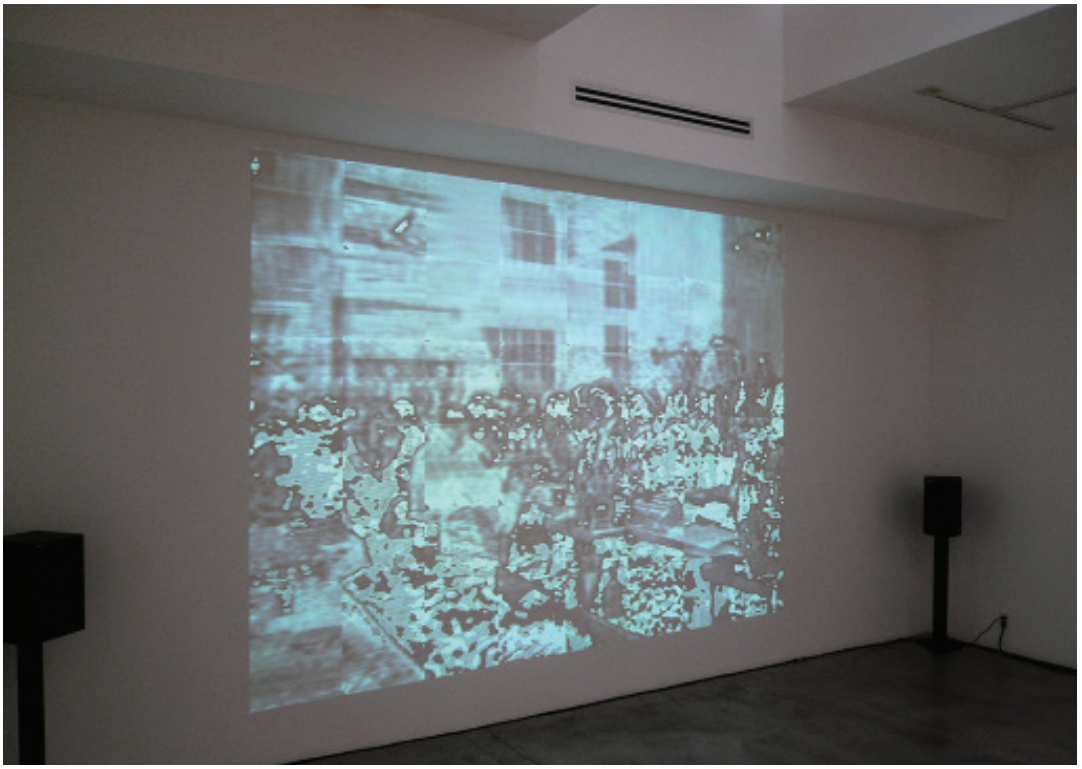

Voice of Sisyphus 2011

HD or 4K projector, Mac-mini computer, MOTU sound interface, mixer, 4 channel active speakers

Edward Cella Gallery, Los Angeles (2011); Nature Morte Gallery, Berlin (2012); Beall Center for Art + Technology, UC Irvine (2013), Chronus Art Center, Shanghai (2015); "Datumsoria", ZKM, Karlsruhe (2017-2018)

Online video sample at: https://vimeo.com/99210579

"Voice of Sisyphus" is a time-based study of a single photograph, realized as a continuous performing audio-visual composition. It is presented as a multimedia installation with a large cinematic projection and 4 channel audio, spatializing sounds by speakers positioned in each of the four corners of the exhibition space.

A photograph of a formal ball taken some time ago, chosen for its emblematic and narrative qualities, is dynamically transformed visually through software in real-time and in the process, generates sounds. The sound composition is created out of the analysis of visual regions in the photograph through the sampling of pixel clusters as the software "reads" and translates areas of the image at 30 frames per second. The sound composition is produced by an image-processing interface selecting image areas and transform them through frequency filtering, masking, and other methods, meanwhile converting them to sound. The software additionally allows for full polyphonic sound through the build-up of multiple image regions operating simultaneously. The sounds are produced by two sonified regions. The first consists of the full image, providing a harmonic background over which a second contrasting voice is created based on smaller, selected regions of the image. This interplay can be equated to "bass and counterpoint" in traditional musical terms. The visual and tonal values are defined by a set of parameters that include low-pass filtering, hi-pass filtering, frequency, volume, mask, noise, and threshold

The novel image sonification software scans and translates regions of the image into audio waveforms. Four main types of movement by which regions of the images are read include: 1) *Stationary*: Usually assigned to the "large" background region, which remains still while the "small" foreground region moves over it. In some cases both background and foreground regions remain stationary, each generating their own sounds based on the filtering process at work. 2) *Smooth scanning*: The foreground region scans over the image either horizontally or vertically and either smoothly or in a randomized back-and-forth manner, 3) *Rectangular divisions*: Cycling either randomly or in a sequential patterns in various directions, a region jumps over grid divisions of the image. 4) *Regions of interest* are selected according to coordinates which have been manually set to feature areas of semantic interest in the image. These include faces, clusters of people, windows, glasses, lines, mirrors, plants, decorations, etc. within the image.

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"Voice of Sisyphus" is a multimedia installation by George Legrady (www.georgelegrady.com) with image analysis, sound synthesis and spatialization software development by Ryan McGee (www.ryanmcgee.com) and audio-visual composition software development by Joshua Dickinson. (www.amusesmile.com) A detailed technical description of the sonification can be found at: http://www.lifeorange.com/writing/McGee_ICAD_2012.pdf

The installation premiered in the "George Legrady Refraction" solo exhibition at the Edward Cella Gallery in Los Angeles from November 5th, 2011 to February 4th, 2012 (http://www.edwardcella.com/exhibition/30/exhibition_works/2078).