

Glossary

Audio signal processing – the electronic manipulation of audio signals. Audio signals are electronic representations of sound waves.

Delay – an audio signal processing technique that records an input signal and then plays it back after a period of time

Looping – an audio signal processing technique that records an input signal and then plays it back continuously.

Distortion – an audio signal processing technique that makes the sound fuzzy and muddled

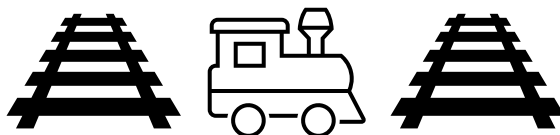
Reverb – an audio signal processing technique that makes a sound reverberate more than normal

Electroacoustic music – a genre of music in which composers use technology to manipulate the timbres of acoustic sounds.

Electric violin – a violin with a built-in pickup that converts string vibrations into electrical signals for amplification.

Imagery – visually descriptive or figurative language, especially in a literary work

Imitation – the action of using someone or something as a model



Listen

Trains!

In *Trains!*, the composer, TJ Cole, imitates the sounds of a train using various techniques and notes on the electric violin. This is a form of imagery and imitation, where the composer is not actually using train sounds, but instead attempting to replicate them musically. If you close your eyes and listen, can you imagine a train passing by?

Dig Deeper

Looping

This piece is performed using a looping pedal. A looping pedal allows a musician to record short segments of music, known as “loops,” and then repeat them continuously until they decide to stop them. The composition of this piece is built around a handful of loops that occur at various times.

Create and Make

Make your own loop piece!

Try making your own loops to create a piece of music. Loops are made by recording short segments of music or sound. If you play an instrument, try recording yourself play short phrases. If you don't play an instrument, you can still create loops, just record any sound you'd like to repeat over and over again.



Listen

Trains!

Listen to the piece with your eyes closed or with the performance video hidden. How many different train sounds do you hear? Are there any sounds missing that you'd like to add? How might you add those sounds? Listen to the piece again, this time with the video. Notice the different techniques used to emulate the different train sounds.

Dig Deeper

Looping

Listen to the piece with your eyes closed or with the performance video hidden. See if you can identify the loops, the short segments of music that are repeated. How many loops does this piece use? Do the loops ever pause and then resume later in the piece? Listen to the piece again, this time with the video. Notice how the performer creates the loops. In order to create the loop, he needs to play the segment of music at least once and record it.

Create and Make

Make your own loop piece!

There are various ways to create loops. If you don't have a looping pedal, you can record directly into a digital audio workstation (DAW) and then copy and paste the recording multiple times so that you have the recording looping seamlessly. You can also use your phone or laptop to record and then export those files into a DAW. Once you have your first loop playing over and over again, add a second loop. Then repeat the instructions for creating the loop in the DAW. Keep creating loops to build a whole piece! If you want to make the piece more complex, you can pause some loops and resume them later in the piece.

