

A Digital Window to the Reality as a Language Teacher

Make a difference, 16.11.2023

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Aim of the talk

1. Why do we use real life language data in language studies and language teacher education?
2. How do we integrate educational technology into language teacher education?
3. What types of software can we use? (examples)
4. Discussion: What learning outcomes can we expect?

1. Why do we use real life-language data in language studies and language teacher education?

1. **Authenticity:** natural flow, authentic speed, importance of context, differences in nuances
2. **Language Variation:** awareness of dialects, registers, stylistic diversity, variability across contexts/social groups
3. **Cultural Understanding:** how culture influences communication styles
4. **Relevance:** learning becomes more relevant and practice
5. **Assessment & Critical Thinking:** allows learners to assess their own performance and language in realistic situations
6. **Motivation & Fun:** often unpredictable (and therefore potentially fun!)

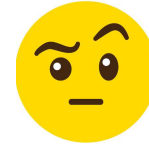


So we need well-chosen & authentic examples to provide a stimulating teaching environment!

The language classroom in the 1990s



Authentic?



Does it reflect variation, culture, style?



Stimulating?



Up to date? /relevant?



2. How do we integrate educational technology into language teacher education? → We need new videos!

→ UCPH funding for teaching development with digital elements in 2023

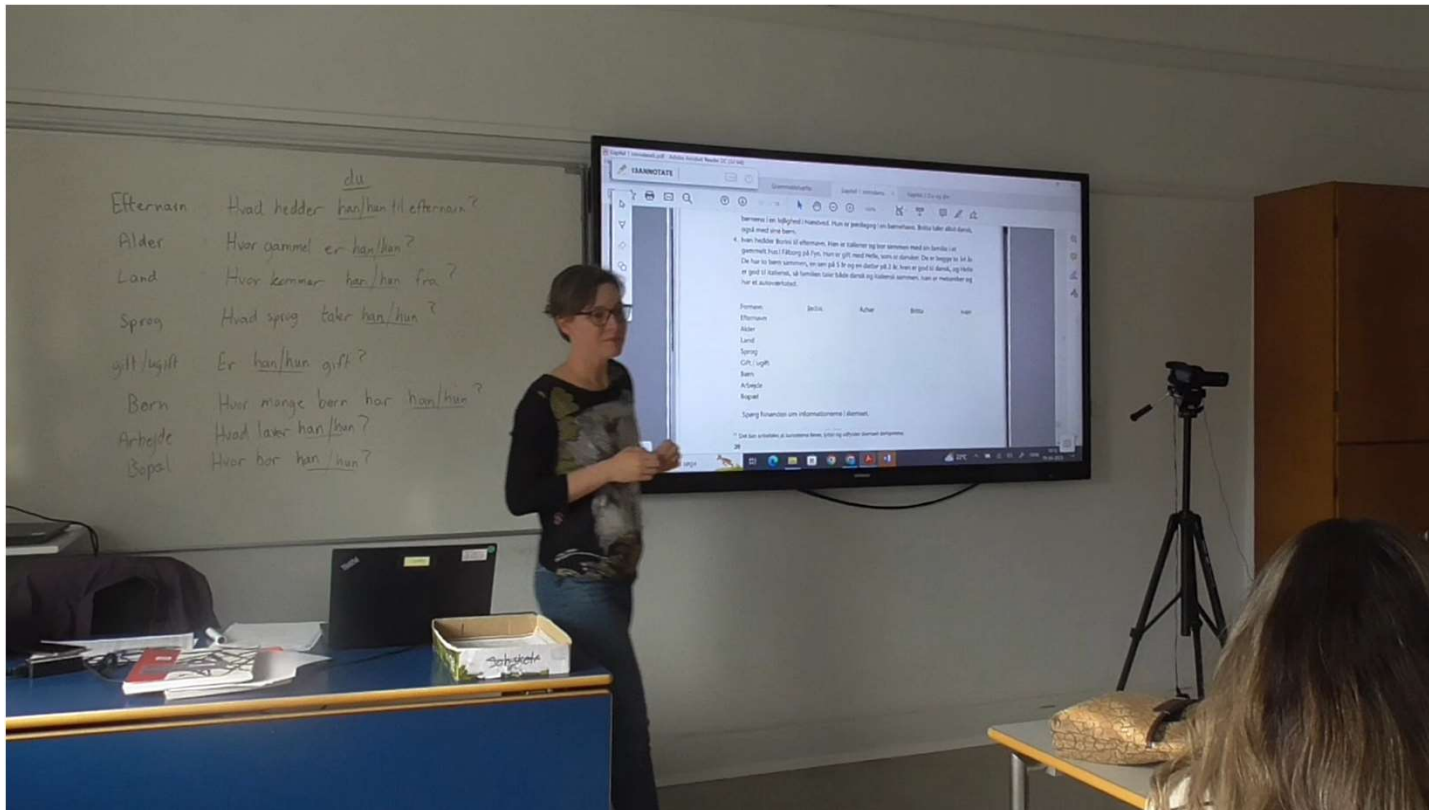
→ 40.000 kr for support of incorporating digital technologies in the teaching activities

→ How did we use the funding?

- Two student helpers employed (Emma Juul & Cecilie Bruun)
- Data collection of **authentic** videos at a **real** language school (10 hours of video data)
 - Classroom teaching & interaction
 - Interviews with teachers and learners of Danish as a Second Language
- Data handling: editing (DaVinci), transcription (ELAN, Whisper)
- Dissemination & training of students (F2023) – learning outcomes yet to be explored.

→ Co-funded by The Dept. of Nordic Studies and Linguistics (NorS) – 60.000 kr.

The language classroom in 2023



- A naturally occurring learning situation, not an artificial one
- Meaning is negotiated
- Several languages are used (English, Danish, learners' L1)
- Technology is applied (smartphones, smartboards)
- Recognizable and relevant environment

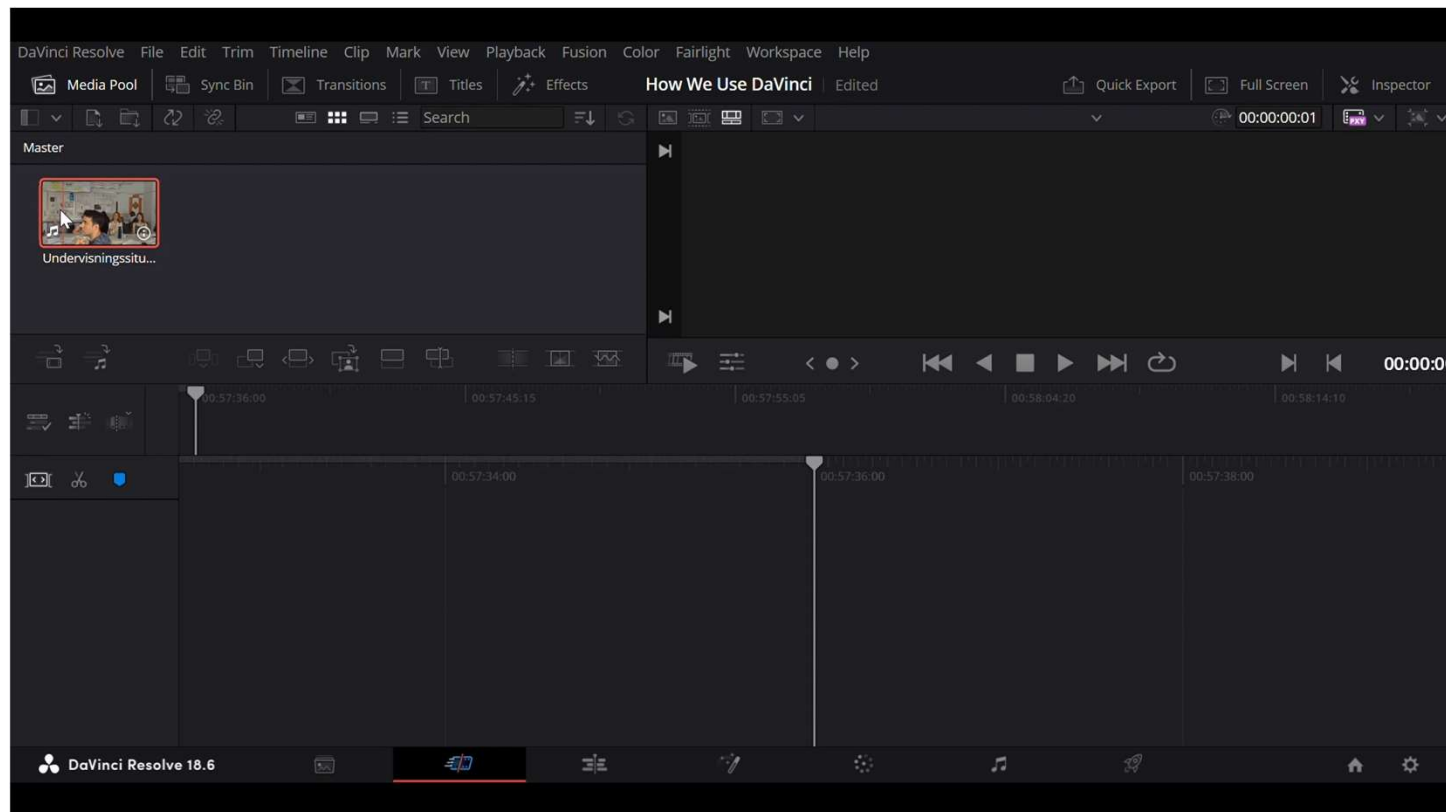
Analysis 1.0

2 Many do we have any i-i-if you want to sa:ay
 3 what is your maritally (marital?) status
 4 Siri ↑mm
 5 Many ↓then
 6 Siri øh
 7 Siri (ja)
 8 Many (jeg er) gift (0.4) ?or not?
 9 Siri we would just ask very straight forward
 10 in danish (0.3) er du gift
 11 Many okay
 12 Siri ja
 13 Siri what is your marital (marital?) status
 14 it's possible! to make that question (0.3)
 15 but we wouldn't do ↓it
 16 Many mm
 17 Siri hvad er din ægteskabelige status
 18 Siri it just feels weird
 19 Many mm
 20 Siri too formal some(how)
 21 Many (yeah) mm
 22 Siri øh we tend to (0.9) (be more straight forward)
 23 Many (direct) (0.2) (yeah)
 24 Siri while (0.6) in english of course (0.9)
 25 very often the questions get more
 26 complicated (to make it more) formal
 27 Many mm-hmm
 28 Many (complicated)
 29 Many mm (0.4) it would be yeah
 30 Siri uh
 31 Siri that is if you (0.3) are asking a
 32 bureaucratic situation anyway, (0.9) in a
 33 personal conversation (.) like this
 34 *are ↑you ↑married* (0.2)
 35 that would be normal
 36 Siri so
 37 Siri we don't have the same (0.5) clear division
 38 of (3.0) bureaucratic formel situation and
 39 (1.2) casual personal situation
 40 as we do in english
 41 Many yeah mm-hmm
 42 Siri there are many things that (0.2)
 43 we just use the same questions

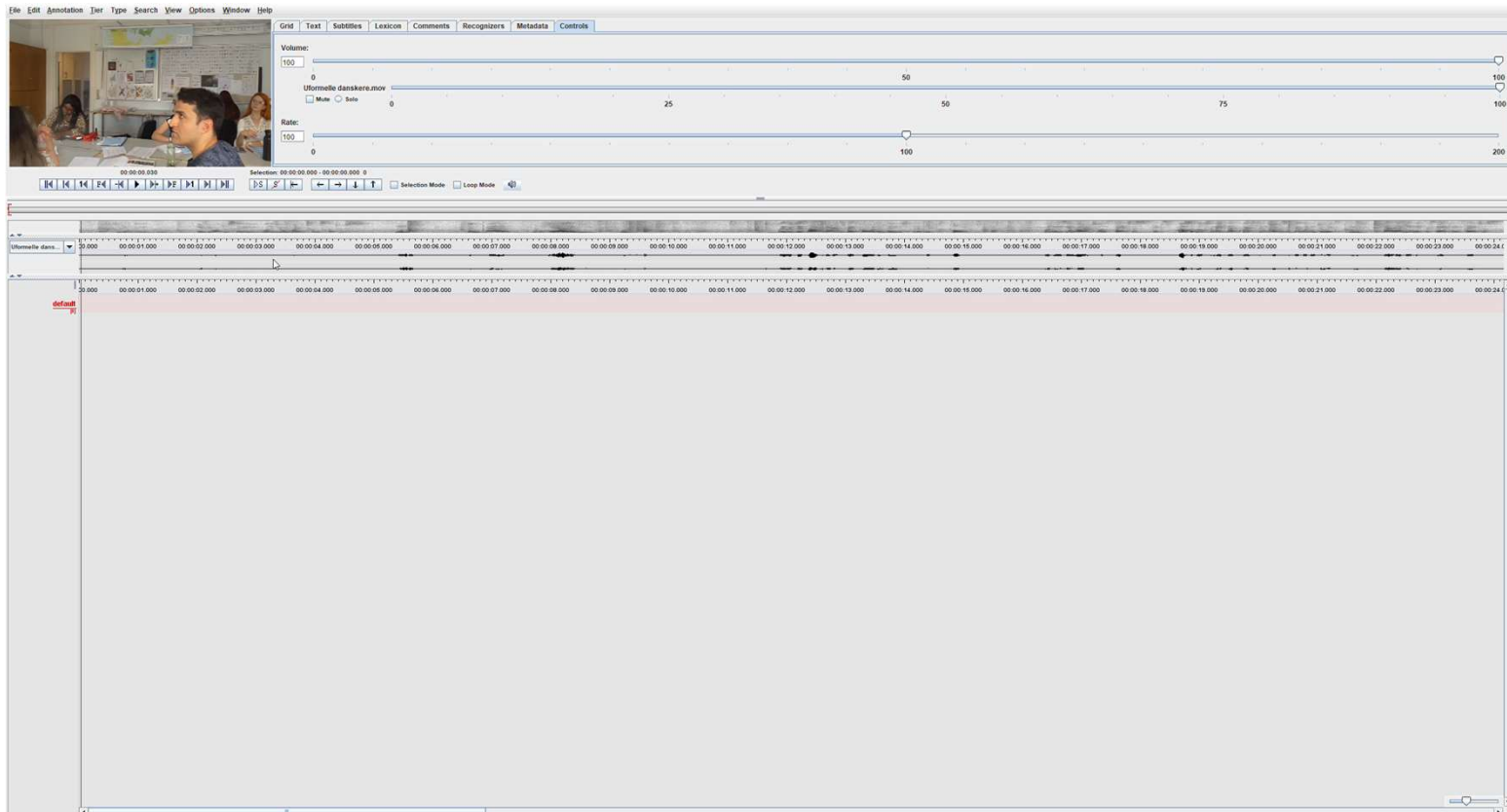


Editing first: DaVinci

For cutting, changing the speed, inserting sounds (e.g. a beep-sound over names) and making subtitles



Then transcription and analysis with ELAN: *For detailed transcribing, measuring pause lengths, identifying overlaps, annotating non-verbal actions, meta-comments etc.*



Examples of quantitative analyses

Search eaf files

Annotations

Search Define search domain Export

regular expression case sensitive

46 occurrences in 45 annotations in 8 files (0.157 seconds)

Nr	File	Tier	Before	Annotation	After	Parent	Child	Begin Tl.	End	Dur.
1	Adjektiver	Martin	he	ah () ja	og (farverne)			00:00.4	00:00.0	00:00.0
2	Adjektiver	Martin	(rammer sig)	ah	ja			00:01.1	00:00.0	00:00.0
3	Adjektiver	Martin	ja	ah hvis vi nu	hmm			00:01.1	00:00.0	00:00.0
4	Adjektiver	Martin	peter	ah ja vi	peter er dum			00:01.2	00:00.0	00:00.0
5	Adjektiver	Martin	det ik så pænt	ah	så kan man			00:01.3	00:00.0	00:00.0
6	Adjektiver	Martin	ah	så kan man	mm			00:01.4	00:00.0	00:00.0
7	Adjektiver	Martin	(han er dum pe...)	ah	maria			00:02.0	00:00.0	00:00.0
8	Bekymret	Martin	ah	ah	sig			00:00.0	00:00.0	00:00.0
9	Bekymret	Martin	griner højt	bekymret (ah)	hmm nanna			00:01.4	00:00.0	00:00.0
10	Bekymret	Raafik	ja	ah bekymret	(ah)			00:01.2	00:00.0	00:00.0
11	Bekymret	Raafik	jeg er jeg jeg b...	ah	jeg kommer			00:01.3	00:00.0	00:00.0
12	Papspejlsesni...	Martin	okay så gar vi	ah	lige som pa...			00:00.0	00:00.0	00:00.0
13	Papspejlsesni...	Martin	ooo skoo(coool)	ah men! han	for kammer...			00:00.5	00:00.0	00:00.0
14	1. Træning af di...	Christian	inår i er klar så	ah	okay yes ok...			00:09.5	00:00.0	00:00.0
15	1. Træning af di...	Christian	godt vi har snakket	ah	og i dog ko...			00:01.5	00:00.0	00:00.0
16	1. Træning af di...	Christian	og i dag komm...	ah	i dag skal vi...			00:01.5	00:00.0	00:00.0
17	Dialog ml. lære...	Christian	vil du stille mig...	ah nej det er	hvad med di...			00:08.1	00:00.0	00:00.0
18	Dialog ml. lære...	Christian	sekssteni	svovtve	okay (0.3) tak			00:11.2	00:00.0	00:00.0
19	Dialog ml. lære...	Victor	er du gift	ah	ja har har d...			00:05.2	00:00.0	00:00.0
20	Dialog ml. lære...	Milla	jeg ah	nein (0.5) je...				00:08.0	00:00.0	00:00.0
21	Dialog ml. lære...	Milla	er du gift	ah (0.3) jeg...	ah (0.4) nei...			00:08.2	00:00.0	00:00.0
22	Dialog ml. lære...	Milla	ah (0.3) jeg...	ah (0.4) nei...	ikke gift () s...			00:08.2	00:00.0	00:00.0

How many filler words ('øh') and in which contexts are they used?

Search eaf files

Annotations

Search Define search domain Export

regular expression case sensitive

21 occurrences in 21 annotations in 8 files (0.156 seconds)

Nr	File	Tier	Before	Annotation	After	Parent	Child	Begin Tl.	End	Dur.
1	Adjektiver	Olya	[?kold?]	(griner)	(peter xxx)			00:01.3	00:00.0	00:00.0
2	Adjektiver	Klasse	(næsten alle s...	(næsten alle...				00:00.1	00:00.0	00:00.0
3	Adjektiver	Klasse	(næsten alle s...	(næsten alle...				00:02.2	00:00.0	00:00.0
4	Bekymret	Martin	jeg tænkte du k...	(griner højt)	bekymret (ah)			00:01.4	00:00.0	00:00.0
5	Bekymret	Klasse	(småsnak)	(griner)	gin fra mart...			00:01.4	00:00.0	00:00.0
6	Dialog ml. lære...	Christian	har du en kære...	haha (griner)	jeg har en k...			00:07.3	00:00.0	00:00.0
7	Dialog ml. lære...	Christian	mm (1.0) er du...	du behøver ikke	(ne)			00:09.2	00:00.0	00:00.0
8	Dialog ml. lære...	Christian	du er gift	ah okay ja sorry	bip (kursist...			00:09.3	00:00.0	00:00.0
9	Dialog ml. lære...	Christian	ja ja okay ((griner))					00:12.3	00:00.0	00:00.0
10	Dialog ml. lære...	Yelena	jeg ikke (kærest...	er du gift ha				00:09.3	00:00.0	00:00.0
11	Dialog ml. lære...	Oleg	(jeg) er gift	((griner))	ah (0.6) ja			00:12.3	00:00.0	00:00.0
12	Dialog ml. lære...	Angelina	niha	((smågriner))	(sult)			00:07.4	00:00.0	00:00.0
13	Dialog ml. lære...	Angelina	seksogtytte	barnebarn haha				00:10.5	00:00.0	00:00.0
14	Dialog ml. lære...	Klasse	((uro, snak på r...	((velena og ((småsnak...				00:09.2	00:00.0	00:00.0
15	ELAN Anden vi...	Margarita	jeg bor ?ensom?	((griner))				00:00.0	00:00.0	00:00.0
16	ELAN Anden vi...	Margarita	jeg bor ?ensom?	((griner))	((spørger o...			00:00.0	00:00.0	00:00.0
17	ELAN Anden vi...	Margarita	((spørger om n...	oh ((griner))	?jeg en? en...			00:04.0	00:00.0	00:00.0
18	ELAN Anden vi...	Margarita	oh ((griner))	?jeg en? en	jeg svarer j...			00:04.1	00:00.0	00:00.0
19	Øvelse ELAN F...	Olya	(nej)	((kæbenhavn? ((griner))				00:05.5	00:00.0	00:00.0
20	Øvelse ELAN F...	Olya	?kæbenhavn? ((((griner))	min familie			00:05.5	00:00.0	00:00.0
21	Øvelse ELAN F...	Siri	metro () det er...	(det er) til	men bus ell...			00:05.5	00:00.0	00:00.0

When and how much do they laugh?

The screenshot shows a video player interface with a video of a classroom. The video shows several students sitting at desks, and a teacher standing at the front. The player has a timeline at the bottom with a red arrow pointing to a specific time point. The interface also includes a volume control slider and playback buttons.

How many speakers and how many turns (pr. speaker)

```

C:\Program Files\Nvivo Plus\Nvivo Plus.exe
File Edit View Tiers Mode Window Help
5 PRO Prosecutor Adult, INT Interpreter Adult, POL
6 Court police officer Adult
7 @Options: CA
8 @ID: dan|Pause|PAU||male||Unidentified||
9 @ID: dan|Judge|JUD||male||Unidentified||
10 @ID: dan, spa|change_corpus_later|ASC||||Adult||
11 @ID: dan, spa|change_corpus_later|UNK||||Unidentified||
12 @ID: dan, spa|change_corpus_later|UNK||||Unidentified||
13 @ID: dan, spa|change_corpus_later|UNK||||Unidentified||
14 @ID: dan, spa|change_corpus_later|UNK||||Unidentified||
15 @ID: dan, spa|change_corpus_later|UNK||||Unidentified||
16 @ID: dan, spa|change_corpus_later|UNK||||Unidentified||
17 @Transcriber: MSK; SOL, gennemlytt
18 @Media: 190327_CONST_SIG_SPA, audio
19 *UNK: xxx •
20 *UNK: xxx •
21 *UNK: xxx •
22 *UNK: xxx •
23 *UNK: xxx •
24 *UNK: xxx •
25 *ASC: hallo: •
26 *ASC: prøv og se om du kan forstå
27 *INT: det det jah •
28 *INT: xxx
29 %com: perhaps buonos dias and so
30 *INT: hablas espanol
31 *SUS: si:
32 %com: ja •
33 *INT: entiendes biene ef spanol1
34 *SUS: [si:] •
35 %com: ja
04may20[E|CHAT] 1
    
```

The screenshot shows the NVivo Plus interface with several key components:

- Project Tree:** A hierarchical view of the project structure, including folders like 'tcl8.4', 'tcLex1.2', 'tx8.1', 'tk8.4', and 'transcriber1.5'. The 'frint980428.tr' file is selected.
- Transcript:** A list of nodes with their content. Nodes are color-coded:
 - (no speaker)
 - [jingle]
 - Patricia Martin
 - Le journal, Simon Tivolle :
 - report - les titres
 - Simon Tivolle
 - [i] bonjour !
 - (no speaker)
 - [indicatif]
 - Simon Tivolle
 - mardi 28 avril .
 - la consultation nationale sur les programmes des lycées :
 - [i] grand débat aujourd'hui et demain à Lyon
 - pour tirer les enseignements du
- Nodes List:** A table listing nodes with columns for Reference, Created On, Created By, Modified On, and Modified By. Nodes are color-coded:

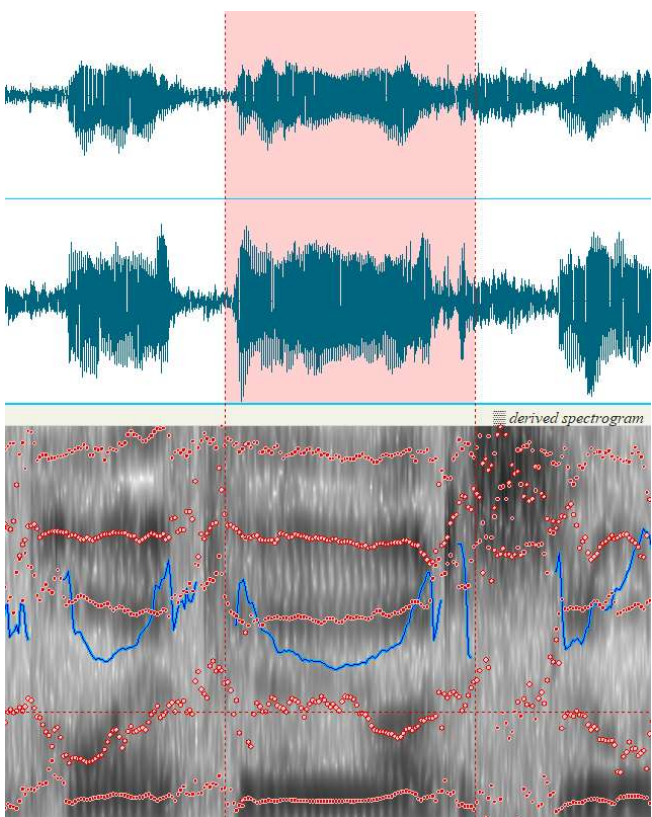
Reference	Created On	Created By	Modified On	Modified By
0	2010-05-15 22:0	WWS	2015-08-24 19:26	WWS
14	2011-05-17 16:5	WWS	2015-03-16 13:40	WWS
13	WWS	2015-05-05 05:12	PM	
13	WWS	2012-03-16 04:16	WWS	
14	EDR	2015-08-06 18:01	WWS	
13	WWS	2015-05-05 05:12	WWS	
13	HGP	2012-05-10 04:20	WWS	
13	WWS	2015-08-06 18:01	WWS	
13	WWS	2015-08-06 18:01	WWS	
DEL		2015-09-08 02:48	WWS	
- Color Legend:** A legend for node colors:
 - None
 - Green
 - Purple
 - Red
 - Blue
 - Orange
 - Yellow
 - Pink
- Annotations:**
 - A red callout bubble says: "Right click on a Node to get the quick menu".
 - Another red callout bubble says: "Assigned color to the Nodes".
 - A yellow callout bubble points to a node in the list: "Id could get a system or like it. There are options to help people. But it's a ns and protecting the ing the londoner, 'Sorry,'".

The screenshot shows an audio player interface for the file 'frint980428'. It includes a waveform display, playback controls, and a transcript of the audio content. The transcript is as follows:

```

music
music
filler
les titres
S. Simon Tivolle (no speaker) Patricia.. Simon.. [n] Simon Tivolle
O. ah bon ? [rire] non .... [i] ... le journal. [i] ... [n] mardi28 la consultation ... [i] grand débat... pour tirer...
S. ... Patricia . ..heures [-rire] . [jingle] ..Tivolle : ... [i] ... [i] ...
    
```

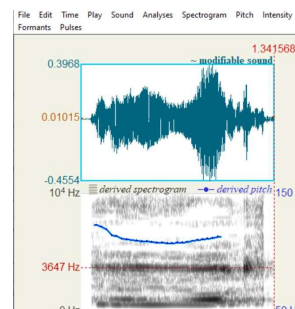
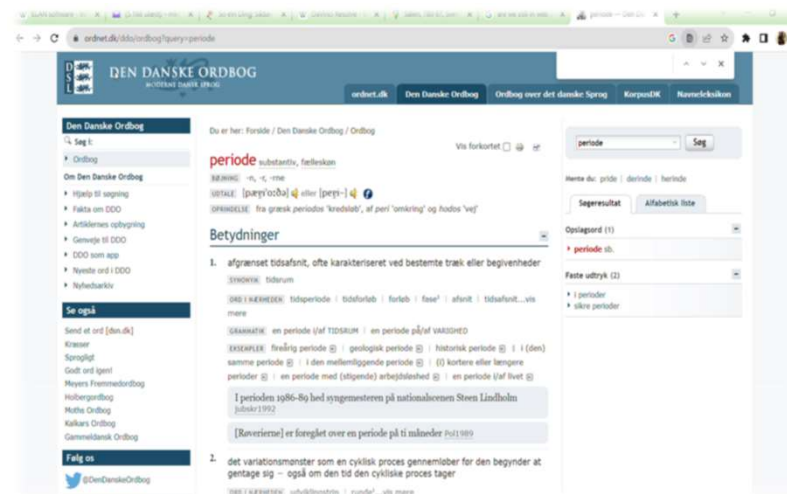
PRAAT - an open source-software tool for phonetic analysis



PERIODE

- 1) [pæi̯ə'oi̯ðə]
- 2) [p^hæ̯.i.'oi̯.ɾ]

Non-standard
[Pæ:iəðə]



Discussion: What learning outcomes can we expect when we use technology?

Pros

- Better view of the world outside the classroom
- Developing new technical and analytical skills
- Possibilities for active participation
- Huge variety of micro and macro linguistic analyses and annotations (phonetics, morphology, syntax, genre)
- Preparation for research-based activities

Cons

- Time-consuming
- Still mostly manual
- Not always intuitive
- Demanding in terms of technical skills

Discussion

- Do you already use similar technology?
- Do you find it useful?
- Do you have suggestions for us?