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German vowel length: quantity and activity

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Introduction

Distribution of short & long vowels (V vs. V:) in German

2 main perspectives:

➤ Synchrony: What does the situation look like in Nhg ?

(Becker [1996], Hall [1992, 1999, 2002a, 2002b,], Moulton [1959, 1962], Vennemann [1990, 1991], Wiese [1986, 1996] a. o.)

Introduction

➤ Diachrony:

V-length from Mhg to Nhg

Lengthening

Shortening

⇒ In which context(s) ? Why ?

(Kyes [1989], Lahiri & Dresher [1998], Leys [1975],
Moulton [1961], Paul [1884, 1998], Reis [1974],
Ritzert [1898], Seiler [2005], Wiesinger [1983] a.o.)

Introduction

Focus:

- Nhg distribution of V and V:
- Mhg-to-Nhg lengthening

Results of the study:

- No synchronic derivation of length in Nhg
- V-length gives hints (morphology)

Introduction

Arguments:

- V-length: weak roots vs. fully inflected forms in strong paradigms
- No variation in weak paradigms
- Length in loans (alternation)
- Length in hypocoristics
- Loan word nativization: ???

Database

Panchronic corpus (monomorphemes)

Nhg entries: 13 300 (15 832)

Mhg (Ohg / Enhg) cognates:

4 382 (6 530) items

Sources:

Maurer, Mitter & Mülner [1996-2000], Wermke, Kunkel-Razum & Scholze-Stubenrecht [2000, 2004]

Auberle & Klosa [2001], Grimm & Grimm [2007], Kluge [2002], Pfeifer [2003]

Lexer [2007], Müller & Zarncke [2007]

1 - Vowel length

Nhg Complementary distribution

V: in open syllables

e.g. *S[e:]* "sea", *L[e:]ben* "life" (2883)

and before a word-final singleton

e.g. *B[a:]n* "way" (2429)

V in closed syllables

e.g. *b[a]ld* "soon", *K[ɪ]rche* "church"
(3457)

1 - Vowel length

Counterexamples

V in open syllables

e.g. R[ɪ]ppe "rib" (2243)

and before a word-final singleton

e.g. B[ɛ]tt "bed" (292)

V: in closed syllables

e.g. Z[i:]rde "ornament" (202)

1 - Vowel length

Database (13300 monomorphemes)

V-length sensible to:

➤ Syllable structure:

e.g. *S[e:]* "sea", *L[e:]ben* "life"

vs. *b[a]/d* "soon", *K[I]rche* "church"

➤ Voice value (following consonant):

e.g. **B[a]d*, but *B[a:]d* "bath"

vs. *M[i:]te* "rent" AND *M[I]tte* "middle"

1 - Vowel length

Diachrony

e.g. <i>mühle</i>	>	<i>M[y:]hle</i>	"mill"
<i>segel</i>	>	<i>S[e:]gel</i>	"sail"
<i>kirche</i>	>	* <i>K[i:]rche</i>	"church"
<i>bald</i>	>	* <i>b[a:]ld</i>	"soon"
<i>tag</i>	>	<i>T[a:]g</i>	"day"
<i>sun</i>	>	<i>S[o:]hn</i>	"son"

1 - Vowel length

Database

Lengthening occurs:

- in open syllables if the following consonant is (underlyingly) **voiced**:

e.g. Mhg *segel* > Nhg *S[e:]gel* "sail"

müle > *M[y:]le* "mill"

vs. *ahse* > *[a]chse* "axis"

gate > *G[a]tte* "husband"

1 - Vowel length

- before a word-final singleton, provided that it is **voiced**:

e.g. Mhg *tag* > Nhg τ [a:]g "day"
ton > τ [o:]n "tone"
rad > R[a:]d "wheel"
vs. *naZ* > n[a]ss "watery"

⇒ **Correlation voice-length**

2- No alternation (weak verbs)

Vowel length is **stable** in Nhg

e.g. $\Lambda[e:]b$ "live!"

+ *-en* \Rightarrow $L[e:]ben$ "life"

+ *-te* \Rightarrow $\Lambda[e:]bte$ "(he) lived"

+ *-bar* \Rightarrow $\Lambda[e:]bbar$ "liv(e)able"

+ *Zeiten* \Rightarrow $L[e:]bzeiten$ "lifetime"

\Rightarrow **not productive!**

3 - Strong paradigms

Clear quantity-alternations

e.g. *g[e:]ben* "(to) give"

vs. *g[i]bt* "(he) gives"

ʌ[ai]den "(to) suffer"

vs. *ʌ[i]tt* "(he) suffered"

h[a:]ben "(to) have"

vs. *h[a]bt* "(you, plur.) have"

3 - Strong paradigms

However, length regulators are the same:

$\Lambda[\text{aI}]den$ "(to) suffer" (Cl. Ia)

$\Lambda[\text{I}]tt$ "(he) suffered"

$f[\text{I}]nden$ "(to) find"

Voicing & syllable structure

3 - Strong paradigms

Class Ia

griff, litt, glich, riss, biss, pfiff

"(he) caught, suffered, resembled, tore, bit, whistled"

vs.

Class Ib

blieb, stieg, mied, schrie, schien, trieb

"(he) stayed, went up, avoided, shouted, shone, pushed"

3 - Strong paradigms

Class IIa

fror, schob, bog, floh, flog, stob

"(he) froze, pushed, bent, fled, flew,
gushed out"

vs.

Class IIb

floss, kroch, sott, troff, goss, roch

"(he) ran, crawled, boiled, streamed,
watered, smelt"

Weak vs. strong paradigms

- Stress, syllable structure & voicing
- For both weak (WP) and strong (SP) paradigms
- WP: Length is "decided" in roots
- ⇒ **Analytic** (Kaye [1995])
- SP: Length affected by - at least - inflection
- ⇒ **NOT analytic**: phonology does not have access to morphological information

Weak vs. strong paradigms

➤ V-length is sensible to morphological structure, hence to the presence of morphological boundaries

➤ there is NO (visible) boundary in SP

SP: closed classes
no productivity

⇒ allomorphy

4 - Loans

Möbel "piece of furniture"

vs. *möblieren* "(to) furnish"

Japan "Japan"

vs. *Japaner, japanisch* "Japanese (Subst., Adj.)"

Length alternations not triggered by
syllabic structure

5 - Diminutives & Co.

Féry [1997]

Itô & Mester [1997]

Iverson & Salmons [1992]

⇒ How ?

⇒ Why ?

Vowel length ?

5 - Diminutives & Co.

Full forms

Religion "religion"
Abonnement "subscr."
Abitur "A-levels"
Ricarda (a name)
Prominenter "VIP"
Mathematik "maths"
Kriminalroman "det. novel"
Trabant (a car)

Short forms

Reli
Abo
Abi
Ricki
Promi
Mathe
Krimi
Trabbi

5 - Diminutives & Co.

Interpretations

➤ No length in diminutives ?

⇒ *Kugelschreiber* "ballpoint" - *Kuli*



⇒ *Bube* "jack, manservant..." - *Bubi*

➤ No synchronic regulation of length

Length is not created anymore

⇒ **No activity, no derivation !**

6 - Loan words adaptation ?

Hall & Hamann [2003]

Fr. *parole* (short, lax)

> Nhg *Parole* "password, slogan"

Counterexample ?

➤ No: Nhg *Parole* < Mhg *parole* < Fr. *parole*

➤ More recent borrowing: Fr. *Parole*

> Nhg *Parole* (Saussure)

> *Parole d'Honneur* "word of honour"²⁴

Conclusion

No synchronic account of V-length in Nhg

- No alternation in WP
- Some alternation in SP (non-analytic forms)
- Some alternation in loans (stress)
- Diminutives do not "create" length
- (Recent) loans: everything is possible

Conclusion

Therefore

Behaviour of words (length) provides crucial information about

- Origin (Nhg *Parole* vs. *Parole*): loan vs. native, recent vs. old loan
- Morpheme structure (Nhg *gibt* "(he) gives" vs. *lebt* "(he) lives"): analytic vs. non analytic, simple vs. complex

Conclusion

Further research:

- Loans adaptation
- V-length in diminutives
- Theoretical and representational account of the analytic - non analytic problem
- Stress in Nhg

And...

[sæ̃k'ju:] !



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