

Three Variations on a Rainbow Bridge

for synthesizer

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.
Completion date: December 17th, 2021.

This piece is a template for improvisation, and as such has no score except the instructions below. Example realizations of the piece are available at <http://jashiin.bandcamp.com>.

Three Variations on a Rainbow Bridge is performed by a single person, and requires a synthesizer with

1. a filter with low-pass and high-pass modes, and real-time control over as many filter parameters as possible (cutoff, resonance, filter envelope, keyboard tracking, etc.), and
2. an arpeggiator.

Additionally, onboard or external effects can be used if you like. To start, set the oscillator(s) up to produce any sustained pitched tone. The harmonic content is built from common waves and can be anything from a simple square wave to a complicated combination of detuned saw waves with sine, noise, etc. added.

Set attack and decay time to zero, sustain to maximum (for release, see below). With one hand, press and hold whichever note you choose (which will be referred to as the base note). This is the beginning of the piece. When you're ready, begin manipulating filter resonance and/or other parameters with your other hand until you are able to produce melodies with the high-pitched sound of the overloaded filter. This is the main content of the piece: unstable, distorted melodies produced by manipulating the filter, floating, so to speak, above the base note. These must always take form of an arch – that is, start at a lower pitch, proceed to a higher pitch, and then sink back to a lower pitch. Play as many as you like, with whichever controls you find right, but always end the filter melody by going to pitches lower than those that preceded them. This is the first section of the piece.

The second section of the piece begins whenever you like, by turning the arpeggiator on. Don't change the base note, just let the arpeggiator trigger it, at any tempo you choose (tempo must remain constant). Repeat the process of producing filter melodies with arch contours and playing with them, this time using two hands, and incorporating the rhythm of retriggered note. The setting for release time can obviously affect this section a great deal, so you must decide beforehand on the kind of rhythm you'd like to produce. This is the second section of the piece.

The third section of the piece begins whenever you like, by turning off the arpeggiator (but keeping the base note going) and changing filter mode to high pass (or band pass, or notch, if they are available and you want to use them – as long as the sound becomes thinner). This may require a pause in the music as you press down the key again, or while the filter mode changes; the resulting pauses and/or sound artifacts are part of the music. Repeat the process of producing filter melodies with arch contours and playing with them. Once you feel you've done enough, make sure the release time is sufficiently long, release the key, and let the sound fade to silence. This is the third and final section of the piece.

Throughout the entire piece, you can adjust whichever aspects of the sound you wish, to add elements to the music, as long as you don't use the LFO (or a separate envelope generator, etc.) to control filter parameters, don't change the base note (so, no pitch bend, no vibrato, etc.), and don't use polyphony (so, nothing added to the base note, no chords, no polyphony at all).