

Audio and video annotation tool

Developed by

The Language Archive
Max Planck Institute for Psycholinguistics
Nijmegen
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General Information

- » free and open source software
- » available for Windows, Mac OS X, Linux
- » http://tla.mpi.nl/tools/tla-tools/elan/



Experts Collaboration

Introduction



ELAN is a generic annotation tool for audio and video recordings. Although it is not only applied in language documentation, sign language and ges-

ture researchers are well represented in the user community as well, it is an application that has benefited considerably from the DoBeS programme. With an average of two to three major releases per year it has evolved from version 1.2 to versions 4.x during the DoBeS life span. During this period of time an increase in size and quality of video recordings has been observed, as well as an increase in the number of levels of annotation, resulting in new requirements for the application.

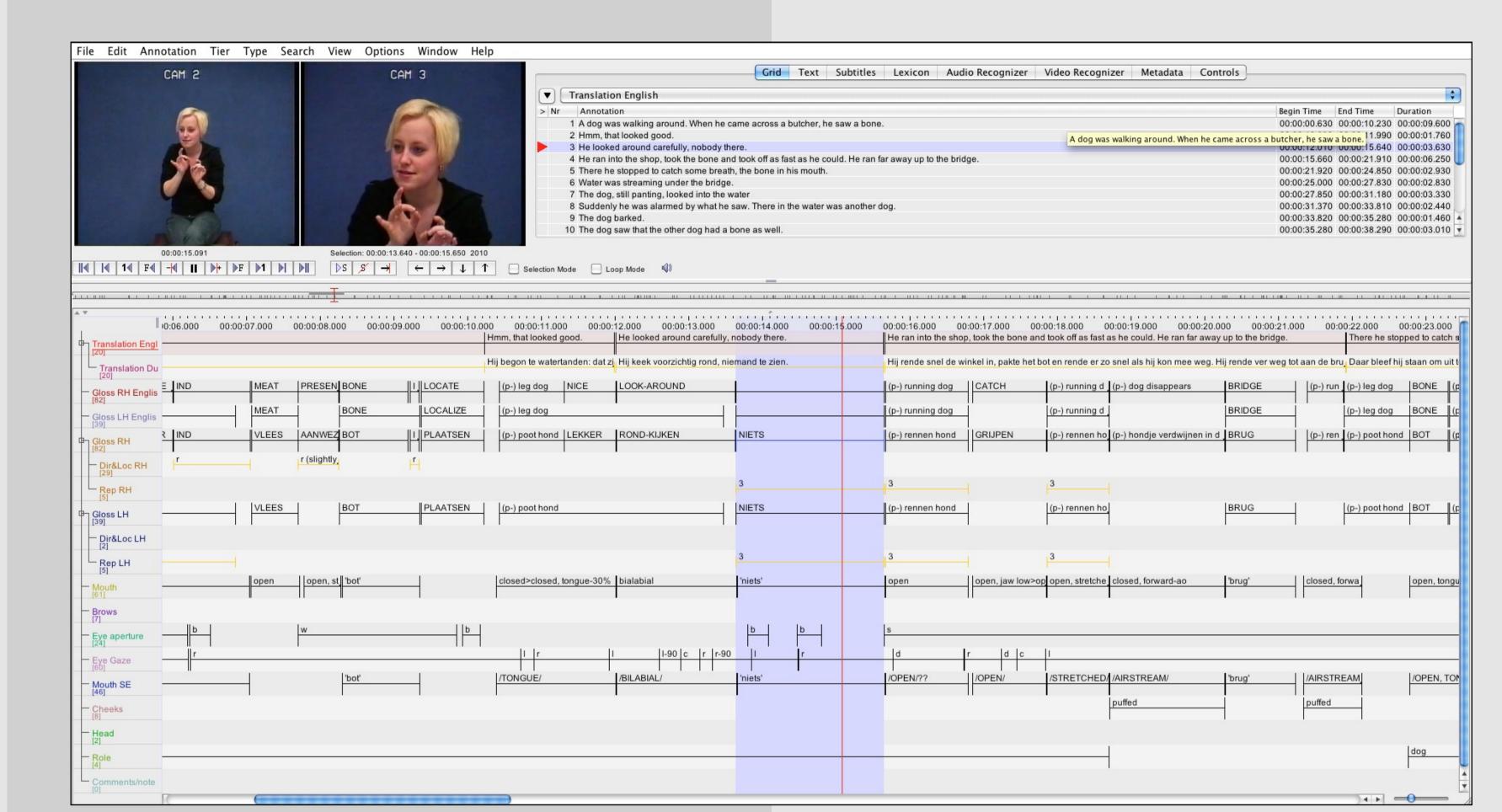
	CAM 2			CAM 3				er Video Recognizer Metadata Controls				
	OHII L			On O		▼ Translation English						
					NEW YORK OF THE PERSON OF	. Nr Annotation	des served Misses				Begin Time End Time	
					No.	2 Hmm, that look		he came across a butcher, he saw a bo	ne.		00:00:00.630 00:00:10	
				The same		3 He looked arou	and carefully, nobod				00:00:12.010 00:00:16	5.640 00:00:00
	100	14			March .			and took off as fast as he could. He ran reath, the bone in his mouth.	far away up to the b	ridge.	00:00:16.660 00:00:21 00:00:21.920 00:00:24	
						6 Water was stre	aming under the bri	dge.			00:00:25.000 00:00:27	7.830 00:00:0
	37			- Call III			anting, looked into the	he water the saw. There in the water was anothe	e doa		00:00:27.850 00:00:31	
	TO V			- T		9 The dog barker	d.		e dog.		00:00:33.820 00:00:36	5.280 00:00:0
							hat the other dog have ne is much bigger, n				00:00:35.280 00:00:36	
						12 If only I had tha		nne is smail.			00:00:41.290 00:00:43	
		A SHARE WAY						n the water : So, you wanna fight?			00:00:43.490 00:00:48	
		40000					want to snatch that b mouth. Splash! The	bone fell into the water and the stream	swept it away.		00:00:61.660 00:00:68	
	100							nd dog seemed to have disappeared!			00:00:68.650 00:01:01	
						17 Only when the 18 Oh no!	rippling stopped an	d the water was still again, the dog und	erstood that it was his	s own race ne saw.	00:01:01.570 00:01:11 00:01:11.320 00:01:13	
	00:00:13.640		Selection: 00:00:13.640 - 00:0	00:15:650 2010								
K K 14		+ (>F) [>1] (>I) [>II	DS S	→ ↓ ↑ Selection	Made Loop Mode 43							
		T										
•		<u>.</u>										
	1.000 00:00		00 00:00:11.000 00:00 Hmm, that looked good.	0:12.000 00:00:13.000	00:00:14.000 00:00:15.000			00:18.000 00:00:19.000 00:00			00:00:23.000 00:00:24.000 topped to catch some breath, the	
Translation English			Hillin, triat looked good.	He looked around carefully,	noticity there.	He ran into the shop	p, took the bone and	took off as fast as he could. He ran far	away up to the bridge	e. Inerenes	opped to calch some bream, the	Dorse in
Translation Dutch			Hij begon te watertanden: dat	zi. Hij keek voorzichtig rond, ni	emand te zien.	Hij rende snel de w	inkel in, pakte het b	ot en rende er zo snel als hij kon mee w	veg. Hij rende ver we	g tot aan de bru. Daar bleef	hij staan om uit te hijgen met het	bot in zij.
Gloss RH English	EN BONE	[I] LOCATE	(p-) leg dog NICE	LOOK-AROUND	NOTHING	(p-) running dog	CATCH	(p-) running d (p-) dog disappears	BRIDGE	(p-) run (p-) leg dog	BONE (p-) leg dog	
Gloss PA English	BONE	LOCALIZE	(n.) lan dan		NOTHING	(n.) nunning dag		(n.) munning d	BRIDGE	I (n.) Inn don	IDONE I (n.) Inn don	1
- Gloss LH English	BONE	LOUALIZE	(p-) leg dog		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(p-) running dog		(p-) running d	BRIDGE	(p-) leg dog	BONE (p-) leg dog	
Gloss RH	EZ BOT	I PLAATSEN	(p-) poot hond LEKKER	ROND-KIJKEN	NIETS	(p-) rennen hond	GRUPEN	(p-) rennen ho (p-) hondje verdwijne:	n in d BRUG	(p-) ren (p-) poot ho	nd BOT (p-) poot hond	
	1ly						11					- 11
- Dir&Loc RH												
L Rep RH					3	3		3				
Fi Gloss LH	BOT	PLAATSEN	(p-) poot hond		NIETS	(p-) rennen hond	1	(p-) rennen ho	BRUG	(p-) poat ho	nd BOT (p-) poot hond	
4.00									-			
- Dir&Loc LH												
L Rep LH					3	3		3				
- Mouth	st bof		closed>closed, tongue-30%	6 bialabial	'niets'	open	open, jaw low-op	open, stretche closed, forward-ao	'brug'	closed, forwa	open, tongue-50%-ao	
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— Brows												
Eye aperture		b			b b	8						
P			r	-90 c r r-90	l r	[d]	r d c	li .				bh
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								putted		putted		"
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An ELAN window showing two videos annotated on multiple tiers

The basics

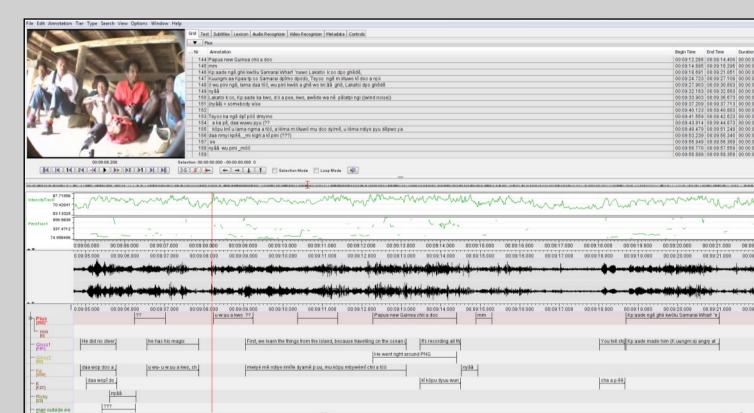
ELAN is an annotation and transcription tool that accepts both digitized video and audio recordings as the basis for annotations. The most elementary form of an annotation consists of a textual label attached to a segment of the primary data, identified by a begin time and end time. A second type of annotation is that of an annotation referring to another annotation.

ELAN supports multileveled transcription. Each annotation is added to a tier, a container for annotations. A transcription can consist of any number of tiers and tiers can



An ELAN window showing two videos annotated on multiple tiers

be grouped hierarchically, i.e. a tier can have a parent tier and multiple child tiers.



ELAN window with visualization of audio and timeseries data

Task oriented working modes

ELAN features different working modes designed and optimized for a specific tasks. The default "Annotation Mode" is the best option for precise segmentation and allows to enter text into annotations as well. The "Transcription Mode" is optimized for entering text into existing annotations quickly and conveniently. In the "Segmentation Mode" empty segments can be created while the media is playing and the "Synchronization Mode" allows for synchronizing multiple audio and video streams.

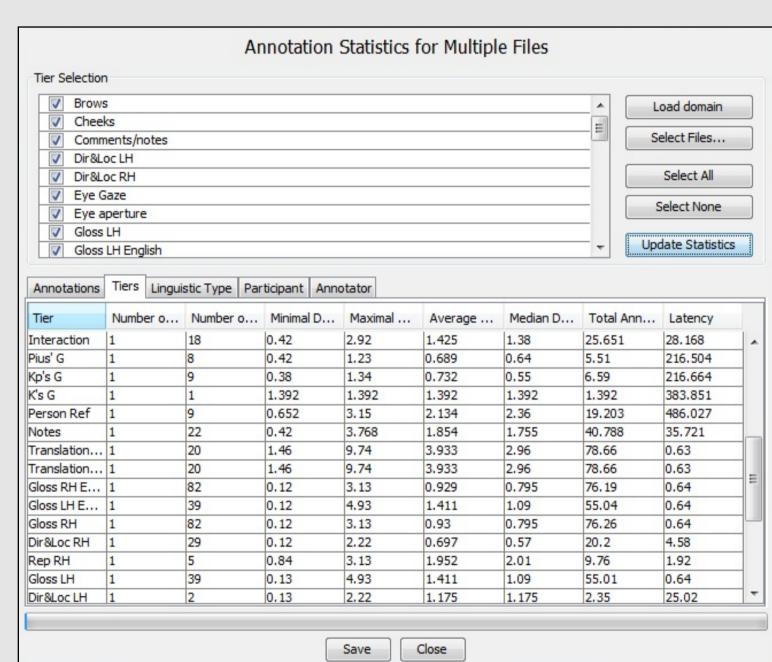
File Edit Annotation Tier Type Search View	Option:	s Window Help			
			Type2 : tl (literal translation)	Type3 : tf (free translation)	Type4 : tn (translation in lingua franca)
《 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图		С_ро	C_tl	C_tf	C_tn
1000 1000 1000 1000 1000 1000 1000 100	704	sesè dzade.	open the kitchen down.	Open the kitchen door	
	705	mêe bò si ŋgbê ċmċ (iì kpaà) i dzade.	like as we are (?) in the kitchen.	We're (?) in the kitchen	
	706	papa na áa fúri irað nĉ mmð.	faning gadget is not available that you will fan that thing there.	The fan isn't there for you to fan this thing ((the fire))	
		D_po	D_tl	D_tf	D_tn
	707	(kûkà > må nyí má sitc álamée - mà nyí ma sitc)	(song > they tied thirty of them - they fied thirty of them)	((sings song titled "they tied thirty enemies"))	
00:00:00.000		H_po	H_tl	H_tf	H_tn
▶ ▶5 S' Loop Mode	708	(simaà)	(laughs)	((laughs))	
Time Interval: 00:00:00.000 - 00:00:00.000 0		А_ро	A_ti	A_tf	A_tn :
10.000 00:00:00.002 00:00:00.004 00:00:00.006 00:01	709	mì to mányí má sitc sí bò nyō)	you should dance (they tied thirty of them so that we will see)	dance "they tied thirty enemies" for us to see!	
		О_ро	D_tl	D_tf	D_tn
	710	(ilikpi katio)	(ilikpi dance)	((dances))	
Volume 100		A_po	A_ti	A_tf	A_tn
Rate 100	711	mito sí bò nyō.	you should dance let's see.	you should dance for us to see	
THE TOO		С_ро	C_tl	C_tf	C_tn
Settings	712	káwiriwiri 5 óré Ábārā.	kawriwri's wife Abara.		
		D_po	D_tl	D_H	D_tn
✓ Automatic playback of media	713	(ta mato ilikpi)	(they are dancing ilikpi)		
✓ Show tier names ☐ Colors only on "No." column		A_po	A_ti	A_tf	A_tn
☐ Navigate across column	714	mì tò sí bô nyō.	you should dance let's see.		
Scroll current annotation to center		D_po	D_tl	D_tf	D_tn
Configure	715	(simaà)	(laughs)		
	716	one - two! mányi má sítt -	one - two! they tied thirty of them -		
		A_po	A_ti	A_tf	A_tn
	717	očt mi yaráso pokosoo sí ibúá ile onyō.	! so that it will really look nice.		
	718	àta fe ikclè kama ní.	you are moving back too much.		
		С_ро	C_ti	C_tf	C_tn
	719	kārā než -	for now -		
		A_po	A_ti	A_tf	A_tn
	720	má nyĩ má sitz álamee -	they fied thirty of them ~~~~ -		
			C_II	C_tf	C_tn
	721	kà bỏ bá bỏa tstrt igbo - igbo nt ŋgbé igbā.	we are coming to write the big one - this big type.	Come let's write this big one here	

The Transcription mode for high speed transcription of linguistic data

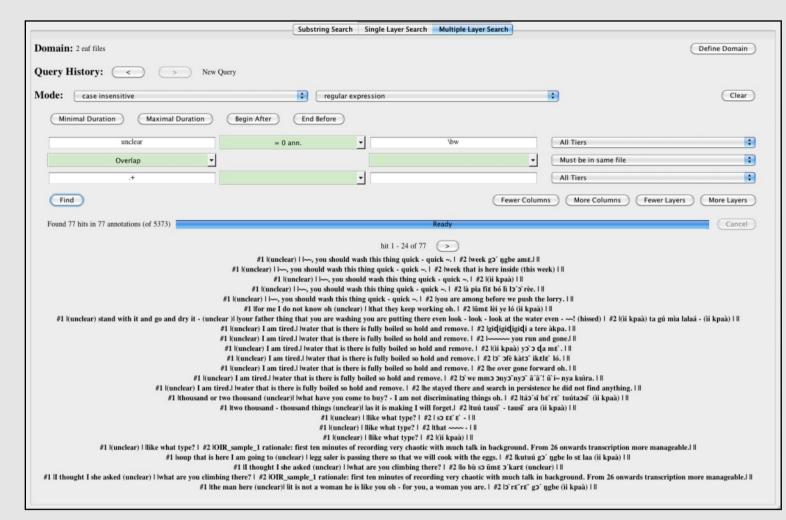
Working with a local corpus

Annotation of recordings has to be performed per file. A corpus typically contains many annotation documents and ELAN offers several tools for corpus-based analysis, description and enrichment. The multi-layered corpus search facilitates queries for occurrences of a particular word, discontinuous sequences and co-occurring events. The results are shown in concordance or by frequency.

Simple statistical overviews can be created for an entire corpus or a part of it and there are options for adding information to all files or perform tier-based operations on them.



Basic statistics created for an entire corpus



The multiple file search interface allows construction of complex queries

Interoperability

Import and export of data from and to several other file formats guarantee a certain level of interoperability with tools that are often used in language documentation. Praat, Toolbox and FieldWorks are frequently used in combination with ELAN.

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