Recording at a distance

Whether due to the pandemic or for other methodological reasons, we have the contemporary technology to collect great recordings for linguistic research. Here are two options that we at the Reed College Lab of Linguistics (LoL) have successfully carried out to collect recordings of participants without ever being in the same room.

These are meant to be helpful step-by-step guides for you to consult *well before* meeting with your participant. Practice these steps at least once with a friend beforehand, not only to get comfortable using the technology, but to get comfortable with using your session materials and/or questions.

Option A: Recording your participant via Zoom

Good for:

- phonetic analysis
- sociolinguistic interviews, incl. with multiple participants¹
- morphosyntactic elicitation

What you need:

- Zoom account (free account is fine; paid account allows recording to the cloud)
- Zoom client software (free), i.e. not the in-browser version of Zoom
- Audacity (free)
- Praat (free)
- Quiet space

What your participant needs:

- USB mic (if needed for the project)
- Quiet space

Before you record:

- Schedule the session with your participant.
- Communicate with them in advance about:
 - The plan for the session (i.e. what you're to do or talk about).
 - Giving their consent remotely (likely by emailing them a copy of your IRB consent form so they can read it in advance), for projects that need IRB approval (e.g. thesis).
 - Arranging mics, if required. Most projects will not require one. Ask participants if they
 have any mics at home that they can use for the session (some do!).
 - Setting up in a quiet place. Ask your participant to find a quiet, private room and to 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.

¹ You can host a Zoom session with two or more participants, get them set-up, get consent, provide instructions, and then let them know you will leave the room with your Zoom session running for 30-60 minutes while they talk. This is a nice way to still be able to control the frame around their interaction, and to receive the files at the end.

 Signing on. Let them know you either invite them from Zoom at the designated time or will send them a link to a scheduled meeting that they can click on at the appointed time.

Step-by-step procedure for recording:

- 1. **Set up your quiet space** (see above).
- 2. **Set up your Zoom session** using Zoom client software, signed in to your account.
 - a. You must be the host for the session, as only the host receives the recordings.
 - b. Click on the arrow next to "Mute" to pull up your audio settings. Your mic selection should be "Built-In Microphone" if you're using your computer's internal mic (the location of which varies by computer model), or if you are using a USB mic (e.g. Snowball), select that option, and make sure the mic is turned on.
- 3. **Set up your participant** in your Zoom session:
 - a. Click on the "i" icon at the top-left of the window if you need to copy the invitation.
 - b. Once your participant is in the session, ask them to check their quiet space setup (as above) and check their mic set-up (as above):
 - i. If they do not have a separate USB mic, their mouth should ideally be <12 inches from the laptop's mic. They can position the laptop on top of books so they don't have to strain to maintain this position.
 - ii. If they are using a separate USB mic (e.g. Snowball), ask them to place it in such a way that it is 6 inches in front of (and slightly off to the side of) their mouth when sitting comfortably.
 - iii. If you're hoping for the cleanest recording possible for acoustic analysis, ask your participant to try not to move around too much, tap their feet, kick the desk, or shuffle papers while speaking.
 - c. You may choose to "Hide Self View" and suggest the same for your participant, to encourage a more natural conversation with less self-consciousness. This depends on your sense of what will work best.
- 4. Before recording, **ask for your participant's consent** to participate in the research. Then ask them for their consent to audio-record, and (if applicable) video-record.
 - a. If you're not planning on using the video, explain to your participant that Zoom automatically records a video+audio version as well as the audio-only version, and that you will delete (or never download) the video+audio version.
 - b. For a class: "So I just want to double-check that you are ok with me turning on the recording and interviewing you/working with you for my assignment for X class. Do you have any guestions? Is that ok?"
 - c. For IRB-approved research: follow the privacy and consent procedures approved in your proposal and consent document.

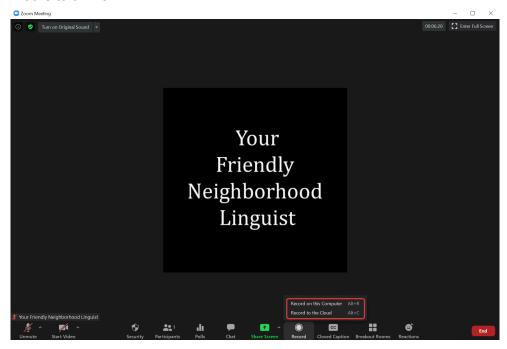
5. Click "record":

a. Choose "record to my computer" if you're not concerned about space, and you don't need the auto-generated transcript. You'll get your files immediately.

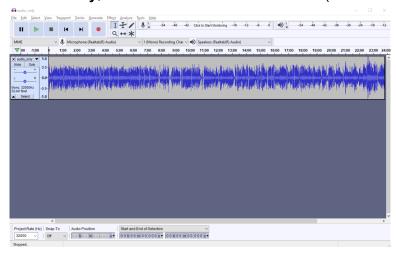
b. [hosts with paid accounts only] Choose "record to the cloud" if you want the benefit of receiving an auto-generated transcript² of the session. You also won't have to worry

² Make sure you have this option enabled on your Zoom account: sign in to the web version of Zoom, click on "Settings," then "Recordings," then scroll down and make sure the box "Audio Transcript" is checked.

about running out of space on your machine. However, the link might take minutes or hours to arrive.



- 6. When done, stop recording, and:
 - a. (Depending on your method), check in with your participant about whether they would like anything deleted or redacted from the recording, or if they'd like the entire recording deleted. You can remind them that they can let you know at any time about this.
 - b. Thank your participant.
 - c. End your Zoom session.
- 7. **Locate/download your files**, which will come to you immediately (if recording to your computer) or via an emailed link once Zoom has processed your files (if recording to the cloud *[hosts with paid accounts only]*):
 - a. An audio recording (.m4a)
 - b. A video-and-audio recording (.mp4)
 - c. [hosts with paid accounts only] A transcript (.vtt), if recording to the cloud
- 8. Open the .m4a file in Audacity, and confirm that it has sound in it (like the image below).



- 9. **Export as a .wav file** (File > Export) in your intended location, as Praat cannot read .m4a files. (See screenshots of exporting files from Audacity on the last page of this document.)
- 10. Now you can open it in Praat!

Option B: Having your participant record themself via Audacity

Good for:

phonetic analysis

What you need:

- Audacity (free), so you can practice before asking your participant to use this software
- Praat (free)
- GoogleDrive (free)

What your participant needs:

- Audacity (free)
- USB mic (if needed for the project)
- Quiet space

Step-by-step procedure for the researcher:

- 1. **Go through the step-by-step procedure for your participant** (see below) as practice, so you have experience with the software and can answer your participant's questions.
- 2. **Create a GoogleDrive folder** to share with your participant. This is where you can upload your script / wordlist and where they can upload the sound file.
- 3. Send a very clear script / wordlist for your participant:
 - a. Make it clear what the participant actually needs to say, and what they just need to read to themself. For example, you can write "read silently" for a context paragraph, and "read aloud" or "repeat twice, out loud" for your target words.
 - b. [for non-English languages] Use orthography whenever possible, and use Latin script and/or English glosses only if your participant prefers it (e.g. if they don't have strong reading skills in the research language), or for disambiguation, or for the instructions
 - c. Avoid using the IPA in the participant's materials.
 - d. Send this as a PDF, to ensure there are no formatting errors.
 - e. Send this well ahead of time, so your participant can reach out to you with questions/corrections.
- 4. Be available by phone/Zoom/email in case your participant runs into issues during recording.
- 5. **Download the .wav file** once it appears in your GoogleDrive.
- 6. Now you can open it in Praat!

Step-by-step procedure for the participant:

- 1. Download, install, and open Audacity.
- 2. Check the audio input by clicking on the menu next to the microphone icon. (Image below.)
 - a. This 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.

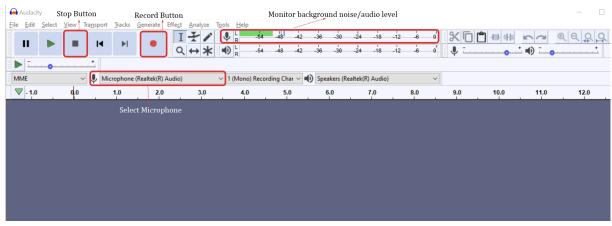
b. Whatever mic you use, be sure that it is positioned about 6 inches in front of (and slightly off to the side of) your mouth. You may need to move your laptop/mic onto a stack of books so that this position can be achieved without straining.

3. Check 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.
- b. 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.
- 4. **Click the "record" icon**, and read the script/wordlist provided by the researcher.
 - 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. There is no time limit, but it may be useful to stop partway through to end the recording and save it, if there's a natural break in your script/wordlist.
- 5. When done, **hit the stop icon**, and then File > Export to **export as a .wav file**. (Image below.)
- 6. Once you have a .wav file, **upload it** to the researcher's GoogleDrive.

Screenshots from Audacity:

Checking your settings for recording



Exporting as a WAV file when done recording

