

Score Performance Notes

Elevator Music Project

Visual Scores

- Originally written for 2 musicians, guitar, and electronics.
- A stopwatch or clock is suggested for timing, or playing along with the provided score guidance videos

Preface

This collection of 9 pieces was originally composed for the Elevator Music Project by Kelley Mitchell in August 2020. There are buttons permanently installed in the Arraymusic accessibility elevator that when pushed, play back the original recordings of these pieces. On the walls of the elevator car, the visual scores are mounted on the wall with vinyl.

The band that made the original recordings of these pieces is Helicopter Money, a duo composed of Kurt Newman primarily on guitar, and Kelley Mitchell, who usually performs visuals and live audio effects, but for this project has transitioned to the role of composer and electronics performer.

More info about the project:

<https://www.arraymusic.ca/elevatormusic/>

To get in touch with Kelley:

Email kelleyamitchell14@gmail.com

Performance Notes

Score A

The Push of a Button

This piece draws parallels between the wiring that powers us, and electronics. Moving from left to right, the first arrowed curve symbol represents the shoulder joint. The second lower arrowed curve represents the elbow joint. The 5 horizontal lines represent fingers on a hand. Halfway through the piece, these mechanical movements of our body are transferred into the circuitry of the system, in this case, the wiring behind a button in an elevator.

For the first half, there is one path to follow. At 45 seconds, each musician may attempt to choose a path melodic or otherwise and follow it to the end.

ScoreB

Multiplexing

This piece elaborates on the technical electrical diagram that represents the process of multiplexing. Multiplexing is the process of combining multiple analog or digital signals over a shared medium, usually to share a scarce resource. It was invented by Major General George Owen Squire in 1910, in order to deliver music to listeners without the use of radio. It allowed for transmission of music through electrical wires into houses, businesses, and even elevators. He started the company Muzak, which composed, recorded and provided background music to public establishments.

Each stage of the score could be thought of as different musical textures (polyphony, homophony, monophony, homophony, polyphony) or simply as the process of separate things coming together into one, and separating again, for example, many different notes, the notes of a chord, and the fundamental tone. It is up to the artists interpretation of how they would like to convey this process.

Score C

Stimulus Progression

The Muzak company began to produce music with the goal of increasing workers' productivity. This program, known as Stimulus Progression, was composed of 15 minute blocks, alternating between music that gradually increased in tempo and aggressive timbre, and blocks of silence.

In this score, there are suggested tempo markings, *lento*, *moderato* and *presto*. Above each tempo marking is a light opacity sound pressure pattern of the timbre that the sound of a flute, piano, and trumpet at middle c produces, demonstrating an increase in the brassiness of the texture. Below *lento* are Delta brain waves that one has during non-dreaming deep sleep. Below *moderato* are Theta and Alpha waves which occur when one is drowsy, drifting down to sleep in a relaxed state. Under *presto*, we find Beta and Gamma waves, which occur when we are engaged in activities, conversation or learning.

Score D Looking Down

In the 1960's, NASA used Muzak onboard its spacecraft to focus, soothe and occupy astronauts as they hurdled through space. This background music helped to connect them with their concept of home which they had become mere observers of.

The static in the background, fading out from left to right can be seen as the mind clearing or calming as one steps back from the moment. The space ship portals, from left to right are also a reflection of the subconscious, and how we see our place in and outside of the world.

Score E Reconvolution

Convolution reverb is a multi-step process that allows you to simulate acoustic spaces for any audio signal. First, you take an impulse response of an acoustic space that measures the echoes and reflection patterns. Next, you deconvolve it, which lines up the time and levels of all the reflections to the beginning of the file. Finally this deconvolved signal can be combined, or convolved with any other audio signal, allowing it to be placed in the original acoustic space.

This score has two layers. The bottom is the original, 10 second sine sweep impulse response waveform, collected in the accessibility elevator at the Array Space, the site of the Elevator Music Project. The top layer is this waveform after the process of deconvolution.

To perform, download the impulse response from <https://www.arraymusic.ca/elevatormusic/> . There is a file for Space Designer in Logic Pro X and for Convolution Reverb in Ableton Live. The electronics performer may choose any sounds, such as that from the guitarist, or found objects, and apply the convolution reverb. The guitarist or other musician is to try to follow the amplitude of the waveform without application of any kind of reverb (i.e, dry or direct signal).

Score F Cerebral Backdrop

The term "furniture music," coined by Erik Satie in 1917, refers to background music, that at that time, was played by live musicians. This is one of the first records of music being composed specifically as a "cerebral backdrop" rather than the focal point.

John Cage forged its revival in the 1960's through his theory of minimalist background music, which focused on atmosphere and texture over traditional form and movement. He performed Satie's piece titled *Vexations* 840 times, and charged admission of \$5. He installed a clock in the lobby so that when each audience member left, they would get a nickel for each 20 minute duration that they attended. He did this so "people will understand that the more art you consume, the less it should cost." The concert ended up lasting more than 18 hours, and only one person watched the entire performance.

Modern day elevator music draws on these concepts, where the listener is presented with an easy listening backdrop for their fleeting vertical movements.

This score is composed of an additional third axis, communicating depth. The triangle, which occupies the farthest parts of the score in terms of this third axis, is divided into 3 distinct sections with a gradient of textures, from least to most accentuated, in which parallels can be drawn to musical texture and atmosphere.

Score G Acoustic Wallpaper

In the 1990's, the environmental Pipedown Campaign began in the UK, and spread to other parts of Europe. It advocated for the removal of background music in public spaces, classifying it as noise pollution that reduced music to a marketing tool. They believe that "music when freely chosen is one of life's greatest pleasures, but that when music is forced on people, [it] can too easily become the exact opposite" (<https://pipedown.org.uk/>). They also advocate for its removal because of reasons relating to those with hearing problems and its affects as a health hazard, such as heightened blood pressure and stress hormones.

You can view a map with all places in Europe that do not have piped in music here:
<https://quietcorners.org.uk/>

This score aims to illustrate how the world around us shapes who we are. In the first section, we are autonomous while information swirls in every direction around us. In the second section, we begin to absorb some of these outside stimuli with our guard still up. Finally we are absorbed and slotted into the order and structure, unsure where we end and the world begins. As we organize this incoming information, do we shape it more, or does it shape us more?

Score H Cascading Domiciles

Muzak historian Joseph Lanza described elevators as "floating domiciles of disequilibrium," suggesting that elevator music was introduced to calm and distract its guests from the terrifying notions of snapping cables, many story plummets, and motion sickness.

One trademark technique of elevator music was cascading strings. Created by Ronnie Binge, and perfected and recorded by Mantovani and his orchestra, this sound involved large string ensembles which had only slightly different parts. In a cascading motion, they made the illusion of reverb of the original sound, much akin to what one would hear in a cathedral. Heavily influenced by Monteverdi, Montovani describes it as "a delayed sound. You have a chord structure and chords move along together and what Binge would do, he would take one note away from the chord and shift it into the next bar and it would create a different sound. It sounded as though you had left something behind – an echo" (<https://ronaldbinge.com/links/cascading-strings>). In audio terms, it can be described as a delay or echo of runs or arpeggios over melodies in the lower strings.

There are two main paths in this score. The first is the ever cascading domiciles in the background. On top is the path of a floating domicile of disequilibrium. The musicians can choose either path, and can choose the same or different path than the other.

Score I Time Perception

Elevator historian Patrick Carrajat explains that making elevators faster would be prohibitively expensive, so they needed a cheaper method of “slowing time down.” He believes elevator music was created primarily as a tool of distraction. Are smart phones and screens the elevator music of today?

This score is divided into 3 sections that represent different levels of cognitive perception of time of one event, such as the performance of this piece. In section 1 (1 second of time and above), we experience a song or phrase or delay effects. In section 2 (10 milliseconds - 1 second), we process tremolos and flanging. In section 3 (10 nanoseconds - 10 milliseconds), we hear one sample.

Please note on this particular score, the time scale is skewed. Each section, divided by 30 second increments along the horizontal axis, is of equal value in terms of seconds but it is not equally distributed along that axis, further emphasizing a shift in the perception of time.

For the electronics performer, you can download the samples at:

<https://www.arraymusic.ca/elevatormusic/>

- Load these samples into your DAW of choice and trigger them in the corresponding section

For the guitarist or other musician, follow the guides for creating musical and signal perception times of your choosing along the timeline.

Section 1 - 0-30 seconds - Long Term Memory

Electronic Sample: (1 whole phrase) “they weren’t aware of how long they were waiting

Optional: apply the different musical events as they occur (delay effects) to samples

Guitar: disconnected events, performance, song, phrase, delay effects

Section 2 - 31-60 seconds - Short Term Memory and first half of Echoic Memory

Electronic Samples: (whole words) they, weren’t, aware, of, how, long, they, were, waiting

Optional: apply the different musical events as they occur (tremolo) to samples

Guitar: tremolo, vibrato, phasing, flanging

Section 3 - 61-90 seconds - Second half of Echoic Memory and Event Fusion

Electronic Samples: (syllables) they were, n’t, a, ware, of, how, long, they, were, wait, ing

Guitar: can imitate samples or individual short notes