# Viewing annotation files in ELAN

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### 1. Brief description of the media files needed for viewing annotations

Multichannel annotation files (.eaf) available on the project website can be viewed using ELAN software developed at the Max Planck Institute for Psycholinguistics (<u>https://tla.mpi.nl/tools/tla-tools/elan/</u>). For each annotation file (.eaf), there is a utility file (.pfsx). This file contains user- and document-specific settings like the font size used to display text, tiers colors and so on. It does not contain annotation data, but for correct display of the multichannel annotation both files are needed.

Depending on the set of annotated channels, an annotation file may contain links to one or several media files from the list below.

- Individual video files taken with frontal cameras (file name contains **vi** code and one of the participants' codes: N, C or R)
- Cover shot video file (file name contains vi code and W code)
- Video files taken with the participants' eye trackers (file name contains **ey** code and N or R codes)
- Audio files taken with individual or central microphones (file name contains **au** code and N, C, R or W code)

The list of media files linked to an annotation file can be viewed or changed in ELAN (Edit > Linked files).

A multichannel annotation sample file by default requires 4 linked media files: 3 individual videos and one cover shot video. The following file combinations are also recommended: a) a full video set for each participant, including a cover shot video, an individual video and an eye tracker video; and b) two eye tracker videos. For detailed work with vocal annotation, one or several audio files may be linked.

Manual and cephalic annotation files from the presented subcorpus each require a corresponding individual and cover shot video. Oculomotor annotation files require a cover shot and an eye tracker video. Other media files can be linked as well, if needed, from within ELAN (Edit > Linked files).

### 2. Starting ELAN and viewing annotations

In order to view multichannel annotation files, the following steps must be taken.

- Install the ELAN software to your computer (<u>https://tla.mpi.nl/tools/tla-tools/elan/download/</u>). (Linux users should note that 64-bit mode is not supported.)
- Download from the site all the necessary media files, the annotation file (e.g., multichannel annotation sample pears22-mult-fragment.eaf) and the corresponding utility file (e.g., pears22-mult-fragment.pfsx). Put all the files in the same folder.
- Start ELAN and open the annotation file.

While working with ELAN, the following settings are recommended.

If your OS is Windows, from the Edit menu open Preferences > Edit Preferences > Platform/OS and set the checkboxes as shown in the screen shot below.

22	Edit Preferences	×
	Edit Preferences	
Editing CV Media Metadata Platform/OS Preferences User Interface Viewers	Windows    Windows  Use Windows Look and Feel  Media Framework   Java - DirectShow Framework   Java - Microsoft Media Foundation (.mp4, .m4a, .m4v, .wmv, .wmv   Correct the video frame when pausing the player   Correct the video frame when pausing the player   QuickTime for Java  Java Media Framework Java Sound (.wav)	4 a, .as >
	Apply Cancel	

For Linux users, the VLC Player Library option is recommended in the corresponding preferences window. After changing the settings, click Apply and restart ELAN before opening the annotation file.

The multichannel annotation sample should look like this:

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#### Russian Pears Chats and Stories

Linked video files appear in the upper part of the window, with the master file being the first on the left. Below the videos, there are player buttons and then the waveform window. The annotation file (.eaf) may have several audio files linked, but the waveform gets rendered only for one of them; to change the depicted audio file use the drop-down menu on the left.

By default, ELAN plays the sound track from the master media file (usually it is the individual video). The sound from other media files is muted. To switch it on, use the sliders on the Controls tab (to the right of the videos). If there are no separate sliders for all the linked media files on this tab, this option must be changed in the Preferences menu (Edit > Preferences > Edit Preferences > Media > Controls):

🞾 Edit Preferences		$\times$
	Edit Preferences	
Editing CV Media Hetadata Platform/OS Preferences User Interface Viewers	Media         ✓ The document's changed flag is set when the media location has changed         Media clipping with script         ✓ Prompt for a clip filename         Only clip the first media file         ✓ Clip multiple media files in parallel         Controls         ✓ Show volume controls for individual media players         Automatically play media         When an annotation is activated         When marking current time as begin of a new annotation	
	Apply Cancel	

### 3. Troubleshooting: Codecs settings and other tips to improve performance

Under Windows, ELAN by default uses system settings and codecs for playing media files. If ELAN fails to open any corpus video files, crashes or the video is played incorrectly, the most probable reason is outdated or missing codecs. It is also recommended to update graphics card drivers.

For the best performance of ELAN, it is recommended to use LAV codecs with the presented annotation files.

Codecs may be installed separately from <u>https://github.com/Nevcairiel/LAVFilters/releases</u> (in this case, do not agree to the proposed default settings during installation), or you may use a codec pack, such as the K-Lite Codec Pack (<u>https://www.codecguide.com</u>; Mega Pack is recommended.

If you already have the necessary codecs installed, check to see if they are set as preferable for the necessary video formats.

To set up LAV codecs as preferable, the Codec Tweak Tool may be used. It is included in the K-Lite Codec Pack or may be installed separately from <a href="https://www.codecguide.com/download\_other.htm#codectweaktool">https://www.codecguide.com/download\_other.htm#codectweaktool</a>.

After installation, open the Codec Tweak Tool and choose Preferred decoders:

Codec Tweak Tool 6.3.4 | K-Lite Codec Pack 14.5.5 Mega

Codec Tweak Tool 6.3.4   K-Lite Codec Pack 14.5.5 Mega					
General:					
Fixes Generate log Check for up	dates				
Settings:					
Reset Backup Restore	•				
Configuration:					
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Codec and Filter Management:					
DirectShow (x86) ACM/VFW (x86) Preferred sp	litters				
DirectShow (x64) ACM/VFW (x64)					
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Win7DSFilterTweaker:					
Preferred decoders Media Foundation MS Codec Tv	veaks				
Help	Exit				

From the opened window, in the left column (32-bit decoders) find MJPEG format and change the preference to LAV Video:

Preferred DirectShow decoding filters in Windows 7/8/8.1/10				
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	O None			
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Help Reset	Apply Apply & Close Close			

Click Apply & Close, and then open ELAN.

Playing several video files simultaneously uses a significant amount of system resources. Here are some tips to improve performance while playing several synchronized videos in ELAN.

- 1. Be sure to use High performance power plan under Windows (or a similar plan if you use additional power control tools).
- 2. Using a laptop, keep it plugged in while working with ELAN.
- 3. Playing several videos from the same hard disc (HDD) creates a heavy resource load. It is recommended to place the simultaneously used video files onto different hard discs. If possible, use SSD.

If all the described steps do not help, it is advised to remove some of the linked files from an annotation. To achieve this, open .eaf file in ELAN, then in the Edit menu choose the Linked files option and remove the less needed files from the list.

A detailed manual may be found within ELAN (see the Help menu), as well as on the developers' website (<u>http://www.mpi.nl/corpus/manuals/manual-elan.pdf</u>).