

*in*Field

## Session 2: Audio capture

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**Arienne M. Dwyer**  
*University of Kansas*

**Yoshi Ono**  
*University of Alberta*

- Your recording questions
- Evaluating “homework” recordings
  - Capturing your recordings
    - Overview
    - Getting digital recordings to a computer
    - Using Audacity
- Capturing analog recordings
- Microphone hardware and placement

Your questions?

- Batteries, Tripod, Cables, connectors
- Batteries
  - Single-use
    - Alkaline
    - Lithium
  - Rechargeable
    - NiCad, NiMh
  - Solar
  - memory effect (none in Sanyo Eneloop)
  - Accessories: charger(/discharger)
- Tripods

- Cables
- Jacks – XLR f / m
  - mini – mono / stereo



## Steps in **audio capture**, overview:

- Audio capture/transfer (to computer- today)
- Save a copy, keep good records (Session 4)
- Audio editing (with software - today)
- Audio analysis/visualization (Session 3) – with tools like Transcriber and Praat
- Audio preservation (Session 4)

- Transfer your recording to your desktop
  - Connect your recorder to the computer via the USB cable
  - Find the SD drive in “My Computer” (or, click on the “new hardware” icon)
  - Copy the recorded file(s) to your desktop
  - (Note, if to laptop with card reader): carefully remove SD/CF card from device and insert in laptop’s card reader [not relevant here]

- Open up Audacity (under *Linguistics*)
- Check your recording – did it record? How is the volume? Background noise? Are the intended speakers' voices prominent? How many spkrs?
- Shortcut: [spacebar]=play
- Find: the frequency, length, stereo/mono
- Pauses – can you find the utterance boundaries just by looking at the wave form? The vowels?

- Keep a pristine (unchanged) *original* version
  - LOCKSS (lots of copies keeps stuff safe)
  - You or others may want to go back to the original
- First, save a copy with a new name
  - Rename the file with a unique, concise, and explanatory label
  - develop your own system; recommend is date, lg code etc.
- Playing, Selecting, Cutting, and Pasting
  - To chop one file into two sessions
  - To excerpt a portion (segment/clause/utterance) for presentation
- Exercise: cut a portion out of your recording and save it as a new file – play this file
  - Icons or Shortcuts: Cntrl-X [cut] or Cntrl-C [copy]
  - File-New, Cntrl-V [paste] -- then save under a new name
  - Other: Cntrl-t [Trim, removes material *outside* the selection], **Undo**, Trim Silence selection (e.g. to remove a long pause or goat noises from recording)

- Zooming in and out
  - use the (+/-) magnifying icons
  - Can zoom whole recording or a portion
  - Helps find boundaries to select and/or cut
- Practice “looping” a sound
  - Helps us find boundaries + do transcriptions
  - With the mouse, select part of the recording
  - Press Shift + play button
- Cut & save your utterances, words, & sounds

### Other digital recorders:

- MP3 (Zen, iPod, many small music players), Minidisc
  - designed for putting music *in* only
  - must have a *digital* out to be at all useful
- DAT recorders
  - digital out + special cable (Sony=optical)



- From your recording, chop the following:
  - Two whole utterances
  - Any two words from these utterances
  - Any two sounds
- Save each of these with systematic names
  - e.g. if the original full-length recording file is called SA001.wav or SA25Jun08.wav, then....
  - How to name the utterances, words, & sounds?

- Digital capture may involve:
  - copy (e.g. from CF or SD card)
  - transfer + conversion (e.g. from DAT tape or MP3/Minidisc to computer as wav)
- Analog conversion:

If you have *analogue audio* (e.g. cassette or reel-to-reel tape) -->Analog-to-Digital (A/D) conversion

- Old recordings are important to preserve
  - Before the format goes out of date
  - Before the tape degrades (esp. w/long tapes)
  - Have a professional digitize your tapes, or
  - Learn the most and do your own
- We'll demonstrate analog capture here
  - Need: recorder + cable + sound card + sw
  - Clean the heads
  - Set up the capture

- Digitizing analog files is important
  - Preservation
  - Ease of manipulation in digital format

If you have...

- Reel-to-reel tapes >> bring to professional
- Cassettes >> professional or d.i.y.

- Professional: usually expensive but quality
- Do-it-yourself

Need cassette player, cable, linear sound card, Audacity

- Laptop capture (via external card – today)
- Desktop capture (via internal or ext. card)
  - Do not use the built-in sound card of the desktop!
  - Either have a linear sound card built in, or
  - Attach an external sound card to your desktop

- Attach sound card to laptop & player
- Open audio editing software (e.g. Audacity)
- Testing: Adjust & monitor the recording level  
(Troubleshoot computer's audio settings); rewind audio to start
- Capture (while wearing headphones):
  - (1) On player, press Pause & Play
  - (2) In editing software, push the record & pause buttons
  - (3) Release both pauses and let 'er rip! Monitor levels
  - (4) Stop software, and save.

- Digital capture
- Audio editing
- Analog capture
- Peripherals (batteries, cables, tripods)
- Homework: Chopping and labelling