



## How to align transcriptions

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This document explains how to align a completed transcription with a recording. This is a task that typically arises when you transform a legacy corpus in EXMARaLDA, and when your original data were not (or insufficiently/inaccurately) aligned. Before you start reading this document, you should read

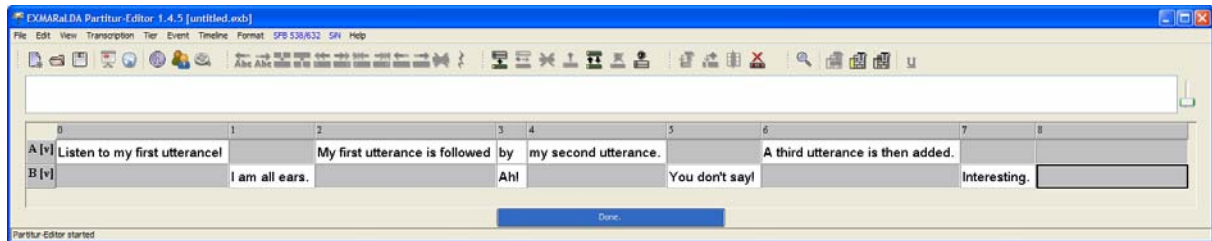
- Understanding the basics of EXMARaLDA
- How to get started
- Audio and video support in EXMARaLDA
- How to make a transcription from a digital recording.

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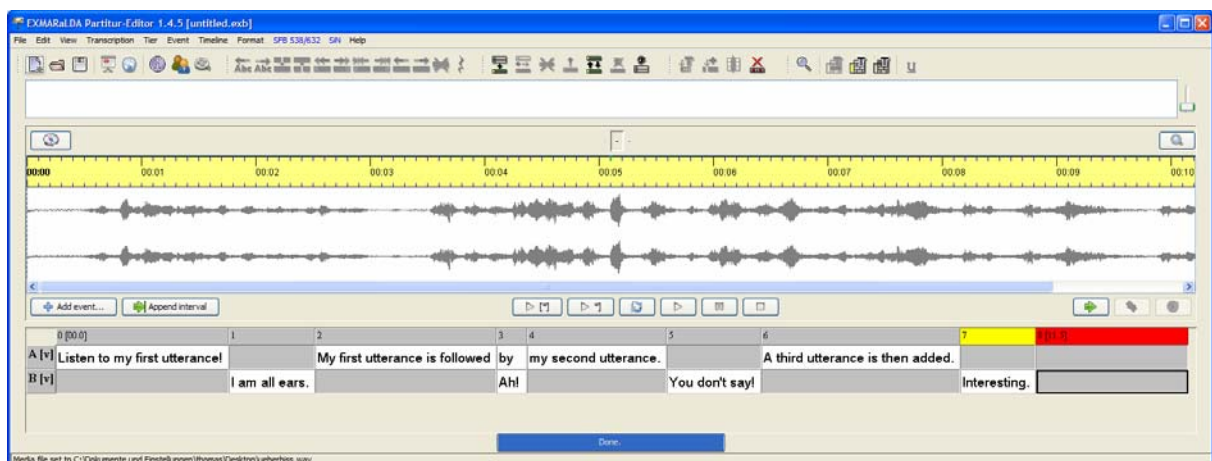
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## 1. Setting up the transcription and the recording

An unaligned transcription typically has no absolute times in the timeline and is not linked to an audio or video recording. When you open an unaligned transcription in the Partitur-Editor, the waveform view is therefore invisible, and the timeline only contains running numbers for the intervals.



The first thing to do is therefore to assign a recording to the transcription. This is done via [Transcription > Recordings....](#) Add your recording to the list and click **OK**. The recording should now be displayed in the waveform view. The timeline is anchored to the recording, i.e. the first interval is assigned the absolute time 0.0, corresponding to the beginning of the recording, and the last interval (now appearing in red) is assigned to the absolute time corresponding to the end of the recording.



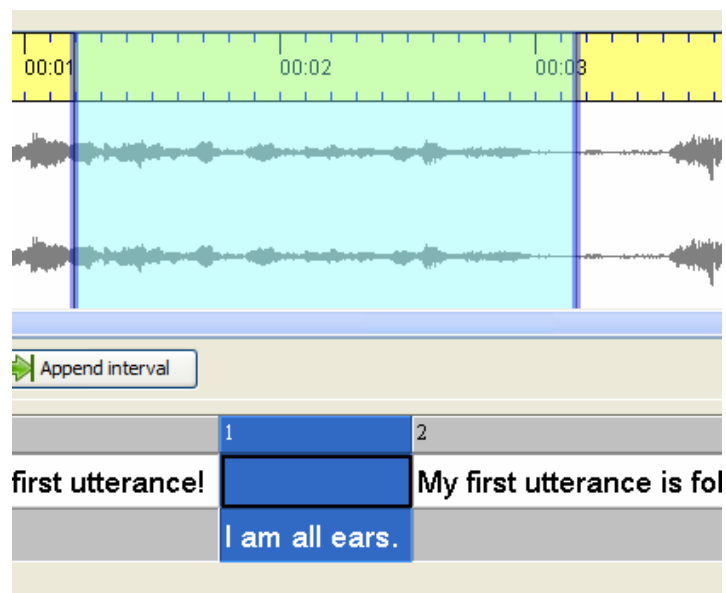
## 2. Aligning individual timepoints / intervals

You can now start to align individual points or intervals in the timeline with specific times in the recording. To do so, proceed as follows:

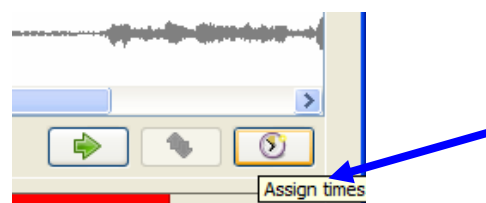
1. Select an interval in the transcription which is not yet aligned with the recording:

	0 [00:0]	1	2	3
A [v]	Listen to my first utterance!		My first utterance is followed	by
B [v]		I am all ears.		Ah!

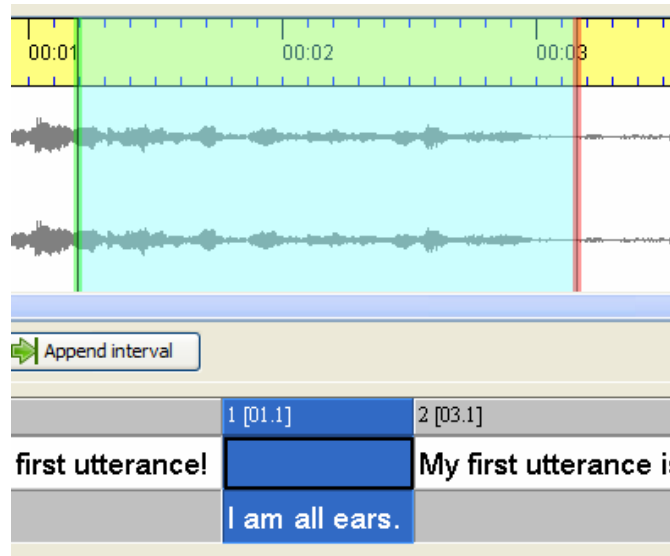
2. Find and select the corresponding part of the recording in the waveform view. Note that the selection boundaries appear in blue since they are not yet attached to an interval in the transcription's timeline.



3. Click on the Button **Assign times** on the right side of the panel between waveform view and transcription.

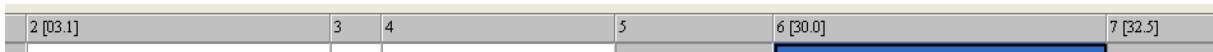


4. The interval selected in the transcription will now be assigned the start and end times of the interval selected in the waveform view. Note that the absolute times now appear in the transcription's timeline and that boundaries in the waveform view are now green and red since they are now attached to an interval in the transcription's timeline.

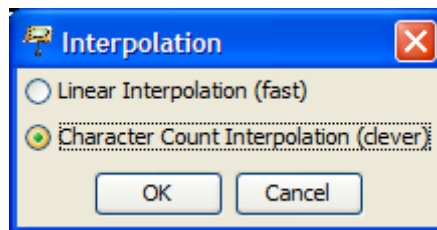


### 3. Interpolating the timeline

In principle, you could align an entire transcription by repeating the steps described in 2) for each interval in the timeline. However, we found that there is a more efficient way to accomplish a full alignment. To do so, repeat the steps described in 2) not for each interval, but for a couple of intervals which are equally distributed across the timeline, i.e. place an absolute time stamp about every 30 seconds. Your timeline will then consist of a couple of timepoints *with* absolute times, interspersed with stretches of timepoints *without* absolute times:

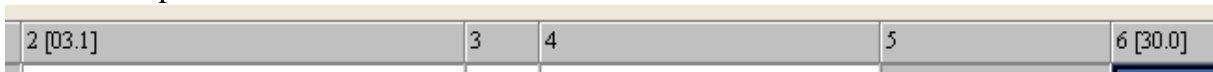


Now choose **Timeline > Interpolate timeline**. The following dialog will be displayed.

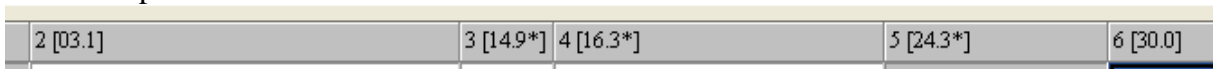


For most purposes, it is better to choose **Character Count Interpolation** in this dialog. Clicking on OK will calculate approximate absolute time values for all points in the timeline which so far were not aligned with the recording. Such interpolated times are marked with an asterisk:

Before interpolation:



After interpolation:



#### 4. Adjusting interpolated times

Absolute times resulting from interpolation are usually not 100% accurate, so you have to adjust them. To do so, select the point in the timeline of the transcription. The corresponding part of the waveform view will be automatically selected, too.



Dragging the green and red boundaries in the waveform view (or moving them by scrolling the mouse wheel) will now also change the absolute times in the transcriptions. Adjust the times until the selections in the recording and the transcription match. Note that this will make the asterisk(s) disappear, i.e. the absolute time is henceforth treated as non-interpolated.

In order for this procedure to work efficiently, you should start out with an interval in the recording which at least partly corresponds to the selection in the transcription. In other words: the interpolation should be at least approximately correct. If this is not the case, do the following:

- 1) Remove all interpolated times through [Timeline > Remove interpolated times](#).
- 2) Set the absolute times for the interval in question as described in 2)
- 3) Do a new interpolation with [Timeline > Interpolate times](#)

Sometimes, a lucky coincidence gives you an interpolated time which is exactly accurate. In this case, you can remove the interpolation status by selecting the timepoint in question and choosing [Timeline > Confirm timeline item\(s\)](#).