Recording Procedure

AAC Speech: Auditory Stimuli

What you need:
- [Audacity](#) (free)
- Microphone
- Quiet space or Sound-attenuated booth
- Video call method
    - [Zoom](#) via [Zoom client software](#) or in-browser version
    - Google Meet

Before the recording session
1. Meet with the researcher over video call.
    a. Go over procedure and wordlist instructions, including the expected pronunciations for each phonetic variant
    b. Clarify any questions about the speaker information survey questions (including consent to use recordings options), recording procedure, recording set-up, research project, etc
2. Fill out the **Speaker Information survey**. (Optionally, complete after recording)
    a. Don't feel like you have to spend too much time on your answers! Some context is enough.
    b. You can submit and come back to change your answers if necessary. To do so, you'd have to copy the 'Edit your response' link that appears after submitting your response (this may look like right clicking on the link, then choosing 'Copy Link').
        i. In particular, if you complete the survey early but won't have all the recording equipment details until you sit down to record, you can skip those questions for now.
3. **Find and set up your quiet space**:
    a. E.g. Sound-attenuated booth in a lab
    b. E.g., Choose a quiet, private room and close the doors and windows. ACs, fans, TVs, refrigerators, cell phones, and other computers should not be in the room or should be turned off.
4. (If you don't already have it) **Download and install [Audacity](#).**

At the start of recording
1. **Open [Audacity](#).**
2. **Check the audio input**.
    a. In the newest version of Audacity (3.2.4), click on "Audio Setup" > "Recording Device". In older versions of Audacity, click the menu next to the microphone icon (Image below).

b. Audio input might be the "Built-in Microphone" if you are just using your laptop, or a USB microphone (e.g. "Blue Snowball") if you've plugged one in.

c. Whatever mic you use, be sure that it is positioned about 6 inches in front of (and slightly off to the side of) your mouth. You may need to move your laptop/mic onto a stack of books so that this position can be achieved without straining.

3. **Check the recording level.**

   a. In the newest version of Audacity (3.2.4), click on the microphone icon next to the recording level meter and select "Start Monitoring" (For visuals, see this link).

   b. While speaking at a normal volume, the meter should stay green. If it enters the yellow or red area (-9 dB to 0 dB) when testing with a normal volume, lower the recording level using the slider until it stays green while you are speaking.

4. **Check for background noise**.

   a. Be sure you're in a quiet room, with no large appliances on (e.g. fridge, TV, AC), no open windows, no foot traffic or people talking in the vicinity.

      i. If at home, ideally, sitting in a small room like a closet would be relatively sound-proof (thanks to the sound-absorbent properties of the clothing!), but only do this if it's a comfortable space. Otherwise a desk area will do.

5. **Check the Project Sample Rate.**

   a. In the newest version of Audacity (3.2.4), see the "Project Rate (Hz)" menu on the bottom left of the window.

   b. Make sure the rate is set to 44100 Hz (the default).

6. **Test the recording set-up.**

   a. Your speech should register as wavy lines as Audacity records. If this doesn't appear, check the mic itself and Audacity's mic settings again.

   b. Say something into the microphone, keeping an eye on the recording level. Listen to how it sounds, and adjust your equipment/surroundings as needed.

   c. Click the "record" icon to record, "pause" to temporarily stop (or restart) recording, and "stop" to end the recording.

   d. When you're ready to begin the actual recording, you can delete the test recording by clicking the "x" button in the top left corner of the audio track.

7. **Open the Wordlist** document.

During recording

8. **Click the "record" icon**, and read the wordlist provided by the researcher (follow the instructions on the **Wordlist** document).

   a. You can pause the recording by clicking the "pause" button, then continue when you're ready with the "pause" icon again.

After recording

9. When done, **hit the stop icon**, and then File > Export to **export as a .wav file**. (Image below.)

   a. Name the file with the Speaker Code provided by the researcher.

10. Once you have a .wav file, upload it to either your personal Google Drive or Dropbox, then **share the file** with the researcher (lspcheng@umich.edu).

11. (If you hadn't yet done so) Note down the specific details of your recording space and equipment (e.g., brand, model) and fill in the **Speaker Information survey**.

Screenshots from Audacity:

Checking your settings for recording
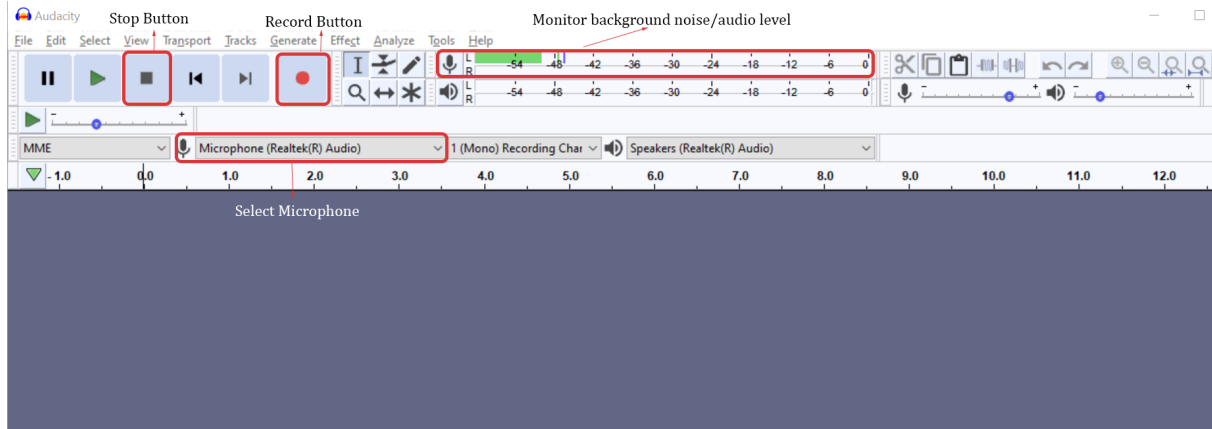
Exporting as a WAV file when done recording