

REALIZATION OF /T/ IN JUTLANDIC DIALECTS OF DANISH

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kort 1 De vigtigste dialektområder

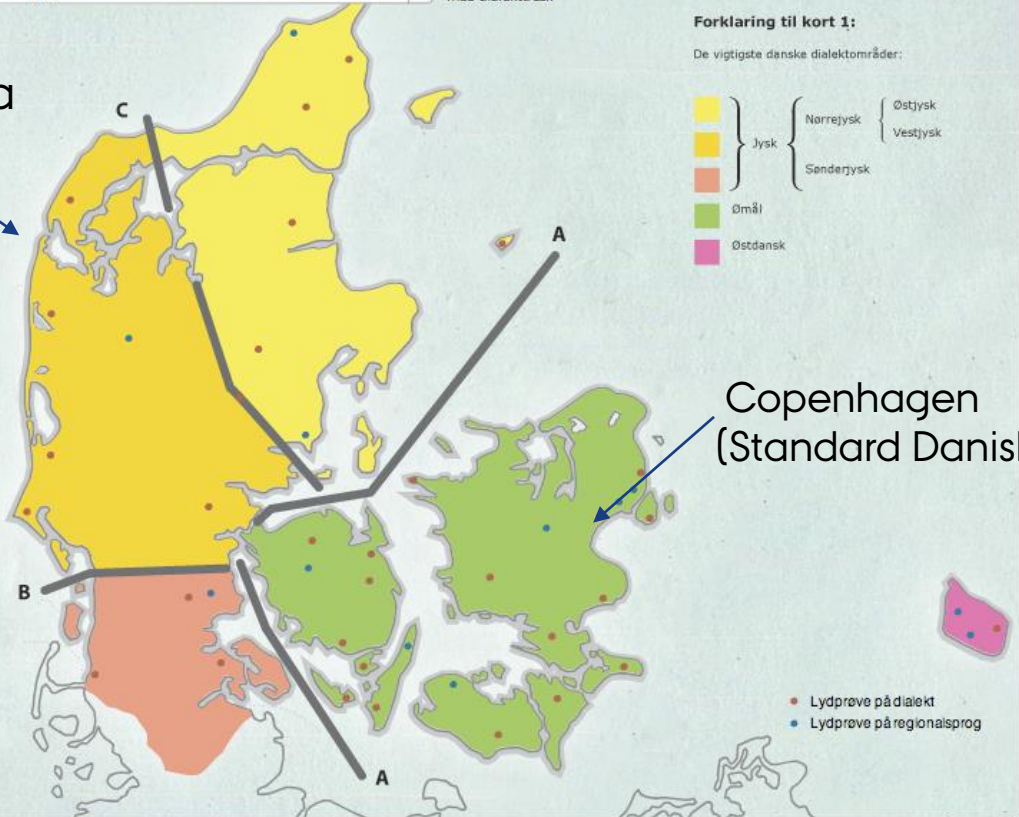
Her kan du vælge kort med dialekttræk

Forklaring til kort 1:

De vigtigste danske dialektområder:

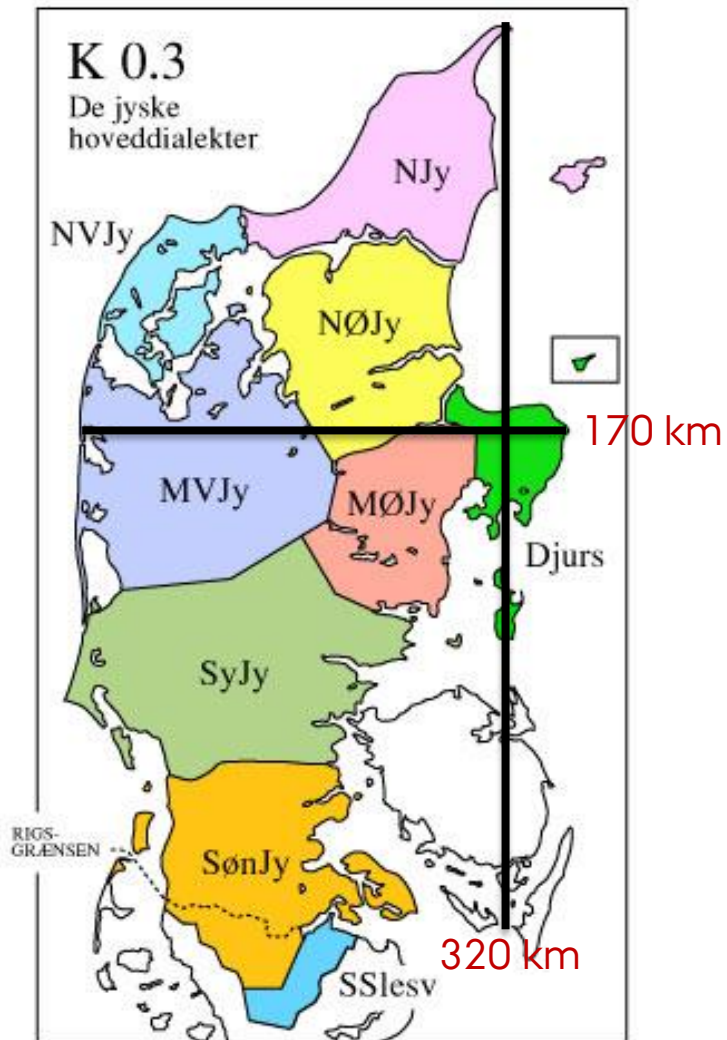


Jutland peninsula



K 0.3

De jyske hoveddialekter

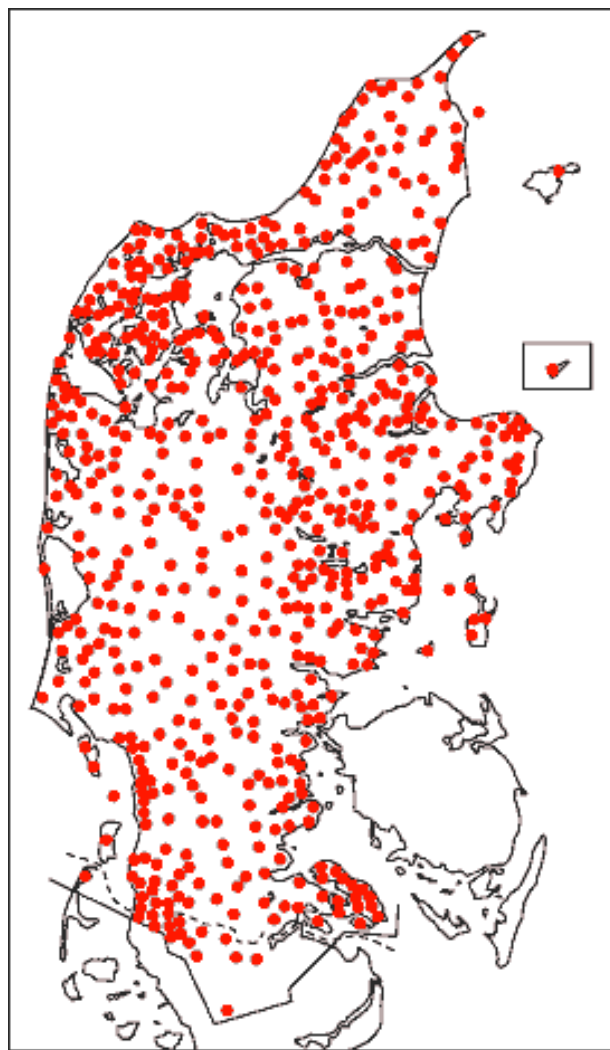


/T/ IN DANISH

- ▶ 6 phonemic plosives /b d g p t k/
- ▶ Voiceless x Aspirated
- ▶ Basbøll 2005: [t^s]
 - › Phonologically *not* an affricate, but an aspirated stop
 - › Aspiration mainly pronounced with the tongue in close proximity to the alveolar ridge, phonetically resulting in affrication
 - › Depending on environment, affrication may be followed by short burst of regular aspiration

CORPUS: PETER SKAUTRUP CENTRE FOR JUTLANDIC DIALECT RESEARCH

- ▶ Comprises well over 1,000 recordings
- ▶ Recorded between the 1930s and the 1990s
- ▶ Informants born from late C19-early C20



PROBLEMS WITH THE CORPUS

- ▶ Stored as MPEG-1 files, sampling rate 44,100 Hz
- ▶ *Not* recorded with phonetic research in mind
 - › Purpose: building comprehensive dictionary of Jutlandic dialects
- ▶ Overwhelmingly not annotated
- ▶ Have not previously been used for phonetic research
 - › Dialect phonology is generally not described on its own terms

DATA

- ▶ 18 speakers
 - › 3 speakers from 6 major dialect areas
 - › 13 male, 5 female
 - › Between 65-94 years old
- ▶ Recorded between 1974-1991
- ▶ For each recording
 - › 20 first instances of simple /t/ onset



METHODOLOGY

- ▶ All /t/ tokens coded for
 - › Phonetic environment
 - › VOT duration
 - › Onset of voicing: First complete vibration of the vocal folds
 - › Level of frication
 - › 4-level scale

- ▶ Phonetic analyses done using Praat, data management using MS Excel, statistics using JASP

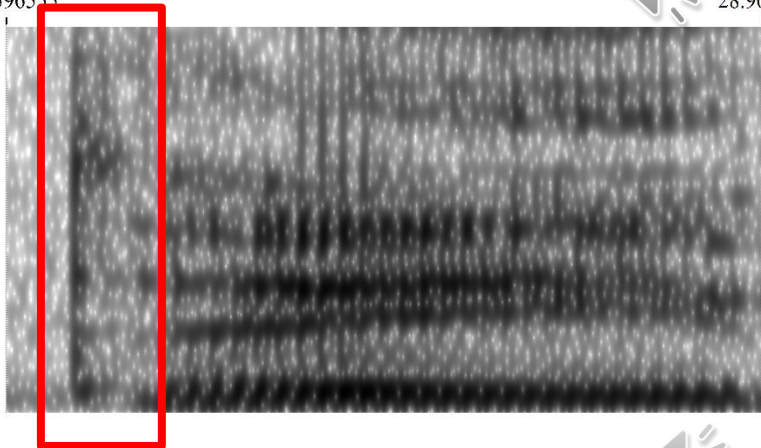
Level 1

1255_Vra|e_Thorvald_Nielsen_fX_o1991



28.6396555

28.901709



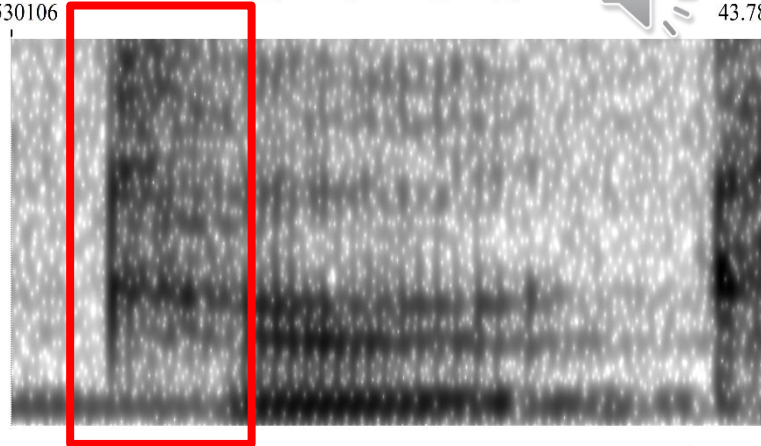
Level 2

1713_Kristine_Ladekarl_f1907_o1983



43.530106

43.7813688



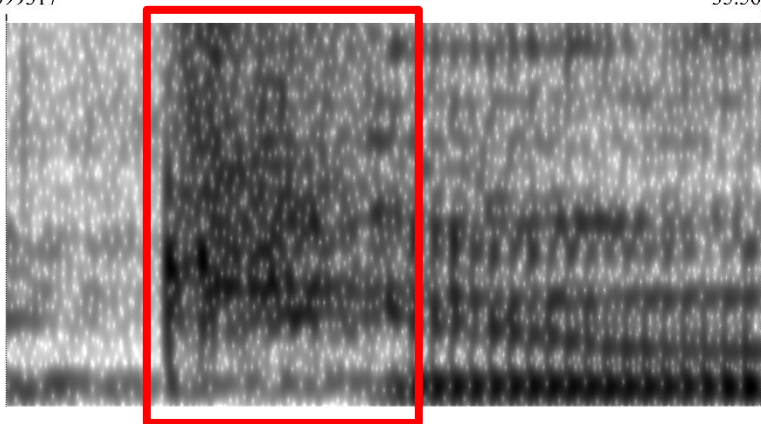
Level 3

2512_S|cnder_Nissum_August_Jensen_f1896_o1984



35.3099317

35.5690541



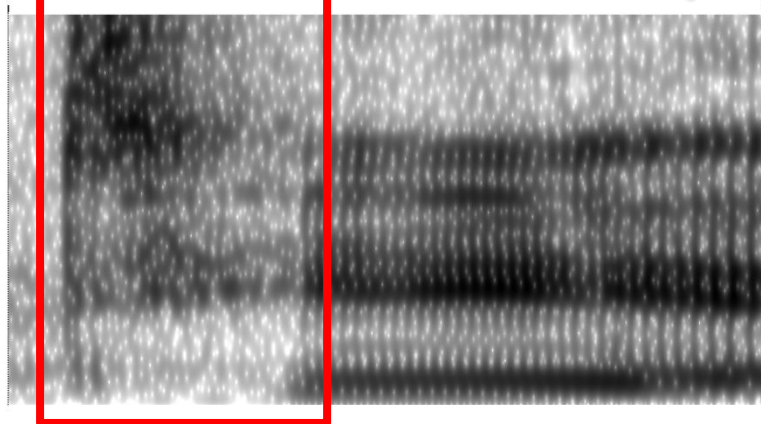
Level 4

2513_Staby_Magdalene_Poulsen_f1910_o1975



44.7555331

45.0094854



RESULTS – FRICATION LEVEL

Dialect type	Frication level				Total
	1	2	3	4	
CE	16	9	11	24	60
CW	7	10	19	24	60
N	36	11	9	4	60
NE	12	15	16	17	60
NW	12	21	17	10	60
S	10	8	14	28	60
Total	93	74	86	107	360

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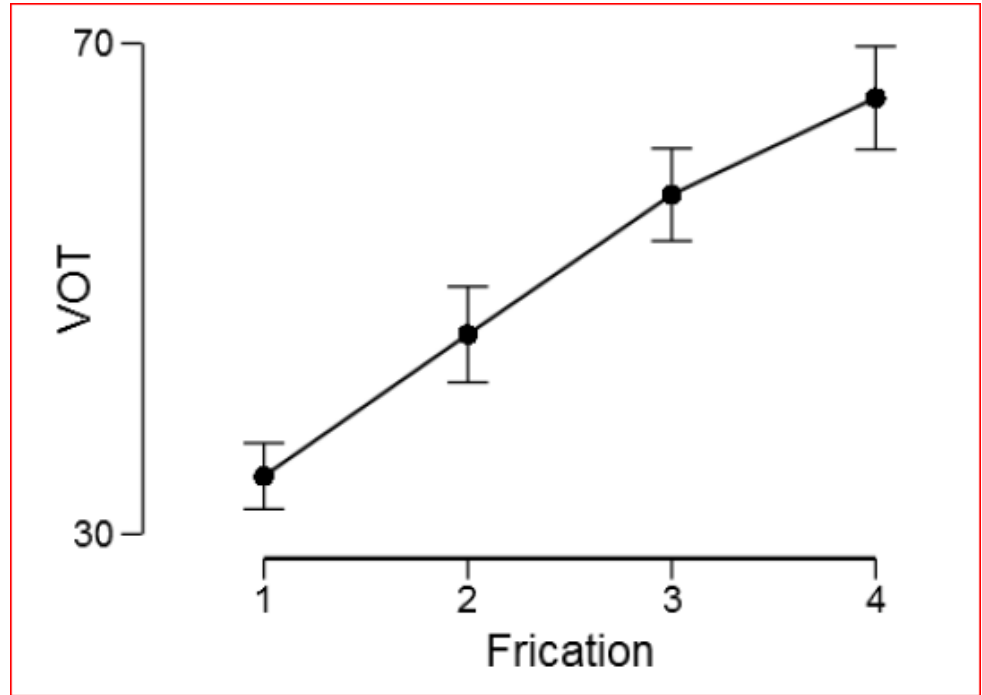
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RESULTS – VOT X FRICATION

Frication	Mean VOT	SD	N
1	34.73	13.07	93
2	46.28	16.86	74
3	57.67	17.59	86
4	65.56	21.93	107



RESULTS – VOT X FRICATION X DIALECT TYPE

Dialect	Frication	Mean	SD	N
N	1	29.03	11.639	36
	2	52.27	10.808	11
	3	66.67	23.049	9
	4	48.75	7.500	4
	Total	40.25	19.75	60
NE	1	44.58	14.687	12
	2	49.67	15.864	15
	3	63.13	14.818	16
	4	87.06	22.504	17
	Total	62.83	23.96	60
NW	1	31.25	9.077	12
	2	37.38	15.781	21
	3	54.12	22.096	17
	4	60.00	18.105	10
	Total	44.67	20.08	60

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RESULTS – VOT X FRICATION X DIALECT TYPE

Dialect	Friction	Mean	SD	N
CE	1	39.38	12.764	16
	2	59.44	20.983	9
	3	68.18	12.898	11
	4	76.25	13.693	24
	Total	62.42	20.78	60
CW	1	40.71	12.051	7
	2	48.50	12.259	10
	3	56.84	11.692	19
	4	65.21	12.552	24
	Total	56.92	14.56	60
S	1	36.00	11.972	10
	2	37.50	15.811	8
	3	42.86	9.139	14
	4	48.04	20.337	28
	Total	43.42	16.84	60

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	Total	43.42	16.84	60

CONCLUSIONS

- ▶ Dry *t* is not exclusive to Northern Jutlandic
 - › But it *is* more frequent in Northern parts of Jutland!
- ▶ /t/ VOT is shorter in Jutlandic dialects than in Standard Danish
- ▶ There is an interesting interplay between dialect, VOT, and frication
 - › Northern: No fully affricated /t/, noisier /t/ in long and marked tokens
 - › NE, NW: Low-noise /t/ on unmarked tokens, affricated on highly marked tokens
 - › CE, CW: Dry /t/ only on very short tokens, affricated on less marked tokens
 - › Southern: Noisy and affricated /t/ also on short, unmarked tokens

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Thank you for your attention!

Questions?

IDIOSYNCRASY

Informant	Frication level				Total
	1	2	3	4	
1251/N/M	9	5	5	1	20
1252/N/M	12	5	2	1	20
1255/N/M	15	1	2	2	20
1373/NW/F	4	7	7	2	20
1375/NW/M	6	9	3	2	20
1376/NW/M	2	5	7	6	20
1711/NE/F	2	3	7	8	20
1713/NE/F	1	7	5	7	20
1714/NE/M	9	5	4	2	20
2091/CE/F	3	0	4	13	20
2092/CE/M	11	6	2	1	20
2097/CE/M	2	3	5	10	20
2512/CW/M	2	5	7	6	20
2513/CW/F	1	0	6	13	20
2514/CW/M	4	5	6	5	20
2591/S/M	7	5	4	4	20
2592/S/M	3	1	5	11	20
2599/S/M	0	2	5	13	20
Total	93	74	86	107	360