

Second International Scientific and Practical Conference  
“The Art of Sound and Light”  
St. Petersburg, Russia  
October 18-20, 2021

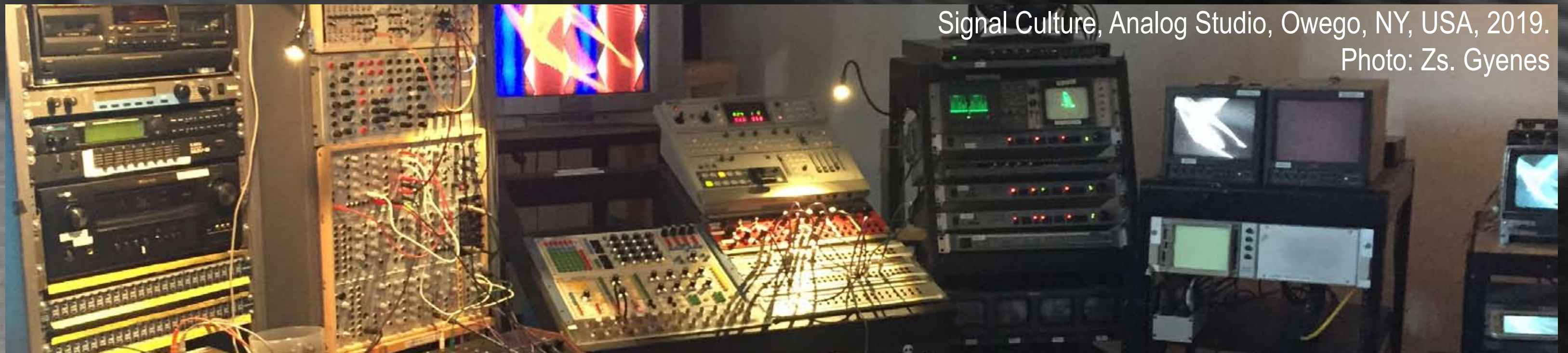
“Lumage” – Wobbulator Then and Now

Zsolt Gyenes  
habil. DLA  
dyenes@gmail.com

## Early sound generated visuals/lights

The early media electronic instruments, like video synthesizers due to their specific features, have proven to be particularly upgradeable for experimental artistic developments. Analog video is an open, modular system consisting of different components.

There are various possibilities to transmit signals.



Signal Culture, Analog Studio, Owego, NY, USA, 2019.  
Photo: Zs. Gyenes



The processual structure of video allows multiple connections of the devices as well as the exchange of audio and video signals.

Sound signals can be translated into image signals and can therefore control the visual phenomena of video. The electronic information can at the same time be realized acoustically and visually.

Analog modular audio synthesizer and Jones Colorizer and Mixer.  
Signal Culture, Owego, NY.  
Photo: Zs. Gyenes, 2019.

The image and sound are produced from the same source. They work together like musical instruments, and they can actually interact too.

Zs. Gyenes: One Minute Signal (Extract), Analog audio-visual work of art, 2019.

Every transposition is a manipulation, deformation, and/or distortion.  
Sound and image experiments produce new aesthetics.



Working in SC studio.  
Photo: Kalpana Subramanian, 2019.

Live electronics. Hybrid technique.  
Improvisation by Zs. Gyenes and Zsolt  
Koroknai. Gyermely, Hungary, 2021.

The analog video synthesizers are basically video equivalents of audio synthesizers, allowing one signal to be used to control another signal in real-time. Improvisation of the visual artists can be seen as comparable to free jazz.



There are discourses in connection with the sound-image relationship that what are the terms of synchronization, asynchronism, or “synchresis” (Chion).

Synchresis is not totally automatic. It is also a function meaning and is organized according to contextual determinations.

“Synchresis” – The score of the audio-visual work of art titled Collage.  
Music: Yu Miyashita, video: Zs. Gyenes, 2020.

The image shows a handwritten musical score on a grid background. At the top, it reads "VIDEO MUSIC OF YU MIYASHITA 2020. MARC - APR." and "Collage". The score is organized into four main sections, each with a circled number and a time signature: ① 7/5 key, ② 7/4 key, ③ 7/3 key, and ④ 7/6 key. The notation includes various symbols, circles, and lines. On the left side, there are vertical labels for video channels: V10, V9, V8, V7, V6, V5, V4, V3, V2, V1, and V0. On the right side, there are vertical labels: V10, V9, V8, V7, V6, V5, V4, V3, V2, V1, and V0. At the bottom, there are time markers (10, 20, 30, 40, 50) and a list of video channel names: V2-retrace1.mov, V2-vms1.mov, V2-vms2.mov, V2-buffer1.mov, and V2-buffer2.mov. There are also some handwritten notes like "A No Effect" and "Delay Color".

## Wobbulator

A raster manipulation unit or 'wobbulator' is a prepared television which permits a wide variety of treatments to be performed on video images; this is accomplished by the addition of extra yokes to a conventional black and white receiver.



3d effect

Wobbulator (Jones Raster Manipulation Unit). SC, Owego, NY., USA.  
Photo: Zs. Gyenes, 2019.



Because the yokes are electromagnets, they react to the audio amplifier in much the same manner that a sound speaker responds; the yokes are driven with the audio amplifier.

Zs. Gyenes: Paralel improvisations with applying analog audio sources and wobulator (Duo-Sonata, 2019-2020, extract).



## Visual Music

The origins of Visual Music can be found in the correspondences of the color spectrum and sound waves, music and color, and sound and light. It's exciting that so much new work and attention are expanding the field rapidly. Both visual and music/audio parts of Visual Music's work are deeply connect and integrate with each other.

Zs. Gyenes: Collage. Video for the music of Yu Miyashita, Hybrid technique, 2020 (still images).

## Analog, digital and hybrid media

Both types of image-making, like electric analog and digital, have their different creative uses and strengths, but to lose analog video as an artistic medium would be a tragic loss.

A lot of analog works have rich organic textures stood out visually. An analog image is always in motion, redrawing itself with slight differences with each recursion. It is saturated with “faults”, artifacts which are the “human face” of the technique.

Zs. Gyenes: Altered Dimensions  
VHS video, 1994.  
(still images)



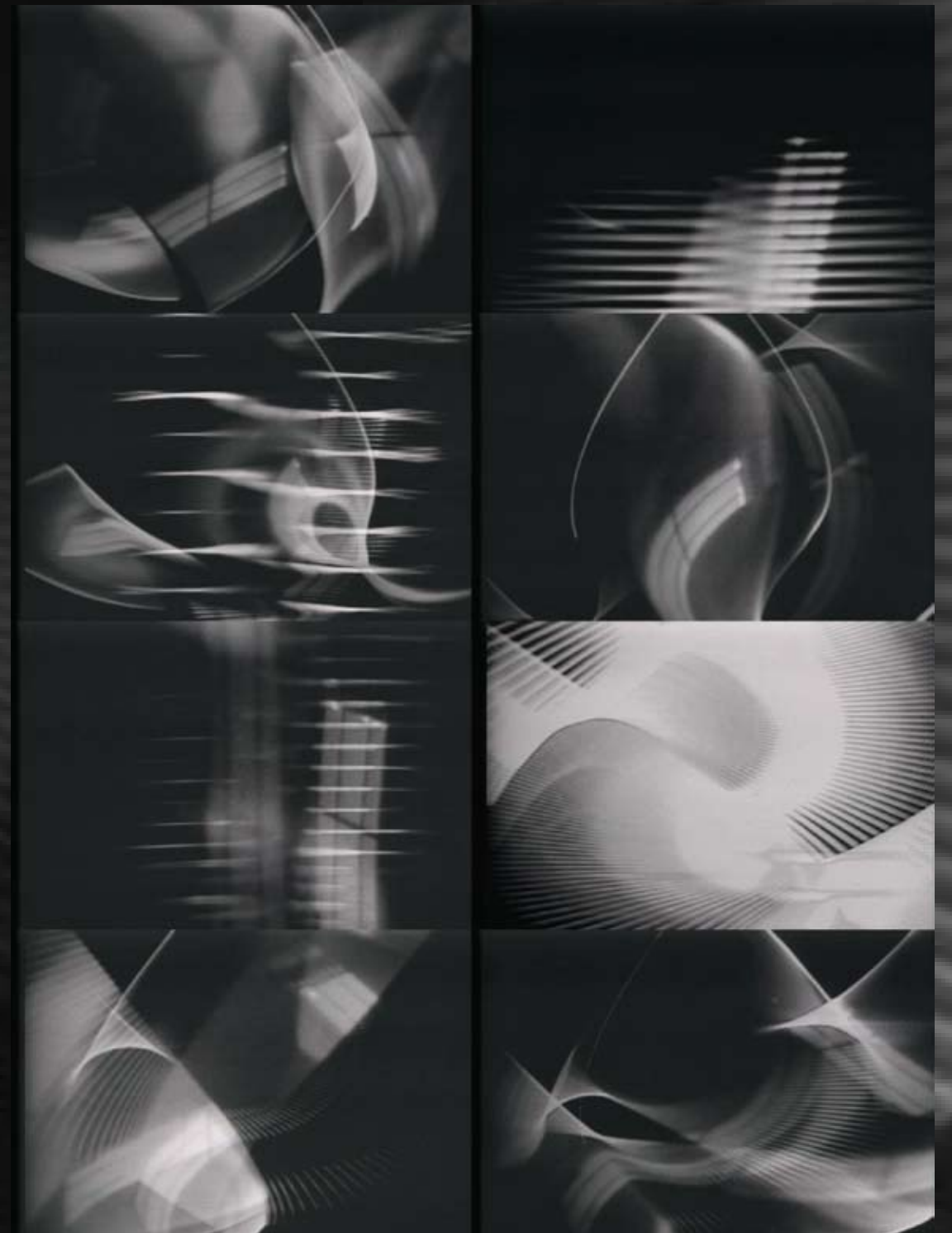
Analog audio-video is acknowledged as a reference medium for audiovisual experiments in digital media.

The hybridity of at the interface between hearing and seeing, and also between analog and digital techniques reaches wide circles and contexts. New possibilities emerge incessantly.

## “Lumage”

The relationships between sound and image is (also) about expressivity, dynamics, and rhythm.

There are approximately four million individual phosphor tracepoints on the face of an analog television screen at any given moment (Youngblood). Electronic image (and electronic sound too) has volatility and immateriality. The “prepared television” is equivalent in concept to the prepared piano. It is a level of variability that is the manipulation when different generators, oscillators, amplifiers produce random or semi-random effects.



Zs. Gyenes: Lumage. Still images from the audio-visual work of art, 2021.

“Lumage” refers to the essence of the work; for light and special editing or montage. This is a fixed version of a sound-generated analog video improvisation. Pure Visual Music. These audiovisual works of art are built on the multi-directional movements, transformations, and interactions of different media.

One can highlight the fact that image yields sound, sound yields image, while the numeral value of the basic information is usually equal.

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