


THE HUMANITIES  
UNIVERSITY OF COPENHAGEN



## Why is Danish so hard to understand and pronounce?

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The slides can be downloaded from  
<http://www.cphling.dk/pers/ng/presentations.html>

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?	?	"så har vi sådan en lille figur som vist skal forestille en pottedyr"
?	?	"ja, vi kan prøve at finde døren"
?	?	"og du behøver ikke trække den endnu"

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speech perception  
is  
a top-down process

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appetizers

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[ˈlø:v]	'løbe, løve' run, lion very distinct: [ˈlø:βə ˈlø:və]
[ˈkʰæ:es]	'kæres, kærres, kagers, kaos' dear ones (poss), cart (poss), cakes (poss), chaos very distinct: [ˈkʰɛ:es ˈkʰæ:es ˈkʰæ:jes ˈkʰæ:ʌs]
[ˈli:ʔð]; [ˈlæ:ð]	'livet, liget; lavet, ladet' life (def), corpse (def); made, loaded very distinct: [ˈli:ʔvəð ˈli:ʔjəð ˈlæ:vəð ˈlæ:ðəð]

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['θ:ð]            'øde, ødet, øget, øvet'  
*deserted, wasted, increased, practised*  
 very distinct: ['θ:ðə 'θ:ðəð 'θ:jəð 'θ:vəð]

['g̥e:ðe / 'g̥eðe]    'geder, gedder'  
*goats, pikes*  
 very distinct: ['g̥e:ðe]    versus    ['g̥e:ðe]

['b̥u:e]            'bure, burre, buer'  
*cages, burr, bows (pl)*  
 very distinct: ['b̥u:e 'b̥u:ə 'b̥u:e]

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contents

segments (individual sounds)

- many vowels; short/long distinction
- ✱ • weakening of consonants at the end of syllable
- complex syllable structure
- ✱ • loss of unstressed 'e'
- phonetic changes in the stem in inflection and derivation
- ✱ • recent developments in pronunciation

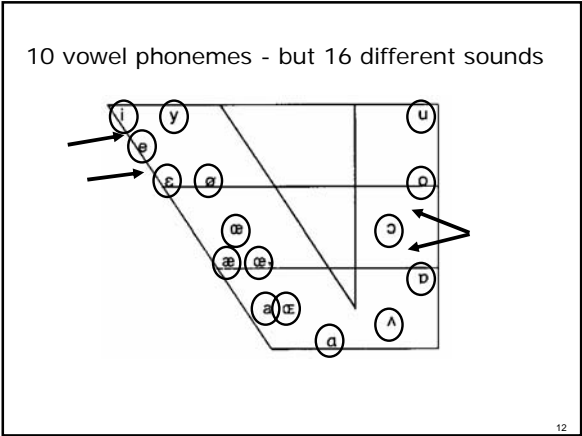
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prosody (suprasegmental phenomena):  
 stress, intonation, stød

- manifestation of stress
- ✱ • absence of specific boundary signals
- ✱ • absence of compulsory sentence accents
- ✱ • absence of local intonation signals about utterance function (modality)
- ✱ • stød!

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the vowels



long	short		
hvile	ville	rest	would
mene	minde	think	memory
pæne	penne	nice	pens
bane	bande	track	swear
hyle	hylde	howl	shelf
søle	sølle	slush	poor
høne	hønse	hen	[a children's game]
kule	kulde	pit	cold
ose	oste	smoke	cheese (pl.)
såler	solder	soles	is drinking

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## the consonants

/v b d g r/ undergo coda lenition (weakening at the end of syllables)

/v/ > [w] post-vocally (always after short vowels, normally also after long vowels):

/b/ > [w] post-vocally (selective and optional):

[lɔw k<sup>h</sup>niw<sup>?</sup>] 'lov; kniv, knib'  
 permission; knife, pinch;  
 (very distinct: [lɔw k<sup>h</sup>ni:<sup>?</sup>v k<sup>h</sup>ni:<sup>?</sup>ɸ])

[lo:v k<sup>h</sup>ni:v k<sup>h</sup>ni:p] in Swedish

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/v b d g r/ undergo coda lenition (cont.)

/d/ > [ð<sup>v</sup>] ('blødt d') post-vocally (compulsory):

[ɸað sɔð<sup>v</sup>] 'bad, sød' bath, sweet;

[ba:d sɔ:t] in Swedish

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/v b d g r/ undergo coda lenition (cont.)

/g/ (> [ɣ])   
 ↗ [w] after back vowels (compulsory)  
 ↘ [j] after front vowels (compulsory):

[lɔw<sup>?</sup>] lov!, låg; promise, lid;

[lo:v lok:] in Swedish

[ɸæj<sup>?</sup>] 'dag' day;

[da:g] in Swedish

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/v b d g r/ undergo coda lenition (cont.)

/r/ > [ɣ] post-vocally (compulsory):

[p<sup>h</sup>ɛɣ moɣ ɣœɣ] 'Per, mor, går' Per, mother, does

[p<sup>h</sup>æ:r mu:r jœ:r] in Swedish

/r/ > [ɣ] > zero after /a a: ɔ ɔ:/ (compulsory):

[p<sup>h</sup>a fa: ɣɔ:<sup>?</sup>] 'par, far, går' pair, father, goes

[p<sup>h</sup>a:r fa:r go:r] in Swedish

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semi-vowels in the coda are deleted

(/g/ > [j] after front vowel)

[j] > zero after long non-low vowels (very general):

[si:ʔ	sø:ʔ	sy:ʔ	ve:ʔ ]
'sig, si	søgl, sø	syg, sy	veg, ve'
sayl, strain (n)	seek, lake	sick, sew	weak, pains
'säg, sil'	[sø:k fjø:	fju <sup>β</sup> :k sy:	ve:k ve:]
			in Swedish

[j] > zero common after non-high vowels, too:

[le:ʔ	bæ:ʔ ]	'læg, læ;	bag' lay (adj), shelter; behind
			(very distinct: [le:ʔj le:ʔ bæ:jʔ])
[le:k le:	ba:k]		in Swedish

semi-vowels in the coda are deleted (cont.)

(/g/ (> [ɣ]) > [w] after back vowels; /v/ > [w] after vowels)

[w] > zero after non-low back vowels (general):

[dʊ:ʔ	tso:ʔ	]	'dug, du;	tog, to'
			cloth, be fit;	took, two
[dʊ <sup>β</sup> :k dʊ <sup>β</sup> :	tʰu:g tvo:	]		in Swedish

[w] > zero commonly after the non-high vowel, too:

[lo:ʔ	]	'låg, lå'	lid, lay (v)
			(very distinct: [lo:ʔw lo:ʔ])
[lok:	lo:g	]	in Swedish

syllable structure

heavy consonant clusters initially and finally:

3 consonants initially 'straks' immediately

4 consonants finally 'skælmsk' roguish

loss of unstressed 'e'  
(schwa-assimilation)

assimilation of schwa ('unstressed e')

makes the syllable count uncertain

[kʰʌŋ]	'komm <del>ə</del>	come	Swedish
			['kʰom:a]
[mɑŋ:]	'mang <del>ə</del>	many	['mɑŋ:a]
[sɡo:]	'skol <del>ə</del>	school	['sku:la]
[bæ:æ]	'bag <del>ə</del>	bake	['ba:kʰa]
[li:i]	'lig <del>ə</del>	equal	['li:kʰa]

## miscellaneous

[ʰbæ:e] = 'bære, bærer, bæger, bager'

*carry, carrier, cup, bak*

'-er, -re, -rer' > [e] is well established

very distinct pronunciation: ['bæ:e 'bæ:e 'bæ:je 'bæ:je]

new r-colouring: /ɛ:/ > [æ:] in front of [e]:

['bæ:e 'bæ:e 'bæ:je 'bæ:je]

and with /g/ > ([ɣ]) > [j] > zero after front vowels: [ʰbæ:e]

Swedish: ['bæ:ra 'bæ:rare 'bæ:gare 'bɑ:gare]

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/r/ may fuse with preceding /ɛ/ and /æ/ and produce mergers like

færdig = fattig: ['fɑ:ɖi] ([ʰfæɹɖi 'fɑ:ɖi])

hæрге = have: ['hæ:u] ([ʰhæɹwə 'hæ:və])

serve = save: ['sæ:u] ([ʰsæɹwə 'sæ:və])

største > stø(r)ste: ['sɔ:stə] ([ʰsɔ:ɹstə])

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in pre-tonic syllables post-vocalic /r/ may disappear:

a(r)tikel, ba(r)barisk, pa(r)ti, ka(r)tofler,  
ma(r)kering, Ka(r)demommeby; ([a] instead of [ɑ])

se(r)vere, dese(r)tør; ([e] instead of [æɹ])

o(r)kester, repo(r)tage, so(r)tere (=sautere),  
po(r)træt, no(r)mal, fo(r)mat, po(r)tion, fo(r)cere;  
([o] instead of [ɔ])

tu(r)né, vu(r)dere; ([u] instead of [uɹ])

Tyr(r)kiet ([y] instead of [yɹ])

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## uncertain vowel length

long and short vowels are no longer distinguished before /d/ ([ð]) and /r/ ([ɹ]):

['g̊e:ðe/'g̊eðe] = 'geder, gedder' *goats, pikes*

['k̊ʰu:ɐ] = 'kure, kurre' *slide, coo*

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## more elision of semivowels

[w] may now also disappear after front vowels:

['læ:ð] = 'lavet, ladet' *made, loaded*

very distinct: ['læ:vəð/'læ:wəð 'læ:ðəð]

['la:gad 'lad:ad] in Swedish

['li:ʔð] = 'livet, liget' *the life, the corpse*

very distinct: ['li:ʔvəð 'li:ʔjəð]

['li:vət 'li:kʰet] in Swedish

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more elision of semivowels (cont.)

[w] may now also disappear after front vowels (cont.):

['ø:ð] = 'øde, ødet, øget, øvet'  
*deserted, wasted, increased, practised*

very distinct: ['ø:ðə'ø:ðəð 'ø:jəð 'ø:vəð]

['ø:ðe] 'ødslad' ['ø:kʰad 'ø:vad] in Swedish

more elision of semivowels (cont.)

/j/ disappears in the diphthongs /aj øj/ before [ð]:

['lɑ:ð] 'lodde, loddet, løjet' *solder, soldered, lied*

very distinct: ['lɑðə 'lɑðð 'lɑjəð]

['lø:da 'lø:dad] 'ljugit' in Swedish

['svɑ:ð] 'svajet, svaret' *swayed (ptcp), answered (ptcp)*

very distinct: ['svajəð 'svɑ:að]

['svaja 'svɑ:rad] in Swedish

prosody

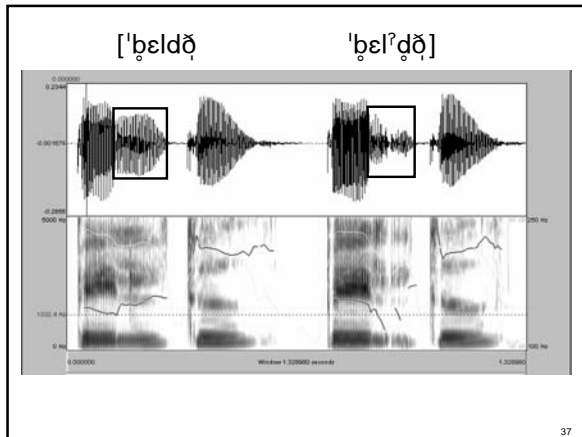
prosody: stress, intonation, stød

- stød
- manifestation of stress
- absence of specific boundary signals
- absence of compulsory sentence accents
- absence of local intonation signals about utterance function

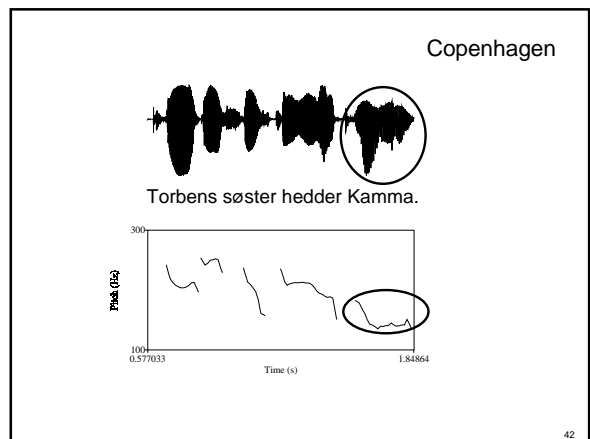
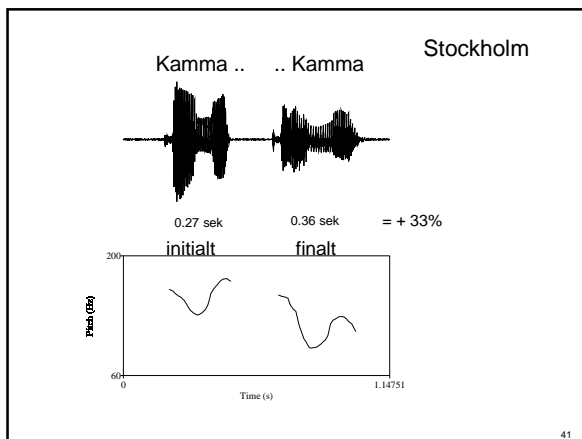
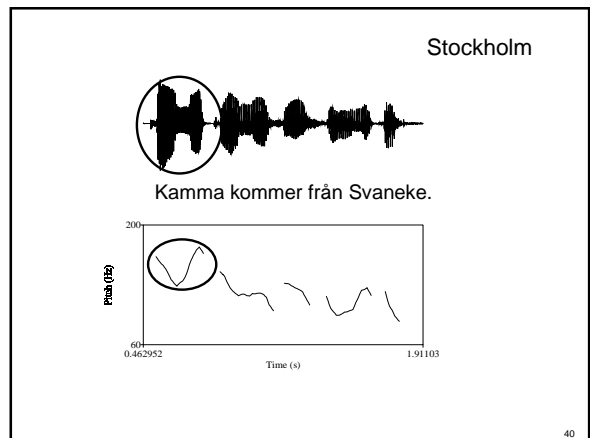
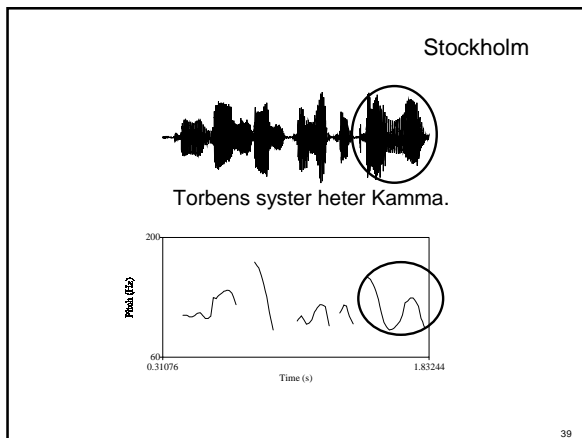
the stød

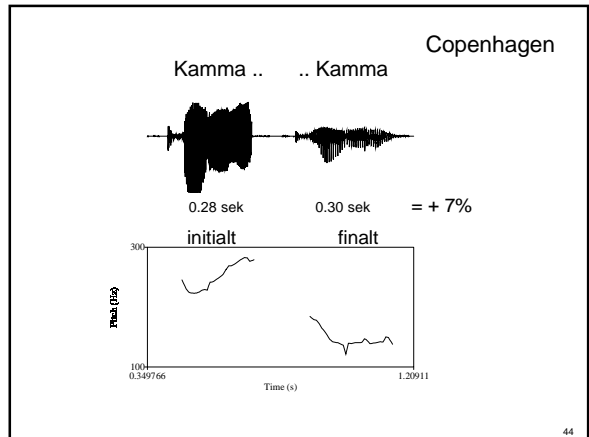
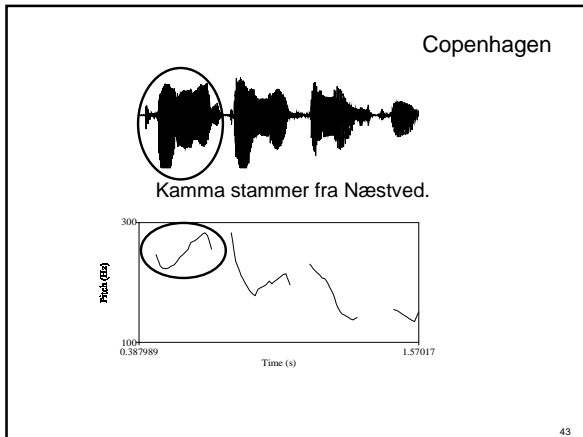
stød is distinctive on the surface

['vi:ʔse]	viser (v) <i>shows</i>	['vi:se] viser (n) <i>hand (on instrument)</i>
['væ:ʔlŋ]	hvalen (n) <i>the whale</i>	['væ:lŋ] valen (adj) <i>lukewarm</i>
['hu:ʔsð]	huset (n) <i>the house</i>	['hu:sð] huset (v) <i>housed</i>
['hɛnʔe]	hænder (n) <i>hands</i>	['hɛne] hænder (v) <i>happens</i>
['møʔe]	Møller <i>(proper name)</i>	['møle] møller (n) <i>miller</i>

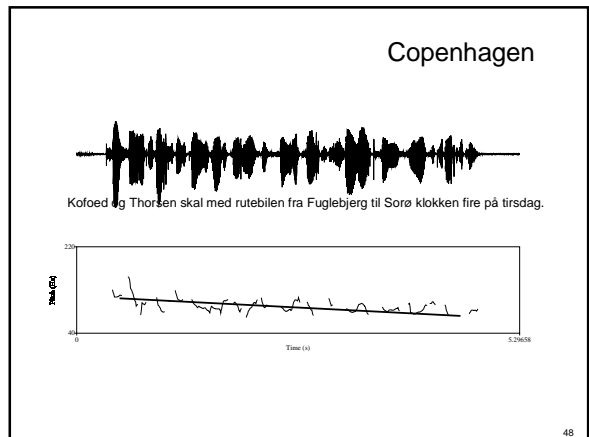
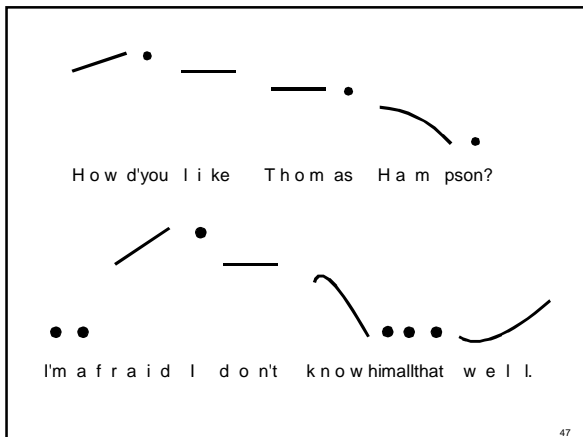
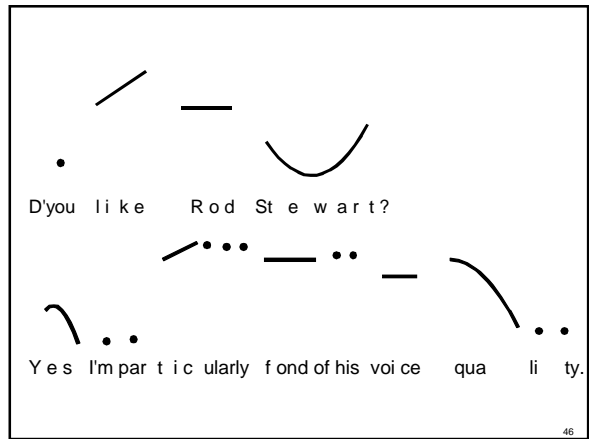


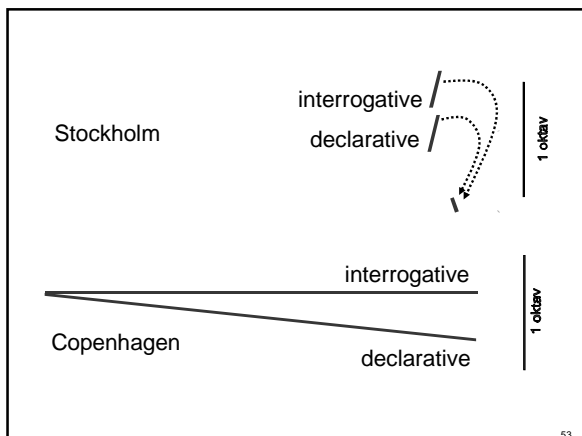
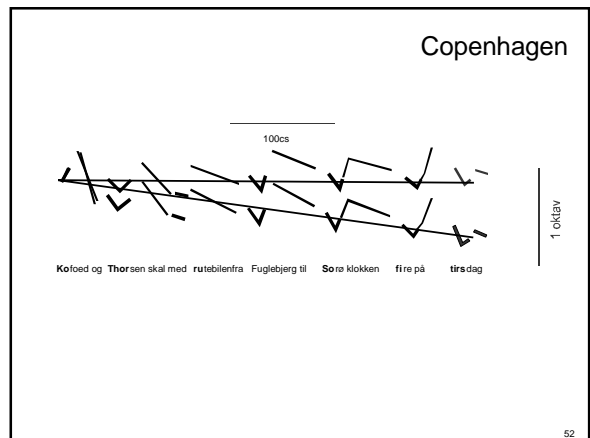
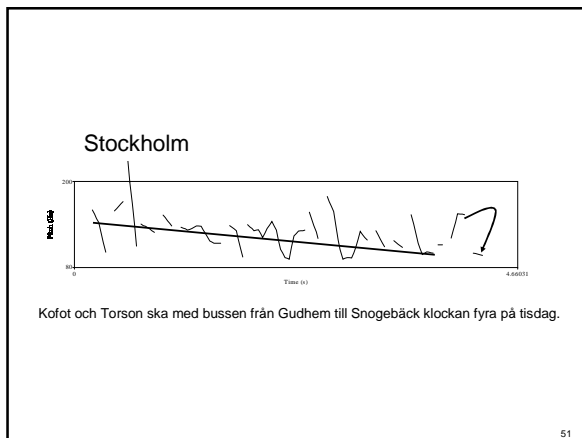
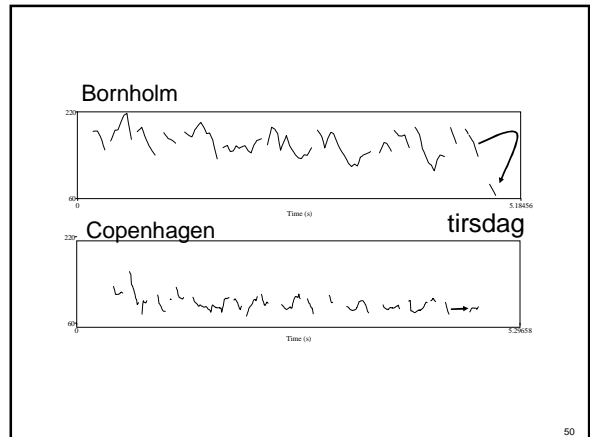
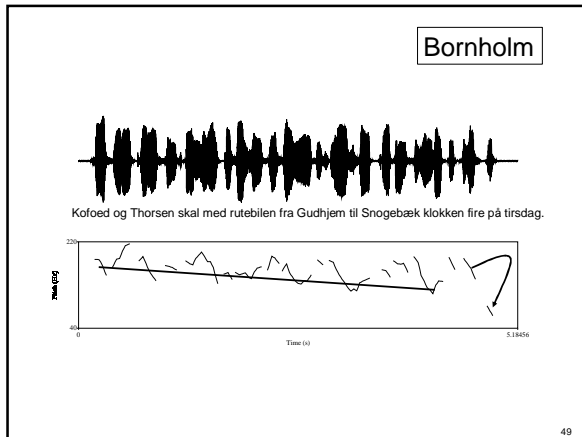
boundary signals:  
final lengthening



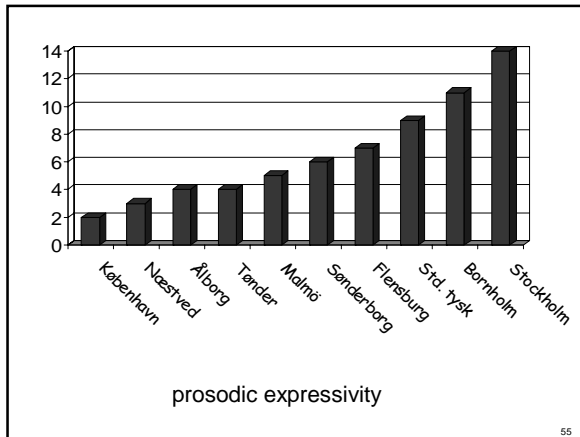


sentence intonation





summary



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	Danish	Swedish
coda lenition	yes	no
light stressed syllables	yes	no
schwa elision	yes	no
/r/ elision	yes	no
semi-vowel elision	yes	no
length vacillation	yes	no
word accents	no	yes
final lengthening	no	yes
compulsory sentence accent	no	yes
signal for utterance function	weak and global	strong, local

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complex segmental phonology  
and  
not very expressive prosody  
makes Danish stand out from other  
languages  
and  
hard to understand (and pronounce)

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## Why is Danish so hard to understand and pronounce?

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