



Destandardization and demotization from a lexicometrical perspective

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0 Points to make

- the (de)standardization debate needs to distinguish between three dimensions of stratificational change: (de)standardization, (in)formalization, (de)homogenization
- these three dimensions are logically and empirically independent of each other
- a quantitative lectometrical approach is the most natural and most appropriate way for studying the phenomena in question

1 Three types of stratificational change

imagine a classical stratificational continuum, simplified to two levels

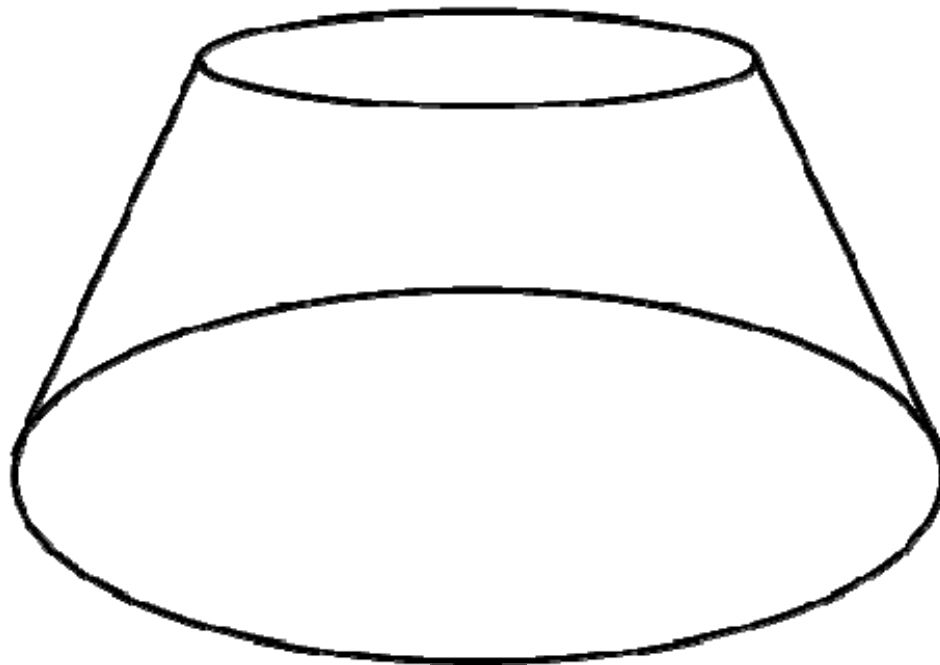
- one considered typical for a higher, more normative, 'better' variety
- one considered typical for a lower, informal, more colloquial variety

with the additional assumption that linguistic usage at the higher level exhibits less variation than that at the lower level

-> what could destandardization mean in this situation?

1 Three types of stratificational change

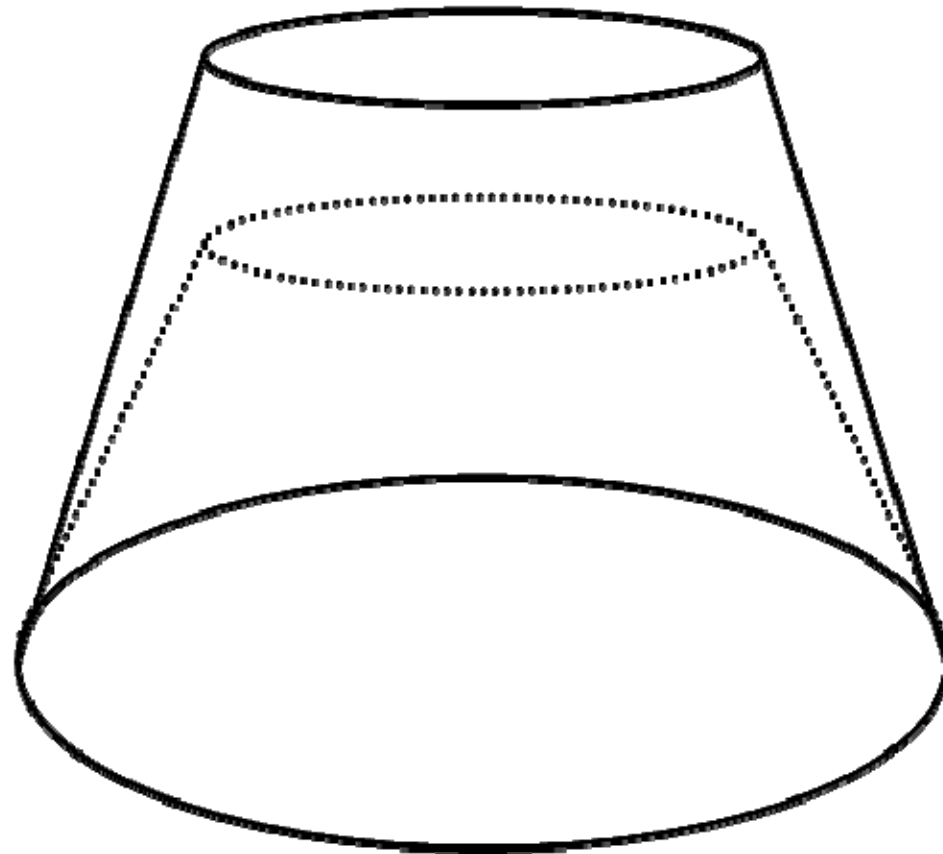
increasing of stratificational distances:



1 Three types of stratificational change

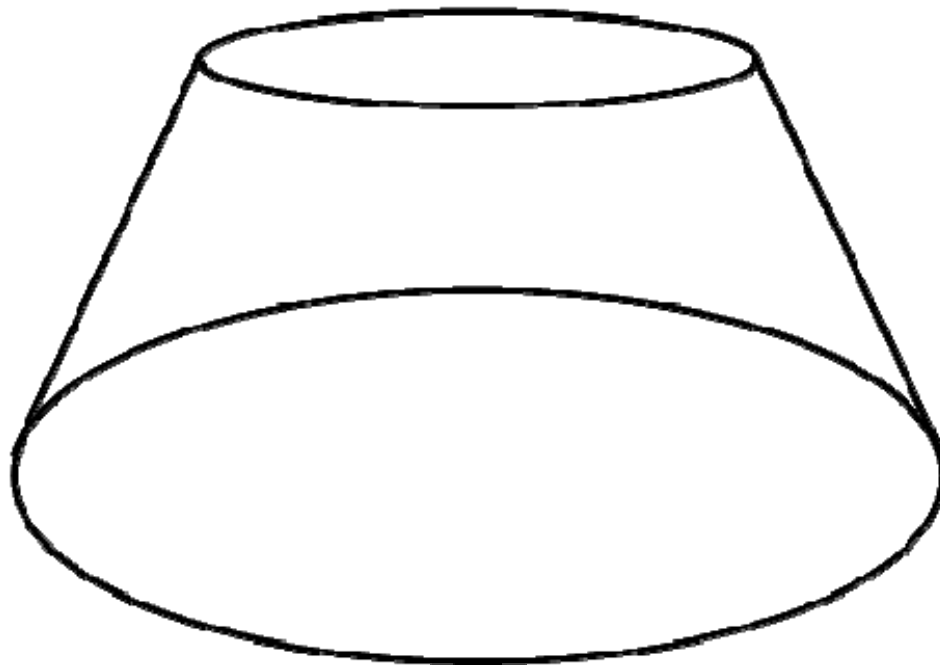
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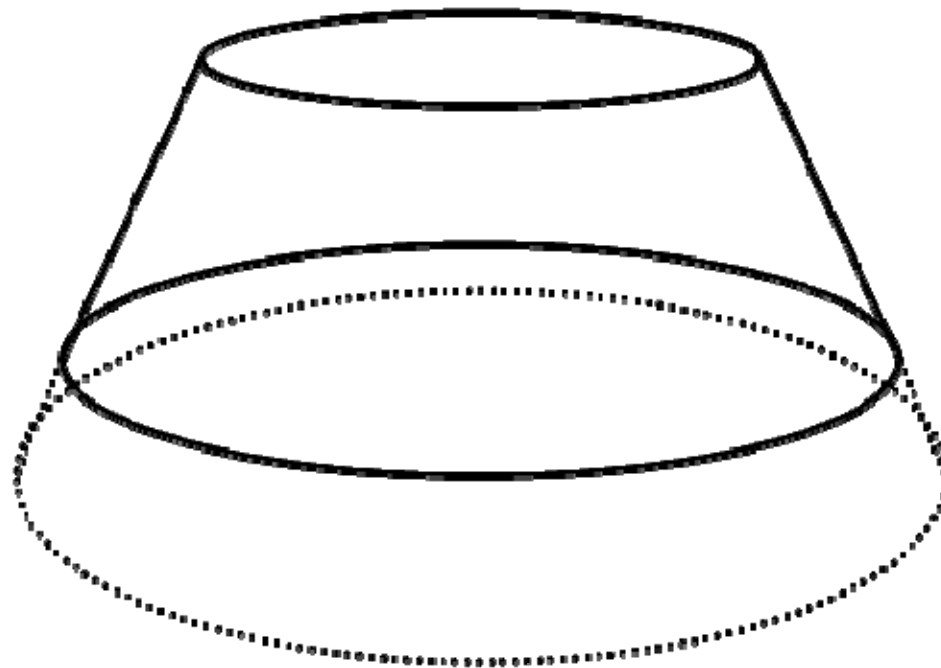
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such an increase contrasts with decreasing distances, as in a classical model of progressive standardization:



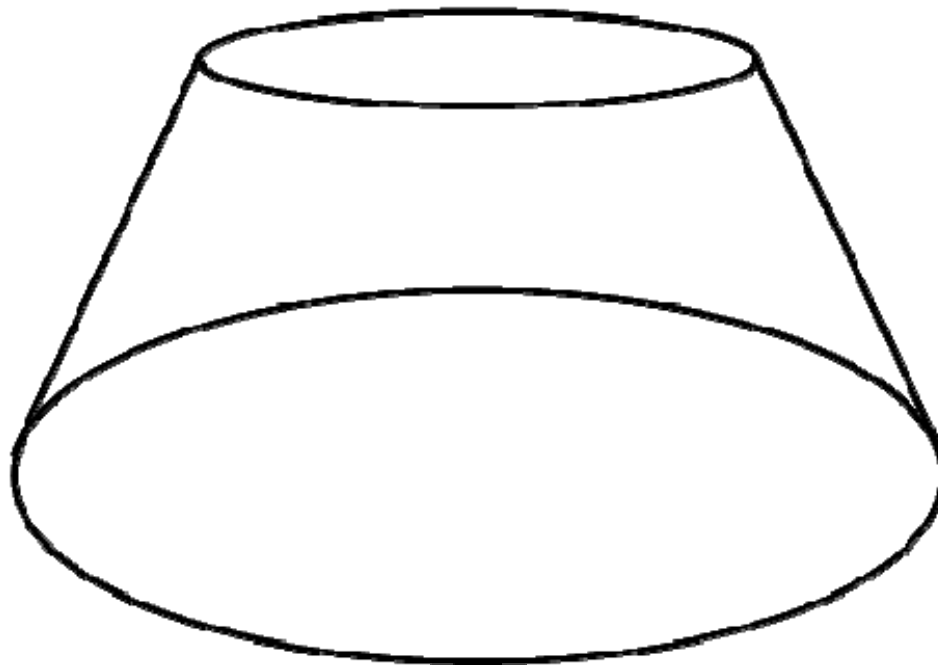
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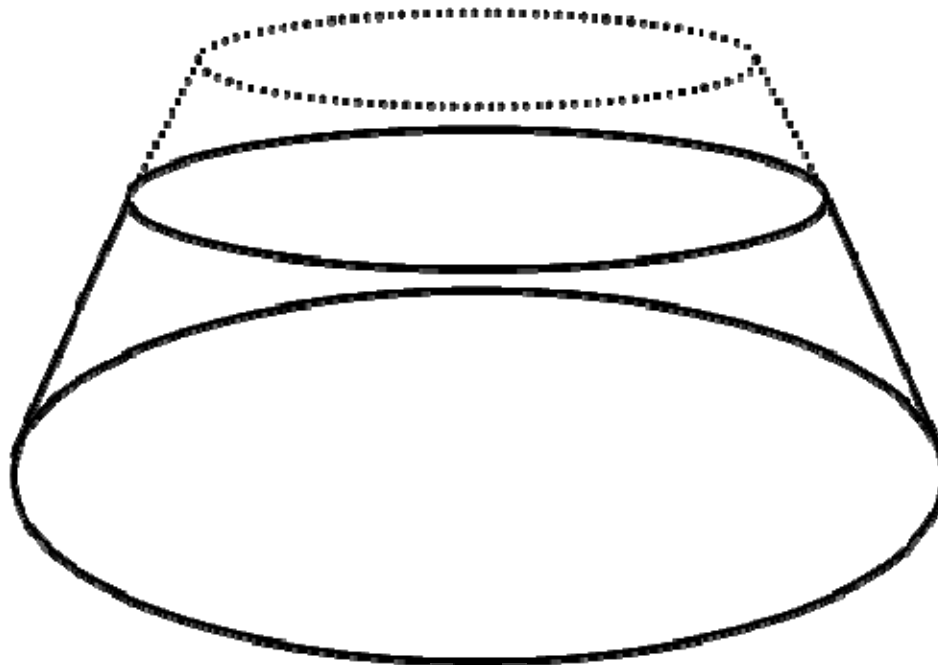
1 Three types of stratificational change

but narrowing of distances could also come about by a downward movement of the top, rather than an upward movement of the bottom:



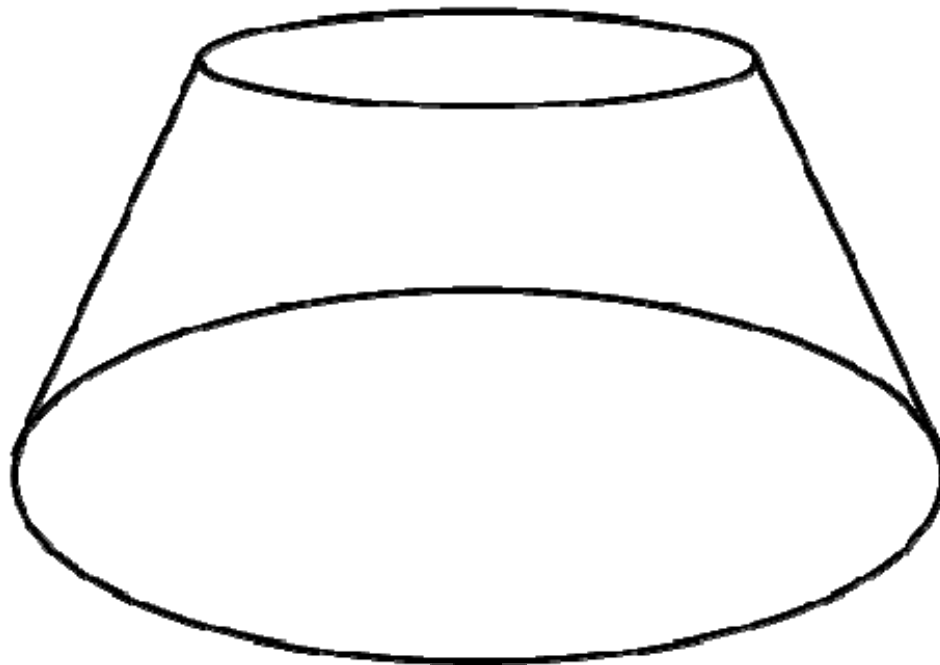
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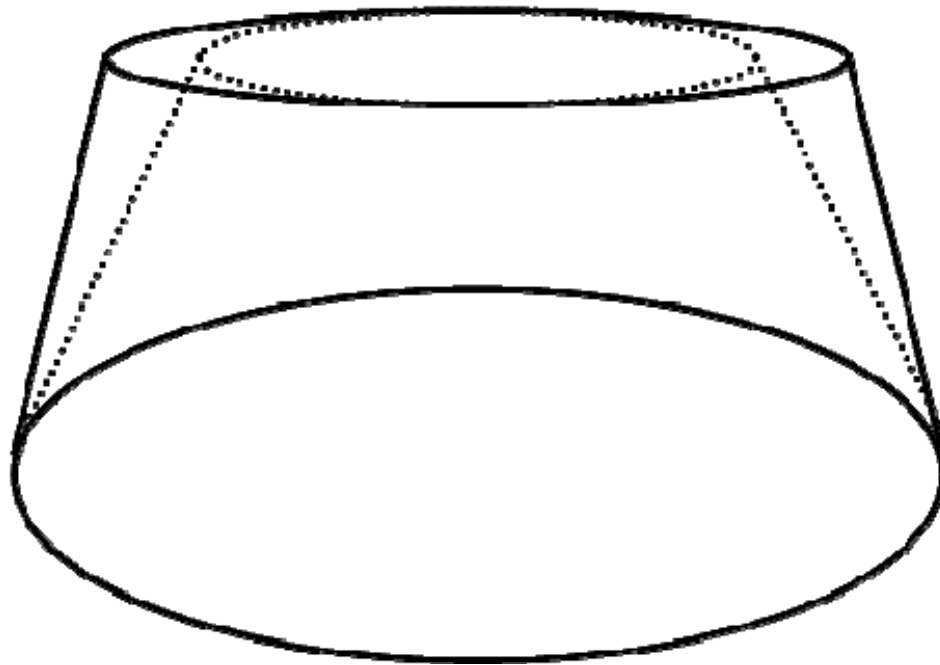
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in addition, a loosening of norms could also take the form of more variation at the upper level, irrespective of a change in distances:



1 Three types of stratificational change

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1 Three types of stratificational change

-> at least three dimensions need to be conceptually distinguished in the (de)standardization debate

- (de)standardization

an increase/decrease of stratificational distance between different levels

- (in)formalization

a direction of development towards/away from the higher stratificational level

- (de)homogenization

an increase/decrease of the variability at one level (specifically, at the higher stratificational level)

1 Three types of stratificational change

PS - how do these types relate to current definitions of destandardization and demotisation?

- . 'Demotisation is [the] revalorisation, ideological upgrading, of [a] 'low-status' language to 'best-language' status'
-> informalization
- . Destandardization is 'a possible development whereby the established standard language loses its position as the one and only 'best language''
-> either dehomogenization or destandardization

1 Three types of stratificational change

either way, using a binary classification to discuss a threedimensional phenomenon is bound to be confusing

2 Lectometric definitions of the three types

generalizing over dialectometry, sociolectometry, stylometry etc., lectometry is the quantitative study of, synchronically, the linguistic distances between lects and the resulting stratificational structure, and diachronically, their convergence or divergence

the definitions given here were first presented in

[Geeraerts, Grondelaers & Speelman 1999](#)

[Convergentie en divergentie in de Nederlandse woordenschat](#)
(Amsterdam: Meertens Instituut)

(refinements and alternative operationalizations exist but will not be discussed)

2 Lectometric definitions of the three types

(de)standardization can be measured in terms of the uniformity between stratificational levels

$$U_Z(Y_1, Y_2) = \sum_{i=1}^n \min(F_{Z, Y_1}(x_i), F_{Z, Y_2}(x_i))$$

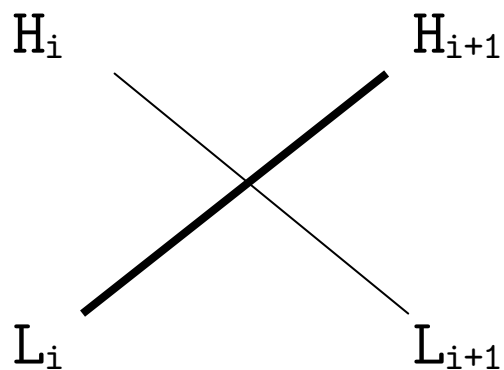
$$U(Y_1, Y_2) = \frac{1}{n} \sum_{i=1}^n U_{Z_i}(Y_1, Y_2)$$

2 Lectometric definitions of the three types

(in)formalization can be measured in terms of the differential strength of attraction between lower and higher strata from time i to time $i+1$:

informalization occurs if the higher stratum moves more in the direction of the lower stratum than that the lower stratum moves in the direction of the higher one, i.e. if

$$U(L_i, H_{i+1}) > U(H_i, L_{i+1})$$



2 Lectometric definitions of the three types

(de)homogenization can be measured in terms of the internal uniformity of one stratificational level

$$I_Z(Y) = \sum_{i=1}^n F_{Z,Y}(x_i)^2$$

$$I(Y) = \frac{1}{n} \sum_{i=1}^n I_{Z_i}(Y)$$

3 Independence of the three types

to establish the independence of the three types, it needs to be shown that their logical combinations are all possible in principle:

standardization ^{1?}	+	+	+	+	-	-	-	-
informalization ^{2?}	+	+	-	-	+	+	-	-
dehomogenization ^{3?}	+	-	+	-	+	-	+	-

1 simplified to: narrowing (+) *vs* stability (-)

2 simplified to: shift from high to low (+) *vs* shift from low to high (-)

3 simplified to: less uniformity (+) *vs* stability (-)

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	10	50	10
form β	-	-	-	-
form γ	10	90	50	90

+ $U(H_i, L_i) = 20, U(H_{i+1}, L_{i+1}) = 60$

+ $U(L_i, H_{i+1}) = 60, U(H_i, L_{i+1}) = 20$

+ $I(H_i) = 91, I(H_{i+1}) = 50$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	10	10	10
form β	-	-	-	-
form γ	10	90	90	90

+ $U(H_i, L_i) = 20, U(H_{i+1}, L_{i+1}) = 100$

+ $U(L_i, H_{i+1}) = 100, U(H_i, L_{i+1}) = 20$

- $I(H_i) = 82, I(H_{i+1}) = 82$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	10	80	50
form β	-	-	10	-
form γ	10	90	10	50

+ $U(H_i, L_i) = 20, U(H_{i+1}, L_{i+1}) = 60$

- $U(L_i, H_{i+1}) = 20, U(H_i, L_{i+1}) = 60$

+ $I(H_i) = 82, I(H_{i+1}) = 66$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	10	90	50
form β	-	-	-	-
form γ	10	90	10	50

+ $U(H_i, L_i) = 20, U(H_{i+1}, L_{i+1}) = 60$

- $U(L_i, H_{i+1}) = 20, U(H_i, L_{i+1}) = 60$

- $I(H_i) = 82, I(H_{i+1}) = 82$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	-	5	10
form β	-	10	5	90
form γ	10	90	90	-

- $U(H_i, L_i) = 10, U(H_{i+1}, L_{i+1}) = 10$

+ $U(L_i, H_{i+1}) = 95, U(H_i, L_{i+1}) = 10$

+ $I(H_i) = 82, I(H_{i+1}) = 8125$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	-	10	-
form β	-	10	-	90
form γ	10	90	90	10

- $U(H_i, L_i) = 10, U(H_{i+1}, L_{i+1}) = 10$
- + $U(L_i, H_{i+1}) = 90, U(H_i, L_{i+1}) = 10$
- $I(H_i) = 82, I(H_{i+1}) = 82$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	10	5	90
form β	10	-	90	-
form γ	-	90	5	10

- $U(H_i, L_i)=10, U(H_{i+1}, L_{i+1})=10$
- $U(L_i, H_{i+1})=10, U(H_i, L_{i+1})=90$
- + $I(H_i)=82, I(H_{i+1})=8125$

3 Independence of the three types

	time i		time i+1	
	stratum H	stratum L	stratum H	stratum L
form α	90	10	10	90
form β	10	-	90	-
form γ	-	90	-	10

- $U(H_i, L_i) = 10, U(H_{i+1}, L_{i+1}) = 10$
- $U(L_i, H_{i+1}) = 10, U(H_i, L_{i+1}) = 90$
- $I(H_i) = 82, I(H_{i+1}) = 82$

3 Independence of the three types

-> descriptive work needs to distinguish between the multiple combinations of the three dimensions; this precludes an interpretative reduction to a single phenomenon like 'the demise of the SLI'

4 A real world example

replication of GGS1999*:

lexical variation for 14 clothing concepts

for 2 chronological points: 1990 *vs* 2012

for 2 lg varieties: Belgian Dutch *vs* Netherlandic Dutch

and for 2 stratificational levels: magazines *vs* shop

window materials

* with many thanks to Tine De Cnodder and Jocelyne Daems

4 A real world example

Belgian Dutch results:

$$+ \quad U(\text{BH}_{1990}, \text{BL}_{1990}) = 50.47$$

$$U(\text{BH}_{2012}, \text{BL}_{2012}) = 73.72$$

$$+ \quad U(\text{BL}_{1990}, \text{BH}_{2012}) = 56.22$$

$$U(\text{BH}_{1990}, \text{BL}_{2012}) = 52.29$$

$$- \quad I(\text{BH}_{1990}) = 69.21$$

$$I(\text{BH}_{2012}) = 74.96$$

-> narrowing of the stratificational spectrum,
informalization (slightly),
increasing homogeneity

4 A real world example

Netherlandic Dutch results:

$$+ \quad U(\text{NH}_{1990}, \text{NL}_{1990}) = 67.72$$

$$U(\text{NH}_{2012}, \text{NL}_{2012}) = 81.65$$

$$- \quad U(\text{NL}_{1990}, \text{NH}_{2012}) = 59.23$$

$$U(\text{NH}_{1990}, \text{NL}_{2012}) = 85.54$$

$$- \quad I(\text{NH}_{1990}) = 68.48$$

$$I(\text{NH}_{2012}) = 71.06$$

-> narrowing of the stratificational spectrum,
formalization,
increasing homogeneity

4 A real world example

a lexical study of 14 concepts is not enough to arrive at general conclusions, but assuming that the effects are representative, the developments exhibit

- in both varieties:

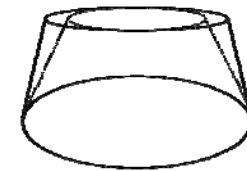
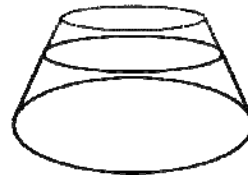
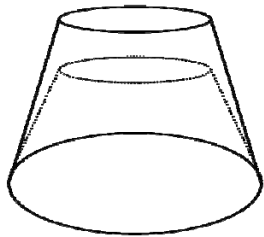
a classical standardizing movement,
with diminishing stratificational bandwidth
and enhanced internal homogeneity

- in the Belgian variety:

a slight shift towards the endogenous forms, signaling the
weakening of the traditional exogenous normative
orientation

5 Take home message

1° the binary distinction between demotization and destandardization needs to be replaced by a description that distinguishes (at least) between (de)standardization (in)formalization (de)homogenization and their multiple combinations



5 Take home message

2° by allowing for an objective operationalization of these three concepts, **corpus-based lectometry** is an indispensable tool for getting a grip on the multidimensional nature of changes in stratificational continua



for further information:

<http://www.ling.arts.kuleuven.be/qvl>

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