

## Arjen P. Versloot

# Using late-mediaeval sources for linguistic reconstructions

See her bare ouwert op musikeeren die Stadie verseteur sond sond seiner hand als hande alse glaamer is the here hande offer pain less off-oke halvene for personeren helbert per son avanderene on son softer personeren helbert theore hande offer pain less off-oke halvene of the soft personer helbert personer on so sone softer personeres theore hande offer pain and the softer person with the personer of all dear present with all or softer the here and have been all offer and the softer person of the personer soft all dear of the softer of the softer softer and the dear the offer and the beland of the softer at the person of the softer of the person of the latter of the softer softer of the softer of the person with the softer of the beland of the softer of another and the threads in person without one find the person of the softer of the softer of the bester of here there and the threads in person of the softer of the softer of the softer of the person of the person of the bester of the here the softer and the threads in the soft action of the softer of the softer of the bester of the bester of here there and the threads in person of the softer of the softer of the softer of the bester of the bester of the softer of the bester of the bester of the bester of the softer of the softer of the softer of the softer of the bester of the softer of the bester of the softer of the softer of the bester of t

#### Model I:

One-third of the authors uses variant A and two-thirds variant B. This implies that the variance per author is minimal, for instance, completely predictable after the first observation in a text, but for the corpus, maximal: Charters from three different authors are needed to establish the 1:2 ratio, but per author, one form is sufficient. In this model it is preferable to count per text or even per author;

#### Model II:

Every author uses both alternatives in the ratio 1:2 in a random alternation in his writings, (for example, within one charter). If this is applied consistently, the individual variance equals the population variance. With a sufficient number of tokens to track the variation with a significant estimation, it is possible to deduce the variation among the entire population. If the inter-speaker variance is zero, it does not matter whether there is a long text from one author or two shorter ones from two authors, assuming that both are representative for that period and region. In this model, token count is the preferred method.

The mixture of forms in one charter is only possible if two conditions are fulfilled:

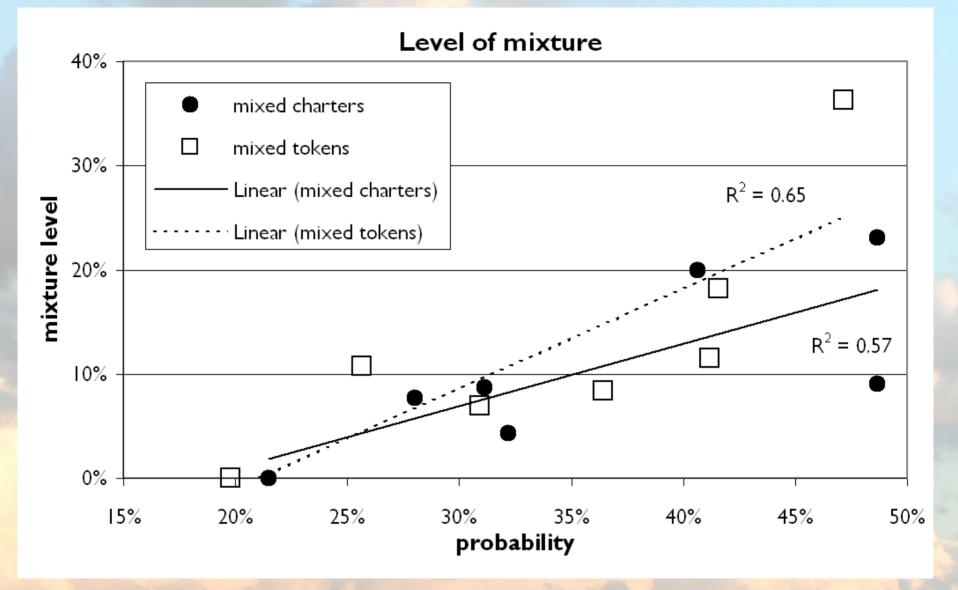
- The two variants must be co-existing at that time;
- A charter must contain at least two tokens for the relevant form to be able to show different variants in one charter.

seka vs. seken 1460-1500	-a	-en	%-а
All tokens in this period	21	30	41%
All charters in this period with an attestation to	18	19	<b>49</b> %
		and the second second	
	both -a and -en	only -a or -en	% mixed
Tokens in charters with at least two examples			

### The following cases have been studied:

- seke 'case'
- seka 'cases'
- bitalad 'paid'
- wesa 'to be'
- kapad 'bought'
- degum 'days'
- habbath 'have'

singular -e or ø plural -a or -en ending with <a> or <e> / <i> root vowel <a> or <e> unstressed vowel <e> or <i> dative plural ending <Vm> or <en> ending with <a> or <e> / <i>



#### Graph 1.9: Level of Mixture, token count.

-	tokens in	tokens in						
words	mixed charter s	charters > 1 token	% mixed tokens	tokens var. 1	tokens var. 2	%overall mixture	variant 1 vs. variant 2	time frame
bitalad	0	14	0%	20	81	20%	<a> - <e i=""></e></a>	-1481
habbath	3	28	11%	10	29	26%	<a> - <e i=""></e></a>	-1435
kapad	12	174	7%	137	306	31%	<i> - <e></e></i>	all
wesa	6	72	8%	39	68	36%	<a> - <e></e></a>	-1471
degum	4	22	18%	42	49	46%	<um> - <en></en></um>	all
seke	29	80	36%	58	65	47%	<e> - ø</e>	1430-1480
seka	3	26	12%	21	30	41%	<a> - <en></en></a>	1460-1500
	57	416	r =	78,8%				
avera	nge /e/ =	12%	r2 =	62,2%				
	df =	5	p 1-T=	1,7%				
	n =	7	p 2-T=	3,5%				

<ael> & <ael> +V <ael> +V <ael> \*V <ael

bitalad/-ath	11	9	45%
bitalia(ne)	9	2	18%
bitalinge	70	6	8%
rest of the			
charters	224	3	1%
Table 2.11: Skewed o	listribution	of the sequence	<aell>.</aell>

	order	% <aell></aell>	log(% aell)
bitala-	0	45%	-0,35
bitalia-	1	18%	-0,74
bitalinge	2	81/0	-1,10
rest	3	1%	-1,88

Table 2.9: Skewed distribution of the sequence <aell>.

					1000 BAR ( 100 - 120 BAR)
-	n =	df =	р 2-Т =	p 1-T =	r2 =
%	4	2	5,0%	2,5%	0,90
$\log(\%)$	4	2	1,9%	1,0%	0,96