Introduction to Recording and Oral Histories with Audacity

Digital Integration Teaching Initiative

Workshop Agenda

- Understand the basic structure of recorded oral histories
- Learn best practices for audio recording
- Learn about and explore Audacity as an audio editing tool
- Learn how to:
  - Record audio
  - Clip audio
  - Add/move/delete tracks
  - Add sound effects and/or background music
  - Save and export projects

Course materials: https://bit.ly/sp24-brown-anth3100-audacity

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What is oral history?

Oral history is one of the oldest fields of study, predating written word. With current technologies, it also has become a modern research area in digital humanities disciplines.

Publishing digital oral histories today involves collaborating with communities to ethically collect, preserve, and analyze recorded memories and histories. It is important to respect and honor different experiences, cultures, and ways of knowing.

This can include, but is not limited to, interviews, video footage, artifacts like recipes and letters, images, music, and other materials.

Examples of Oral Histories

Library of Congress Civil Rights History Project

Stonewall: Riot, Rebellion, Activism, and Identity

Harriet Tubman House Memory Project

Heirloom Gardens Oral History Project

Reckonings Project

Record your personal family history: DITI Meet the Method blog

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Oral History Research

Oral history research is a part of the process to record and shape history. We gain a richer understanding of people, places, past events, and experiences which have shaped the current world by hearing their stories directly.

Oral history research is used across multiple disciplines, including history, anthropology, law, gender studies, and more. Marginalized groups who have historically faced challenges accessing the resources needed to write or publish histories have been able to use oral history to share their narratives.

Oral history research depends on collaboration and respect among researchers, community partners, interviewees, and other artifact holders.

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Ethical Considerations

If you were being interviewed, what information would you be comfortable sharing?

What kinds of information do you think should be kept confidential?

What can you do to make sure speakers are comfortable being interviewed?

Ethical Considerations

- Obtain informed consent from your interviewees, guests, and other speakers before recording. This can be verbal consent recorded prior to the interview or written, depending on intended use of the recording.

- Ask speakers if there is any information that should be kept private, and let them know they can request to remove content after the interview. You can edit and redact audio prior to publishing to make sure confidential information is kept private.

- Ask speakers if there is any information that should be highlighted, or is especially important to include in the recorded interview. This adds context for future analysis, and helps interviewees take an active role in preserving their own stories.

Ethical Considerations

- Make sure your speakers know how their information will be used and stored, and address any concerns they have about the purpose of the recording.
- Be mindful of discussing potentially triggering topics while recording and record a content warning if needed.

What other ethical concerns do you think could arise during oral history research?

Recording Oral Histories

Recording Oral History Projects: Structure

- Recorded interviews and oral histories typically begin with an **opening segment** of 10–30 seconds of audio recording the context and purpose of the interview.
- The opening segment is followed by the recorded interview(s).
- The recording ends with a closing segment.

For oral history work, it is important to record any cultural, social, or other relevant contexts to ensure interviews are framed and used responsibly, and to situate the oral history in time and space.

Intro/Opening Segment

- The beginning segment of the recording is an important space to record the context, purpose, and consent of the interview.
- The opening segment can accomplish several goals:
  - **Establish consent and context:** Record the interviewee's consent to be interviewed and share the purpose of the interview.
  - **Organize recordings:** You should record interview metadata, or data about the interview, such as the interview location, time, interviewee and interviewer names, etc. This will be helpful to keep track of recorded interviews.

Opening Segment Example

Listen to the beginning of the [oral history interview of Mr. Collie Graddick](#) (start through 0:50), conducted by Hanna Garth for the Heirloom Gardens Oral History Project.

- What information do you think is important to include in the opening segment for our interviews?
- Do you think anything is missing or should be added?

Recorded Interviews

- Try to keep your tone **conversational**.
- Use a set of guiding questions to keep your interview organized and on track, and let the conversation flow naturally.
- Do your research and have your questions written **before** you start recording; know how your recording is laid out and how much time you have.
- Mark out spaces where you will transition between questions, and identify which questions are priority for your interview.

Closing Segment

You can wrap up the interview by asking the interviewee:

- If there is anything else you should have asked them or they would like to comment on?
- What is the best way to follow up with them after the interview?
- Thank them for their time.

The closing segment of 10–30 seconds of audio can provide the **institutional affiliation**, **audio/production credits,** and **acknowledge** those whose work or advice has significantly influenced or contributed to the recording. An outro script might look something like "This recording was made by [interviewer name] with the support of [Institutional affiliations]...with special thanks to [Interviewee name] for their contribution."

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Closing Segment Example

Let's listen to the end of the [oral history interview of Mr. Collie Graddick](#) (45:45 to end) conducted by Hanna Garth for the Heirloom Gardens Oral History Project.

- How did the interviewer wrap up the conversation with Mr. Graddick?
- What would you change? Add?

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Best Practices for Recording

General Best Practices

- **Test your mic** and technology before you start.
  - Record some test audio and play it back before you begin.
- **Have a plan** for the conversation and transitions.
  - Give yourself a script. As you record, mark out spaces for transitions in the recording (topic-to-topic, parts of the episode).
- **Prepare phonetic pronunciations** for names or jargon and write out long numbers in full (e.g., "twelve thousand, four hundred and two" vs "12,402")
- Include **transcripts for accessibility** (use software like Otter AI).
- Use **open access media/music** ([Incompetech](#), [YouTube](#)).

Getting Started: Tips for Recording Audio

- Record test audio and adjust mic volume if necessary.
- Record a few seconds of silence at the start and end of each track
- Begin way in advance, and do several takes.
  - Editing often takes much longer than the recording itself!
- Speak slowly, clearly, and conversationally.
  - If you use too many "filler words" (um, like, so) you can always edit them out later. Stop recording and start again at the top of the sentence to avoid jarring sound cuts in post-production.

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Environmental Considerations

- Ideally, find a room with good sound absorption to prevent the "echo effect."
  - **Yes:** carpet, cushions, bookshelves, clothes (bedrooms, closets).
  - **No:** larger spaces with hard, smooth surfaces (kitchens, bathrooms).
- Put some **distance** between yourself and the microphone (depending on your equipment).
  - Being too close can make the audio too loud or garbled sounding. If you are positioned too far away, the audio will be too quiet or too muffled to salvage.
  - Know where your microphone is located and keep it clear of papers/other objects.

Environmental Considerations cont'd.

- Use headphones when recording and editing.
  - After you finish editing, listen to the file without headphones to see where the audio is too loud/quiet when played in a space.
- Take ambient noise into consideration.
  - A/C units, refrigerators, traffic, pets, roommates, loud clothing, etc.
- Stay hydrated!
 - Keep a drink nearby (water, juice, etc.) to soothe your throat and keep it relaxed.

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Recording Considerations for Interviews

- **Remote recording** (via Skype, Zoom).
  - If you record via Zoom, **save your recording to your computer,** not the cloud.
- **Ease into the interview** with low-stakes conversation
  - Interviews are like playing catch. Start with questions that allow everyone to get comfortable. Be yourself!
- **Don't rush,** and know you can start over
  - You don't need to get everything in a single take, and you won't use all the audio that you record. So don't be afraid to pause frequently and remember you can start over (or cut something altogether!)

Using Audio Recording Apps

- These apps universally use a big, red button to start recording. This slide shows Google's Recorder app, but all of these buttons will be very similar regardless of the app you are using.
- If you want to take a short break in your recording you can hit **pause** (highlighted in green). This will stop the recording until you hit record again, but it won't end the recording as a whole.
  - To get to the pause button in Apple Voice Memos, swipe up on the recording while it's running.
- Finally, when you're done recording remember to hit **save** or **stop** (often represented by a square) depending on your app. This will end the recording altogether and let you send it to your computer.
- Be mindful of how your data and the recorded audio is stored on different recording apps.

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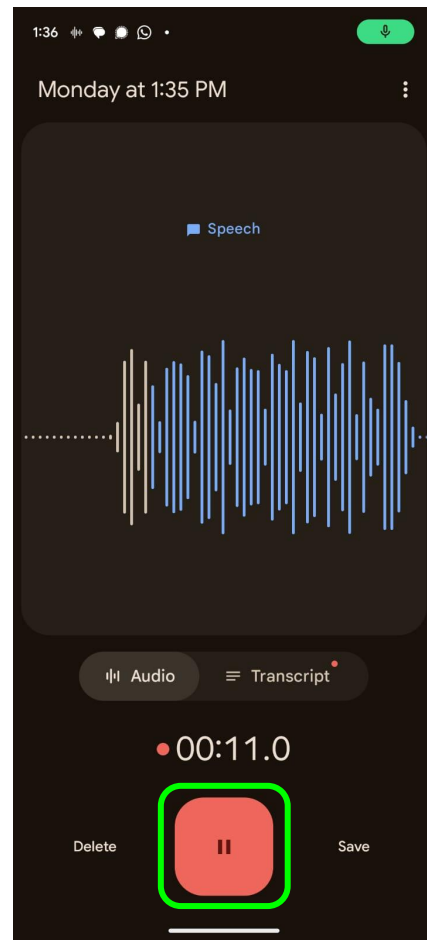
Monitoring Your Recording

- While you are recording, the app will show a **waveform** (highlighted in red), which shows the current audio input
  - **Make sure to check your waveform intermittently as you record** (especially at the beginning)
  - If **you aren't seeing any waveform or it is very small**, the phone is likely **not picking up your audio**
  - The peaks and troughs of the wave show when it is picking up more and less audio. This should generally match the louder and quieter parts of your interview recording, though don't worry if it doesn't seem to be completely precise.

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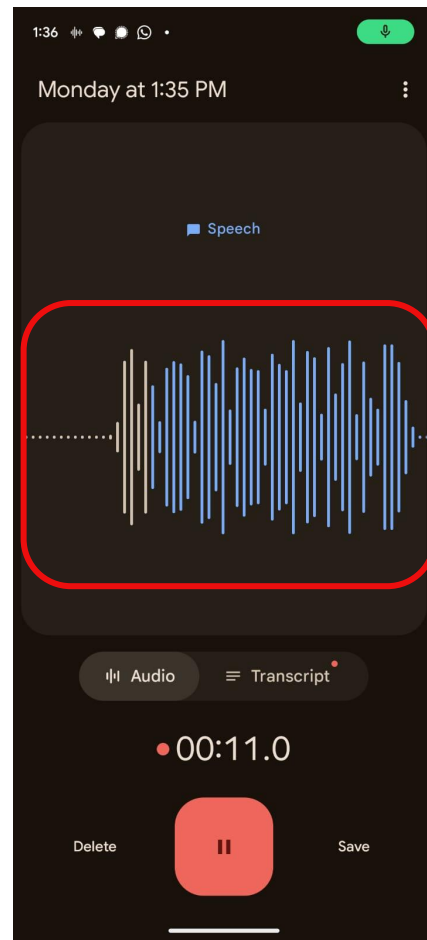
Getting the Audio From Your Android

- The easiest way to get the file from your phone to your computer will be to use the **share** function. Look for a symbol like the one highlighted on the right.
  - From the share menu, you will be able to send the file to yourself in various forms, such as email.
  - Sometimes the file size may exceed the limit for email, which is where Google Drive can worke better
- As soon as you have files on your computer, you can move on to audio editing!

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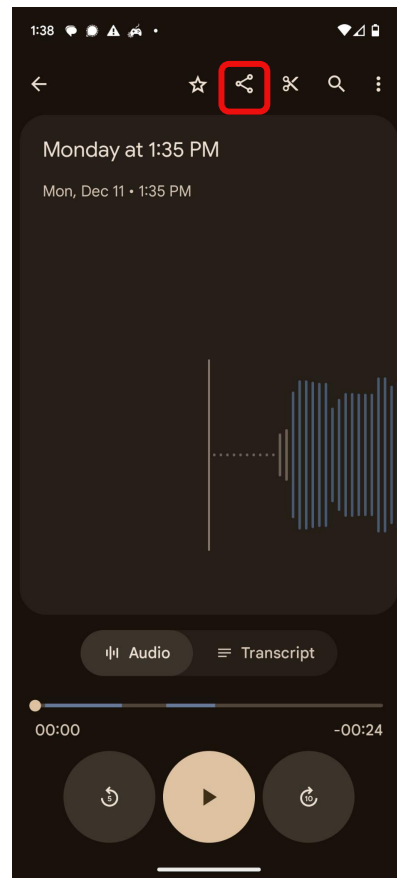
Getting Audio From Your iPhone

- To get audio out of Voice Memos, click the three dots (highlighted in red) and select "share" (highlighted in green).
- You'll need to pick a method that works for you:
  - Airdrop and iCloud work.
  - If you download the app for Drive or Dropbox (or similar), you can send the file to those.
  - It will probably be too big a file to email to yourself.

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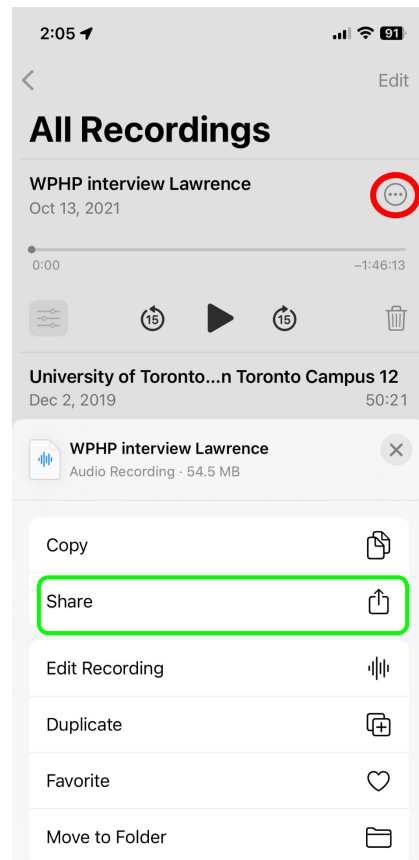
Recording with Audacity

What is Audacity?

Audacity is a free **multi-track** audio editor and one of the more popular free audio editors used for creating recordings and podcasts.
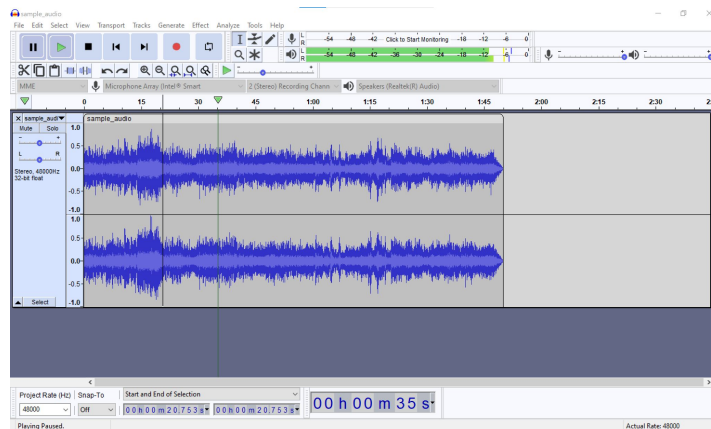
Multi-track: the ability to have different layers of audio in one clip.

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Downloading Audacity

https://www.audacityteam.org/ —Audacity is platform-agnostic!

Audacity is free software and developed by volunteers.

⊞ Audacity for Windows	⊕ Audacity for Mac OS X / macOS	Δ Audacity for GNU/Linux
Windows 10/8/7/Vista (XP support has officially been dropped)	Mac OS X/macOS 10.7 and later.	Source code

For PC users: download **Windows Installer**
For Mac users: download **MacOS.dmg**

DOWNLOAD	FILE	SIZE	VERSION	ANTIVIRUS
Audacity **Windows Installer**	Signature	26.6 MB	2.3.2	0 / 15
Audacity **Windows Zip**	Signature	13 MB	2.3.2	0 / 15
Audacity **macOS DMG**	Signature	36.2 MB	2.3.2	0 / 15
Audacity **Linux Source**	Signature	8.6 MB	2.3.2	0 / 15
Audacity **Manual**	Signature	20.2 MB	2.3.2	0 / 15
Audacity **macOS 2.1.1-DMG** (screen reader accessible)	Signature	38.6 MB	2.1.1	0 / 15

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Anatomy of Audacity

Main buttons (L-R): pause, play, stop, fast-forward/ backward, record

Microphone, volume, input, and output

Recordings (audio tracks) will display in this window
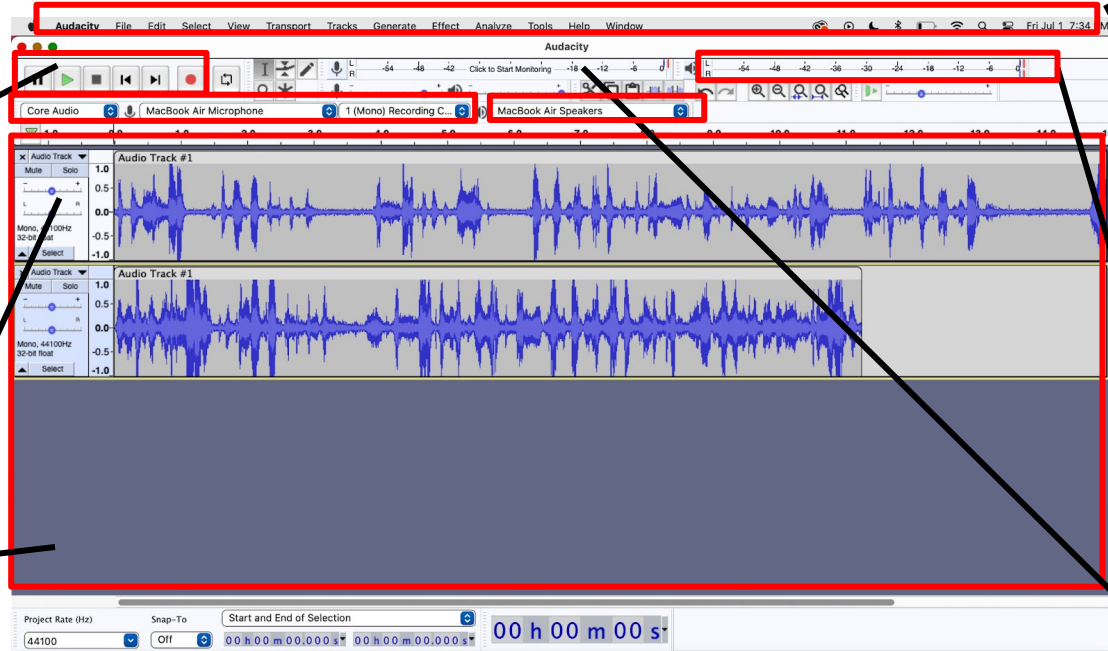
Editing, saving, effects, transporting or exporting the recording

Output Volume Level Monitor: shows the loudness of each track in real-time
Tip: try for -12 to -6db

Other Audacity tools

https://manual.audacityteam.org/

Key Terms

- **Track:** a single audio channel or stream.
  - **Multi-track**: an audio recording or chanel with more than one track or recording of sound.
- **Clip**: a section of audio, often made with the **split** tool.
- **Waveform:** the curve within a track showing the duration and volume of individual sounds.
- **Mixing**: the process of audio production, or mixing tracks of recordings, music, and other desired media.
- **MP3 File:** the most generally used audio file format. Others include .wav and .mp4.

Basics: Audacity & Recording Audio

Recording

Make sure your **microphone** is working by checking to see that it is selected in the microphone section of the screen. Each computer will have different microphones, so check your sound settings for your model.

Microphone Array (Conexant Smar   ∨ 2

To **record**, click the button with the **red circle.**
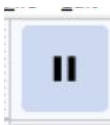
Hit the **pause** button to pause a recording.
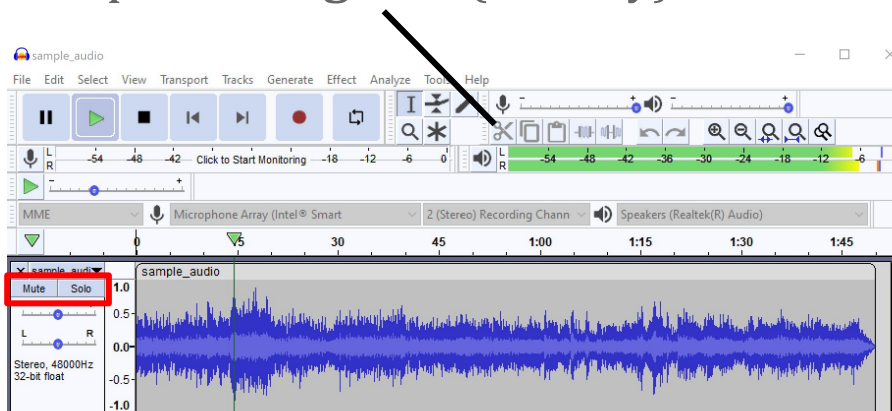
Hit the **stop** button to stop recording.

Use **re-play** to verify that the recording is the quality/ volume that you want.

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Checking volume

Keep an eye on the **monitor** when recording and playing back your audio—try to keep it in the **green** (literally).

If your volume is too loud, the monitor levels will turn yellow and red. Tracks that are too loud will have a blown-out effect when played back.

If one of your tracks is louder or softer than the others, you can adjust the volume on each track.

Tip: to hear one track without the others, you can **mute** the other tracks or click **"solo."**

Moving Tracks

To move entire tracks or audio around in Audacity, you can click and drag them by hovering your mouse over the top of the clip.
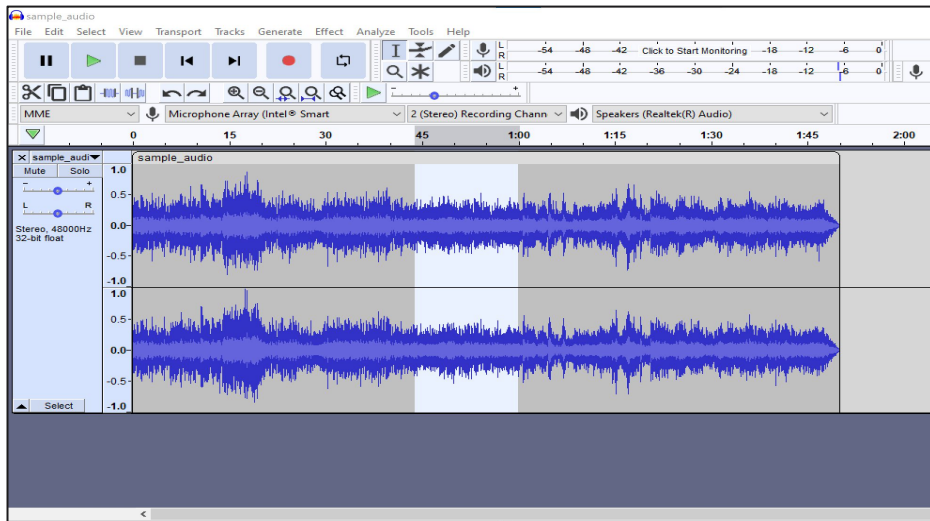
Click whatever clip or track you want to move and drag it into position.

Basics: Audacity & Editing Audio

The Audacity Toolbar

- I   The **selection tool** will be selected automatically when you open Audacity.
- ∗   The most useful tool is the **multitool**, which allows you to use all the functions of the other tools without switching to them.
  - The selection tool function is the default.
  - Hover over the waveform borders to use the envelope tool function.
  - Use your trackpad to zoom.
  - Zoom in and click to use the draw tool function.

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The Audacity Toolbar (Cont'd.)

- The **envelope tool** allows you to smooth changes in volume by using control points at the top and bottom of the waveform.
  - Clicking on the blue border will create control points, which you can then move around to adjust the waveform envelope.
- The **zoom tool** lets you zoom in and out of the waveform in order to make adjustments.
- The **draw tool** allows you to manually redraw the waveform to change the volume or correct background noise.
  - You can only use the draw tool if you've zoomed into the waveform.

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Removing Parts of Tracks

Once you have recorded audio in Audacity, you can easily edit it. Here is how to remove sections using the **Selection Tool (F1)**:
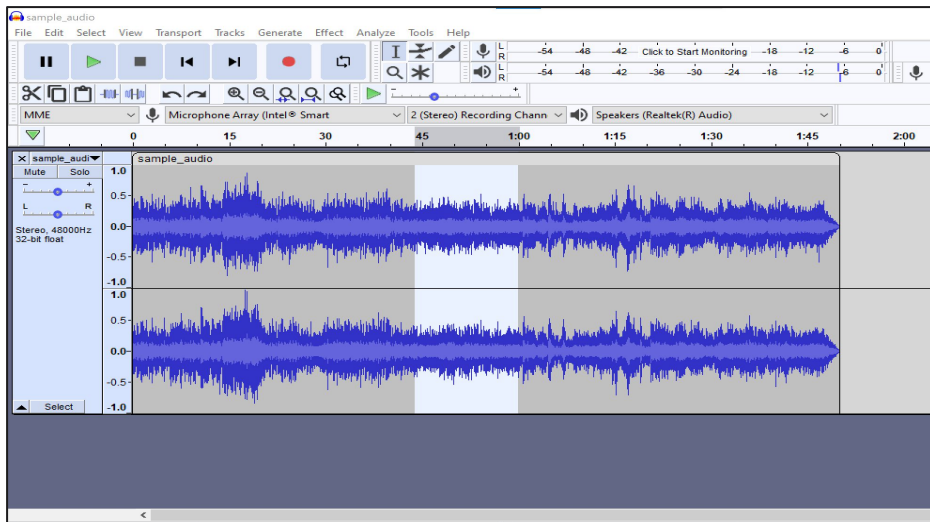
Click and drag with your cursor to select the portion your wish to remove.

Then, hit backspace or delete on your keyboard.

Tip: you can zoom in and out with the **Zoom Tool (F4)** to better see what you're trying to delete.

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Fading In/Out

To fade music in and out on Audacity, use the **Envelope Tool (F2)**. Two yellow bars will show up on each track.
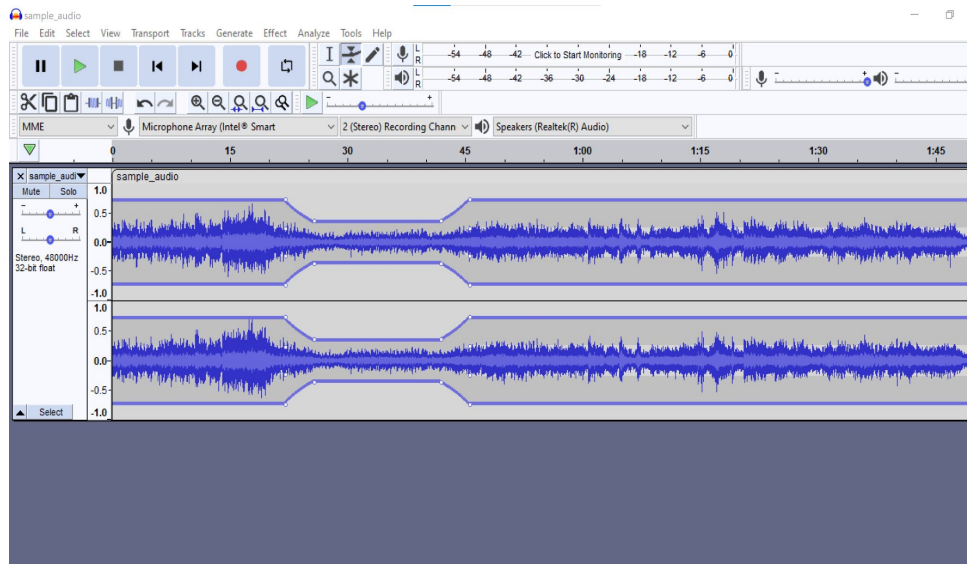
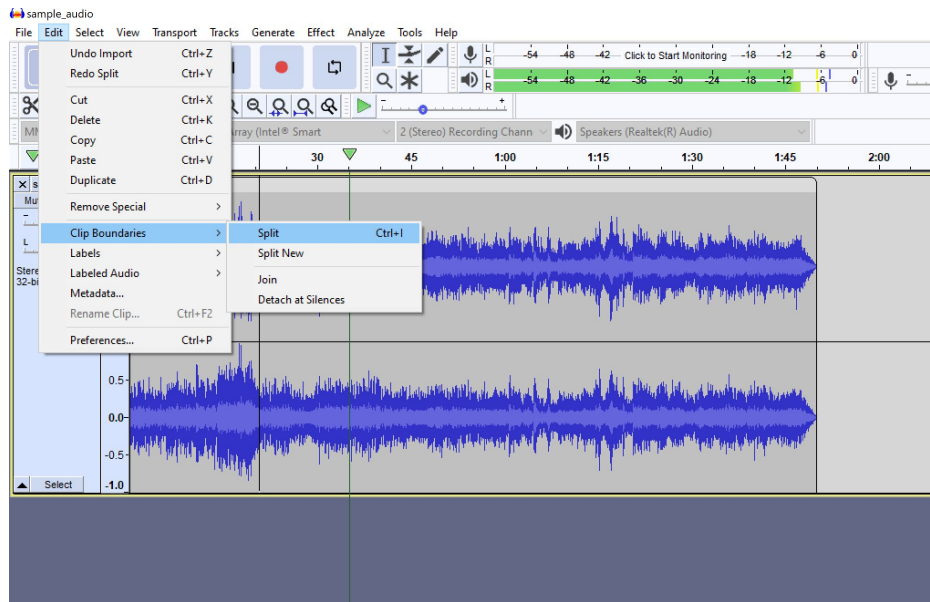Click to add **control points** (little white dots) on the track you want to fade in.

Drag and move the nodes to up and down and side to side to change the volume and how gradual the volume fade is.

Add and adjust nodes at the end of the track to fade the music back in.

Splitting Tracks

To split a track in Audacity, follow these steps to make shorter clips:


With the **Selection Tool (F1)**, place your cursor over the section where you want to split your track.

Navigate to the **Edit** section, click under "**Clip Boundaries**" and select "**Split,**" or press **Ctrl+I**.

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Adding Tracks

To create additional tracks in Audacity for a **new recording**, hit the record button and it will start a new track. Another option is:
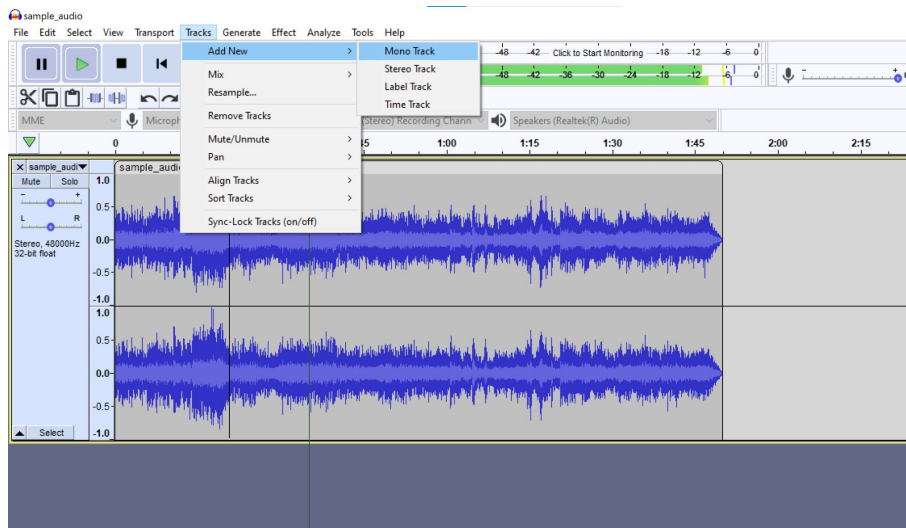
Navigate to the "Tracks" menu option and select "Add New." This will open a list of options. Select the "Mono Track" option. You can also add a new mono track by pressing **Ctrl+Shift+N**.

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Your Turn!

- Visit incompetech.com and click on 'Royalty Free Music' OR studio.youtube.com and click on the 'Audio Library' tab (you have to be signed into Google for this one)

- Download something you want to play around with and try to:
  - **Remove** some of your track.
  - Choose a part to **fade in** or **fade out.**
  - **Split the track** into multiple.
  - **Add a new track** to your project.

Saving, Exporting, and Sharing from Audacity

Saving

Audacity does not auto-save! Save your recording, early and often!

Try and save after each major edit/input of a recording, just to be safe.

Save in multiple places. Always have backup.

File > Save Project > Save Project As> "Name of your recording"

And once your project is saved…

File > Save Project > Save Project > [saves the updates to your file]

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About File Formats

- **Lossless Audio File Formats:** better than or equal to CD-quality.
  - **WAV:** uncompressed file, meaning huge file size. Best for editing raw audio files in Audacity.
  - **AIFF**: Apple's alternative to WAV. Uncompressed, not widely used.
- ***MP3/MP4:** compressed audio file, ensures small file size. Best for exporting and distributing from Audacity.
- **Ogg Vorbis**: Open-source alternative to MP3. Used in Spotify streaming.

Note: The DITI typically recommends you save files as MP3 (sometimes MP4, if you use a PC).

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Exporting and Sharing

Finished with your recording?

- Make sure you **export your project as an MP3** before you share it!
- This will ensure that other people are able to listen to your project. Exporting to an MP3 will ensure that anyone–even people who don't have Audacity–can listen to your project file.

File > Export > Export as MP3
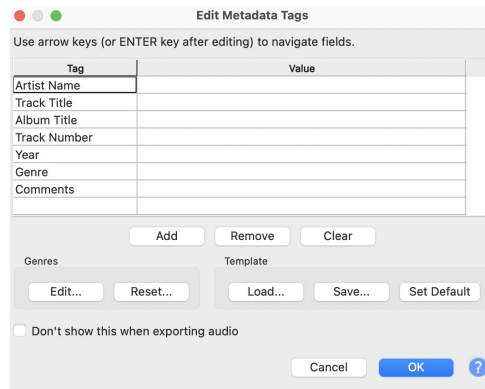 Select "best quality"

Exporting Metadata Tagging

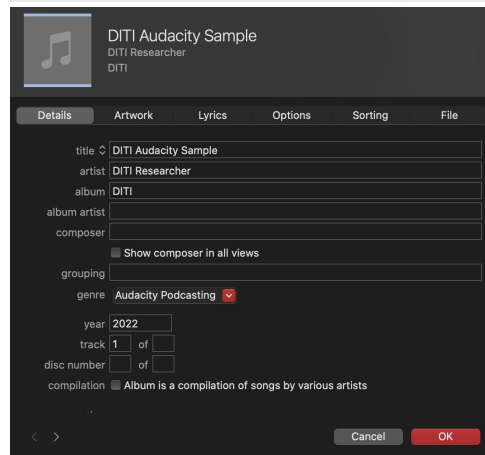When you export your file, Audacity will prompt you to add metadata tags to identify it.

On a Mac you can add artwork by importing your file to an Apple Music library, Control-clicking on it and choosing "Get info."

On a PC, you can edit the MP3 metadata by clicking through to File Properties.

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Oral History Storage and Access

There are several ethical considerations of how to store and maintain recorded oral histories.

Those who contributed to oral histories should know where their data is stored, how it will be managed, and who can access it.

Western and eurocentric cultural and academic norms assume freedom of information. This may be inappropriate and potentially harmful for certain communities and their oral histories.

It is important to come to a mutual agreement with community members about how oral history recordings are stored.

Oral History Storage and Access

When co-creating the oral history project design with collaborators, it is important to develop a plan for long-term data storage, ownership, and access.

Universities can store recorded oral histories and their associated data in digital repositories. However, there are some ethical concerns with university storage. For example, consider the power dynamics of a university storing the oral histories of a community that has historically been denied access to education. What ethical issues do you think could arise?

[Northeastern University's Archives and Special Collections](#) hold the oral histories of multiple different projects, such as the Harriet Tubman House Oral History Project.
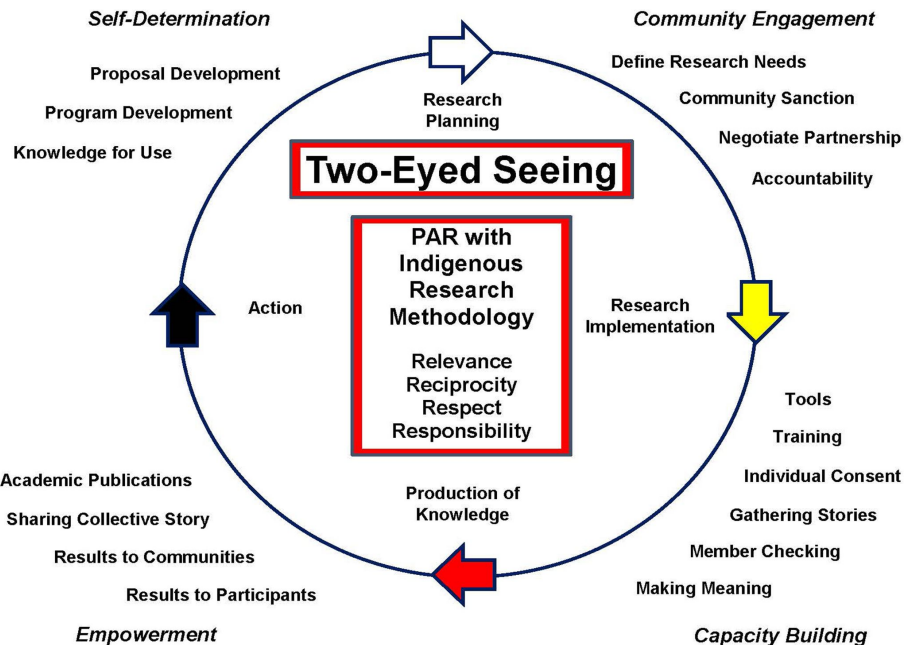
Co-creating Research with Communities

An iterative process of collaboration, workshopping agreements with community partners, and ensuring the community gains tangible benefits from the research.

Resources:

- [Principles of Anti-Oppressive Community Engagement for University Educators](#) and [Researchers](#)
- [Oral Literature in the Digital Age](#)
- [Oral History Association Best Practices](#)
- [Reckonings Project Interview Toolkit](#)

Self-Determination

Proposal Development

Program Development

Knowledge for Use

Two-Eyed Seeing

PAR with
Indigenous
Research
Methodology

Relevance
Reciprocity
Respect
Responsibility

Research Planning

Community Engagement

Define Research Needs

Community Sanction

Negotiate Partnership

Accountability

Action

Research Implementation

Tools

Training

Individual Consent

Gathering Stories

Member Checking

Making Meaning

Academic Publications

Sharing Collective Story

Results to Communities

Results to Participants

Empowerment

Production of Knowledge

Capacity Building

[An Application of Two-Eyed Seeing: Indigenous Research Methods With Participatory Action Research](#)

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For Further Exploration

- [DITI Handout on Audacity](#)
- [DITI Handout on Copyright and Fair Use](#)
- [DITI Handout on Accessibility](#)
- [DITI Handout on Data Ethics](#)
- [Northeastern Library Recording Studios](#)
- [Northeastern Library Digital Media Toolkit](#)

Thank you!

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Developed by: Dipa Desai, Kasya O'Connor Grant, Claire Lavarreda, Emily Sullivan, Juniper Johnson and Cara Marta Messina

- Course materials: https://bit.ly/sp24-brown-anth3100-audacity
- For more information on DITI, please see: https://bit.ly/diti-about
- Schedule an appointment with us! https://bit.ly/diti-meeting
- If you have any questions, contact us at: nulab.info@gmail.com
- To give us feedback: https://bit.ly/diti-feedback

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