

Some tips and tricks for using ELAN

The purpose of this guide is to provide fieldworkers with the basic knowledge they need to start using ELAN and to use ELAN in conjunction with other useful software, specifically Praat and FLEX. There are many ways that fieldworkers can use ELAN, Praat, and FLEX for transcription, annotation, interlinearization, and other analysis. This guide presents one possible workflow where transcriptions and translations are created in ELAN, Praat is used for clipping tokens or spot-checking transcriptions, and FLEX is used for interlinearization.

This guide covers the following:

1. How to get started using ELAN (for those who do not already use it)
2. How to design a tier structure and create a template for it in ELAN
3. How to export from ELAN to FLEX
4. How to import Praat TextGrids to ELAN (and vice-versa) and link Praat with ELAN

This document is basically a brief distillation of the User Guide for ELAN Linguistic Annotator (written by Maddalena Tacchetti, October 2013 version¹) and “Working with ELAN and FLEX together: and ELAN-FLEX-ELAN teaching set” by Tim Gaved and Sophie Salffner (January 2014 version²). The basic template that I use for exporting from ELAN to FLEX is a simplified version compared to the one used in Gaved and Salffner’s teaching set. The template used here only works for exporting from ELAN to FLEX and does not permit exporting FLEX interlinearizations back into ELAN. Gaved and Salffner’s guide provides a thorough description of exporting data from FLEX back into ELAN.

1 Getting Started with ELAN – just the basics!

ELAN is software for transcribing and annotating audio and video recordings. ELAN has five modes for different stages of the annotation process:

- **Annotation Mode:** provides a top-down view of all annotations (e.g., transcriptions, translations, notes), but is not very useful for entering data or making changes
- **Media Synchronization Mode:** for use with projects that involve both audio and video
- **Segmentation Mode:** for dividing a recording up into segments that will be annotated
- **Transcription Mode:** for entering transcriptions and other time-aligned annotations
- **Interlinearization Mode:** a new mode in ELAN 5 and higher that includes parsing and lexicon capabilities

This section explains how to create an .EAF file, segment a recording, and enter a transcription in ELAN. Media Synchronization and Interlinearization are not described in this guide, but there are many excellent resources online to learn more about these and other features of ELAN.

¹ The most recent version at this writing is from December 2018, available online at:
https://www.mpi.nl/corpus/html/elan_ug/index.html

² The most recent version at this writing is from November 2015, available online at:
http://www.mpi.nl/tools/elan/tp/how-to/ELAN-FLEX-ELAN_2015-11-06.zip

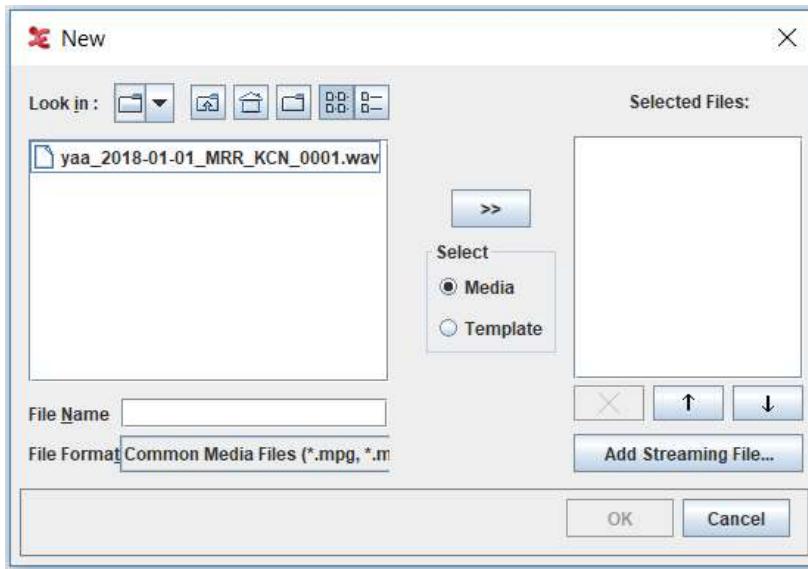
There are many different ways to incorporate ELAN into a project's workflow. A minimal workflow is likely to include the following steps:

1. Create a recording
2. Open the recording and template in ELAN
3. Segment the recording
4. Transcribe and annotate the recording

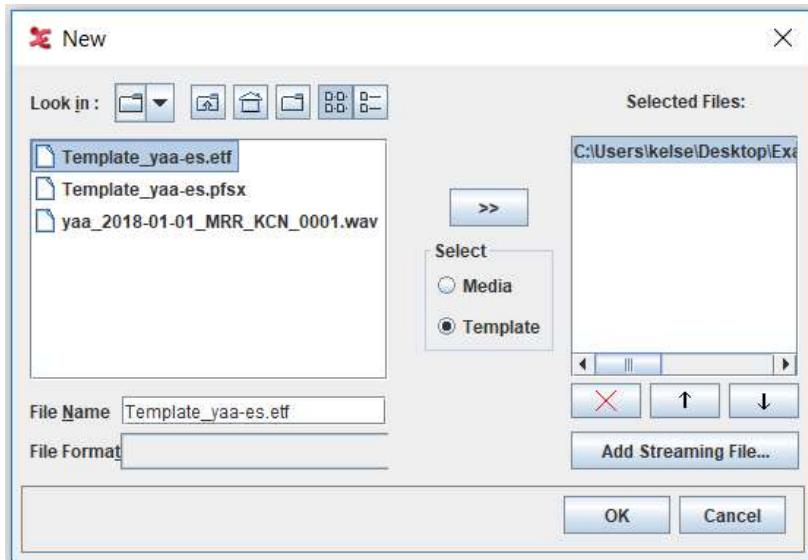
In reality most workflows will involve additional steps including changes to the segmentation and annotations, and imports/exports from/to other software like Praat or FLEX, which are covered in later sections.

1.1 Opening a file in ELAN for the first time

When you open ELAN for the first time you will notice that there is almost nothing on the screen. To start a new .EAF annotation file, click File → New. This will open a window:



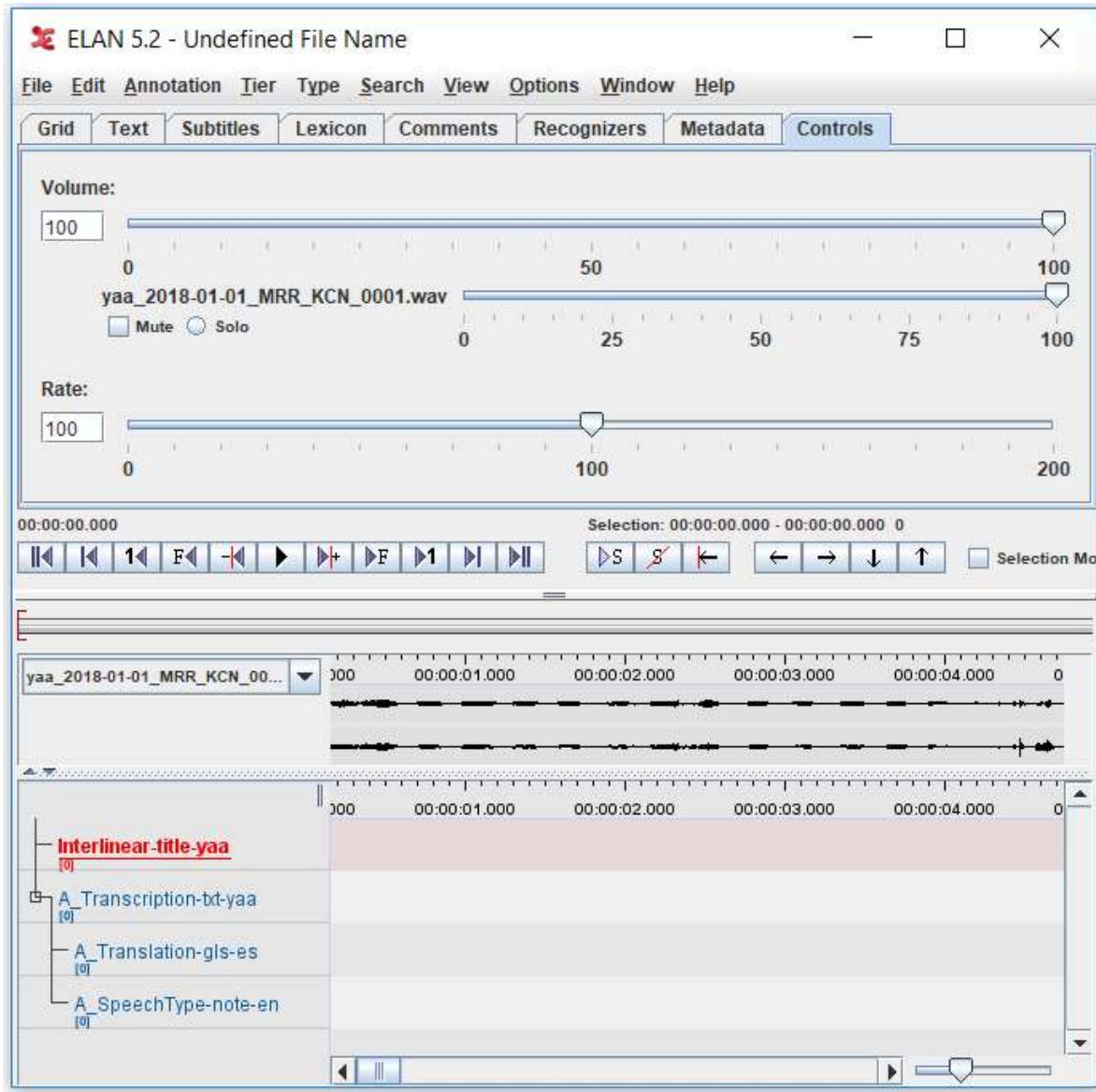
Navigate to the folder where your recording is located, click it, then use the '">>>' button to add it to the file list on the right.



Select the 'Template' button and navigate to the folder where your project ELAN template is located. Select the template and add it by clicking '">>>' as above.

Clicking 'OK' will open your audio file and first .EAF file in Annotation Mode, which is basically the master viewing mode.

It should look something like this:



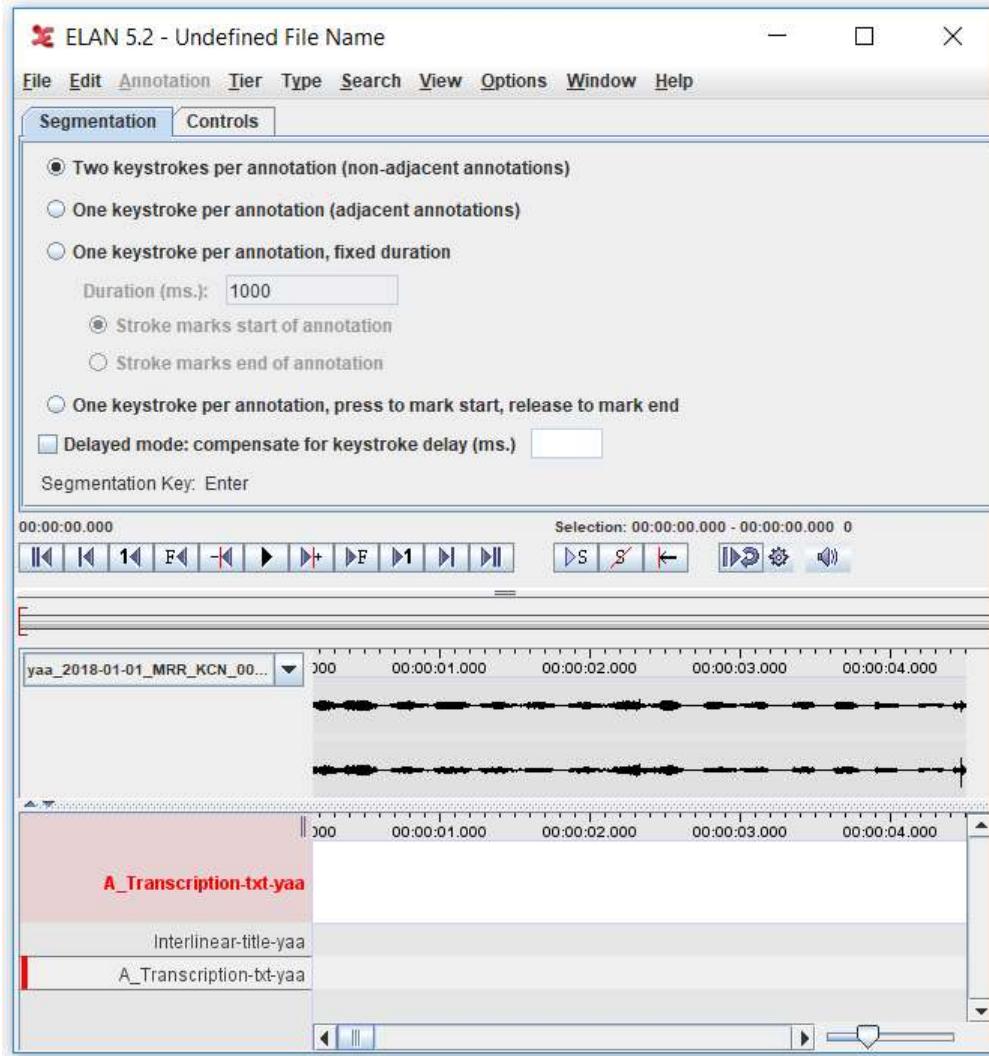
Note: the tier template used in this example is one designed for exporting to FLEX – your project template may differ.

Don't forget to save your file with a name that refers to the recording and to a location that you can easily find. Note: ELAN does not always handle file names with diacritics well, **try to stick to ASCII characters only**.

The next step is segmenting the recording to prepare it for transcription and annotation...

1.2 Segmentation Mode

To open **Segmentation Mode**, click the Options menu, then select ‘Segmentation Mode’. You should see something like this:

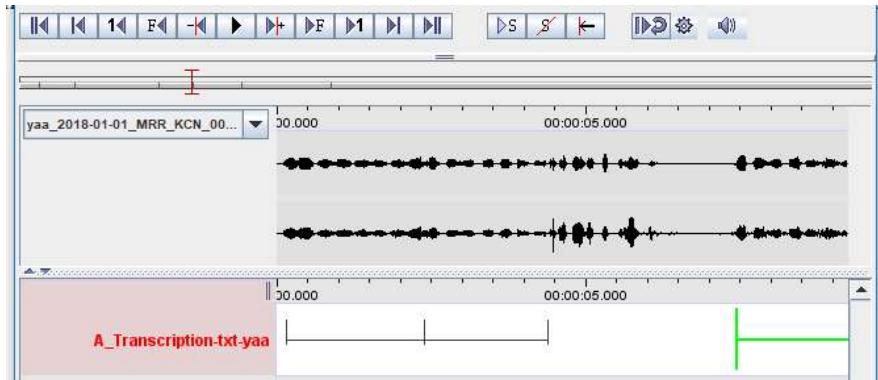


In Segmentation Mode, you can change the preferences for how you want to create your **segments**.

This tutorial will show how to make non-adjacent annotations, which is what many fieldworkers use for monologic speech or elicited speech.

Different fieldworkers may prefer to use two keystrokes (i.e., press Enter to start and press Enter again to end) or a single keystroke (i.e., press and hold Enter for the duration of the segment). Segments can be created while the recording is playing in ELAN or while it is paused. Using the two keystroke method, you can mark the beginning of a segment, play or pause as necessary, then mark the end of that segment.

Once some segments have been created, the window should look like this:



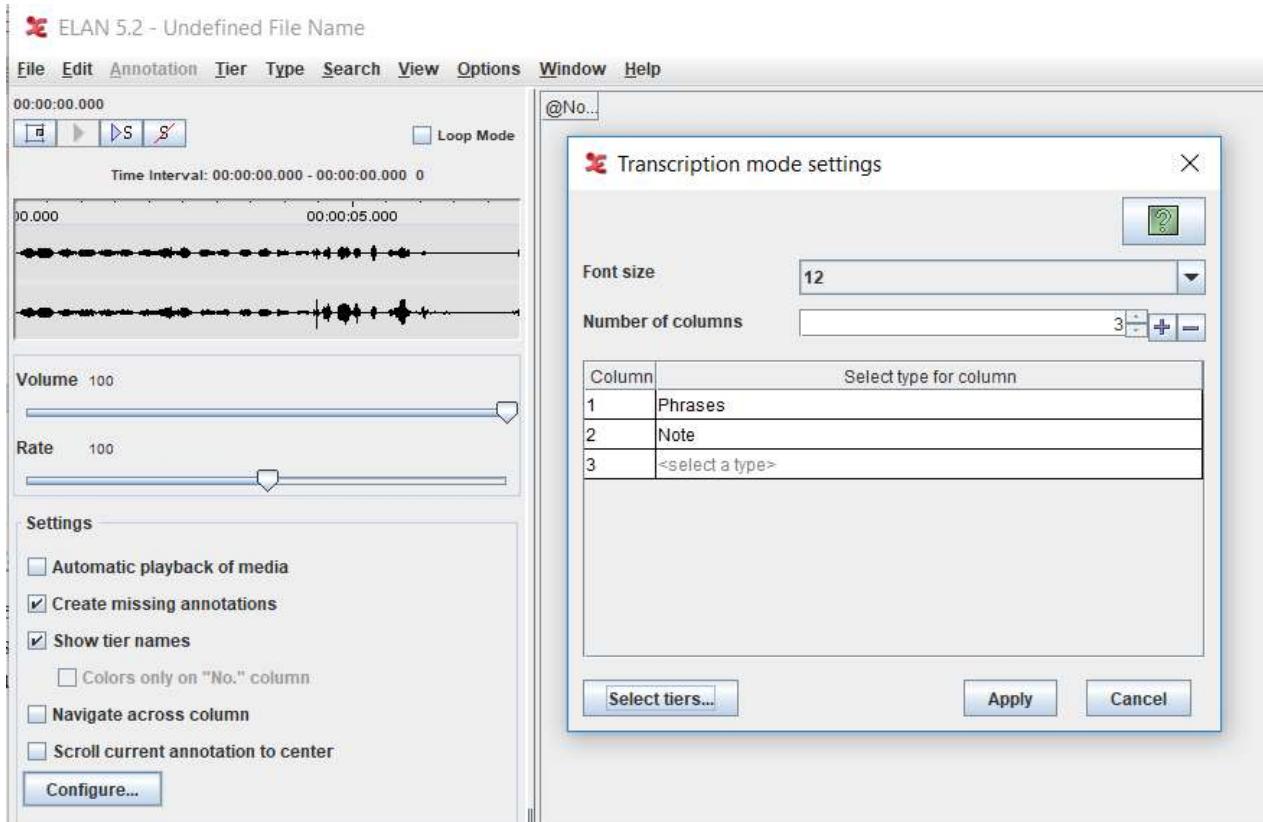
Hovering over a segment will turn it green. To delete it, press backspace.

If you need to adjust the beginning or end, hover over the vertical bars and drag left/right.

If a whole segment needs to be moved, hover over the horizontal bar and drag and drop into position.

1.3 Transcription Mode

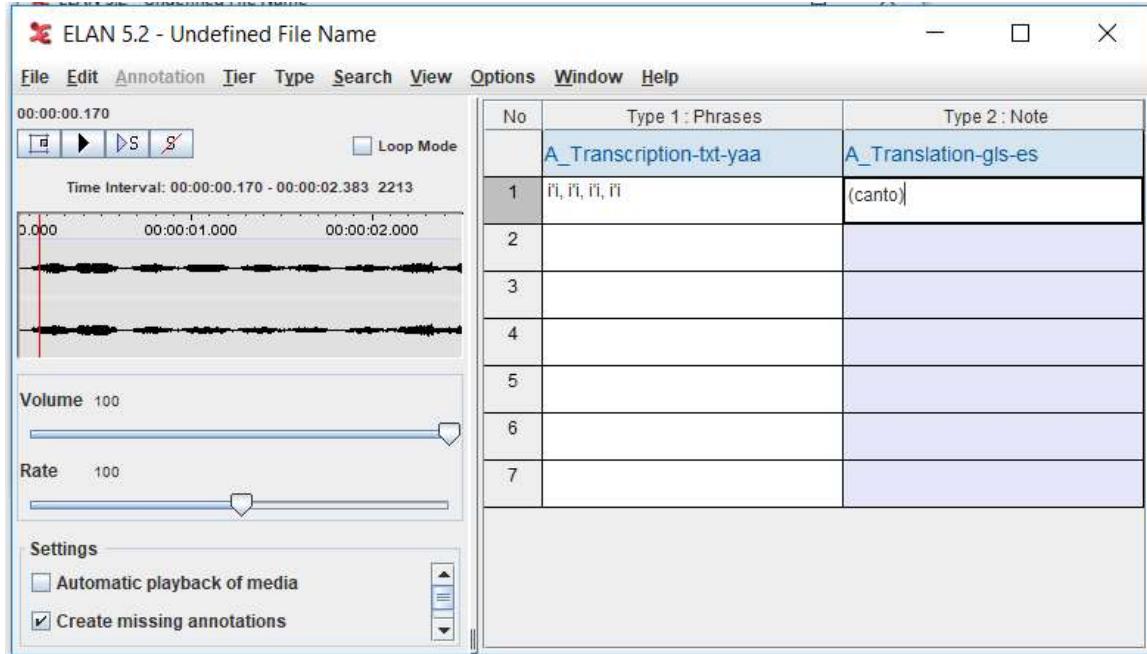
Once some or all of the segments have been created, **Transcription Mode** can be used to create transcriptions, translations or other annotations. To open Transcription Mode, click the Options menu, then select ‘Transcription Mode’. This will open a window like this:



To set up a new transcription, you select the ‘**types**’ that correspond to the appropriate tiers in your template.

Phrases corresponds to material in the study language and **Notes** to material in the contact language.

The number of columns, including the blank column 3 shown above, can be adjusted by clicking the +/- buttons. Remove column 3 using the ‘-’ key and click ‘Apply’. Transcription Mode should look something like this:



To get started, click on the first line and hit the tab key to play. Transcribe what you hear!

Enter a translation or other note in additional columns if desired (as shown). The following section describes tier structure and templates in more detail.

The settings can be changed to automatically play media when you navigate to a new line by selecting the ‘Automatic playback of media’ check box.

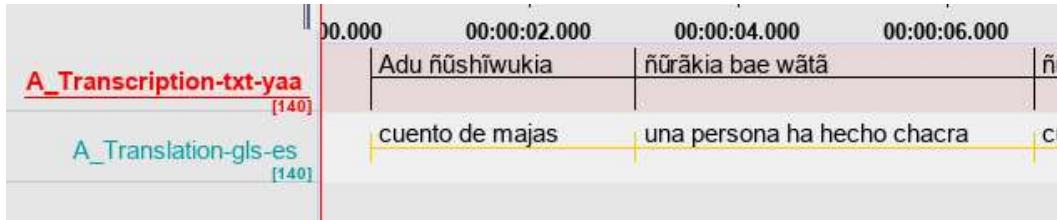
Complete your transcription/annotations and don’t forget to save periodically!

2 Tier structure and templates in ELAN

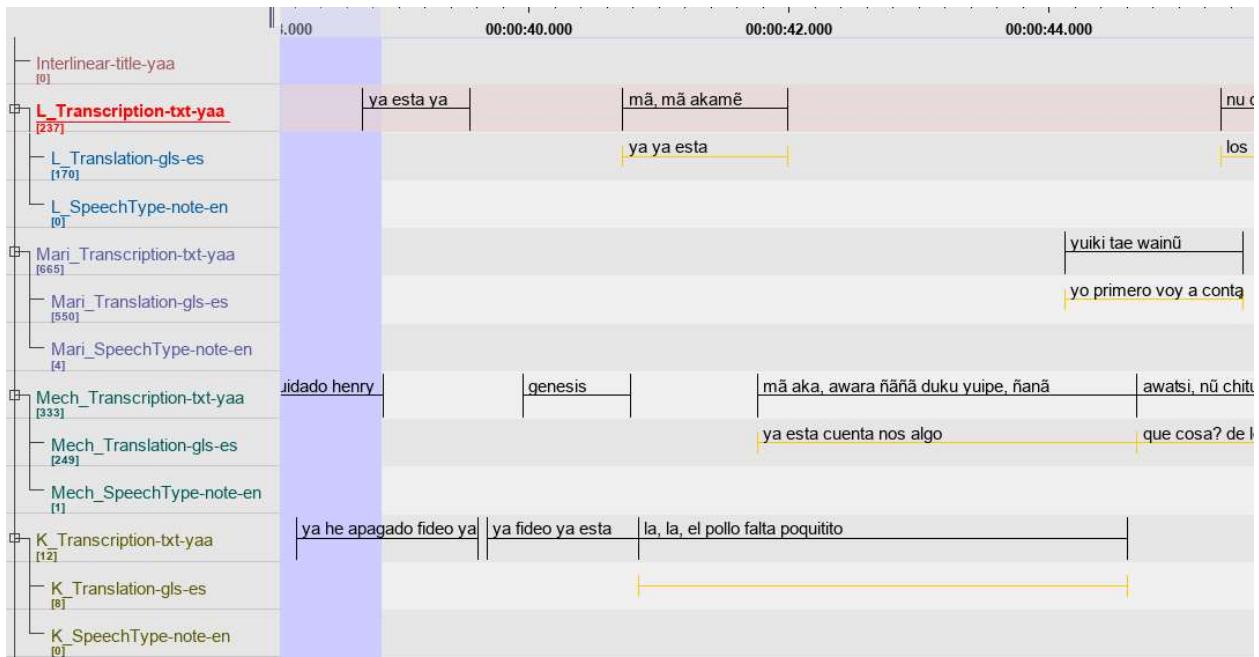
ELAN annotations consist of one or more **tiers**. A tier may consist of a transcription, a translation, metadata, notes/tags of interesting phenomena, or other information. This section describes some of the ways that tier attributes can be modified and tier structures organized to create a customized template for the types of annotations that a fieldworker may need to make. In particular, this section presents how to design a tier structure template that allows data to be exported to FLEX, and how to modify this basic structure for annotating multi-participant interaction.

2.1 An introduction to tiers and their attributes

Tiers can be organized in nested, parent-child relationships where child tiers can be set to automatically inherit certain properties from the parent tiers. For example, a very minimal tier structure like the one exemplified below may consist of just two tiers: a parent tier with a transcription and a dependent tier with a translation, with the translation tier inheriting the time-alignment (segmentation) properties of the parent.



A more complicated template might include a metadata tier (“Interlinear” in the example below”), tiers for notes, and use nested structure to represent the speech of multiple participants.



In this tutorial, we are going to use a template with the following generalized structure:

<u>Purpose</u>	<u>Label</u>	<u>Relationships</u>
Metadata tier:	Interlinear-title-xxx	Parent-level, no dependent
Transcription:	A_Transcription-txt-xxx	Parent of translation
Translation:	A_Translation-gls-yyy	Dependent of translation

This guide discusses the naming conventions of these tiers (which facilitate export to FLEX) in section 3. If FLEX is not part of your workflow, you could also just label them “Metadata”, “Transcription”, and “Translation”.

Tiers in ELAN can have different properties (e.g. time-alignable vs. not-time-alignable) and can have different relationships to each other (e.g. symbolic association, symbolic sub-division). Each tier in ELAN must correspond to a **type**, which are customizable bundles of these property and relationship values.

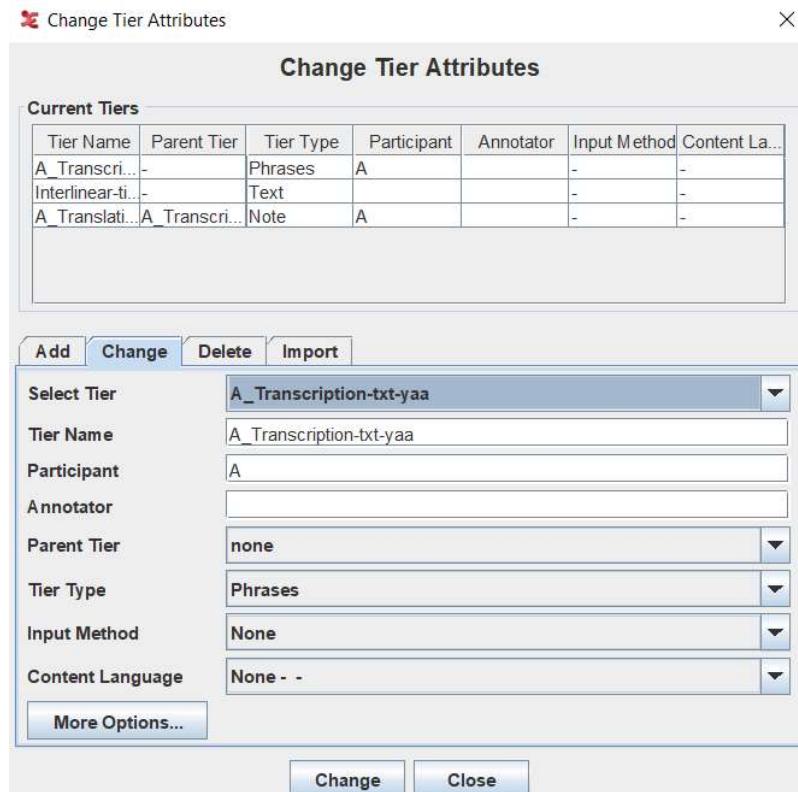
The tiers that we use in this guide have the following types:

Type	Type attributes	Corresponding tier	Tier purpose
Text	no stereotype, time-alignable	Interlinear-title-xxx	Metadata
Phrases	no stereotype, time-alignable	A_Transcription-txt-xxx	Transcription
Note	symbolic association, not time-alignable	A_Translation-gls-yyy	Translation

This set of types will allow us to import data into FLEX, specifically the text title from the metadata tier, the baseline from the transcription tier, and the free translation from the translation tier.

2.2 Customizing types and tier attributes

Tiers can be customized in a number of ways, ranging from major changes in the structure and function (e.g., changing type attributes or parent-child dependencies) to minor, aesthetic changes (e.g., the color of the tier). This section provides an overview of the ways tiers and tier structures can be customized.



To change tier attributes, click “Tier” in the menu bar, then “Change Tier Attributes”. This will open this pop-up menu.

The “Change Tier Attributes” menu allows the user to change:

- The tier name
- The participant label
- The annotator label
- The parent of the tier
- The type of the tier
- The input method and content language (optional)
- The tier color and highlight color (optional)
- The tier font (will need to be changed to match the font in FLEX before export)

Tier names

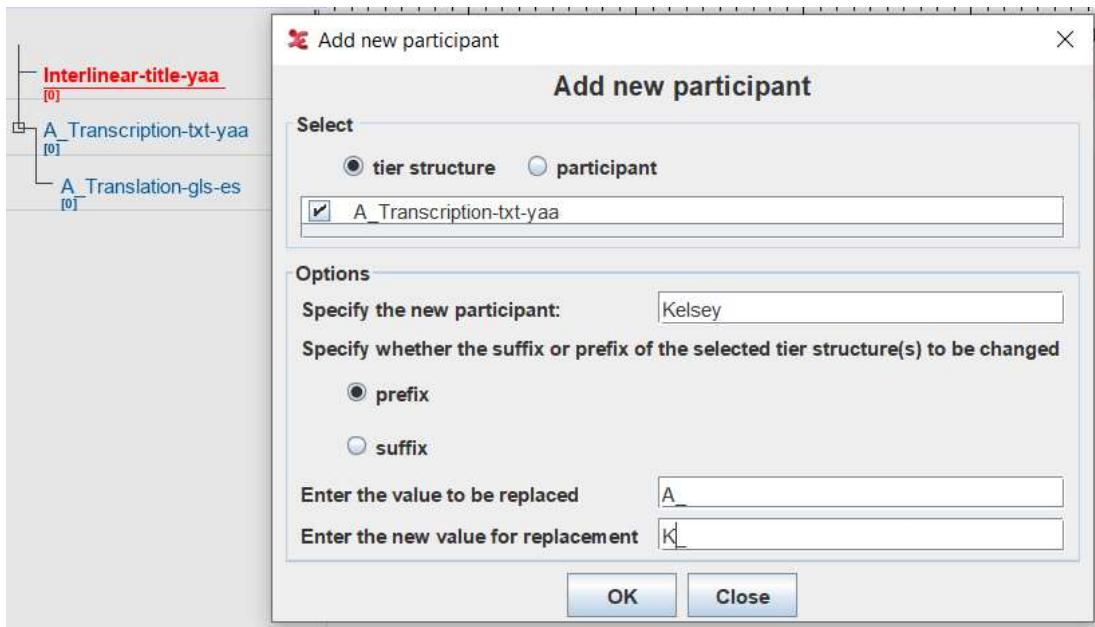
A good tier name is descriptive and gives a reader other than the annotator an indication of the contents of the tier. In the case of the tiers used in this guide, the names take forms like “A_Transcription-txt-yaa”. In this example tier name, there are four parts:

- ‘A’ is a participant label indicating the identity of the speaker (this can be changed to any string, e.g. KCN or Kelsey – participant labels and the annotation of multi-party interaction is discussed more later),
- ‘Transcription’ is the descriptive element indicating the nature of the contents,
- ‘txt’ is used by ELAN in the FLEX import process, discussed more later, and
- ‘yaa’ is the FLEX internal language code (in this case identical to the ISO code) for Yaminawa, the (primary) language of the contents in this case.

Participant and annotator labels

Participant labels identify the speaker in the metadata and are particularly useful for the annotation of multi-participant speech. The identity of the participant can also be identified in the name of the tier, as described above.

One handy feature of ELAN for annotating multi-party interaction is the “Add new participant” menu under the “Tier” menu. This feature allows the user to copy a parent tier and its dependent’s structure, specifying a new participant in the metadata and changing either a prefixed or suffixed participant label in the tier name. In the example below, the tier structure under the parent “A_Transcription-txt-yaa” is copied, the participant label is changed to “Kelsey” and the prefix ‘A_’ on the tiers is changed to ‘K_’.



(Upon clicking ‘OK’ ELAN will give you a “process report” to tell you that it executed the change – just click ‘OK’ to close.)

The annotator label allows the user to specify the identity of the person who annotated a particular tier – potentially useful for projects involving multiple researchers, students, or where speakers use ELAN themselves to perform transcription and translation tasks.

Parent of the tier

A newly created tier can be assigned as a dependent of another tier by selecting the parent tier from the drop down menu.

Type of the tier

This drop down menu allows the user to change the type of the tier. To create a new type or to change the properties of a type, click ‘Type’ on the menu bar, then either “Add New Tier Type” or “Change Tier Type” (once the pop-up opens, both are available by clicking tabs).

Add Type

Current Types				
Type Name	Stereotype	Use Controlled Vocabulary	DC ID	Time-alignable
Text	-	-	-	✓
Phrases	-	-	-	✓
default-It	-	-	-	✓
Words	Symbolic Subdivision	-	-	—
Note	Symbolic Association	-	-	—
Blank	Symbolic Association	-	-	—

Add **Change** **Delete** **Import**

Type Name: New

Stereotype: None

Use Controlled Vocabulary: None

Lexicon connection: (empty)

ISO Data Category: (empty)

Time-alignable:

Add **Close**

There are five **stereotypes** for available for types:

- **Symbolic association** – for dependent tiers; the segmentation is copied from a parent tier
- **Symbolic subdivision** – for dependent tiers; the segmentation is copied from a parent tier and can be divided into equal-sized sub units
- **Time subdivision** – for dependent tiers; the segmentation is copied from a parent tier and can be divided into time-alignable sub-units (must be contiguous!)
- **Included in** – for dependent tiers that are also parent tiers; used to create gaps between the top-level parent tier and lower tiers (e.g., where there is a silence – see Tacchetti’s 2018 manual for ELAN)
- **None** – for independent or parent tiers

The check box toward the bottom of the pop-up allows the user to specify if the tier is time-alignable or not. Generally, only top-level parent tiers will be time-alignable.

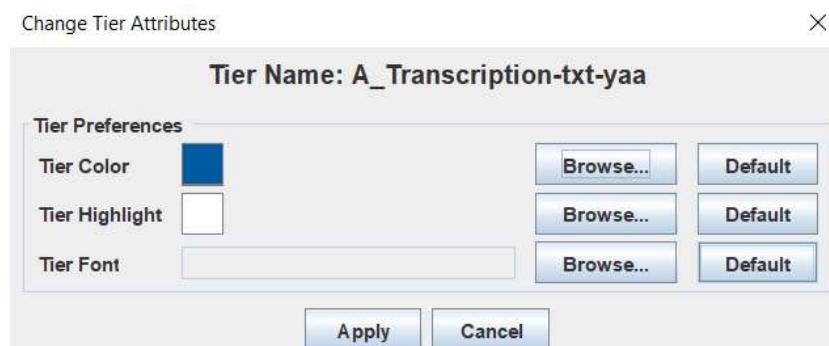
There are a number of other optional attributes that can be specified for a tier type. A **Controlled vocabulary** is a pre-set list of values that can be used in annotations, particularly useful for ensuring consistency for tag-type annotations. See Tacchetti's 2018 manual for more on how to set these up and use them. A **Lexicon connection** is used when data is interlinearized using ELAN's (new!) interlinearization mode, which is not covered here. The **ISO data category** can be added to include extra metadata in the tier, if desired.

Input method and content language

The **Input Method** drop down menu in the “Change Tier Attributes” pop-up allows the user to choose the keyboard that will be used in that tier, allowing you to switch seamlessly between two virtual keyboards (e.g., IPA and English International). The **Content language** drop down allows the user to specify the (primary) language used in the tier.

Tier font, color, and highlight

Clicking the “More Options...” button in the “Change Tier Attributes” pop-up opens another pop-up with further, mostly aesthetic options.



Tier color and Tier highlight are entirely aesthetic, but they can be useful for improving readability or making certain tiers stand out in particularly complex tier structures.

Tier font is important for the ELAN to FLEX export process, as the same font and encoding must be used in the .eaf file as in the FLEX file in order to avoid encoding problems with punctuation, etc. Changing the tier font through this menu changes all the annotations in the tier, so it is possible to use one font for annotating, and then change it to the FLEX font when the annotations are complete. Section 3 details how to find the font used in FLEX.

Finally, notice that in addition to adding and changing tiers in the pop-up, tiers may also be deleted. Be sure to click “Add”, “Change”, or “Delete” (as relevant) before switching to a different tab in the pop-up or before hitting “Close”. These buttons will apply the changes you make immediately, and you can see the tier structure change if Annotation Mode is open in the background of the pop-up.

2.3 Saving a tier structure as a template

Once you have developed a tier structure that works for your project, you can save it as a template that can be loaded for future annotations. Just click on “File” → “Save as template”. Make sure to give the file a descriptive name and select a folder/location that is easy for you to locate in the future. If you use multiple templates, you can even save them in different folders corresponding to the different data types they are intended for (e.g., stimuli responses vs. naturalistic speech, monologic vs. multi-party speech).

Template files have the extension .etf, whereas annotations linked to specific media have the extension .eaf.

Another useful tool in ELAN is the “Import Tier” feature under the “Tier” menu. This feature can copy tiers from either an .eaf (annotation) or .etf (template) file to be used in a new/modified tier structure.

2.4 Using complex tier structures

One of the strengths of ELAN for creating annotations is the handling of overlapping speech of different participants in multi-party interaction. As we saw in section 2.1, ELAN permits a bundle of tiers for each participant, and makes it easy to visualize their overlaps and temporal organization in Annotation Mode. Transcription Mode makes transcription and translation of multi-party speech easier for the linguist and the consultant by chronologically ordering the annotations across different participants, as seen below.

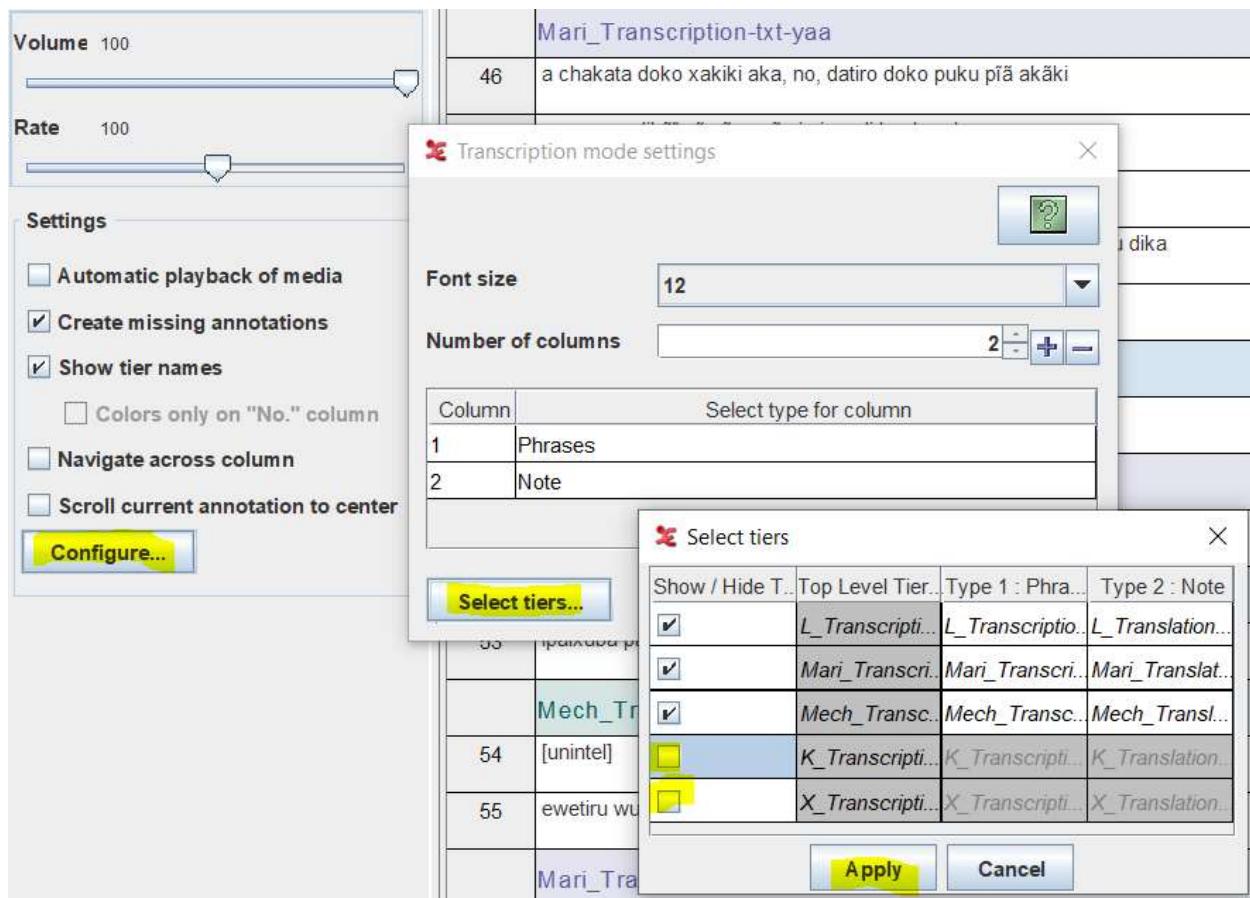
The screenshot shows the ELAN 5.6-FX software interface in Transcription Mode. The window title is "ELAN 5.6-FX - Yaminawa_2016-11-04_LAW+MML+MMS_KCN_0538.eaf". The menu bar includes File, Edit, Annotation, Tier, Type, Search, View, Options, Window, and Help. The toolbar on the left includes buttons for playback (rewind, play, fast forward, stop), a "Loop Mode" checkbox, and a volume slider set to 100. The timeline below shows a red vertical line at 00:00:46.000. The "Settings" panel on the left contains checkboxes for "Automatic playback of media" (unchecked), "Create missing annotations" (checked), "Show tier names" (checked), "Colors only on 'No.' column" (unchecked), "Navigate across column" (unchecked), and "Scroll current annotation to center" (unchecked). The main area is a table with three columns: "No", "Type 1 : Phrases", and "Type 2 : Note". The table contains 20 rows of data, with rows 14 and 17 highlighted in grey. The data is as follows:

No	Type 1 : Phrases	Type 2 : Note
	Mech_Transcription-txt-yaa	Mech_Translation-gls-es
14	mā aka, awara ñāñā duku yuipe, ñāñā	ya esta cuenta nos algo
	Mari_Transcription-txt-yaa	Mari_Translation-gls-es
15	yuiki tae wainū	yo primero voy a contar
	Mech_Transcription-txt-yaa	Mech_Translation-gls-es
16	awatsi, nū chitudawa wāwunā	que cosa? de los mashco piros
	L_Transcription-txt-yaa	L_Translation-gls-es
17	nu chitunawa	los mashcos
	Mech_Transcription-txt-yaa	Mech_Translation-gls-es
18	atu akitāwu	vamos a contar lo que la pasado
	Mari_Transcription-txt-yaa	Mari_Translation-gls-es
19	wanimē wanimē, atu tsaiki	a ver donde, donde es que vamos a conversar
	Mech_Transcription-txt-yaa	Mech_Translation-gls-es
20	ejē, da, diri shara uwē	si, este, ven mas acacito
	L_Transcription-txt-yaa	L_Translation-gls-es

Automatic color coding of different participants makes it easy to identify which speaker you are transcribing. The color can also be customized in the Tier attributes menu, as described above. The chronological ordering of the tiers makes it easier to work with native speakers to transcribe overlapping speech, which is notoriously difficult.

If you use a complex structure that involves tiers that contain annotations beyond just the standard transcription and translation kind, there are some potential pit-falls that can be avoided by thoughtfully designing your tier structure.

- If you use multiple dependent tiers that have the same tier type attribute, this can cause you to have difficulty selecting which tier of that type you want to appear in Translation Mode. This is commonly an issue with a type like “Note” used in the examples here. To avoid this, make a type with identical attributes but give it a different type name. In this way, you can precisely select which tier(s) you want displayed in Translation Mode.
- If you use a tier structure that has annotations at the parent level that you do not want to include in Transcription mode (for example, tiers containing the linguist’s speech, or parent-level notes), you can de-select those top-level parent tiers by clicking “Configure” → “Select tiers...” → (de)select relevant tiers → “Apply” → “Apply”.



3 Exporting from ELAN to FLEX

This section explains how to export an ELAN .eaf annotation file to a .flextext file that can be imported to FLEX for interlinearization. In order to attempt the steps described in this section you will need the following:

- 1) both ELAN and FLEX installed on your computer,
- 2) an ELAN .eaf annotation file with a completed transcription and translation, and
- 3) a FLEX database set up for the study language, with the writing system configured.

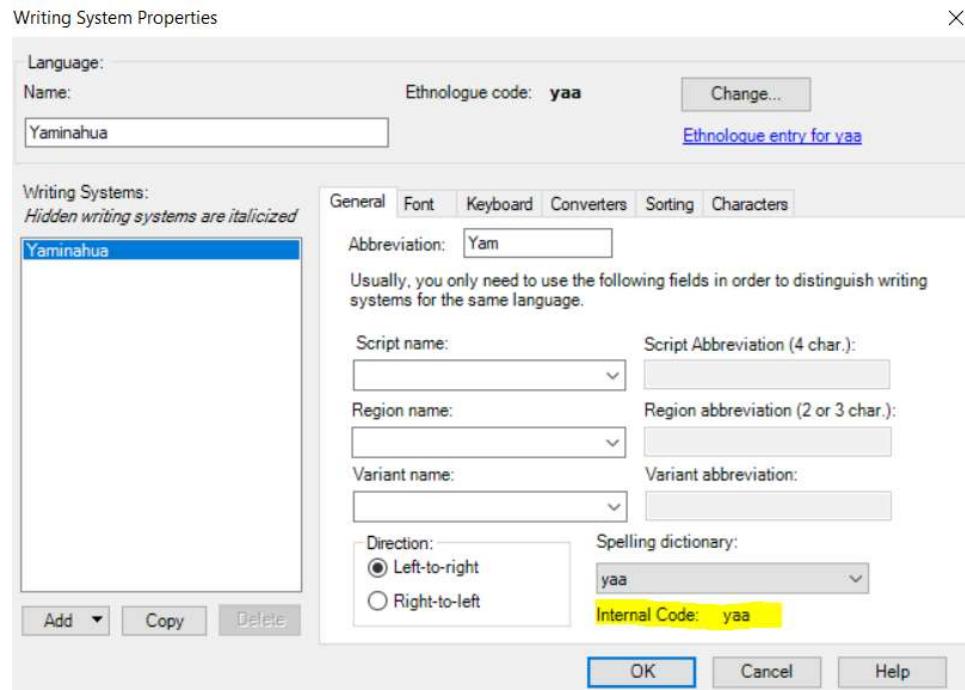
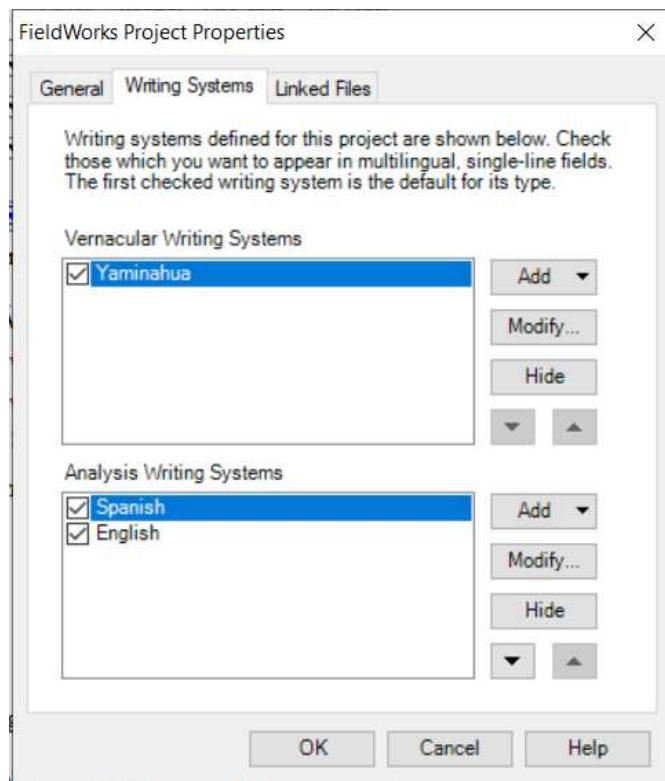
3.1 Before you start the export

Before starting the export process, you will need to check some things in your ELAN annotation and in your FLEX database to avoid errors.

- 1) The ELAN .eaf file that you want to export should be more or less complete -- make sure that the transcription and translation are “finished” (meaning you are mostly confident in your phonological analysis and ready to start interlinearizing).
- 2) Minimally, the tier structure should have the following three tiers:
 - Metadata (top-level)
 - Transcription (top-level)
 - Translation (dependent of Transcription)
 The tier structure may have additional tiers and this should not cause any problems as long as they have different tier types than “Text”, “Phrases”, and “Note” which are used for the export (see section 2). In the event that you use the same tier types for additional tiers, you will want to make sure during the steps of the export process that you select the correct ones (one of the three above).
- 3) Unfortunately, the export does not work well for multi-party interaction and will not add participant labels for individual lines in FLEX, as FLEX is designed for use with monologic texts only. In version 5 of ELAN, an Interlinear Mode was introduced, and this seems like a promising avenue for researchers interested in interlinearizing conversation in a structured way.
- 4) The minimal three tiers listed above should have the appropriate suffixes to their names:
 - the metadata tier should end in ‘-title-xxx’,
 - the transcription tier should end in ‘-txt-xxx’, and
 - the translation tier should end in ‘gls-yyy’,
 where ‘xxx’ is the FLEX internal code for the vernacular/study language and ‘yyy’ is the internal code for the analysis/contact language.
- 5) The font used by the transcription and translation tiers must be the same as the font specified in the “Writing Systems” settings in FLEX.

To check for the font and language internal codes in FLEX, click “Tools” (in the menu bar) → “Configure” → “Set up Writing Systems”. This will open a pop-up like this:

In FLEX, the “vernacular” language refers to the language being studied and the “analysis” language(s) refer to the language(s) used as a contact language or for other levels of analysis.



Highlighting a language and clicking the “Modify...” button to the right of it opens another pop-up window that displays the FLEX internal language code used to identify each language. This is usually, but not always, the same as the ISO code for the language.

Clicking on the “Font” tab displays the font used in FLEX for the language. Make a note of the font(s) and of the Internal codes of the vernacular and contact analysis language. **Change the tier names to include the language codes and change the tier fonts to match FLEX** (as described in section 2.2).

3.2 The export process

Once you have changed the tier names to include the language codes and changed the tier fonts to match FLEx, you are ready to begin the export process. To begin the export click “File” → “Export as” → “FLEx file”. This will open a pop-up that will guide you through the .eaf to .flextext export process.

Export as FLEx file

Step 1/4: Element Mapping

Element Mapping

Export interlinear-text tier **Interlinear-title-yaa**

Export paragraph tier

FLEx Element Name	Corresponding Tier Type
paragraph	
phrase	Phrases
word	No linked types available
morph	No linked types available

Select tiers to be exported

paragraph	phrase	word	morph
	<input checked="" type="checkbox"/> A_Transcription-txt...		

Previous Next Finish Cancel

Make sure the “Export Interlinear-text tier” box is checked and select your metadata tier (in this case “Interlinear-title-yaa”) from the drop down.

Doing so will automatically populate the Transcription tier (of the type ‘phrase’) in the bottom boxes where tiers are selected for export.

When this step is complete, click “Next”.

The pop-up should automatically select your translation tier for export.

Export as FLEx file

Step 2/4: Element-Item Configuration

Select a tier type for ‘morph-type’ tiers

Item Mapping

interlinear-text_item	phrase_item	word_item	morph_item
No linked types available	Note	No linked types available	No linked types available
No linked types available	No linked types available		

Select tiers to be exported

interlinear-text_item	phrase_item	word_item	morph_item	morph-type
	<input checked="" type="checkbox"/> A_Translation...			

Previous Next Finish Cancel

If not, go back and check in your tier structure that the transcription tier is the parent of the translation tier, and that transcription has the type “Phrases” and translation has the type “Note”.

When this step is complete, click “Next”.

In the third step, check that the types and languages are correct.

Export as FLEX file X

Step 3/4: Element-item 'type' and 'lang' attribute configuration

Specify the value for type and lang attribute based on

tier tier type

TierName	type	language
interlinear-text		
Interlinear-title-yaa	title	yaa
phrase		
A Transcription-txt-yaa	txt	yaa
A Translation-gls-es	gls	es
word		
morph		

Type-Lang value configuration

Add/remove values for type language

Add custom value Add

Select the value to be removed <select> Remove

Previous Next Finish Cancel

The type and language values are based on the suffixed information in the tier names. The “title” and “txt” types should be in the study language and the “gls” type should be in the analysis/contact language. The language codes must match those used by FLEX, as described in 3.1.

The “title” type will go in the title field of the FLEX text, the “txt” type will go in the baseline, and the “gls” type will go in the “free translation” line associated with each line of the baseline in FLEX.

When you have checked that the types and language codes are correct, click “Next”.

Export as FLEX file X

Step 4/4: Save as

Select destination file Browse...

Previous Next Finish Cancel

In the final step, click “Browse...” to choose a location for the exported file and to give it a name.

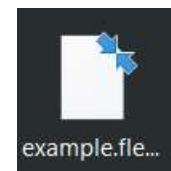
Export as FLEX file X

Step 4/4: Save as

Select destination file Browse...

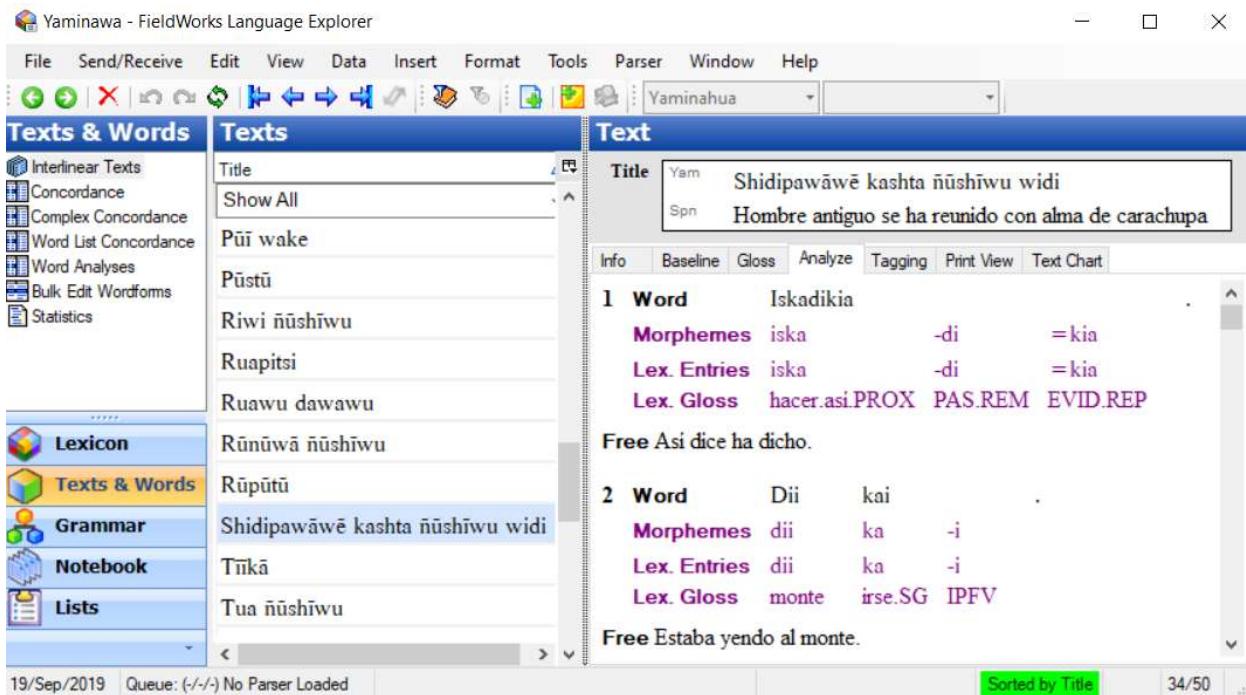
Previous Next Finish Cancel

Click “Finish” to complete the export. The flextext file will now appear in the folder you indicated.

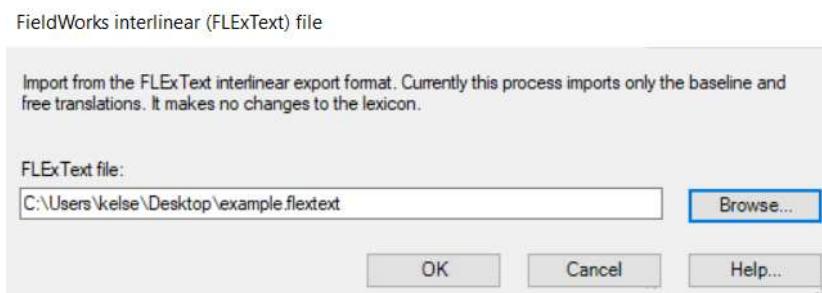


3.3 The import process

Once the .eaf file has been exported to a .flextext file, you can begin the import side of the process in FLEX. Navigate to the “Texts & Words” tab at the bottom left corner, and select “Interlinear Texts” at the list on the top left.



In the menu bar, click “File” → “Import” → “FLEX Text Interlinear...”.



Click “Browse...”, navigate to the folder where you saved the .flextext file, and select the file.

Click “OK”.

The text will now appear in the list of texts, using the title specified in the metadata tier. Each segment in the .eaf file will be imported as a numbered line in the .flextext, with the translation appearing in the baseline (the material listed next to “Word” in the Analyze tab), and the translation appearing in the Free Translation line (the material listed next to “Free” in the Analyze tab).

The text is now ready to be interlinearized and analyzed in FLEX! FLEX allows you to export interlinearized texts back to a .flextext file (for import back to ELAN or to other FLEX projects), as html, xml, or an OpenOffice .odt file. To export the texts from FLEX, click “File” → “Export Interlinear...” while in the “Texts & Words” tab with “Interlinear Texts” selected. Formats like XML can be further parsed by Python scripts to be output to other formats like LaTeX.

4 Using ELAN with Praat

ELAN can be used with Praat in two ways: opening audio from ELAN directly in Praat, and the import/export of annotations between .eaf and .TextGrid format. This section briefly covers how to use ELAN in workflows that involve the use of Praat.

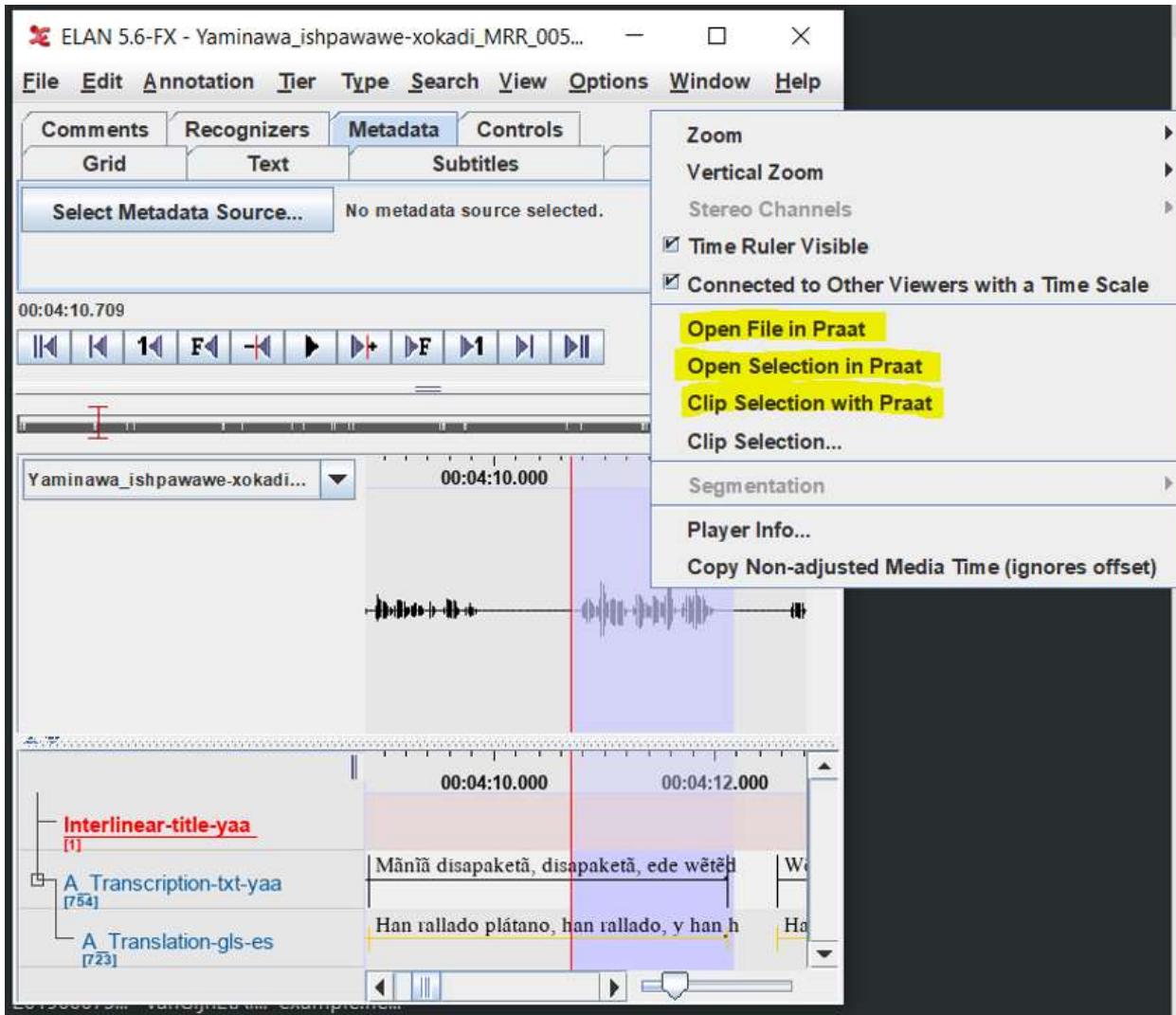
4.1 Viewing audio from ELAN in Praat

ELAN can be linked with Praat to allow you to open selections or make clips in Praat directly from the waveform in ELAN. In order to do this, you will need the following:

- 1) ELAN installed, with a media file opened
- 2) Praat downloaded (<http://www.fon.hum.uva.nl/praat/>)
- 3) SendPraat downloaded (<http://www.fon.hum.uva.nl/praat/sendpraat.html>)

I recommend putting the SendPraat executable in the same place as the Praat executable – for most people this is usually right on the desktop.

In ELAN, select a portion of the waveform as shown below and right-click to open the menu. This will give you various options for viewing the material in Praat.



“Open File in Praat” opens the whole media file in Praat. **“Open Selection in Praat”** loads the whole media file in Praat, but the window opens centered and zoomed in on the portion that you select in ELAN. **“Clip Selection in Praat”** works like “Open Selection in Praat”, but it takes the extra step of clipping the selection from the rest of the media recording. Note that the file will still need to be saved as a .WAV or other format from Praat.

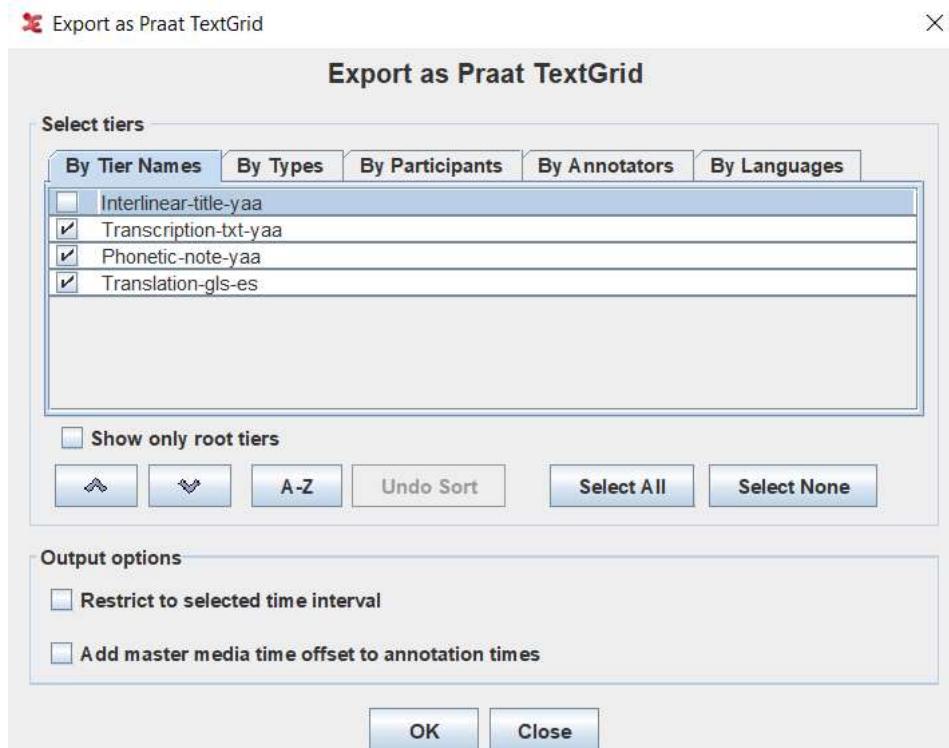
The first time that you attempt one of these three options, ELAN will take you through a short dialogue to select the locations of Praat and the SendPraat executable. It's just that easy!

These same options are also offered if you select part of the waveform in the small window in ELAN's Transcription Mode pane.

4.2 Importing and Exporting to/from Praat TextGrids

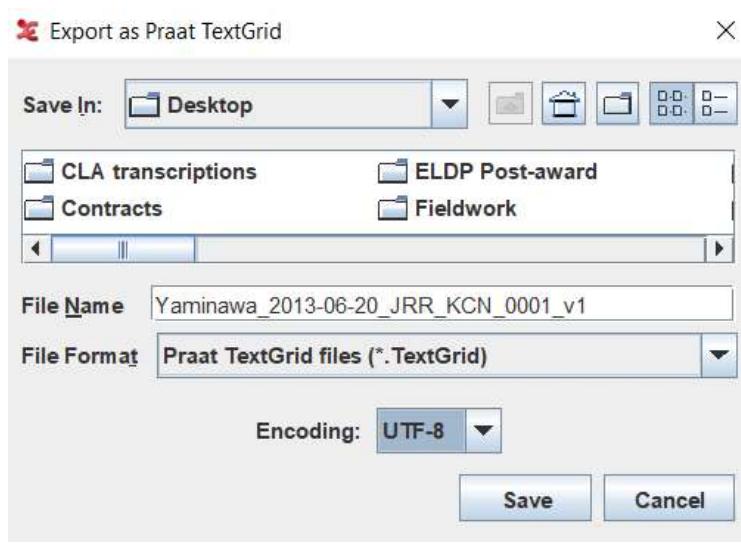
ELAN allows both import from and export to Praat TextGrid files.

ELAN makes transcription very fast, but Praat has some capabilities like clipping and scripts that make it very useful for linguists, particularly interested in phonetic detail. To export an .eaf transcription to a .TextGrid transcription, open the .eaf in ELAN, then click “File” → “Export as” → “Praat TextGrid”. This will open a window like this:



Select the tiers that you want to be exported to the TextGrid.

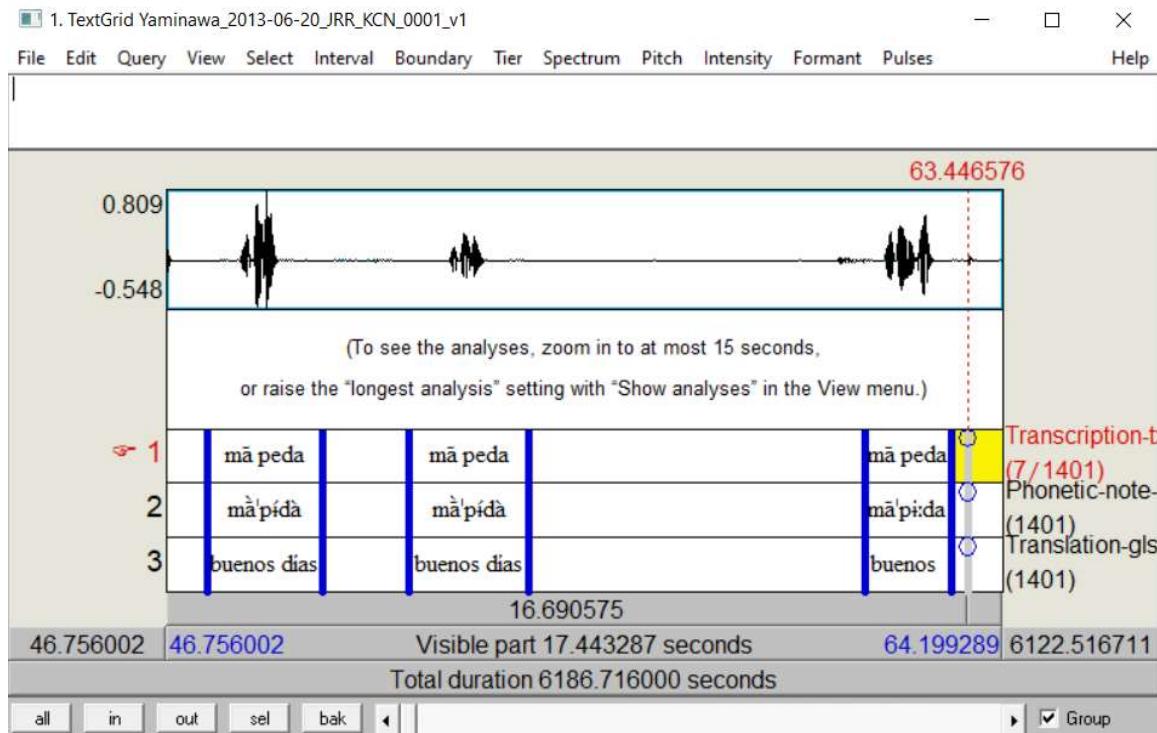
Click “OK”.



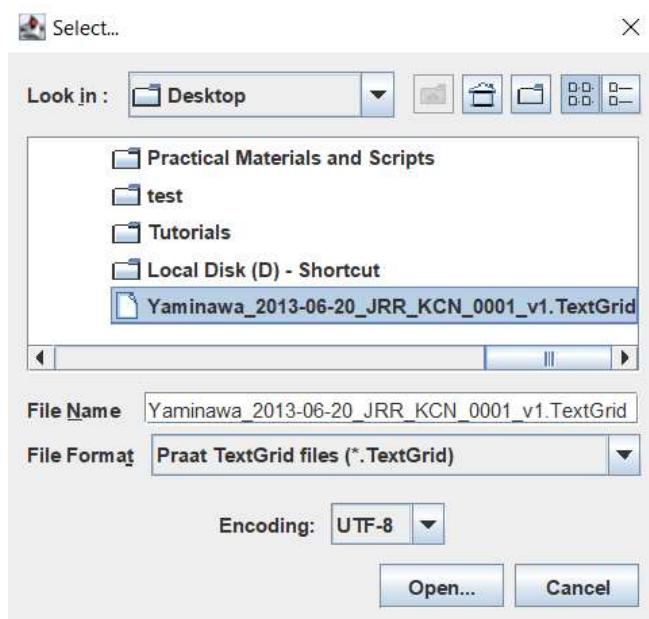
Select a location for the TextGrid file, name it, and click “Save”.

Note that encoding is sometimes an issue – ELAN gives you the option to output as UTF-8 or UTF-16. Praat is usually set to read UTF-8. (You can check this in Praat by clicking “File” → “Preferences” → “Text reading preferences”.)

You can now open the TextGrid and audio file in Praat. As you can see below, the hierarchical structure of tiers in ELAN is flattened in a TextGrid representation.



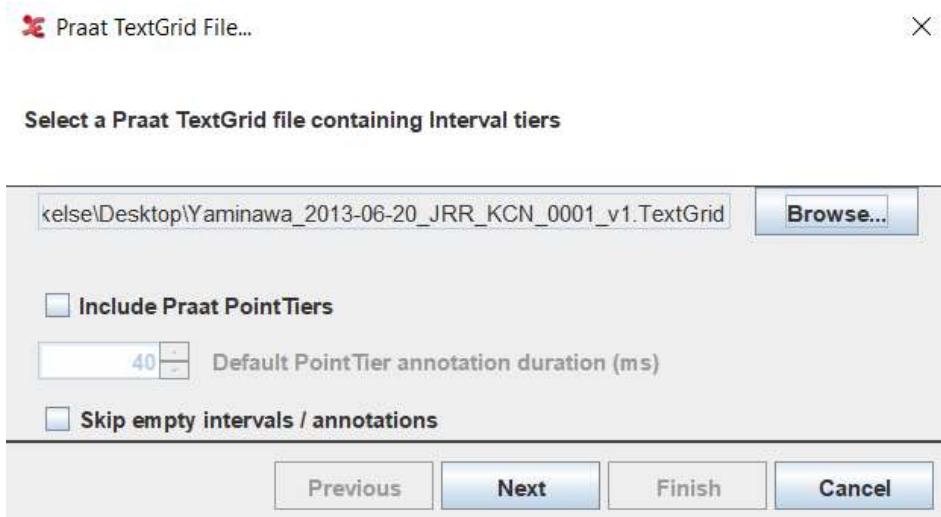
It is also possible to import TextGrids as .eaf files in ELAN. This can be useful for researchers who started out transcribing in Praat and switched to ELAN, and who want to put all of their transcriptions in the same format. To do this, click “File” → “Import” → “Praat TextGrid File”. This will open a pop-up dialogue that asks you to choose the TextGrid file that you want to import. Clicking “Browse...” will open a dialogue box to select it:



Select the file you want to import.

Remember to check the encoding, and be sure that it matches the format that Praat writes to. You can check this in Praat by clicking “File” → “Preferences” → “Text writing preferences”.

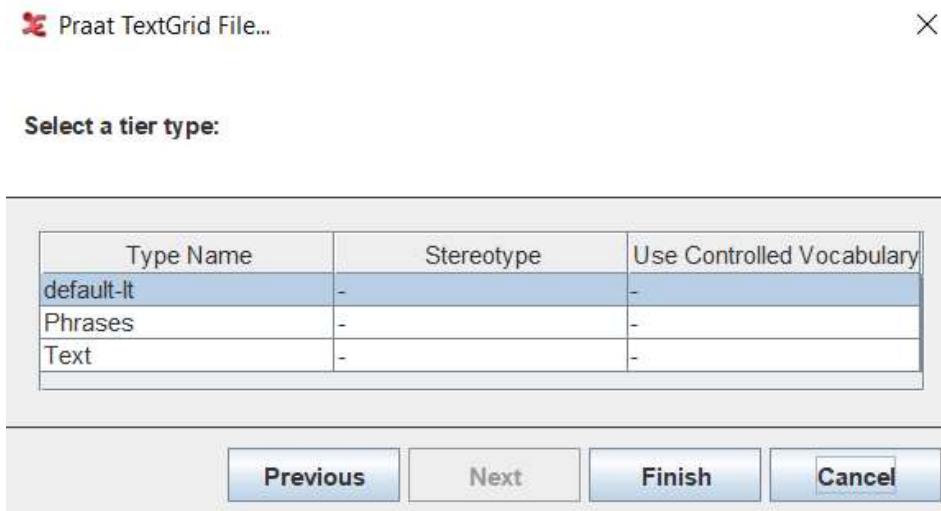
When you have done this, click “Open”.



ELAN gives you the option to include PointTiers and to Skip empty intervals. In most cases, you will want to Skip empty intervals.

Click “Next”.

This will open the next window in the dialogue.

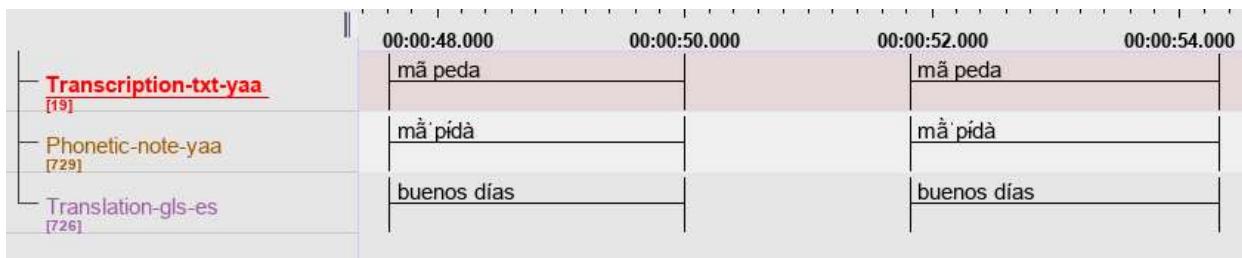


Choose a tier type for your tiers to be imported as.

Because TextGrids have a flat structure, you will only be given options for types with the stereotype “none”.

Click “Finish”.

You should now be able to see your annotations:



Finally, make sure to save the file!