

# annotation tool for multimodality research a progress report

ELAN



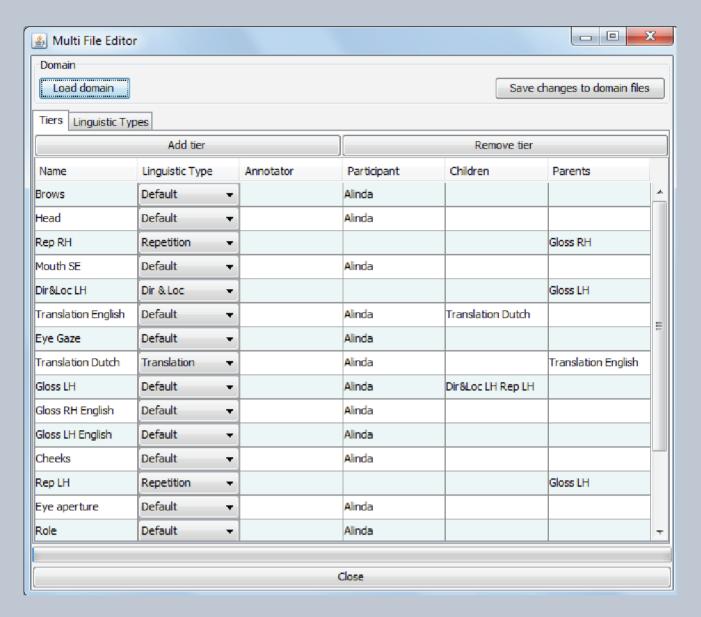
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- ELAN is a multimedia annotation tool
- · freely available, sources available
- · written in Java, stores data in XML
- current version 4.3.3

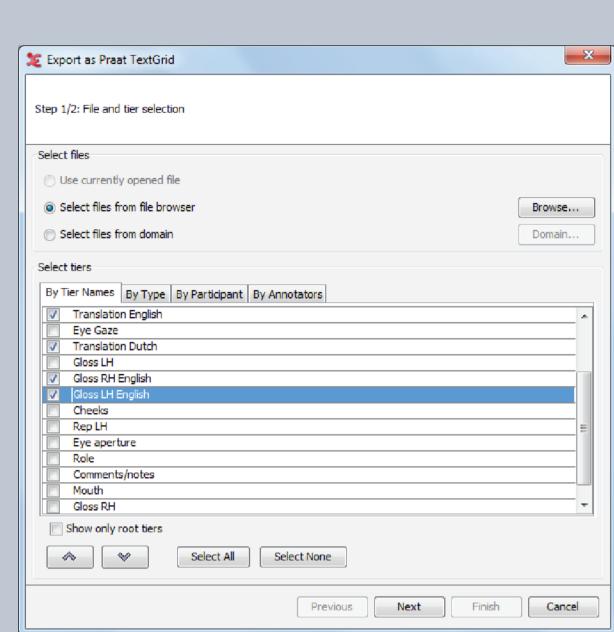
#### Multiple File operations

reduces repetition of the same manual actions (mouse clicks, key strokes)



## MF tier and type editing

add or remove tiers, edit tier and type attributes



#### MF export / conversion

export to several formats; tab-delimited text, Toolbox, Praat

#### MF search, find-and-replace

complex structured search, find and replace with support for regular expression

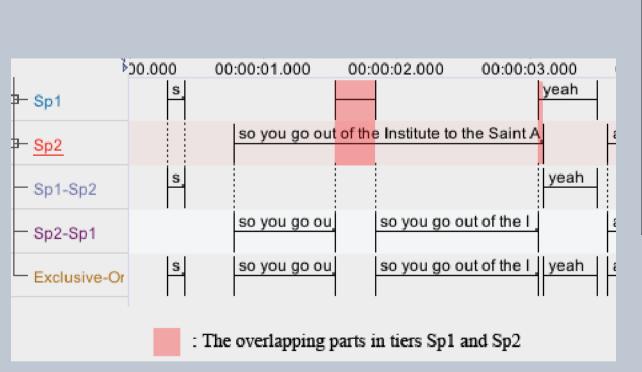
#### MF creation

create eaf files for all media files in a selected set of

folders

### MF tier operations

annotations from overlaps, by merging or subtraction



Search eaf files			
Substring Search   Single Layer Search   Multiple Layer Search	ch		
Domain: 2 eaf files	Define Domain		
Query History: New	v Query		
Mode: case insensitive	▼ regular expression ▼		
Minimal Duration Maximal Duration	Begin After End Before		
hond = 0 and	n.		
Overlap ▼	✓ Must be in same file ✓		
.+	→ All Tiers →		
Find	Fewer Columns More Columns Fewer Layers More Layers		
	, che commo junto a la		
Found 198 hits in 198 annotations (of 189	P2) Ready Cancel		
< hit 145 - 154 of 198 >			
#1  (p-) poot hond   WEG  #2  open     #3       #1  (p-) poot hond   WEG  #2  /OPEN/     #3       #1  (p-) poot hond   WEG  #2  rd     #3       #1  (p-) poot hond   WEG  #2  Hij keek in het water, de andere hond was weg!      #3       #1  (p-) poot hond   WEG  #2  He looked into the water, the second dog seemed to have disappeared!      #3			
		#1  (p-) poor hond   WEG  #2  rie looked into the water, the second dog seemed to have disappeared:      #3       #1  (p-) poor hond   WEG  #2  dog     #3	
		WAT-EEN-TEGENVALLER  #2  Pas toen de golven weer minder waren, zag hij dat het gezicht in het water van zichzel	
		I-TEGENVALLER  #2  Only when the ripp	pling stopped and the water was still again, the dog understood that it was his o
	hond   WAT-EEN-TEGENVALLER  #2  b     #3		
#1  (p-) poot hond   WAT-EEN-TEGENVALLER  #2  c     #3			

#### Tier-based operations

create new tiers with annotations based on the annotations of two or more existing tiers apply logical operation AND, OR or XOR, or subtract

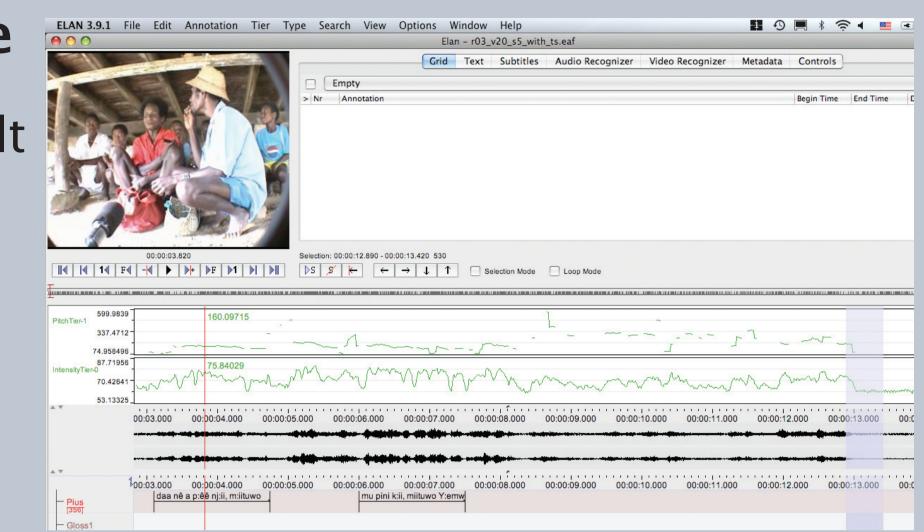
#### **Media Support**

new player for Windows 7 based on Microsoft Media Foundation adds support for mp4/H.264

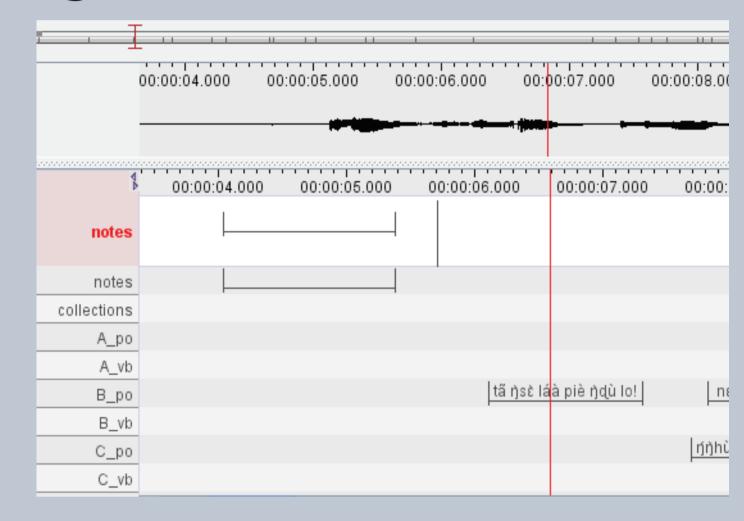
#### Task oriented working modes

#### **Annotation Mode**

 the classic, default mode, allows both segmentation and labeling

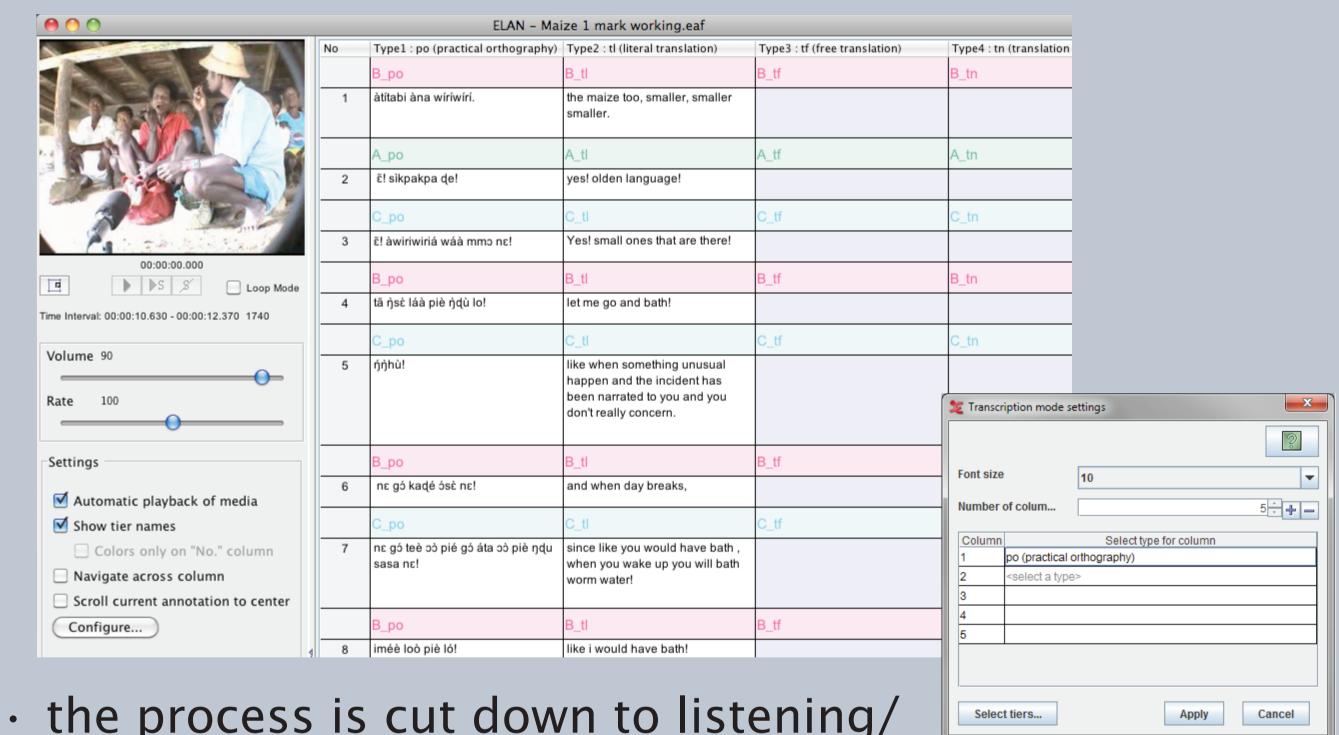


#### **Segmentation Mode**



- rapid creation of segments while media is playing
- segments created only on root tiers and on "included in" type of dependent tiers
- keyboard driven segmentation

#### **Transcription Mode**



- the process is cut down to listening/ watching and typing
- · displays all annotations on all tiers of a certain type in one column
- tiers are loaded based on the tier type
- · first column can have tiers of any type

#### **Audio and Video recognizers**

- manual annotation is time consuming, 1 hour of recording can take up to 100 hour transcription
- usage of audio/video pattern recognition software can speed up transcription work
- an extension mechanism
   has been implemented for recognizers
- · speech/non-speech detection, speaker clustering, forced alignment, head-hand-arm detection

Transcription mode settings dialog