**12 October 2024**

This workshop will be all about recording your voice. I'm going to be utterly pretentious and shoehorn the segments into Parts all starting with the same letter. Standard homiletic technique :) Forgive the singer in me as we go!
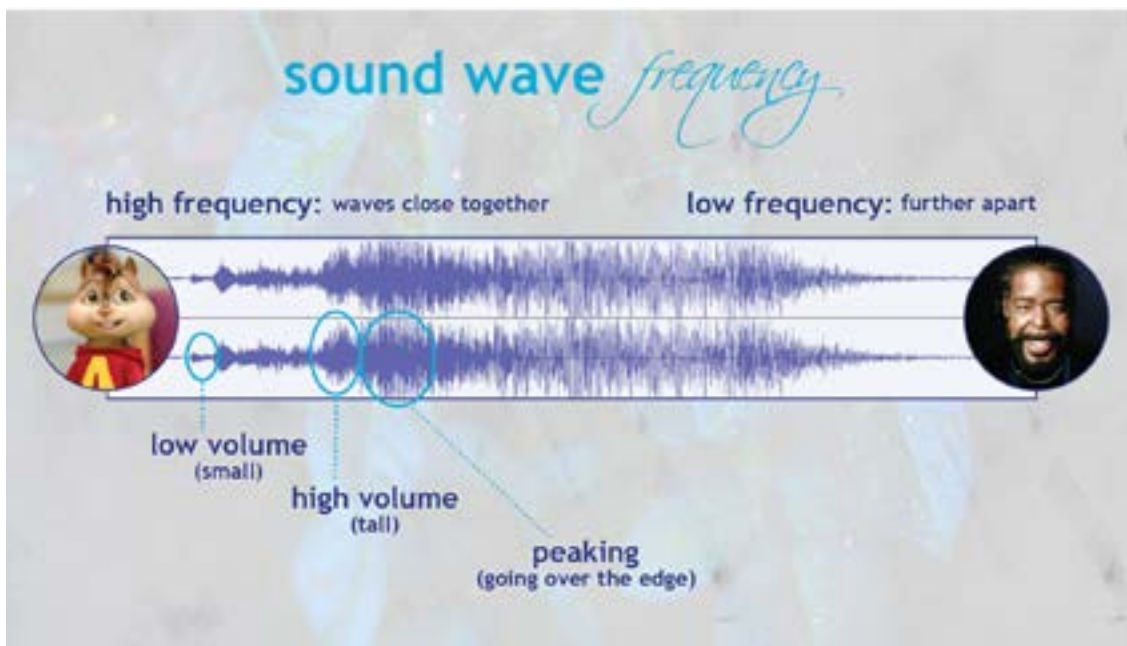

Before we get into the technical stuff, I'd like to give you a really brief list of lexicon words.

Sound, as you know, travels in waves. If the waves are close together, they are more frequent.
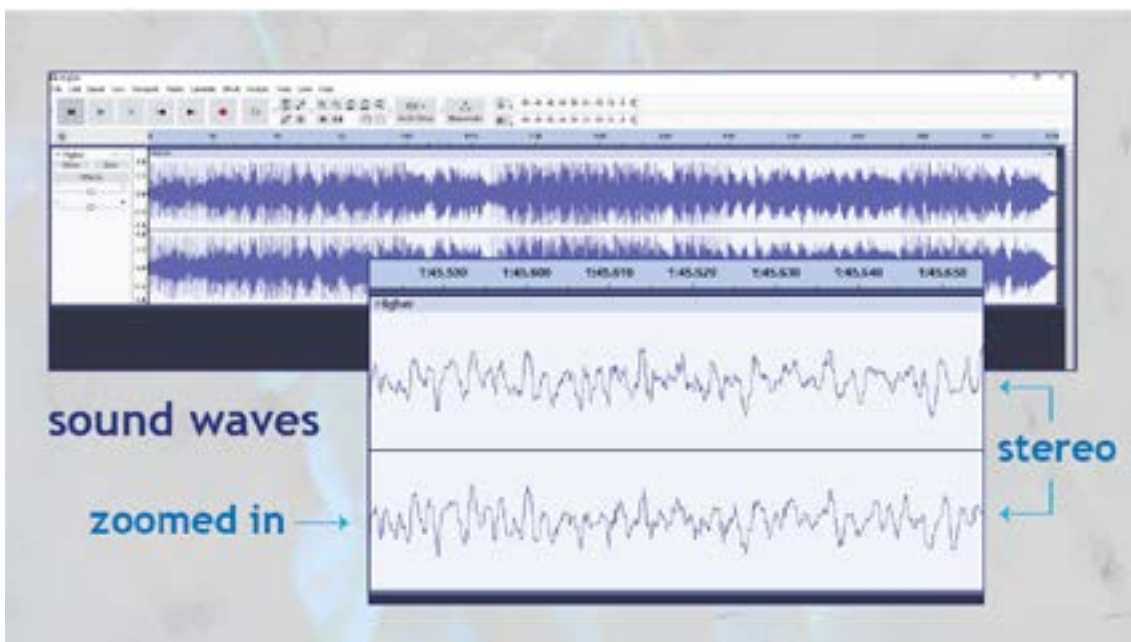
If the frequency is higher, so is the pitch. On a scale of *A* to *B* ...

We will have to make sure that the force of the sound coming in, does not 'colour outside the lines' by being too powerful for the equipment; nor so soft that you have to crank your speakers to hear it.

terms *of endearment*

Here are some handy terms. You can hang around the church sound desk & drop a few!

getting levels   balancing sound-force with equipment

peaking   too much sound-force (overload)
clipping
distortion   hitting the ceiling

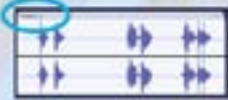*compression*   squishing the wave so it is dense, not loud

                                                    evenly avoiding the ceiling

take   a bit of recorded audio

track   one or more takes, one set of controls

mixing   balancing the volumes
            and intensities
            of the tracks together

split clip	to cut up a take so timing can be adjusted

right-click on
the splitting point

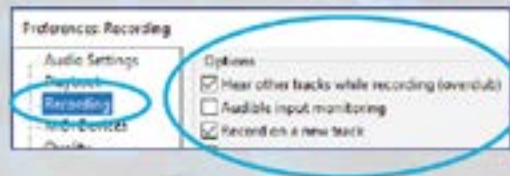|	
splicing	juggling the segment bits around (editing)
reverb	big or small room echo/resonance effects
pop filter	foam or stocking between voice + mic

overdub	to add layers on top (harmony, instruments, backing track) – make sure this is ticked in Edit → Preferences so you get a new track each take.

Preferences: Recording

☑ Hear other tracks while recording (overdub)
☐ Audible input monitoring
☑ Record on a new track

We need some hardware and some software. Let's talk about the software first.

Note: this information is current October 2024. That won't last long ...

There are several options for recording, and I'm going to recommend Audacity, the last one; but just for your info, they are:

1. You can use your phone — the quality of the sound will be fine — but files may need converting, which is a-ca-awkward. And if you have more than one track, you'll need to compile them — using Audacity!

1. Open the VoiceMemo app, record your piece
2. Select the piece you want, locate the ...
3. Click Share, click the email, send it to your PC
4. It will arrive in your inbox, from yourself, as an m4a file attachment. Which Audacity can't read.

So then you'll have to convert the m4as to wav or mp3. And for that, I recommend DB Poweramp.

2. You can use a slideshow app already on your computer — but you kinda need a slideshow to go with it! Which is not a bad way to go, but very time-consuming.

I recommend Audacity, which is the app I'm going to teach you today. This is a basic recording program. It's only as complicated as you make it! It's good for Windows, Mac & Linux (some variations apply). Click the image download it, if you haven't already.

Go ahead and get the Muse Hub installer — you can delete it later. Be sure to at least disable it in Task Manager's 'Startup' list.

Install Audacity, but don't open it just yet.

What else do we need?

The idea of using a mic is that you can record your voice close-up, where it will filter out a lot of surrounding noise. The reason we use headphones is that without playback coming through your speakers back into your mic, it won't be creating weird double-up effects and layers of ambient noise.

Most laptops do have a built-in microphone (for things like Skype.) This is fine if you live in a dead silent environment, but at my house, it's planes, trains & automobiles.

Note: 2024 prices

Quality control: In general, the best signal is <u>USB</u> on the end of the cord. But a 'good-enough' mic will still do the job. I'll be modelling the Shintaro, which is only just good enough! *Comment from Anne Hamilton: don't put listeners off by having awful sound!*
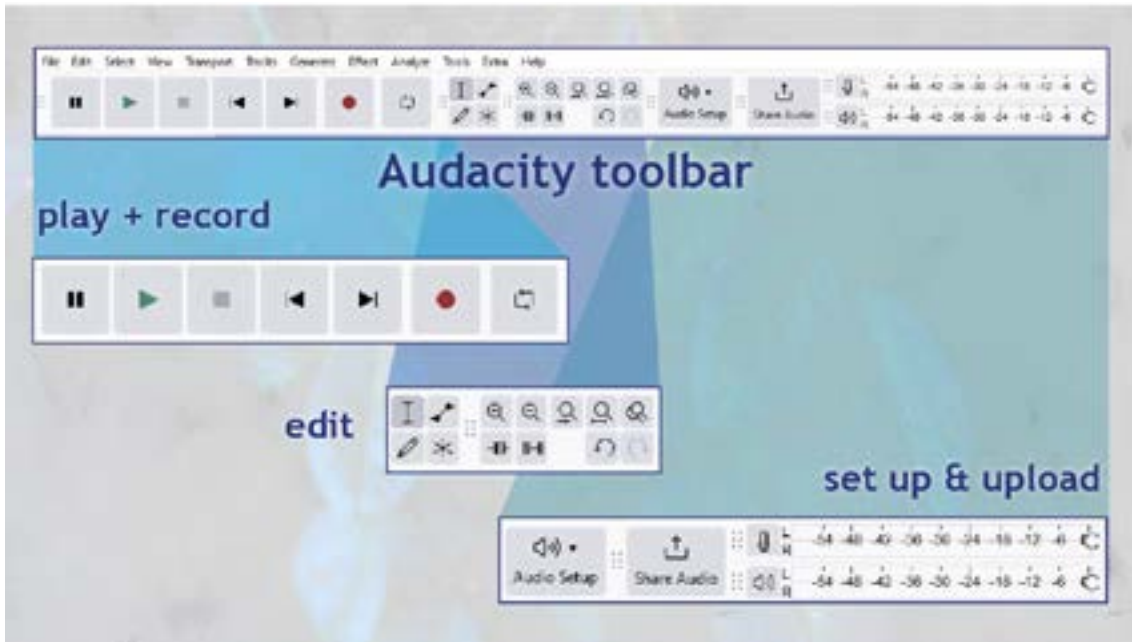
So how do you plug it in?

The more you can avoid using a combination of adaptors, the better things will go. Because while they do work, they're wibbly-wobbly, and therefore not timey-wimey.

Plug your mic in BEFORE you open Audacity. Are you ready? Let's open the program.

Let's explore the Audacity toolbar.

It's got 3 sections: *recording, editing,* and *technical difficulty!*

This is where we record, and play back what we've recorded. (Who had one of these bad boys, back in the day?)

Audacity toolbar

zoom in/out

bookmark
+ cursor

silence highlighted bit

This middle section is where we edit our wave — chop bits out, copy bits in, move things over, add harmonies, delete clatter, fix problems.

Audacity toolbar

recording volume
(speaking)

playback volume
(listening)
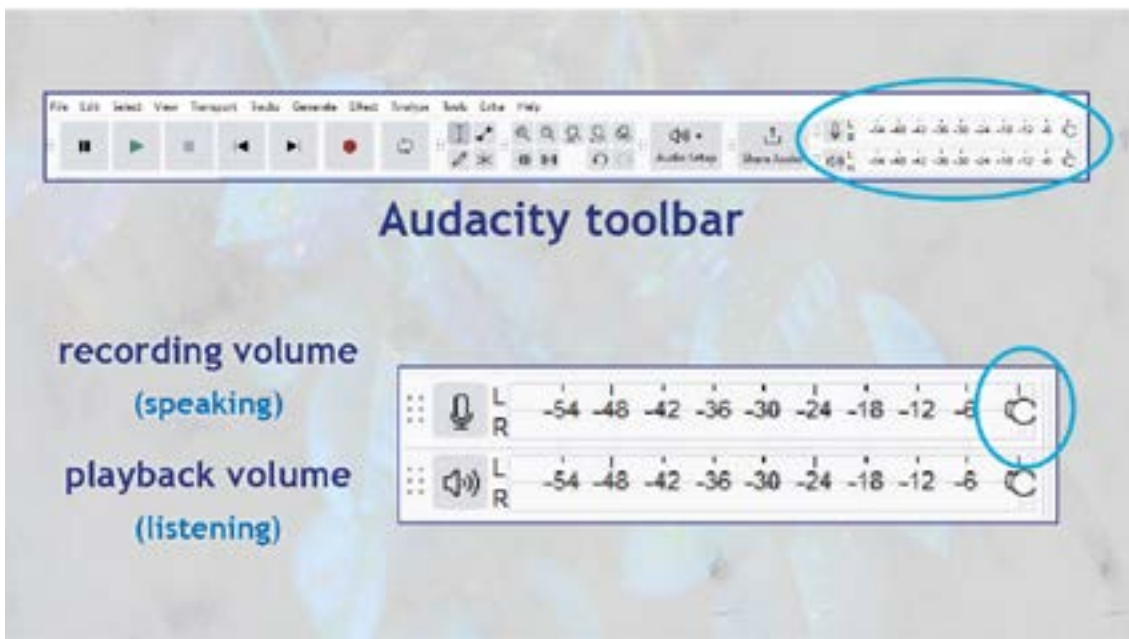
And this bit is where we start: **setting our levels**.

Start with both 'knobs' all the way up. Then run a test recording of your voice, speaking at normal volume.

If Audacity is not detecting your microphone, click *Audio Setup* and make sure the correct mic device is selected. You may need to restart with the mic already plugged in.

Try moving your face further from, or closer to, the mic — and just experiment with the recording 'volume knob' and your distance, until you produce a nice wave that takes up about a third of the track.

This is called a 'track'. It's doubled because STEREO, but a mono track is fine too. Each snippet segment on a track is called a 'take'.

It's okay to stop, start, or redo. We call this 'multiple takes'.
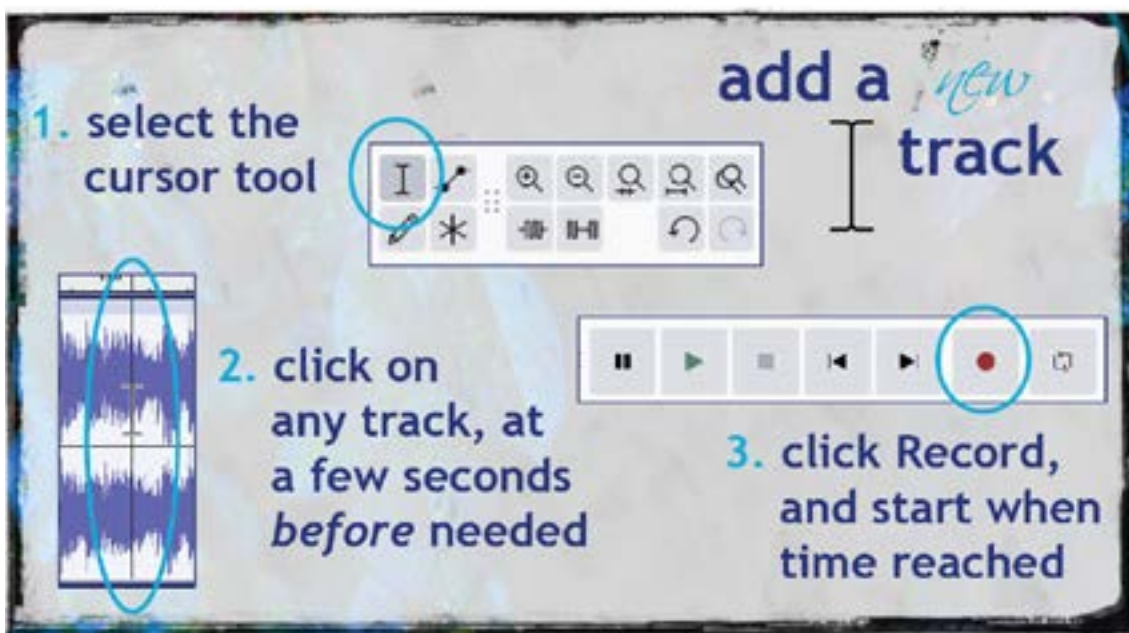
To restart the recording: Put your cursor near the end of your last take, so you have some lead-in time, and hit *Record* again.

overdub   to add layers on top
(harmony, instruments, backing track)
– make sure this is ticked in Edit → Preferences
so you get a new track each take.

Audacity will give you a fresh track for your new take. If it doesn't, open *Edit-Preferences-Recording* and tick 'Record on a new track'.

naming the tracks

1. click the •••
2. select Rename Track
3. choose a name; OK

You might like to LABEL the tracks! We do this in the left-hand panel. Find the dots …

If you want a nice instrumental music track behind your speaking, or an opening jingle, you can add in mp3 or wav files as part of your project.

Be sure to be ethical about this; it's a copyright issue. In the same way you wouldn't want someone plagiarising your writing, don't plagiarise their music — licence it. You could consider a subscription to a licencing site such as PremiumBeat. (This of course only applies to online and commercial projects. Have all the iTunes karaoke fun at home that you want!)

Since very few of us are one-take wonders, you will end up with multiple recorded tracks.


If you like, you can move them all onto one track. You can also make the tracks narrower so you can see more at a glance. Grab & drag. Use the magnifiers to zoom in and out. Mostly, consolidating tracks is useful for music, when you might be adding lots of different harmonies in small chunks.

Before you go moving takes around, be sure the volume of each take matches the others, so you don't end up with MEDIUM**LOUD**softsoft**LOUD**.
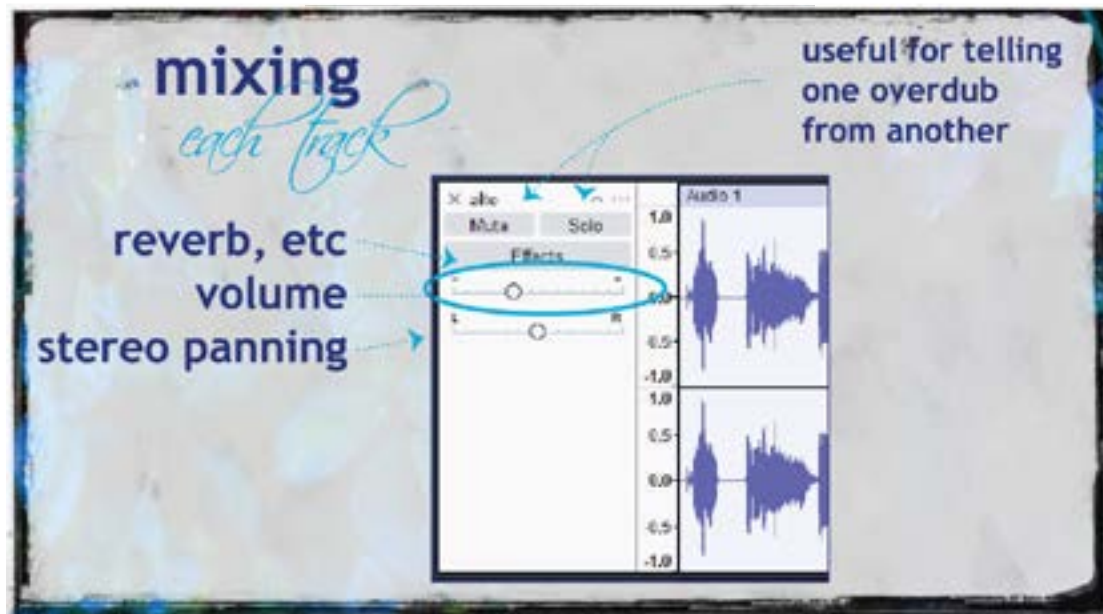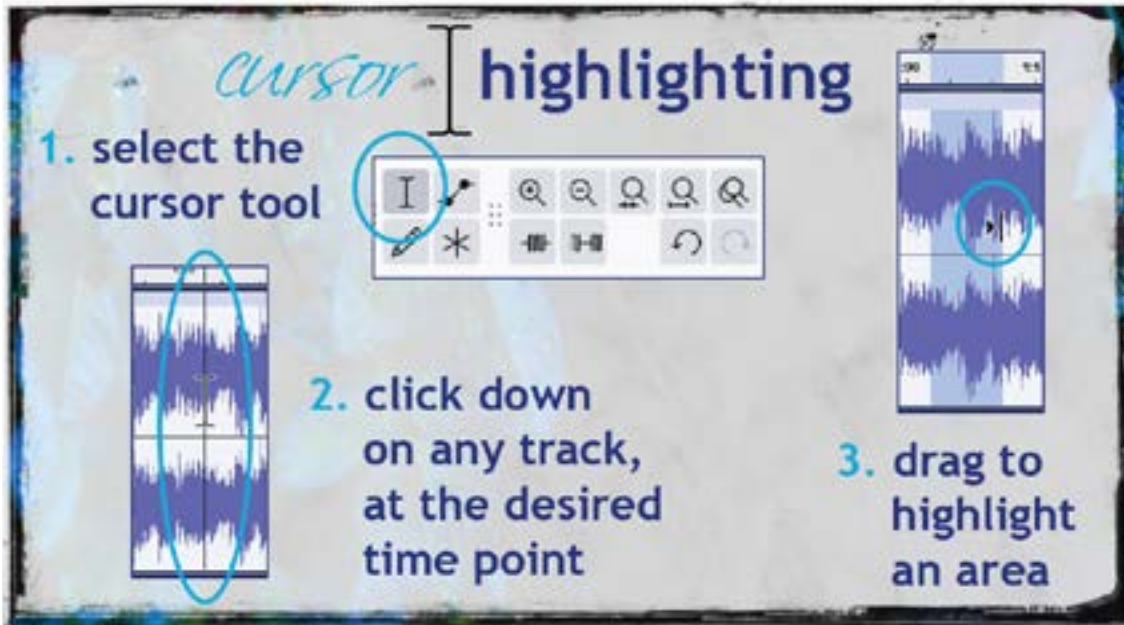
Here are the volume controls.

We need to equalise things, the way a sound tech at a mixing desk would. Check each take, on its own track, and if it needs its own volume adjustment, don't move the take to another track where it might be sharing with something at a different volume!

the tracks

We're going to *splice* things up a little! This is how we troubleshoot and polish.

The first thing I need to show you is how to highlight.

Looking at the middle part of the Audacity toolbar, you'll see the I-shaped cursor you've been using in Word for years and years. All you do is click on the sound wave, hold down the mouse button, and drag — same as Word.

You'll see a little fwd/back triangle, and you can continue to make little adjustments.If you drag the mouse up or down, you can highlight the same time frame in multiple tracks. So be very careful before you hit 'delete'!

Imagine you've recorded your 10-minute podcast, but you've said 'um' 20 times. Or you've mispronounced a word. Or your teenager in the next room roared a bad word. You hit a wrong note. Or you sneezed. OH NO!

If you highlight and delete your sneeze, on track 1, that time VANISHES from the track, taking the space-time continuum with it. Anything you have on the other tracks will now be out of sync by 1 sneeze-worth, unless you delete that bit on ALL tracks.

Now you *can* highlight them all and manually 'grab' the top bar of one, and drag the whole lot 1 sneezeworth backwards. But it's awkward. Instead, we're going to use the silencer.
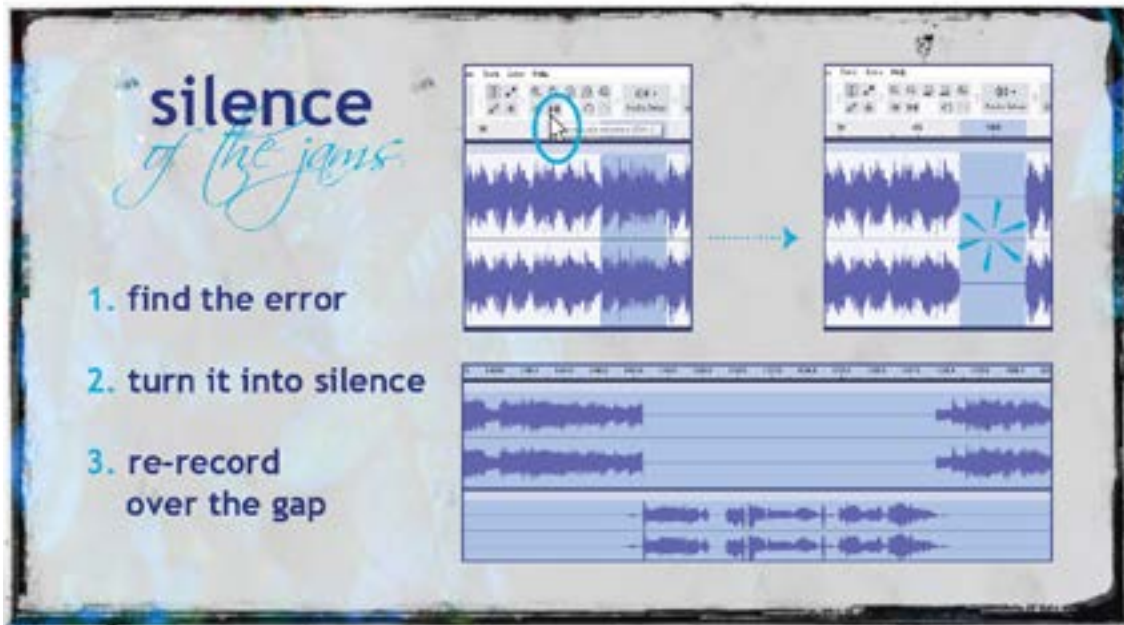
We highlight the offending article. We locate the *Silence* tool in the middle of the toolbar. And *voilà!*

Now we can record a new track to fill in the gap with our correction. Remember, you don't have to go back to the very beginning - you can start the new track just before the end of the previous bit, by clicking the cursor on *that* take. And use *Silence* to hide any exta noises.

What do we do with peaking bits?

Peaking, as you'll remember, is when there is too much sound-force coming in.

We can often fix this with compression, but like photography, it's always better to take a good shot in the first place rather than 'fix in in "post"'. Sometimes, though, it's such a small bit of clipping that we don't want to redo it.
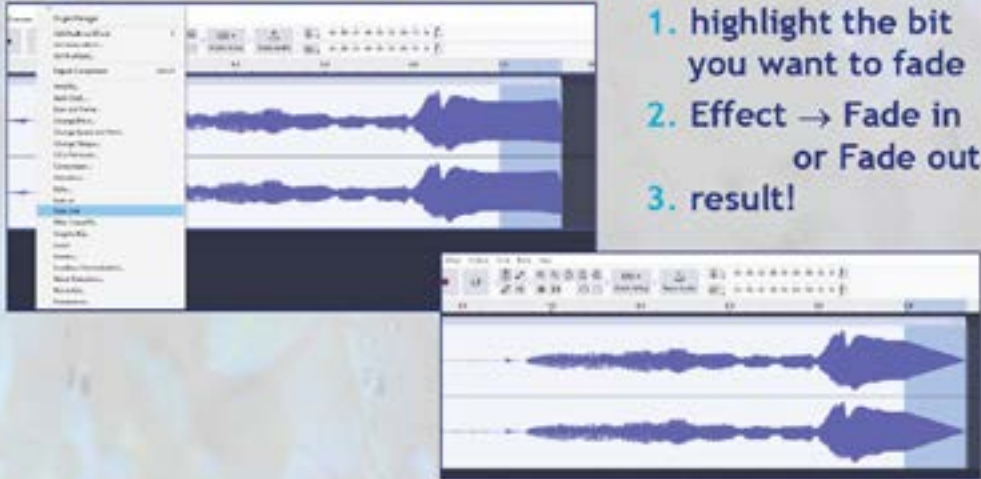
First, we highlight the bit where the wave is banging its head on the ceiling and floor. Then we go to our top menu and click *Effect*, and pick out *Compressor*. Just use the preset and click *Apply*. And you'll see (top right) how it no longer goes off the edge.

Think your voice sounds too harsh? Have a play with the *Reverb* effects. There are so many permutations — you'll just have to experiment until you find a setting that mellows without being gimmicky.

Want to incorporate a jingle, but have it fade it out as you start speaking? There's an effect for that!

We're at the tail end of our tale! We've recorded, edited and mixed the tracks. Time to render and export.
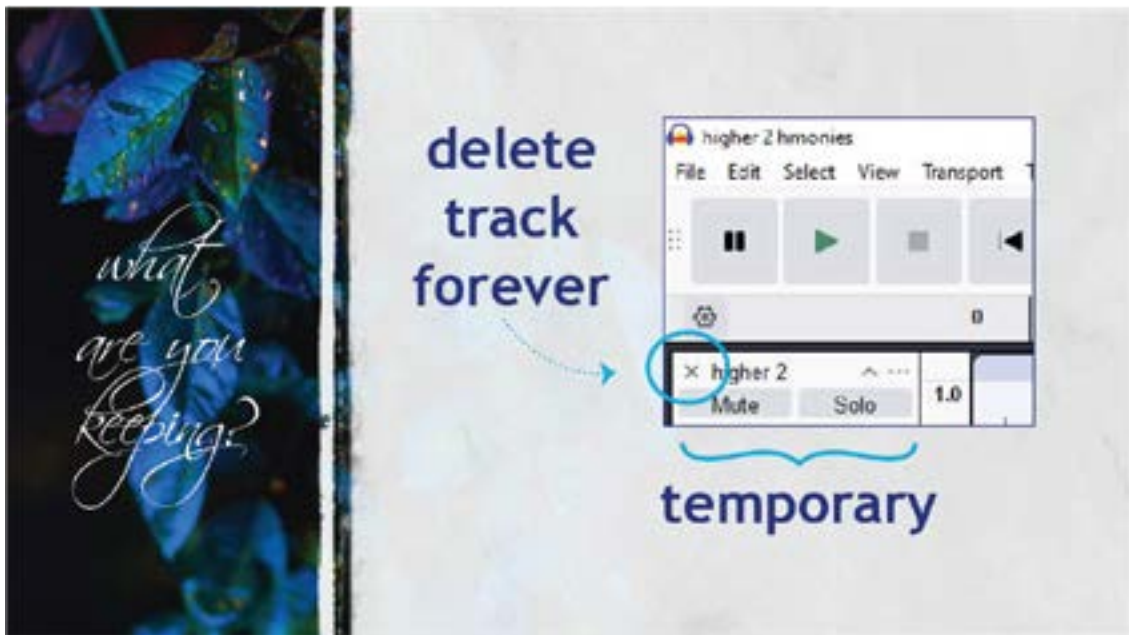
At this point you need to decide how many of your tracks are staying in the mix. Delete or mute the ones you aren't going to use.

Remember how I said, if you have to adjust the volume of a take, don't move it onto another take's track?

Well, there is a way to combine takes, without sacrificing volume. We call it 'mix and render.'

mix *and render*

1. highlight the tracks you want combined

2. Tracks → Mix → Mix and Render

3. rename the new merged track (appears at the bottom)

Highlight <u>all</u> the things you want to combine, which will include whatever levels and effects you've selected. Then go to *Tracks—Mix—Mix and Render.*

This will merge all the highlighted tracks into ONE new track. The individual highlighted 'ingredient' tracks will be gone — 'cake' baked!

If you want to retain your original tracks but also have a version of them all mixed, then select *Tracks—Mix—Mix and Render <u>to New Track</u>*. This new track will be added at the bottom of the pile. (Keep in mind that the best workflow is non-destructive, allowing for future tweaking.)

You can move an entire track upwards over the others (reorder the tracks) by grabbing the blank space in the left panel (under *Volume*) and dragging upwards.

Once you've got your project tidied, it's time to export the file.

It's always best to export as mp3, because these are smaller files than .wav, which means they load quicker for your subscribers.

export the project to your computer

2.5 edit the metadata before exporting, if desired

1. File → Export Audio

2. file name, mp3, then folder; Export

This will combine all the unmuted tracks with all their settings, into ONE mp3 file, stored on your computer. ALWAYS have this backup — someone else's Cloud is not 100% reliable.

You can now do what you like with that file — upload it to your podcasting host site, send it to your friends, put it on your website — whatever you like.

https://www.audio.com

audio.com

broadcasting website

- free
- cloud-based
- platform provided
- simple
- linked to Audacity

One of the fantastic things about Audacity is that it is linked to Audio.com.

In a nutshell, you can export your Audacity project directly to this cloud-based broadcast site. You don't even need to render it first.

Step one is to create your account. Step two is to link the account to Audacity.

If you don't already have podcast hosting, you can get it here — free for the first hour's worth, then various rates for longer. It's quite cheap.

If you go back to your Audacity project, you'll see a button labelled 'Share.' This goes directly to Audio.com, where your mp3 is uploaded and you fill in a form describing it.

You will be asked if you permit people to download the piece, if it's for public access, or hidden. It'll give you a link to copy to your social media.

At Audio.com, this is what you'll see. All very civilised. The 3 little icons on the right are for edit, share, and manage.

I hope you learned something helpful. All software is trial and error - just have a Google and have a go!