

## Phon Demonstration

**Download** the latest version of Phon from <https://www.phon.ca>.

Choose from the **macOS** or **Windows** operating systems.

The setup wizard will lead you through the **installation** process.

**Open** the program and you'll see the **Welcome** window.

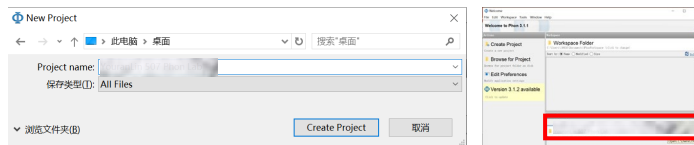
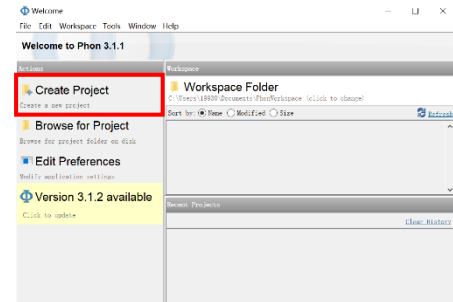
### Create a new project.

A project is the largest structure of your dataset.

The default location for Phon projects is “**PhonWorkspace**”.

But I chose to create my new project on my **desktop**.

The new project showed up in my “**Recent Projects**”.

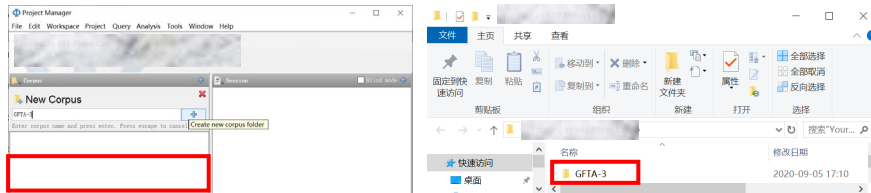


Open the project and **create a new corpus**.

A corpus is a subset of your data.

Insert **corpus name** and click on the “+” to **create**. You can create the other corpa by the scenario.

Your project and corpus (corpa) are showing up as folders in your chosen directory.



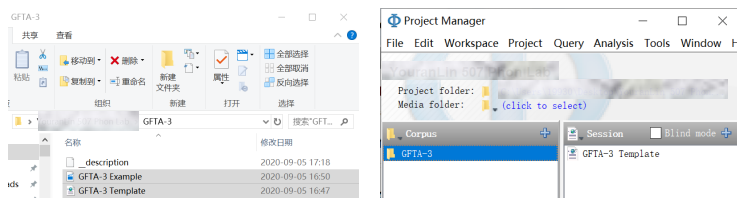
Next step we'll **import a template and a media file**.

Download the “**GFTA-3 Temple.xml**” file and “**GFTA-3 Example.mp4**”, and save them under your corpus folder “**GFTA-3**”.

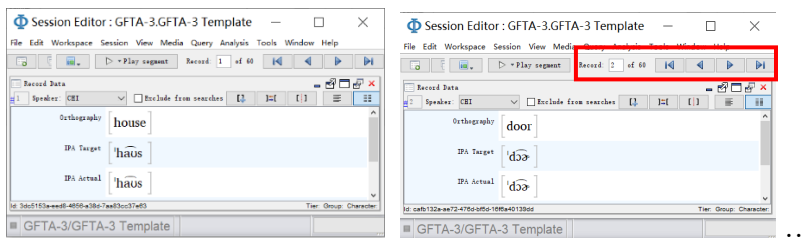
Now **close and reopen** your **Project Manager**, you'll see the template showed up as a **session**.

You can also simply **drag the xml file into your session box**.

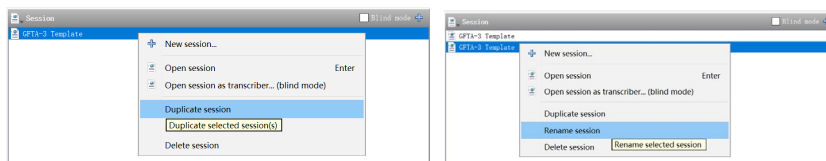
A **session** is a file for one test on one day (or one period) that correlate with one media file.



The **template** contains a pre-transcribed list of standardized target words. Word order is usually predictable. Each word/utterance is a “record”. Use the buttons to **play, go to the next, go to the end**, etc.

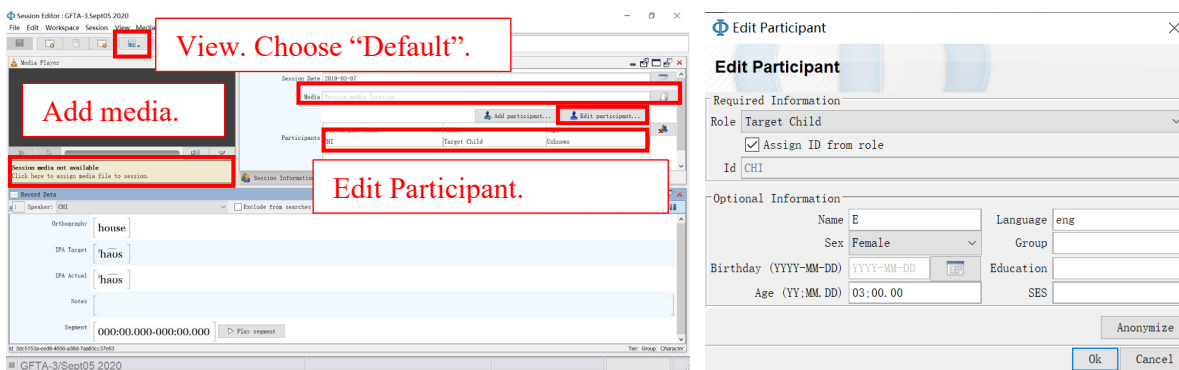


You never want to transcribe directly in the template. **Duplicate the template** and **rename the session**. For example, I named the session “Sept05 2020” to indicate the date of testing.

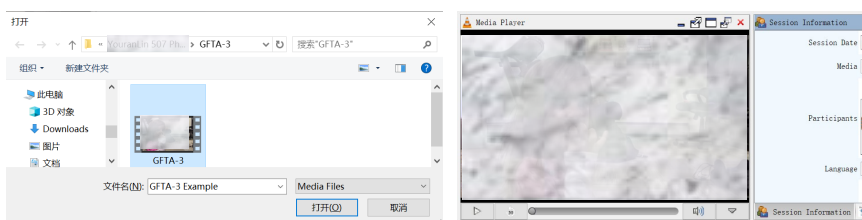


Open the session, you should see this view. If your window looks different, use the “View” button and choose “Default”.

There’s a default child speaker in the template. Highlight the line, click on “**Edit participant**” and **fill in the child information**. You can choose what information is important to be documented.



Now click on the yellow bar under the Media Player, or the folder button at the end of “Media” directory. **Browse and choose the media file**, then it will be **imported to the Phon session**.



**Save your session** periodically.

Now we are going to **segment the file**.

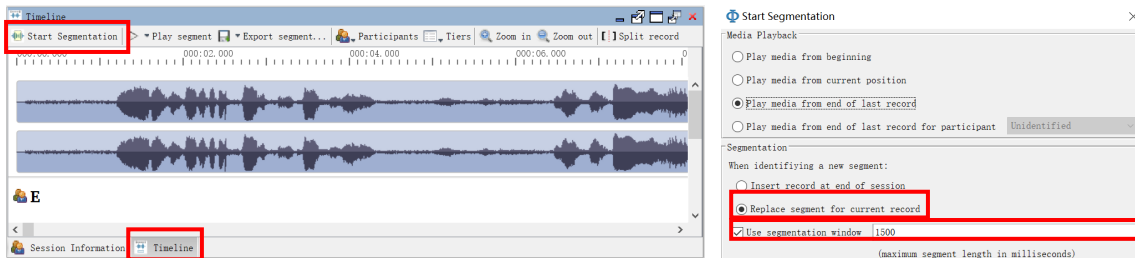
Just in the past year, Phon developed a new function of “**Timeline**” which visualized waveform.

If your waveform is not showing up, you might need to click on the notification to generate it.

Click on “**Start Segmentation**”, and a window will pop up with settings.

For template segmentation, the most important is to choose “**Replace segment for current record**”.

For isolated single words, 1000-1500 ms **segmentation window** is usually enough.



Hit “**Enter**” after choosing the segmentation settings. The video will start to play, and you see a colored **segmentation window** moving along the waveform. That is your segmentation window.

When you start to segment, **hit a keystroke (“1” for the first participant)** as soon as the child finished saying a target word. Phon will put a time marker where you hit the keystroke, and another marker 1500 ms earlier. Therefore your target word will be contained in the “window”.

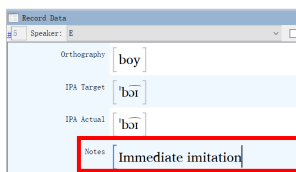
Meanwhile, that window of waveform will be assigned to Record #1 (“house”), and your record data will automatically proceed to Record #2 (“door”), waiting for you to hit the keystroke.



You may keep going and finish segmenting the whole file in one sit. But you might need to pause and make some adjustments, or just to take a break.

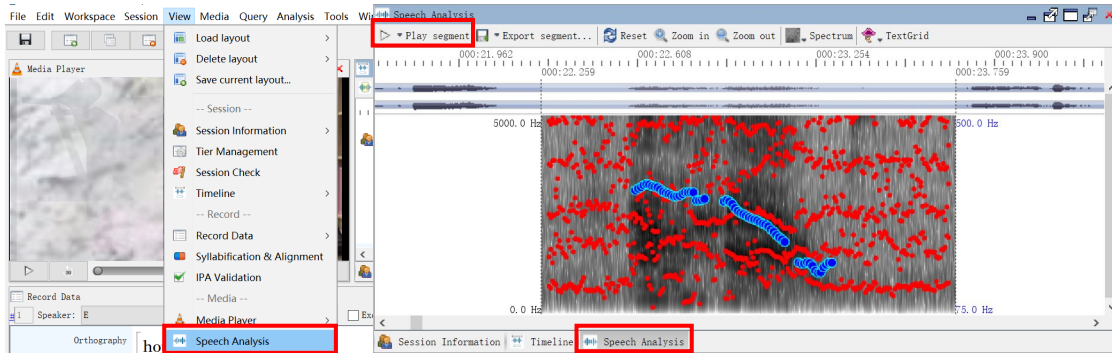
You are able to **adjust the segmentations** by moving it or changing its length.

Some productions were imitative (e.g. #5 “boy”). You can take that down in your “**Notes**”. Or, you can create a second participant/speaker for imitative productions. Thus, you’ll hit “1” when it’s spontaneous, and hit “2” when it’s imitative.



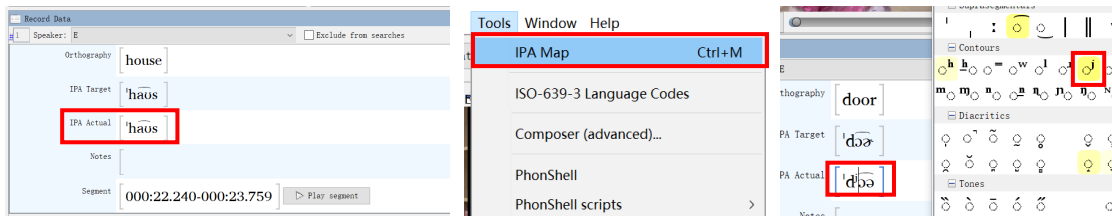
Make sure all the records have been segmented properly. Now we’ll go back to Record #1 and **transcribe!**

To get the acoustic cue, you need to go to the “View” menu and turn on “**Speech Analysis**”. You’ll see a spectrogram showing up for the current record. If acoustics doesn’t help you, you can skip this step.



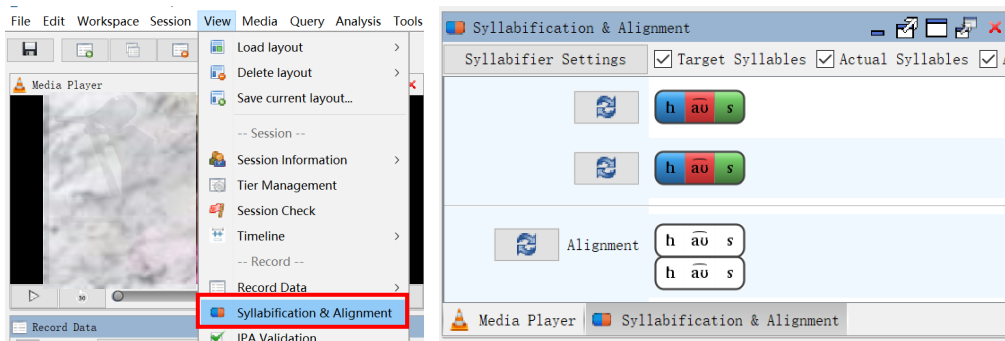
Hit the button “**Play segment**” (It’s basically everywhere in Phon) to watch/listen the records. You can select a **part of the word** to listen. Don’t forget your **visual cues** from the video too!

You’ll work in the tier of “**IPA Actual**” to **make changes to the expected pronunciation** (streamlining). If it sounds no-problem to you, you don’t need to change anything in **IPA Actual**. If there’s a difference, open “**Tool - IPA Map**” and use the symbols to **replace the expected transcription**. If the child used an acceptable variation, remember to change the **IPA Target** to avoid mismatch.



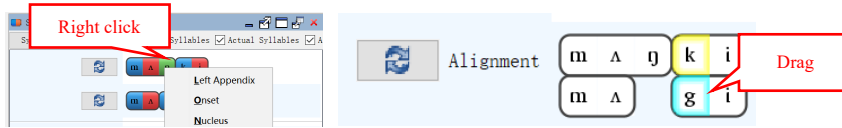
Like we discussed in the class, **alignment** is the foundation of computer-based analysis. Open “**View – Syllabification & Alignment**”, you’ll see a new window open.

\* Phon’s automatic syllabification and alignment are usually accurate for English, but still worth checking.



Right click on the squares, you may **change the syllabic position** of this segmental/sound.

You may also drag the segmentals to **fix any mis-alignment**.



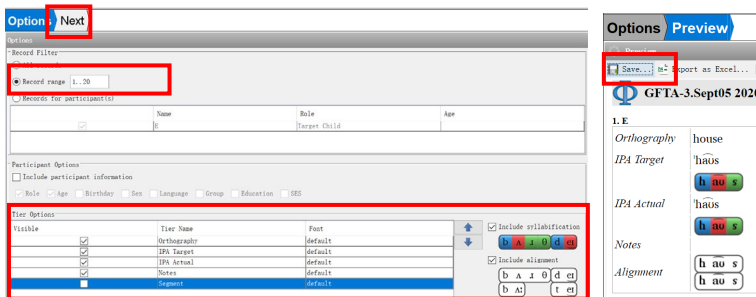
You need to **export your session** to a readable PDF for submission.

Go to “**File – Export session (HTML)**”.

You can change the settings to include only 20 records.

Make sure to include **Orthography, IPA Target, IPA Actual, Notes (if any), Syllabification & alignment**.

Hit “**Next**”. **Save as HTML**. Right click on the opening webpage, and choose “**Print – Save as PDF**”.



(Optional) Practice **segmenting and transcribing without template**.

**Create a corpus** for unstructured speech sample. **Create a new session**.

Now download “Connected Speech Sample.mp3” and import it to the Phon session. **Create a new participant**. You’ll notice that you don’t have any record data (yet).

When segmenting, **set your window longer** (~ 3000 ms, or even longer), and choose “**Insert record at end of session**”. Thus, each time to hit the keystroke, you’ll insert a new record.

After segmenting, you might have to **adjust the position and length of your windows** A LOT.

You need to **transcribe the records orthographically**.

Go to “**View – IPA Lookup**”, you’ll see a new window open.

Choose “**English**” as your IPA Dictionary language, and click “**Auto-transcribe Session**”. Make sure both **IPA Target and Actual** are checked.

You can use this method to **generate your own template** for any test or wordlist!



Now close the IPA Lookup window. Your records should include IPA transcriptions now!

You can start from the first record and do the **streamlining transcription** in IPA Actual.