

Opposite typological developments in French and Dutch

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Table 1: prototypical properties of syllable (syllable counting) versus word (stress counting) languages¹

nr.	criterion	syllable languages → syllable counting syllable as basic prosodic unit (foot length variable)	word / accent languages → stress counting phonological word as basic prosodic unit (syllable length variable)
1	syllable structure	CV syllables (rarely closed syllables); all syllables equally long	variable syllables type of different complexity, dependent on the stress position; often differences between medial and peripheral syllables
2	syllable boundaries	well defined, constant syllable boundaries	ill-defined, variable, speech-rate dependent syllable boundaries
3	sonority hierarchy	sonority hierarchy is obeyed, i.e. maximal sonority difference between C and V	sonority hierarchy is less obeyed, e.g. voicing of intervocalic plosives, assimilations (word internally).
4	geminate	geminate possible	geminate reduction, except in places where they are morphologically relevant, e.g. in internal compound boundaries e.g. German <i>Schiffahrt</i> [f:]
5	stress effects	no / few differences in structure of stressed vs. unstressed syllables	stressed syllables are heavy, unstressed syllables are light
6	stress assignment	mostly syllable based; absence of fixed word stress possible	stress assignment (often complex) is morphologically / lexically / semantically determined
7	tonality	can be present, also on unstressed syllables	if present (which is rarely the case), then only on stressed syllables
8	phonotactics	regular, stable phonotactics, no positionally determined allophones	word boundary (delimitative) signals positionally determined allophone (initial, medial, final) phonotactic restrictions
9	vocalism	little discrepancy between strongly and weakly stressed syllables, relatively equal tenseness.	strong discrepancy between strongly and weakly stressed vowels (German, Danish, English). Heavy stress: often difference in length, centralizations (reductions)
10	vowel harmony / umlaut	possible	rare
11	vowel reduction and deletion	because of reasons of syllable optimization	because of stress

12	epenthesis	for reason of syllable optimization comp. epenthetic <i>e</i> in Luxemb. <i>Arem, hëllefén, Vollek</i> , intrusive <i>n</i> in Alamanic	if there is, then in order to let stand out morphemic structures like in German <i>eigen-t-lich, namen-t-lich</i> , etc, bonding phoneme <i>s</i> in German and Dutch
13	liaison	yes (across morpheme boundaries)	no (border signals / junctures, e.g. glottal stop)
14	sandhi	external	internal
15	consequences for morphology	morphs that promote optimization of syllable structure	morphs that promote the information structure of words
16	reanalyses	re-analyses follow syllabic principles (Swed. <i>ni</i> , lux. <i>mir, dir nis</i>)	reanalyses are not syllabically motivated (OHG <i>ni.mis.du</i> > <i>ni.mist</i> > NHD <i>nimmst</i>)

A. Dutch: a monotonic change towards a word language; differences between the North and the South

I. Evolution of Dutch towards a word language.

Dutch = Low Franconian with North Sea Germanic influences. The evolution is roughly parallel to that of High German:

i. Development of boundary signals

- Already in Old Dutch (OD): **Final Devoicing** (Quak 1997:43)

- (1) *wort* (Wachtendonck Psalms (WP, around 1000 AD, 18.2) vs. gen. *wordes* 'word'
gif, inf. *geuon*, (WP 59.13, 61.13) 'to give'
weh (WP 18.6) (alongside *weg*) 'way'

(This seems to confirm Vaught's (1979) conclusion (reported in Szczepaniak 2007: 219-224) that there was final devoicing already in the OHG/OD period.)

- **consonant epenthesis** at word/morpheme endings (but more limited than in High German): *ieman* > *iemant/d* (criterion 12)

- **development of linking s** (criteria 12, 15) just as in High German

- (2) a. *raad#heer* > *raadsheer* 'lawyer' b. *dorp#café* > *dorpscafé* 'village pub'

- ii. Degemination (criterion 4) in the early Middle Dutch (MD) (Van Bree 1987:155) (orthographic geminates however maintained in order to distinguish between tense and lax vowels). This paves the way for MD being a language with quantity based stress, analogous to the development toward MHG as mentioned in Szczepaniak (2007:124))

- iii. Vowel Reduction (criterion 11) from the MD period onwards. Unlike Modern High German, it is still productive. *banaan* > [bā'nān]

- iv. Syncope of unstressed vowels (criteria 1, 11): MD (*hi*) *cussedesē* > (*hi*) *cussese* 'he kissed her'

New Dutch (ND): *po'li*[ts]ie > [pə'lisi] > ['plisi]. (Van Bree 1987:79)

¹ This table is has been adapted from Nübling & Schrambke (2004: 284-285).

v. Diphthongisation (criterion 9) of stressed tense high vowels in ND (15th-17th century)

- | | | | | |
|-----|------|-------------|----------------|---------|
| (3) | /y/: | huus > huis | [hys] > [hœys] | ‘house’ |
| | /i/: | tijd | [tit] > [teit] | ‘time’ |
| | /u/: | jou | [ju] > [jou] | ‘you’ |

II. Division between the North and the South:

i. Apocope (criterion 11)

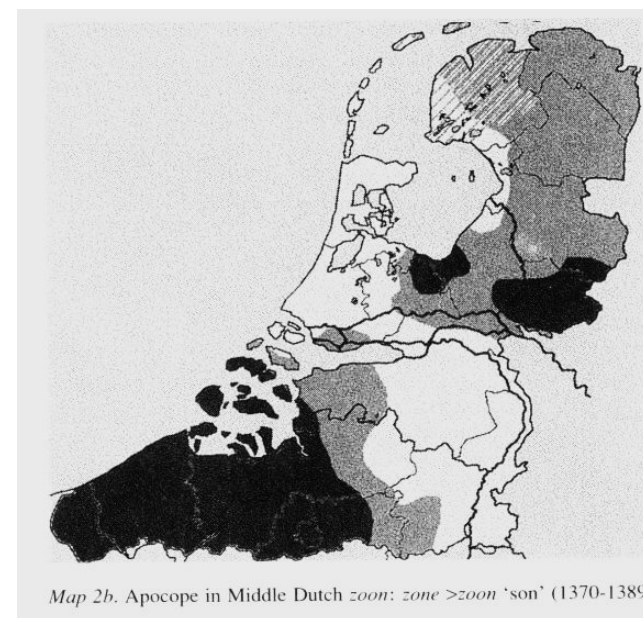
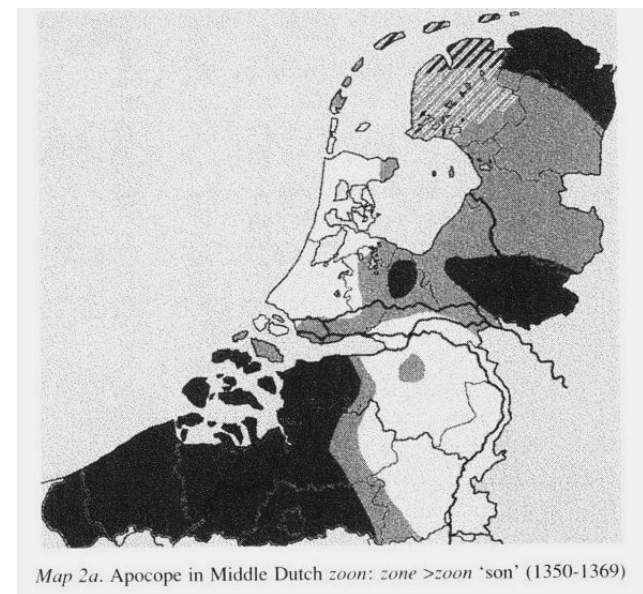
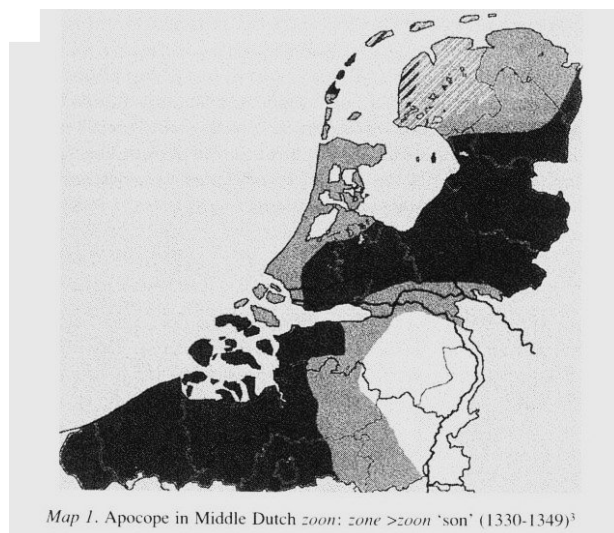
- (4) MD sonne > ND zon ‘sun’, MD (ic) geve > ND (ik) geef ‘(I) give’
 MD zone > ND zoon ‘son’

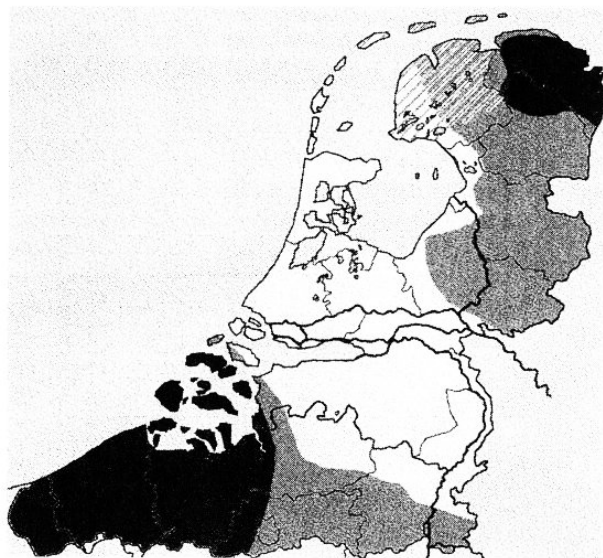
This change did not take place in all areas, Van Heule (1626, one of the first grammars of Dutch), notes that **e-apocope** happens in Hollandic Dutch (i.e. the Dutch spoken in the historic county of Holland), but not in Southern dialects like Flemish. This shows that in the early 17th century, this type of vowel deletion happened in Northern Dutch, but not in Southern Dutch:

“De Vlaemsche sprake die verlangt de woorden dikwils met eene *E*, zeggende *Loopene*, *Draegene*, *Komene*, *Werkene*, ook zeggen zy *Schuyte*, *Wagene*, *Steene*, zo ziet men hier dat de Hollantsche ende Vlaemsche sprake zeer strijdig is / de een de woorden te zeer verkortende / ende de ander die buyten natuyr verlangende.” (1626:91)

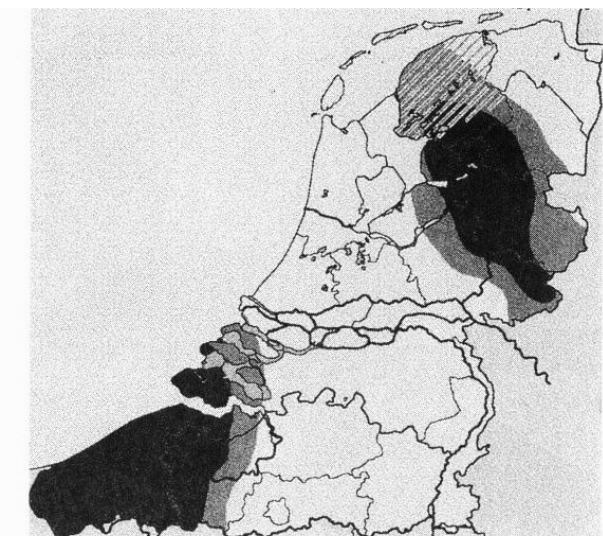
The Flemish language often demands word with an *E*, saying *Loopene*, *Draegene*, *Komene*, *Werkene*. They also say *Draegene*, *Komene*, *Werkene*. One thus sees here that the Hollandic and the Flemish language very much oppose each other, the one too much shortening and the other lengthening beyond what is natural. (my translation)

A systematic computer-aided analysis of notarial records, conducted by Van Reenen & Mulder (2003) show how apocope proliferated in the 14th century in Hollandish, while final *ə* remained intact in Flemish, cf. the following maps (Van Reenen & Mulder (2003:190-192, the lighter the area, the higher the percentage of apocope):





Map 3. Apocope in Middle Dutch *zoen*: *zone* > *zoen* 'son' (1390-1400)



Map 4. Apocope in Modern Dutch *zoen*: *zone* > *zoen* 'son'; modern dialects.



(map: the dialects of Middle Dutch)

→ Confirmation by the investigation of place names:

(5)	<i>Flanders / Zeeland</i>	<i>(rest of the) Netherlands</i>
	Blankenberge	HardenbergØ
	Oostende	WesteindØ, OosterendØ, PurmerendØ
	Middelkerke	OuwerkerkØ
	Oudenaarde	DodewaardØ, TernaardØ
	Roeselare	GelselaarØ
	Jabbeke	JabeekØ
	IJzendijke	GanzendijkØ
	Zuiddorpe, Westdorpe	SlootdorpØ, RansdorpØ
	Zeebrugge	BalkbrugØ
	Beervelde	BentveldØ

ii. Diphthongisation of tense mid vowels in 'Postmodern' Northern Dutch (20th and 21st centuries ('Poldernederlands' ('Polder Dutch'), Stroop 1998, Jacobi 2009):

/e:/ and /o:/: [e:] > [eɪ]; [o:] > [oʊ]

(along with concomitant lowering [eɪ] > [ai], [oʊ] > [au], as part of a chain shift (e: > eɪ, ei > ai) to give way to the new Poldernederlands diphthongs).

Not present in the Southern Dutch.

iii. Cliticization:

Word boundaries were blurred in the spelling of Middle Dutch: Van der Wal (1992:131) notes that there are many examples of proclitic and enclitic forms in Middle Dutch (MD) texts. This shows that word boundaries were often not felt:

(6) MD cliticized forms	MD non-cliticized equivalents	gloss
a. tien tiden	te dien tiden	‘at that time’
b. darne man	die arme man	‘the poor man’
c. hi leidene	hi leide ene	‘he lead him’

Multiple syllable induced vowel and consonant deletions, cliticizations, in Modern Colloquial Flemish, much more than in Northern Dutch;

- (7) a. dat ik /dat ɪk/ > [dak]
 b. was het /was ət/ [wast]
 c. dat /dat/ > [da]
 d. worden /wɔrd+ən/ => [wɔrən]

iv. Liaison/glottal stop insertion

Contrast Modern Northern / Modern Southern Dutch: glottal stop insertion vs. liaison (Noske 2005:476):

(8) underlying form	Northern Dutch	Southern Dutch
a. /æyt + eində + lək/	[æyt.ʔeində.lək]	[æy.ʔeində.lək]
b. /vər + arm + ən/	[vər.ʔar.mən]	[və.ʔar.mən]
c. /ən + ɛns/	[ən.ʔɛns]	[ɔ.ʔɛns]
d. /berɣ + ax.təx/	[ʔberx.ʔax.təx]	[ʔber.ʔax.təx]

Conclusion: The facts of (i) apocope, (ii) diphthongisation of tense mid vowels, (iv) cliticization and (iv) liaison/glottal stop insertion suggest that the evolution towards a word language went further in the North than in the South.

B. French: a zig-zag evolution

(Jacobs 1992:, ‘**Pendular**’ movement: of syllable structure typology: >closed (Class. Latin) > open (Late Latin) >closed (Gallo-Romance, Old French > much more open (Modern French)

Not only movement in syllable structure, but also in the word/syllable language typology:

1. Early/Classical Latin: features **showing clear characteristics of a word language**:

- i. The fusional type of language, with substantial freedom of word order substantial and the near-absence of clitics suggest that there was a high autonomy of the word. Little or no resyllabification. (criterion 13) (Marotta 1999:301, Sampson 2010:47).
- ii. (regarding criterion 1) Complex maximal syllable structure: sCCVVCs (Marotta 1999, Sampson 2010:46)
- iii. Vowel length contrast
- iv. Syncope (criteria 1&11): 6th-5th cent.: in the 2nd syllable, caused by initial initial stress (Meiser 1998:53),
 (9) *monestrum (*related to moneō*) > monstrum (Meiser 1998:66);
 in the final syllable: after -t, mostly if the preceding syllable contains at least 2 moras:
 (10) *dōt-is > dōs, *mort-is > mors (Meiser 1998:73)
- v. Apocope (criteria 1&11):
 (11) *h₁éss(s)i > es, *h₁éss-ti > est, *h₁s-énti > sunt
 (12) *occasional apocope*: fac, fer, dic, duc < face, *fere. dīce, dūce,
 vi. Weakening (criterion 11): vowels in unstressed open syllables weakened to ə, later usually evolving to e (Meiser 1998:67)
 ex.: internal syllables
 (13) a > i: cād-ō ce-cīd-ī
 b. e > i: leg-ō ē-lig-ō
 c. o > i: *kupidō-tāt-s > cupiditās (compare *kupid-qs cupidus
 d. u > i: caput capit-is
 + 7 other types of vowel weakening in internal unstressed open syllables (Meiser 1998:68-70)
 (14) *in final syllables* *pro-dāt > pedit
- vii. (criterion 6) Development towards quantity sensitive stress: from initial to penultimate/antepenultimate stress, dependent on the weight of the penultimate syllable.

However: already cluster simplification from Pre-Latin to Classical Latin (Maniet 1975:97-98, Steriade 1988, quoted by Sampson 2010:49, Maniet 1975)

- (15) word-internally: a. *sarpmentum > sarmentum (cf. sarpi-ō)
 b. *indultum > indultum (cf. indulge-ō)
 c. *aksla > *azla > āla (cf. axilla)
 word-initially: d. *ktunika > tūnica ‘tunic’
 e. *psaflom > sābulum ‘sand’
 f. *sni > nix ‘snow’
 word-finally: g. *kord > cor

2. Classical Latin → Late Latin: Clear movement into the direction of a syllable language

- i. Loss of vowel length distinction
- ii. Monophthongization (already partially in Classical Latin, Väänänen 1984:38-39).
- iii. Cluster simplification, giving rise to a more open syllable structure (Väänänen 1984:62-63):
 - (16) a. sanctus > santus, b. cinctus > cintus
 - b. (dē)functus > defuntus c. sursus > susus, nunc > nuc
 - d. quondam > quodam
- iv. Loss of final nasals, giving rise to open syllable structure:
 - (17) diem > die (*Väänänen 1984:66*).
- v. Beginnings of I-prosthesis (Sampson 2010:54ff), resolving sC(L) onsets.
 - (18) a. spes > ispes b. spatium > ispatium c. instutui > inistutui

3. Late Latin → Gallo-Romance and Old French: A swing back to a word language

- i. Second diphthongization (criterion 9): stressed vowels in open syllables are diphthongized (Fouché 1956, vol. 2:223ff, Pope 1953: 60-62, 103-104, La Chaussée 1989:182, 185, 187, 194).
- (19) a. *dēbet* > *OF* *deit* (*Mod. French* *doit*, cf. *devoir* vs. *doit*) ‘must’
b. cor [kɔr] > [kuɔr] ‘heart’
c. mare [ˈma:re] > [ˈmaɐ̯ra] ‘sea’
- ii. Degemination (criterion 4): The geminate consonants of Late Latin and those resulting from assimilation in the Gallo-Romance period were reduced to single consonants in Old French. This happened from the 9th century onwards (Pope 1952:147)
- iii. Vowel reduction due to stress (criterion 11, Pope 1952: 103-104)
- (20) a. *ter:a* > *tērā* ‘earth’ b. *portas* > *portās* ‘doors’
- iv. Vowel deletion due to stress (criterion 11, Pope 1952: 112)
- (21) a. *perdere* > *perdrā* ‘lose’ b. *arborem* > *arbrā* ‘tree’
- v. Final devoicing (criterion 8) from the 7th century onwards (Pope 1952:98), centuries before the same process happened in Germanic ,
- (22) a. [luŋgum] > [luŋk] ‘long’
b. [grandem] > [grānt] ‘big’
c. [perdo] > [pɛrt] ‘loose’
d. [ri:sʊm] > *[rizʊ] > [ris] ‘laugh’
e. [serwum] > *[servə] > [seɾf] ‘slave, servant’

4. Old French → Middle French and Modern French: A swing to a very clear syllable language

- i. Monophthongization (criterion 9) again, for the 11th century onwards (Pope 1952: 443ff), au >[o], ai >[e], etc.

- ii. Loss of productivity of vowel reduction (criterion 11): Unstressed full vowels introduced into the language at the time, e.g. in loan words, were no longer reduced to schwa. Schwas remain as relics of a word language
- iii. Loss of final devoicing. (Apart from a few relics like the lexicalized alternations in *neuf* ~ *neuve* and 'new' *grand ami* [grātami] ~ *grande amie* [grādami] 'big friend'.
- iv. A change in the conditioning of final vowel deletion (criterion 11)
 Vowel deletion (of schwa) has remained in Middle and Modern French, but has taken another role: instead of being conditioned by stress, **it is now conditioned by syllable structure optimization**:
 (23) *le + homme* > *l'homme* (/lə+ɔm/ > [lɔm]) 'the man, mankind'
proliferation of cliticization and resyllabification,
- v. **Final Coronation of syllable-languagehood**: loss of word accent. Because of vowel reduction en syncope in OF, stress could become word final. From ± the 18 th century onwards: loss of word accent. **The word ceases to be a relevant metric category.**
Development of Unbounded feet.

References:

- Auer, Peter, 1993. *Is a rhythm-based typology possible?* = KontRI Arbeitspapier Nr. 21, Universität Konstanz. Downloadable from: http://www.germanistik.uni-freiburg.de/auer/?Personal:Prof._Dr._Peter_Auer:Publikationen#Online.
- , 2001. "Silben- und akzentzählende Sprachen". In: Haspelmath, Martin, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.). *Language Typology and Language Universals. An International Handbook*. Berlin: de Gruyter, 1391-1399.
- Bree, Cor van. 1987. *Historische Grammatica van het Nederlands*. Dordrecht: Foris. On line available: http://www.dbnl.org/tekst/bree001hist02_01
- Fouché, Pierre. 1958 *Phonétique historique du français*. 3 vols. Paris: Klincksiek.
- Heule, Christaen van. 1626. *De Nederduytsche Spraec-konst ofte Taelbeschryvinghe*. Leiden: Jacob Roels. On line: http://www.dbnl.org/tekst/heul001nede01_01/. Facsimile edition of the 2nd edition (1633), edited and commented by W.J.H. Caron, published in 1953 by Wolters, Groningen.
- Jacobi, Irene. 2009. *On Variation and Change in Diphthongs and Long Vowels of Spoken Dutch*. Ph.D. Dissertation, University of Amsterdam. On line available: <http://dare.uva.nl/record/293297>
- Jacobs, Haike. 1992. "The interaction between the evolution of syllable structure and foot structure in the historical phonology of French". In Terrel Morgan & Christiane Lauffer (eds.), *Theoretical Analyses in Romance Linguistics*. Amsterdam: John Benjamins, 55-79.
- La Chaussée, F. de. 1989. *Initiation à la phonétique de l'ancien français*. Nouvelle édition revue et augmentée. Paris : Klincksiek
- Lahiri, Aditi, Thomas Riad & Haike Jacobs. 1999. 'Chapter 6: Diachronic Prosody'. In: Van der Hulst, Harry. *Word Prosodic Systems in the Languages of Europe*. Berlin: De Gruyter, 335-422.

- Meiser, Gerhard. 1998. *Historische Laut- und Formenlehre der lateinischen Sprache*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Maniet, Albert. 1975. *La phonétique historique du latin*. 5ème éd. Paris: Klincksieck.
- Marotta, Giovanna. 1999. "The Latin Syllable". In Van der Hulst, Harry & Nancy Ritter (eds.), *The Syllable. Views and Facts*. Berlin: Mouton de Gruyter, 285-310.
- Noske, Roland. 2005. "A prosodic contrast between Northern and Southern Dutch: a result of a Flemish-French sprachbund". In Broekhuis, Hans et al., *Organizing grammar. Linguistic Studies in Honor of Henk van Riemsdijk*. Berlin: Mouton de Gruyter, 474-482. On line available: <http://perso.univ-lille3.fr/~rnoske>
- . 2009. "Autonomous typological prosodic evolution versus the Germanic superstrate in diachronic French phonology". In Aboh, Enoch, Elisabeth van der Linden, Josep Quer & Petra Sleeman (eds.), *Romance Languages and Linguistic Theory 2007*, 223-242. Amsterdam/Philadelphia: Benjamins. On line available: <http://perso.univ-lille3.fr/~rnoske>
- Nübling, Damaris & Renate Schrambke. 2004. "Silben- versus akzentsprachliche Züge in germanischen Sprachen und im Alemannischen". In: Glaser, Elvira, Peter Ott & Rudolf Schwarzenbach (Hrsg.), *Alemannisch im Sprachvergleich. Beiträge zur 14. Arbeitstagung für alemannische Dialektologie in Männedorf (Zürich) vom 16.-18.9.2002*. Stuttgart: Franz Steiner, 280-320.
- Quak, Arend. 1997. "2. Oudnederlands (tot circa 1200) door A. Quak met syntaxis door J.M. van der Horst": '2.2. Interne taalgeschiedenis'. In: Toorn, Maarten C. van den et al. (red.), *Geschiedenis van de Nederlandse taal*. Amsterdam: Amsterdam University Press, 42-68. On line available: http://www.dbnl.org/tekst/toor004gesc01_01/
- Pope, Mildred. 1952. *From Latin to Modern French*. 2nd edition. Manchester: Manchester University Press.
- Reenen, Pieter van & Maaike Mulder. 2003. "Linguistic Interpretation of Spelling Variation and Spelling Conventions on the Basis of Charters in Middle Dutch and Old French: Methodological Aspects and Three Illustrations." In: Goyens, Michèle & Werner Verbeke (eds.), *The Dawn of the Written Vernacular in Western Europe*. Leuven: Leuven University Press, 179-199.
- Sampson, Rodney. 2010. *Vowel Prosthesis in Romance. A Diachronic Study*. Oxford: OUP.
- Steriade, Donca. 1988. "Gemination and the Proto-Romance Syllable Shift". in Birdsong, David and Jean-Pierre Montreuil (eds.), *Advances in Romance Linguistics*. Dordrecht: Foris.
- Stroop, Jan. 1998. *Poldernederlands: waardoor het ABN verdwijnt*. Amsterdam: Bakker.
- Szczepaniak, Renata. 2007. *Der phonologisch-typologische Wandel des Deutschen von einer Silben- zu einer Wortsprache*. Berlin: de Gruyter.
- Väänänen, Veikko. 1984. *Introduction au Latin Vulgaire*. 3ème éd. rev. et augm. Paris: Klincksieck.
- Vaught, George M. 1979. *A Study of Auslautverhärtung in Old High German*. Ann Harbor.
- Wal, Marijke van der. 1992. *Geschiedenis van het Nederlands*. Utrecht: Het Spectrum.