This tendency has been elaborated in German dialectology as the 'Reihenschrittheorie' (e.g. Wiesinger 1982) and is sometimes mentioned in Dutch dialectology as 'reeksvorming'.

As a result, the development of the vowel system of most West Germanic languages and dialects is characterised by a high degree of parallelism between front and back vowels, as can be illustrated by the classic symmetry of the Great Vowel Shift:

- WGM. *î* and *û* both diphthongized to resp. [ai] and [au]
- WGM. *ê* and *ô* both rose to resp. [i:] and [u:]

This symmetrical development was also clearly noticeable in the distribution of Germanic umlaut. Most words with umlaut differ(ed) from their non-umlauted stems only by the feature [±back], possibly also by [±round], cp. the surrounding dialects of Zutendaal:

[vu:t] 'foot'      [vy:t] / [vi:t] 'feet'  
[vo:t] 'foot'      [vø:t] / [vɛ:t] 'feet'

### b) Asymmetrical developments

The patterned symmetry has only rarely been broken in the southern Dutch dialects, e.g. Goossens (2000) who defines a central area in the Dutch-speaking part of Belgium in which (at least) one of the closed or high long vowels developed asymmetrically. West Germanic *î* - *ÿ* - *û* are for instance in Sint-Truiden realised as [ɛ:] - [œ:] - [ɑ:]/[æ:] and more to the west (where *ÿ* and *û* merged) e.g. as

[ɛ:] - [ɑ:]  
[ɑə] - [ɔə]  
[ɑ:] - [ɔə]  
[æ:] - [ɔə]  
[ai] - [ɔi]

etc.

The rise of mid WGM. *ô*, however, has to be motivated otherwise and is (at present) restricted to the dialect of Zutendaal.



## The development of long vowels in Zutendaal

### • Initial situation

To begin with, Zutendaal is located at the border of an area that preserved West Germanic [i: - (y:) - u:] and [e: - (ø:) - o:].

### • Unrounding

Secondly, Zutendaal belongs to a central area in Belgian Limburg in which all rounded front vowels have been unrounded and replaced by their unrounded counterparts, e.g. \*[kry:s] became [kri:s] 'cross'.

As a result, Zutendaal [ø:] only occurs loan words and suffixes (e.g. [amə'tø:r]) and Zutendaal [œ:] is restricted to the interjection [œ:] 'erm', weakened [nœ:] 'no' and the exclamation [pœ:] 'pfew'. This must once also have been so for Zutendaal [y:].

### • Fronting

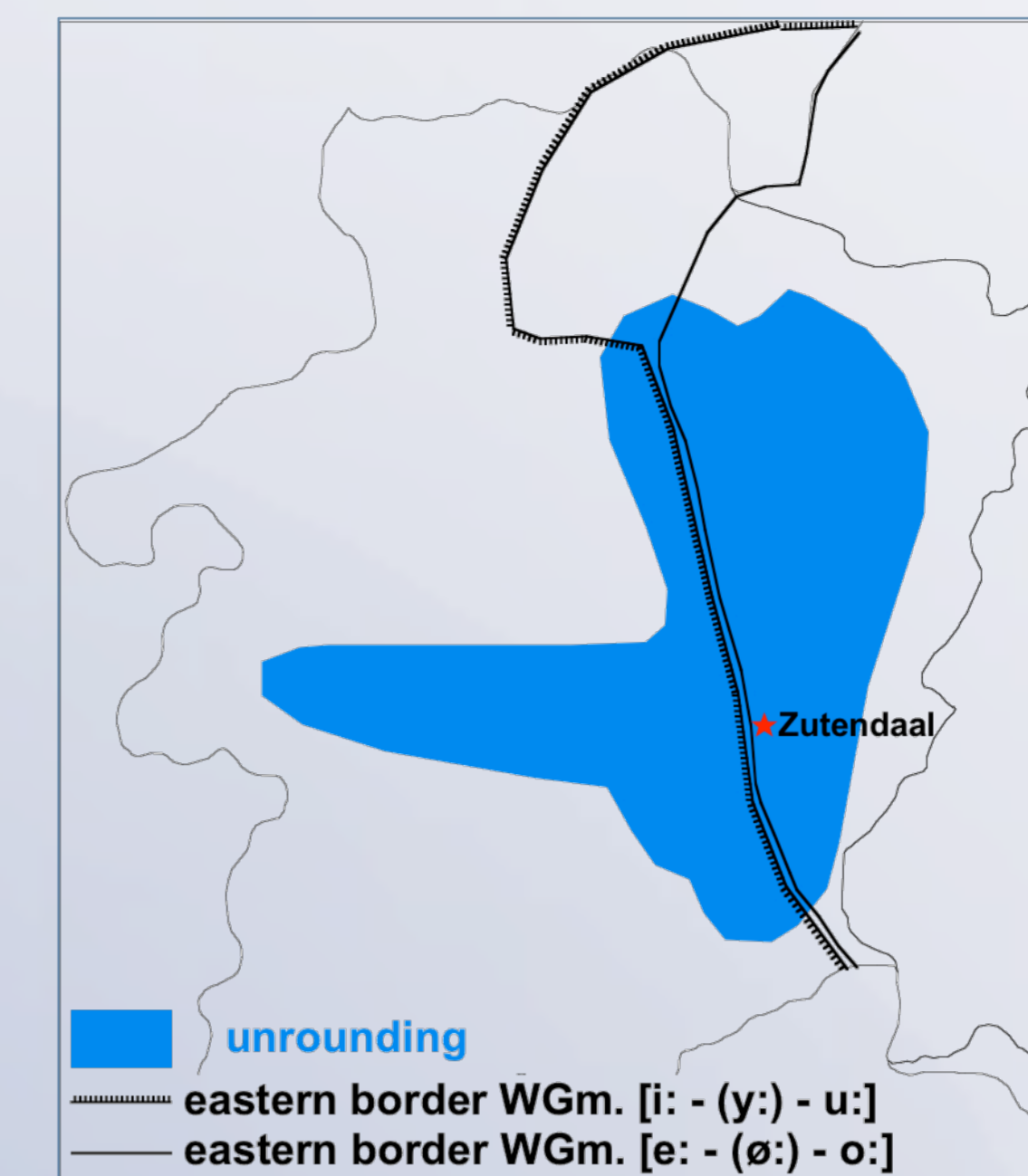
The empty position of initial [y:] was filled again by the fronting of initial Zutendaal [u:], e.g. \*[bu:k] became [by:k] 'belly'.

*The fronting thus clearly took place after the unrounding of the front vowels and historic data make it possible to date this development in the second quarter of the twentieth century. Goossens (1956) already mentions Zutendaal as one of the places where the fronting of [u:] to [y:], [y:] has progressed the most and thanks to a discussion between Kloeke & Leenen (1929) it is known that [u:] had not fronted yet at that time (e.g. [mu:s] 'mouse').*

### • Raising

In a final stage so far, Zutendaal [o:] developed to [u:], e.g. \*[bo:k] became [bu:k] 'book'.

*This development did not take place earlier than the 1960s, for in questionnaires of the former 'Zuidnederlandse Dialectcentrale' of the University of Leuven, sent out between 1922 and 1956, or in the 'Reeks Nederlandse Dialectatlassen' (Blancquaert et al. 1962) there still is no sign of this development, e.g. [blo:t], 'blood', [ʎo:t] 'good', [ho:t] 'hat' etc. which at present all have [u:].*



## Some interesting aspects of this development

### Why did [o:] not front as [u:], but instead moved upward?

As a matter of fact, Zutendaal [o:] could develop in two ways: since both positions were empty it could either rise to [u:] (as it did) or front to [ø:] as for instance Philadelphian /ow/ moved forward in parallel with /uw/.

Both possibilities correspond to more general or universal principles of linguistic change, e.g. Labov (1994):

- Principle I In chain shifts, long vowels rise
- Principle II In chain shifts, short vowels fall
- Principle III In chain shifts, back vowels move to the front

Nevertheless, Labov (1994: 208) already indicates that

"the fronting of /o/ has no connection with either chain shifting or the principles of chain shifting ... but instead represents a generalization of the fronting of the high back vowel."

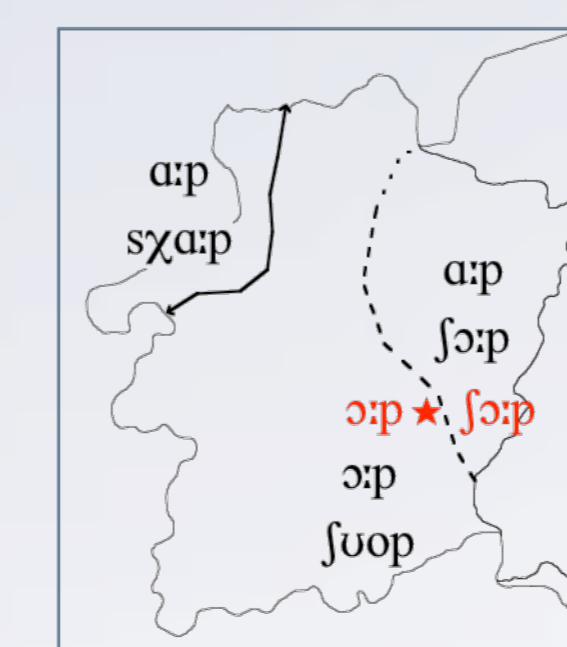
In contrast to most current English dialects, fronting in the Limburgian dialects is clearly restricted to the high or closed back vowel and did not affect the mid vowel. The raising of [o:] in Zutendaal, however, is a unique development in the Limburgian dialects.

### Will Zutendaal [ɔ:] (and [ɑ:]) also move upward?

From a mere linguistic-internal point of view, it might be expected that Zutendaal [ɔ:] (and [ɑ:]) will eventually also participate in the chain shifting and move upward.

A view on the surrounding dialects, however, shows that Zutendaal [ɔ:] occupies a rather unique position in the Limburgian dialects. Whereas all eastern Dutch dialects differentiate West Germanic *â* and *ā*, both have merged in Zutendaal to [ɔ:], compare for instance the following examples:

	<i>ape</i> (WGM. <i>ā</i> )	<i>sheep</i> (WGM. <i>â</i> )
Tongeren	[ɔ:p]	[ʃʊp]
Zutendaal	[ɔ:p]	[ʃɔ:p]
Maastricht	[ɑ:p]	[ʃɑ:p]



Whereas the raising of [o:] might be favoured by the western dialects, this is not the case for Zutendaal [ɔ:], that corresponds both to western [ɔ:] < WGM. *ā* and eastern [ɔ:] < WGM. *â*.

## Umlaut

Whereas the relationship between words with umlaut and their non-umlauted stems usually can be defined in terms of backness and in addition possibly also of roundedness, this no longer holds true for Zutendaal, e.g.

[by:k] - [bi:k] 'belly - bellies'  
[bu:k] - [be:k] 'book - books'  
[hɔ:k] - [he:k] 'hook - hook'

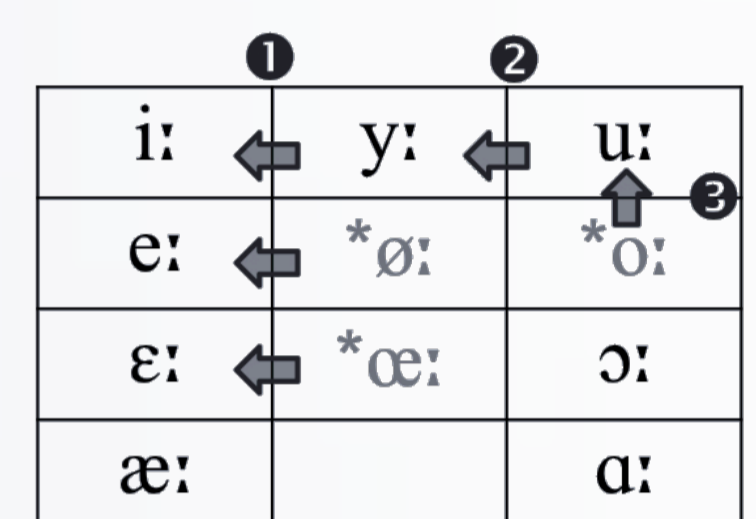
It seems that the main characteristic of umlaut in Zutendaal shifted from [±back] via [±back] [±round] to [±round], but it is not so easy to generalize the relationship between both forms in a simple formula as is possible for most other Limburgian dialects.

## Conclusion

The development of long vowels in the dialect of Zutendaal reveals a clear example of a recent drag or pull chain, that has nevertheless remained largely unnoticed in the existing studies and relevant literature.

Furthermore, historic data show that the final stage so far took place in the second half of the twentieth century.

This chain shift, however, raises several interesting questions on the nature and direction of vowel shifts and has led to remarkable asymmetries and unique developments in the Zutendaal vowel system.



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