# AUDIO EDITING WITH ADOBE AUDITION 6

IMPORTING AND PLAYING AUDIO IN WAVEFORM MODE

In *Waveform* mode, you work with a single audio file at a time. It is a **destructive** type of editing, which means that changes you make permanently overwrite your original audio (.wav) files.

- **Import your audio** (.wav) files into Audition. Here are some ways to do that:
    - Drag and drop your files into the *Files* window in Audition (the top left window).
    - Double click in the *Files* window in Audition, then select the files to import.
    - Go to File > Open and select the files to import.
    - (Remember: **NEVER import files into Audition directly off of your audio recorder or SD card. The files need to be saved to your computer's Audio folder first.**)

- **Save a copy** so you don't accidentally change the original file. Here's how:
    - Double-click the audio file in the *Files* window so it appears in the *Editor* window.
    - Go to File > Save As.
    - Choose a new name and a location for the file (it should be saved in the same folder on your computer as the .wav files you imported).

- **Play** your audio files – there are three ways to do this!
    - Playback buttons on the bottom of the *Editor* window.
    - Drag or move the playhead by clicking anywhere in the *Ruler* at the top of the *Editor* window.
    - Playback shortcuts (J, K, L and the space bar).

- **Zoom in** to see details in the audio. **Zoom out** to see more of your audio. A few ways to zoom:
    - Use the horizontal magnifying glass tool on the lower right side of the *Editor* window.
    - Use zoom keyboard shortcuts (+ and -).
    - Expand, contract and move the view area in the **Nav bar** above the **Ruler.**
    - Scroll the mouse's trackball up and down when positioned on the Ruler at top of window.
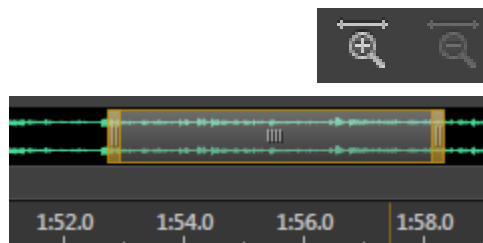
MARKING YOUR AUDIO

Create a cue marker: You can mark a specific spot in your clip or on your timeline so you can find it later. Here's how:
- Press "M" or go to Edit>Marker>Add Cue Marker.
- You can now see your **Cue Marker** in the *Ruler* at the top of the window.
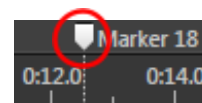
Create a range marker: You can also mark a whole section of your clip. This is like highlighting a sentence on a page so you can easily find it later. Here's how:

- Select the area you want by clicking in the black part of the window where the clip starts, hold the mouse down and drag until you have the whole area selected, then release. The part you selected should now be highlighted in white.
- **Pause playback** (otherwise you'll just create another cue marker)
- Adjust the selection by dragging the edges in and out. Clear the selection by pressing "G."
- With your selection highlighted, press "M" or go to Edit>Marker>Add Cue Marker.
- Above the ruler, you should now see a line across your selection. This is your **Range Marker**.
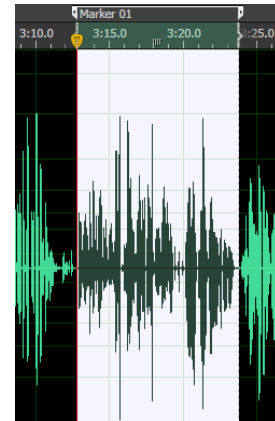
Find and name your markers:

- Go into the *Markers* window on the left side of the screen. Your markers are listed under each audio file. Notice how the *Cue Marker* and *Range Marker* symbols look different.
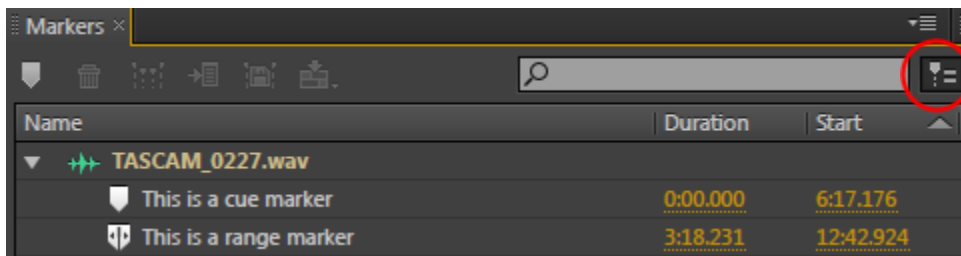

- **Rename your markers** in the *Markers* window so you can easily find them later. To rename a marker, click the text twice to highlight it, then type in a new name.
- If you don't see the *Markers* window, go to the Window file menu and make sure there's a check next to Marker.
- To see all your markers, click the top right button (circled) to "show markers of all files."

ASSEMBLING YOUR AUDIO IN MULTITRACK MODE

Multitrack mode is where you put together different audio clips to assemble your completed story. This is a **non-destructive** type of editing, so if you delete or change something, it doesn't affect your source material (.wav files).

To start a new *Multitrack* session:

- Click the "Multitrack" button in the upper left hand corner of the screen OR
- Go to File > New > Multitrack Session.
- You will be prompted to start a new session. Give your project a name, save it **in the same folder where you are storing your .wav files** (this should be located in your computer's AUDIO folder) and check the project settings, then press "OK".
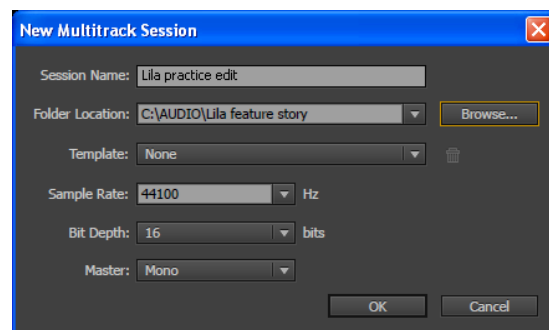
- **Organize your tracks:** In your Multitrack session, each interview or audio element should be on its own track.
    - Click on each track name (where it says "Track #" on the left side) once to highlight it, then rename it with a description of what will be on that track ("narration," "interview" etc).
    - Click the "M" button to **mute** that track.
    - Click the "S" button to **solo** that track – meaning every other track is muted.
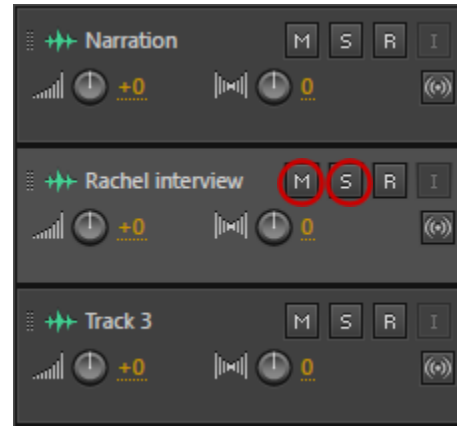
- **Import audio** into your *Multitrack* session:
    - *Range Markers:* Click on the range marker you want in the *Markers* window, drag it to one of the tracks, and release the mouse to drop it.
    - **Raw audio:** In the *Files* window, click on the audio file you want, drag it to one of the tracks, and release the mouse to drop it.

Adjusting CLIPS and using TOOLS in *Multitrack* mode

***Multitrack* mode tools**. The toolbar is on the top left of the window.
- **Move Tool** – Use to select and move entire clips
    - **Razor Tool** – Use to slice a single clip or multiple clips at once (choose "selected clips" or "all clips" from the tool's drop-down menu)
        - **Slip Tool** – Use to change the part of the clip that you'll hear, without changing the length or location of the clip in the track
   - **Time Selection Tool** – Use to select part of a clip or part of a track

- To adjust the beginning or ending of a clip, hover your mouse over the edge of the clip until the cursor becomes a red horizontal line with arrows on either end, then click and drag to adjust the clip length.
- To take out part of a clip you don't want to use, use the left mouse button to highlight those sections. Then press "delete" on your keyboard. You can also use the Razor Tool.
- When you delete part of a clip, make sure you are **"cutting to the breath"** – that means you should zoom in to make sure you're cutting right up to the start of the next sentence. That way, it will sound like a person talking normally, instead of like a robot with no breaths between their words.
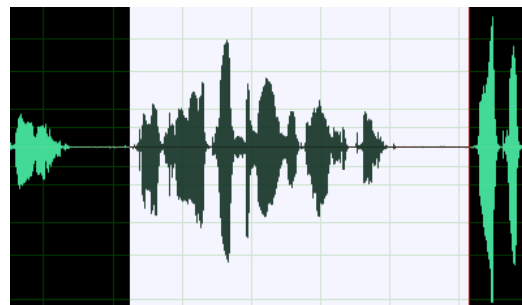
ADJUSTING VOLUME

Try to get all the volume at about the same level throughout the piece, between -6 and -3 (that's different from your recording volume). You can see your volume using the *Levels* window at the bottom of the screen. But you should also **listen** to make sure volume sounds even.

- To adjust a **Clip volume**: to adjust overall volume, click and hold on the yellow line and drag it up or down.

- **Keyframes:** To adjust the volume of individual parts of a clip, click once on the yellow line to create a "keyframe." Drag keyframes up and down individually to change the clip's volume over time.
  - To get rid of a keyframe:
  - Right-click on it and choose "delete selected keyframe" OR
  - Left-click on it, and swipe it all the way to the top or bottom of the clip.
- **Track volume:** To adjust the overall volume of an entire track, drag the dial under the track name up or down.
  - To adjust the volume of individual parts of a track, first click on the arrow next to "read." Then click on the yellow line underneath the track to create keyframes.
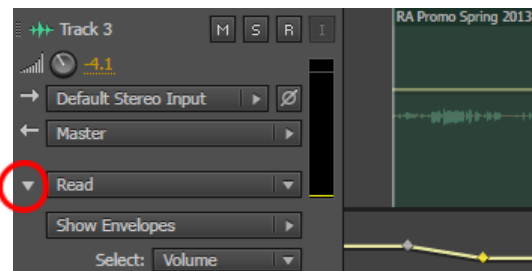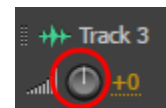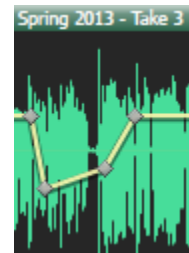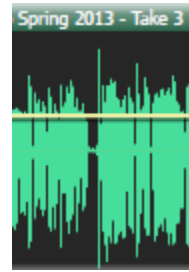
ADDING FADES

When you select a clip, two grey boxes appear at the top of the clip — at the beginning and end. Your mouse becomes a crosshairs when *you* hover it over one of these boxes. Click and drag to **create** a fade. Drag it left and right to make it longer or shorter. Drag it up and down to change how it sounds.

Overlap two clips **to create** a cross-fade. You can adjust the length and abruptness of the cross-fade with the fade-in/fade-out boxes.
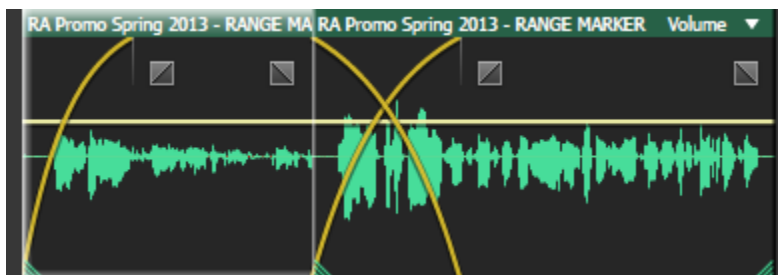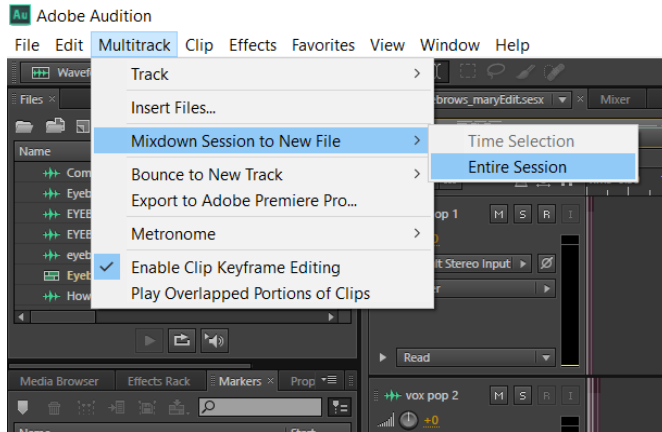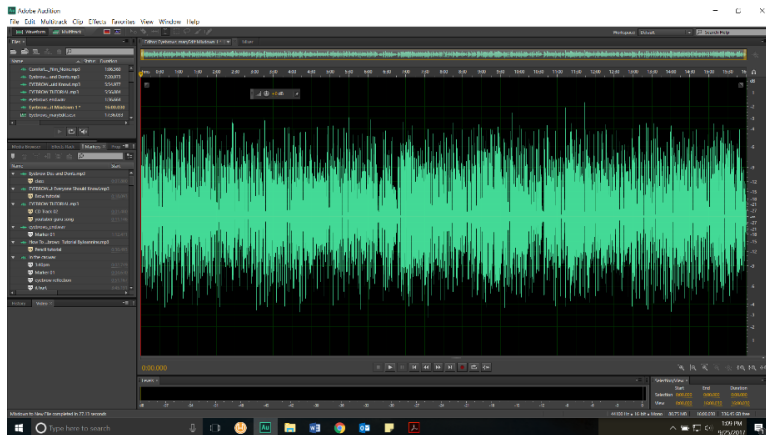
MIXING DOWN YOUR STORY

Done with editing? Let's export it into a .wav file!

To mix down your Multitrack Session:
- Go to Multitrack > Mixdown Session to New File > Entire Session.

- Here it is! Your entire session is now one .wav file.
- Let's save it: Press CTRL + S or go to File>Save.

BATCH PROCESS FOR SAVING ALL SESSION FILES INTO ONE FOLDER

1. Open the Audition Session
2. File > **Save all audio as batch process**
3. Click OK (if alert box pops up)
4. A Batch Process panel will appear on left side of your Audition screen:
   a. Click Export Settings > Browse > Choose the folder you want everything to go in
   b. Click "OK"
   c. Click "RUN"

This will make sure all the audio files in your session are saved in one folder. It won't include the actual Audition session file (.sesx) in that folder, so make sure to put that into your final folder too.

MIXING ACTIVE TAPE

"Mixing" is the process of creating balance, consistency and clarity with differing audio sources. It only happens after the elements of the story are edited and arranged.

Most audio stories are made from clips of audio that originate from different sources. A news story might consist of recordings of a reporter speaking (narration), sound bites from interviews, some scene-setting sound or active tape, and ambience (the sounds of the environment). Those things are all edited, arranged, and layered in a way that tells a story — but it won't sound like a cohesive whole until it is mixed.
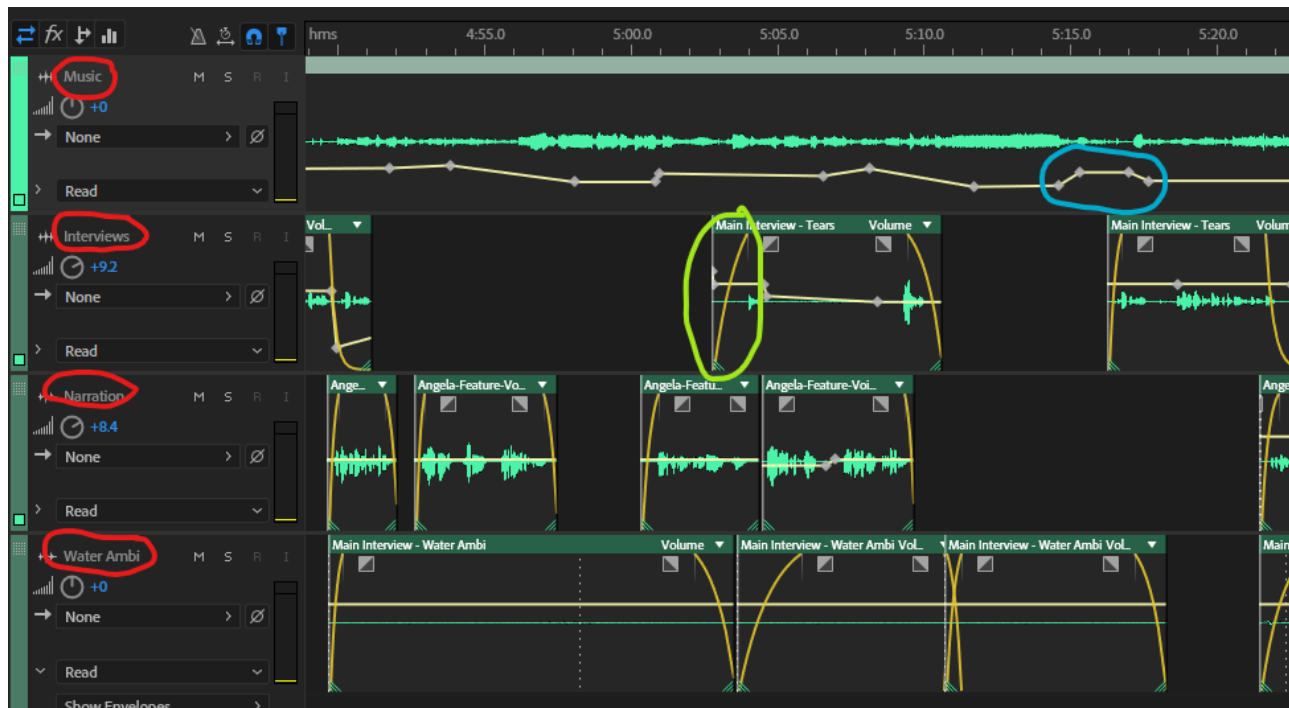
This is a screenshot of the 2014 RadioActive story *How my dad escaped Vietnam at age 14, without telling his mom* by Angela Nguyen.

- **Tracks (circled in red):** Each track contains a different type of audio.
- **Keyframes (grey dots circled in blue):** Use keyframes to make volume adjustments to specific sections of the track.
- **Fades (yellow line circled in lime green):** Make sure the tops and tails (beginnings and ends) of each clip have fades, even if they are very short. It's best practice to place fades at the top and tail of every clip to avoid abrupt entrances.

Some mixing resources:
- The producer's handbook to mixing audio stories | NPR Training (training.npr.org/audio/mixing)
- How to mix: 8 steps to master the art of mixing audio stories | NPR Training (training.npr.org/audio/mixing-DIY)
- Stupid Fade Tricks | Transom (transom.org/2003/stupid-fade-tricks-2)

AUDITION GLOSSARY & SHORTCUTS

- **Cross-fade:** A transition between two audio clips where one clip fades down and the other simultaneously fades up.

- **Cue Marker:** A marker you can create for a single location in an audio file or tracks, like an arrow pointing to a specific second you want to remember.

- **Decibel (dB):** A unit of volume measurement – when recording, you want your levels to be between -6 and -12 dB.

- **Keyframes:** Points you create in an audio file or track that you use to change a property (like volume) over time.

- **Multitrack:** An editing mode in Audition where you assemble different audio elements on separate tracks. A non-destructive mode (meaning changes you make to pieces of audio don't affect the original file), Multitrack is where you will assemble your final piece and add effects and fades.

- **Playhead:** The line that indicates where in the track or file you are.

- **Range Marker:** A marker you can create for a section of time in an audio file or tracks, like highlighting a sentence on a written page.

- **.Wav files:** A standard, uncompressed Windows digital audio format that uses the file extension .wav (pronounced "wave").

- **Waveform: 1)** A visual representation of an audio recording. Where the waveform is high, the recording level is louder and where it is low, the recording level is quieter. **2)** An editing mode in Audition where you work with a single audio file. Waveform mode is destructive, meaning changes you make to the audio in this mode affect the original file.

SHORTCUTS: Quick ways to do things with your keyboard. (Don't forget to try right-clicking for more great shortcuts!)

Zoom In / Out	+ / -
Undo	Ctrl + Z
Save	Ctrl + S
Save as	Ctrl + Shift + S
Open (import) audio files	Ctrl + O
Split clip	Ctrl + K
Group selected clips	Ctrl + G
Select all clips	Ctrl + A

Play / Pause	Spacebar
Reverse / Stop / Fwd	J / K / L (press again to change speed)
Move playhead to next edit	Ctrl + Right arrow
Move playhead to previous edit	Ctrl + Left arrow
Add marker	M
Cut	Ctrl + X
Copy	Ctrl + C
Paste	Ctrl + V

Select Arrow (Move) tool	V
Select Razor tool	R
Select Time Selection tool	T
Select Slip tool	Y