Welcome to a GCDI Workshop!

Using Audacity for Interviews

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What is GCDI?

We offer **support for digital scholarship**

- **Workshops**
- **Office Hours**
- **Working Groups**
- **Online Resources**

Before we begin

- ❏ Audacity installed?
  - ❏ If you're currently running MacOS 10.15 (Catalina), Audacity will not work properly on your computer. You may need to borrow our laptops for the duration of this workshop.
- ❏ FFmpeg import/export library installed?

Introductions!

Turning to the person next to you, share your:

Name,
gender pronouns,
program, and
could you share if you have a project in mind that you are
planning to use Audacity for?

Orientation of workshop

- Overview of digital audio recording
- Best practices for interviews
- Application time!
  - Recording your interviews
- Loading your interviews
- Processing/editing your interviews with Audacity
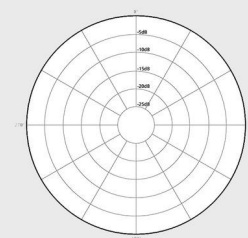- Output

Digital audio recording

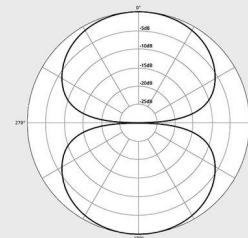Microphones

ding Devices

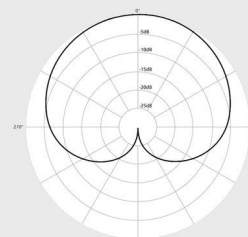# Microphone polar patterns

- Lapel microphones: omni
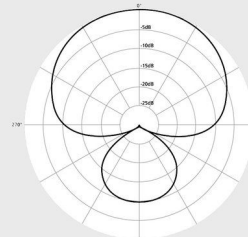- Mic on Zoom H5: cardioid
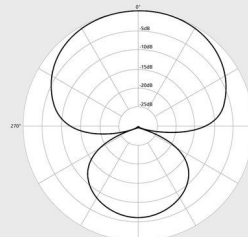- Snowball/Yeti: omni & cardioid
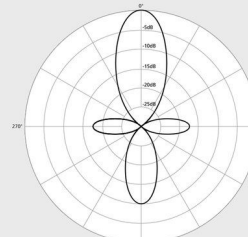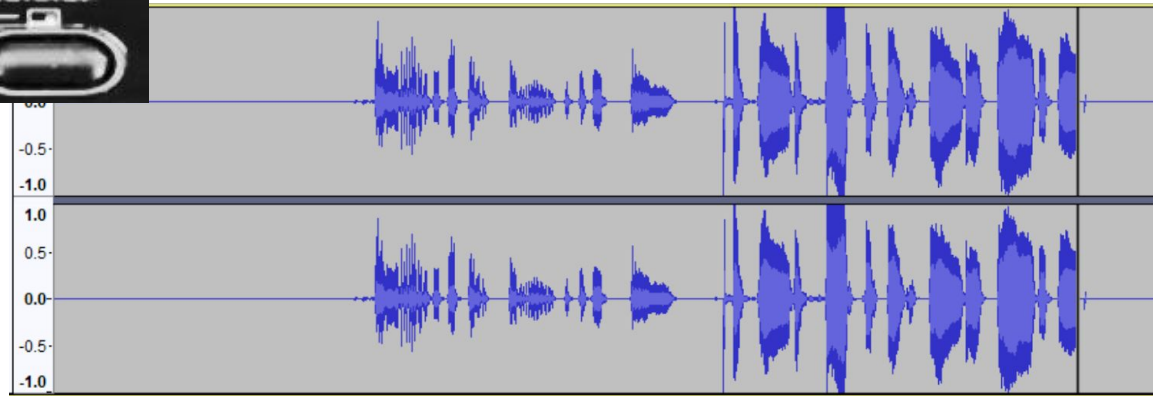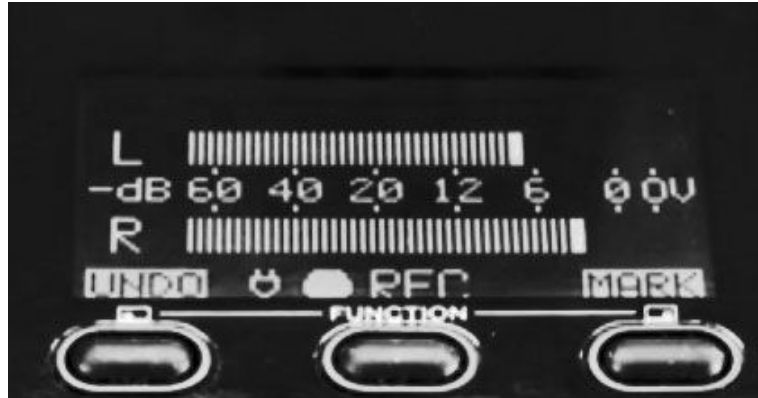

Omni-directional

Bi-directional

Cardioid

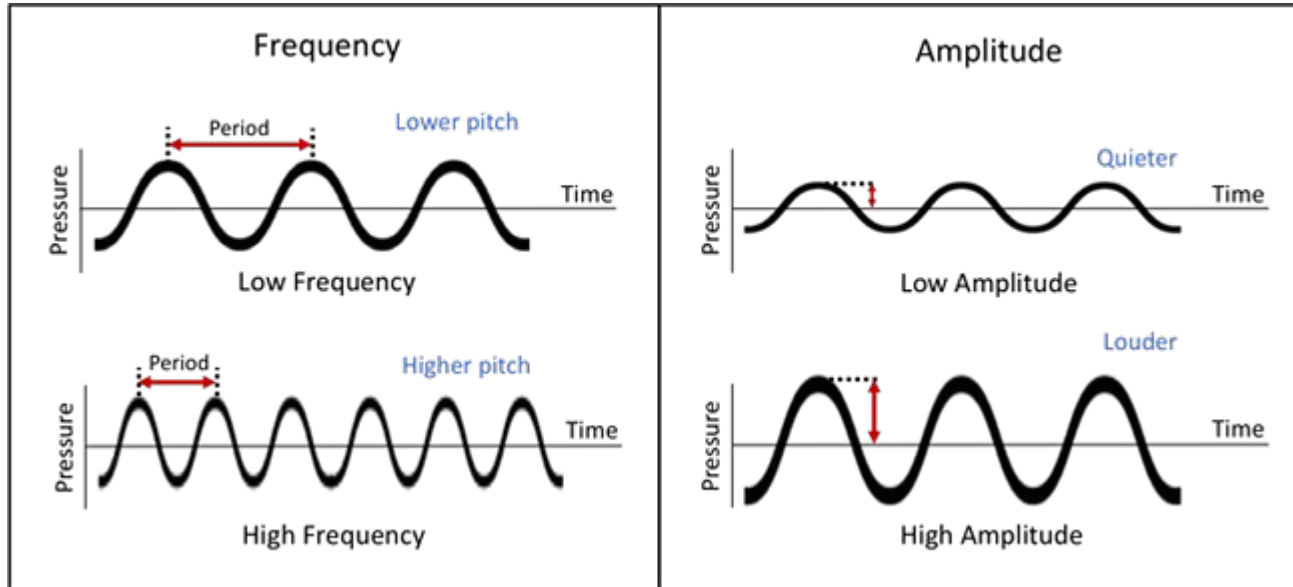Super-cardioid

Hyper-cardioid

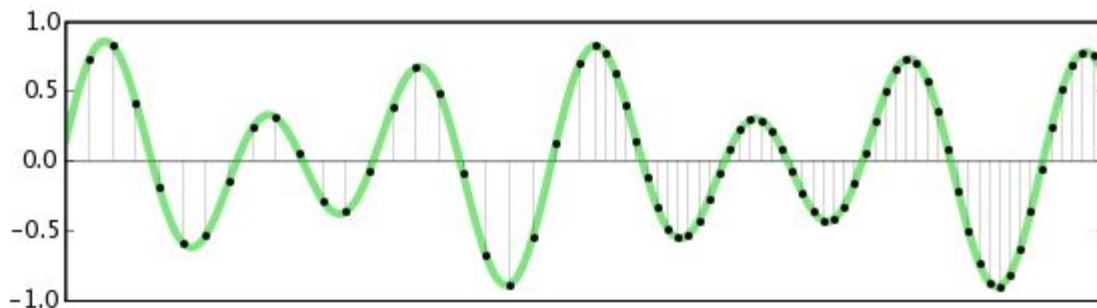Ultra-cardioid

Recording devices

Amplitude and Frequency

Digital audio quality

- Hertz aka sample rates
  - Number of samples captured per second; Higher rates = higher audio frequencies represented
  - Human ear 20 Hz - 20,000 Hz; sample rate of 40,000 min if reproducing full range of audible sounds
- Common sample rates:
  - 44,100 Hz -- CD audio quality

Digital audio quality

- Bits aka sample formats
  - The more bits used, the more precise the representation of each sample; increasing bits = increase max dynamic range
- Common sample formats and dynamic range:
  - 16-bit integer: 96 dB*
  - 24-bit integer: 145 dB
  - 32-bit floating point: near-infinite dB
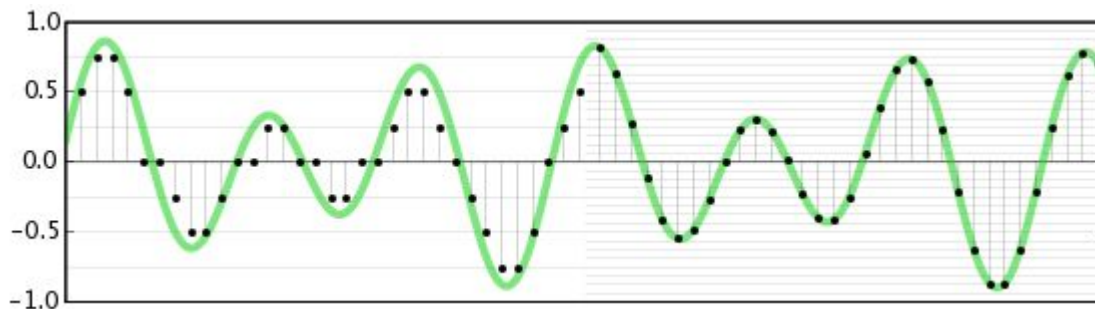
File formats

- Uncompressed formats
    - WAV (loseless)
    - AIFF (loseless, codes each audio sample into binary)
- Compressed formats
    - MP3 (lossy)
    - FLAC (loseless)
- Audacity plug-in: FFmpeg import/export library

Considerations before interviewing

Some ethical considerations

- Likely to require IRB approval!
- If you are planning to post the interviews online, you will likely have to consider a 'deed of gift.'
  - A signed legal document that transfers ownership from one person/institution to another voluntarily and without recompense. This is sometimes used to officiate the ability for the person/institution conducting/housing the interview to publish the interview.
  - The Louie B. Nunn Center for Oral History at the University of Kentucky has a sample deed of gift that can be helpful to you.

Some data management considerations

- How are you planning to name your files? Anonymity concerns?
- What metadata is important to your interviews?
  - Archival vs. just for yourself
- What file format will you save your audio as?
- Where will you be saving your audio?

Best practices for recording

- Back-ups and batteries!
- Storage space on your devices
- Mic placements
- Room tone

Audacity®

- Free and open-source audio editing and recording software
- Works across different operating systems (Windows, Mac OS X, GNU/Linux)
  - Great for sharing project files
- Allows for many different audio file formats (compressed and uncompressed) and input modes (mono, stereo, multitracks)

Navigating Audacity
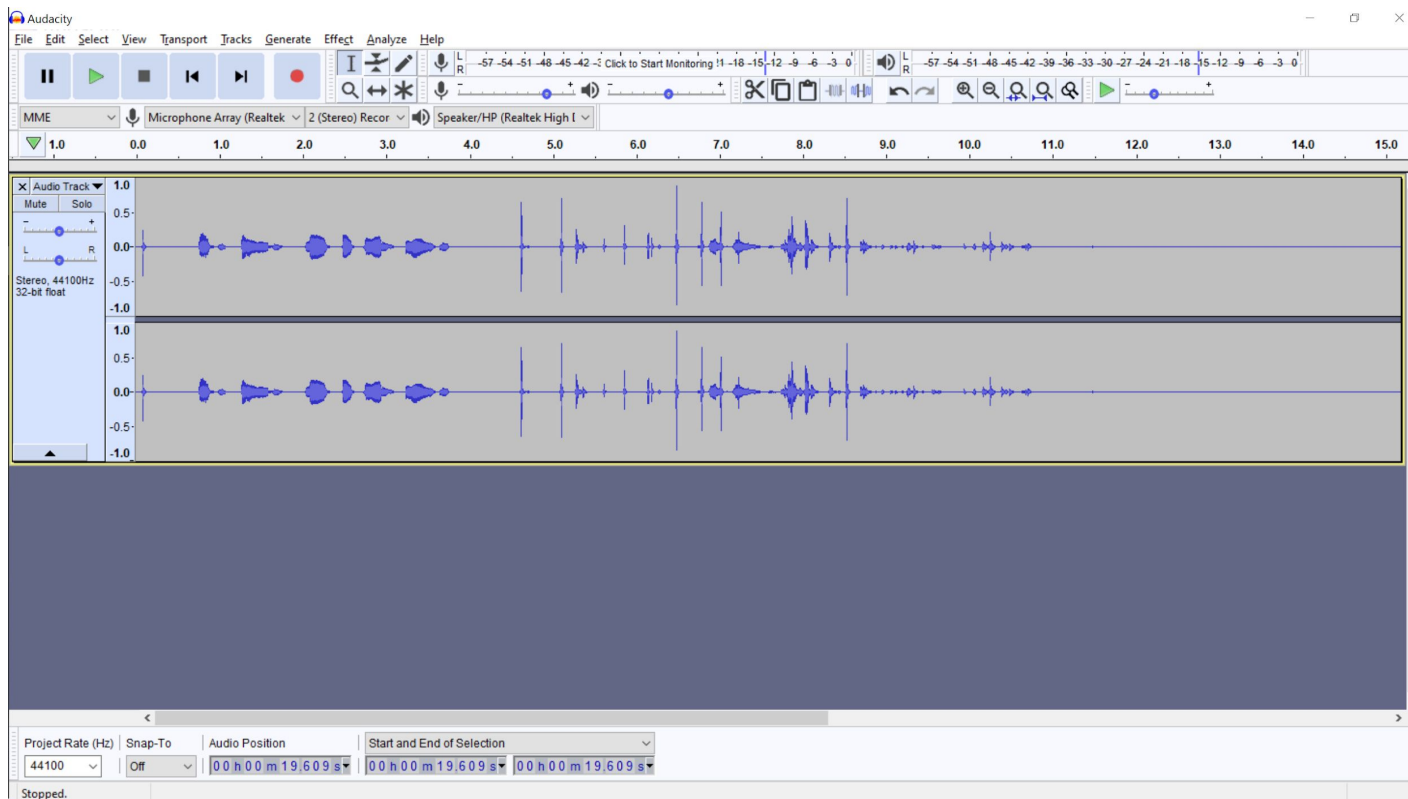
Application time!

- Record room tone (20-30s) + best practices
- Ask your partner the questions
- Switch role
- Save your file
- Make a new recording with a distorted audio (e.g. speak closely to your mic, increase your gain input)

Questions:

What is your favourite meal?

What are you planning for dinner?

Loading your interviews

- Always save a copy **before** editing; avoid directly editing an original file
    - In case of corruption or other accidental edits (e.g. deleting a chunk of your interview) you can always return to your original recording
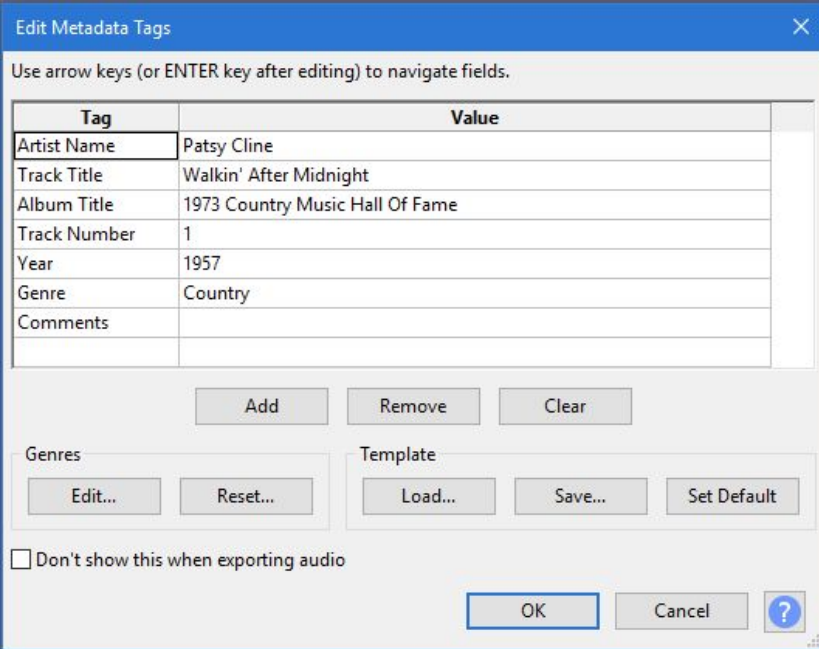
Cleaning your recording

- [Noise reduction](#)
  - Be careful you don't end up eliminating part of your interview!
- [Amplifying](#) and [Normalization](#)
  - Beware of distortion!
- Fade-in and fade-out

* Note that applying an effect on a long recording will take a while; Audacity has a preview function (default = 6 secs)

Saving your output

- Metadata
- Streaming v. archival purpose
- Naming formats

Edit Metadata Tags

Use arrow keys (or ENTER key after editing) to navigate fields.

Tag	Value
Artist Name	Patsy Cline
Track Title	Walkin' After Midnight
Album Title	1973 Country Music Hall Of Fame
Track Number	1
Year	1957
Genre	Country
Comments	

Add   Remove   Clear

Genres
Edit...   Reset...

Template
Load...   Save...   Set Default

☐ Don't show this when exporting audio

OK   Cancel

More resources

- [Audacity manual](#)
- [Oral History in the Digital Age](#) (a little old)
- [Oral History Association](#)
- [DARC's Wiki page](#)
- [Radio.co's Audacity radio editing guide](#)

Evaluations

cuny.is/gcdievals2020

DARC Events

- Meeting on 03/10 (Tues) @ 2-330
  - Future meetings in April and May
- [DARC's wiki page](#)
- Follow us on [our commons group](#)!

How can I get involved with GCDI?

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