

Visual Acoustics

– exploring the dynamics between visual art and sound

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Abstract

Various types of sensations lie at the basis of equally varied and divergent creative possibilities. What differences are there between the established compositional genres like animation, motion picture, and many others? What kind of role do artists who take an experimental approach to sound have, and how do they contribute to the debate of what is ‘realism’? These and many other questions contribute to the rich diversity of issues that spring up from what we refer to as “visual music”. Personally, as an artist and theorist, I am interested in mostly the new possibilities this specific type of art. Which (new) passages can appear between the sound and pictures? What is the characteristic feature of synchrony or asynchrony? How we can interpret “synchresis”? What are the roles of the software, the new technics? How can these reflect to nowadays?

Keywords: visual music, synchresis, visualization, aesthetics of fault, hybrid media

Visual Acoustics

“It was strewn with fine sand, and Jonathan, by means of an old cello bow which he drew up and down the edge from top to bottom made it vibrate, and according to its motion the excited sand grouped and arranged itself in astonishingly precise and varied figures and arabesques. This visible acoustic, wherein the simple and the mysterious, law and miracle, so charmingly mingled, pleased us lads exceedingly; [...]”

Thomas Mann: Doctor Faustus, 1948, 17-18.

The common structural basis of all types of sensation is being hidden by creative possibilities in connection with correspondence (Kepes, 1969). What does visual acoustics/music mean? What differences are there between the established compositional genres or expressions? What would be the common language that would help us walk the path? These and many other questions contribute to the rich diversity of issues that surround what we refer to as visual music.

There are a variety of visual structures that can be called visual music. The general, short definition of this special artistic expression could be the next: structurally integrated intermedia works, in which sounds and images are given equal importance and are developed simultaneously (Kapuscinski, 1997, 2001). Classified as a specific type of art, visual music is principally the use of musical structures that refer and connect to visual expressions. In many cases, sound or music is transformed into pictures through a variety of means, but equally viable solutions in the opposite direction can be imagined too, particularly when the visual elements (and other structures such as text) are converted into sound. Visual music, therefore, can be thought of as a search for a unified spirit.

This type of art is known for producing exciting experiments to match, synchronize (and sometimes a-synchronize) sound and (motion) picture. The different media are not perceived as one complementing the other. One can step from one to the other through different transcoding, with the presented end product that can be termed as a visible acoustic. At the point where a sound event and a visual event meet in synchrony,

the effect of “synchresis” (Chion, 1994) becomes particularly prominent.

Sound is a medium that has gained a lot of ground in the visual arts in recent decades, even though it seems to contradict the very concept of visual art.

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We perceive the surrounding world in a holistic way. Why we have to renounce this in the fields of art? The visual music has about 300 years old tradition if we strictly speaking. As summarized can be said that thinking of the relations, correspondences between sound/music and pictures are always updated. Visual music has got new dynamics with aiding new technical possibilities.

Through the computer, man has created an active, creative partner to produce wholly new aesthetic experiences (Noll, 1967). Via digital technology, visual acoustics works of art experiment with new ways of merging sound and image, creating holistic works that meld traditional and digital media through a software-world, in search of realizing a new, magical age. This is one of the peculiarities of hybrid media.

There can be differentiated three categories of visual music; the Static, the Dynamic and Pure visual music (Gyenes, 2014, Fig. 1). The first gives the sound/music a visual shape (for example Paul Klee: “Fugue in Red”, 1921 or Vince Briffa: “Ripples in a Pond”, 2018 – see Fig. 4). The works of art relating to the second category are the most abstract films and videos. They have specific expanded structures in time (for example Viking Eggeling: “Symphonie Diagonale”, 1921 or T. Bortnyik/Tubák: “N-Dimension”, 2012-2018). The “Pure” visual music’s slogan is: you hear what you see. Here is the synchrony of sound and image (for example Norman McLaren: “Synchromy”, 1971 or Andrea Szigetvári: “CT”, live electronics, 2010).

Fig. 1

The three main categories of Visual Music

STATIC V. M.	Makes an attempt to give the music a visual shape	2D, 3D – Abstract fine art can be connected to this category	Sound is not united	e.g., Paul Klee: Fugue in Red, 1921.
DYNAMIC V. M.	Expanded structures in time	Motion picture; film, animation, video – Abstract film/video can be connected	Silent or sound motion picture	e.g., Viking Eggeling: Symphonie Diagonale, 1921.
PURE (NEW) V. M.	You hear what you see – Synchrony	Role of computer/software – Can be interactive, live electronics performances, computer as instrument	Sound is united	e.g., Norman McLaren: Synchromy, 1971. Interactive: Andreas Koller–Thomas Hittahler: Light-trails, 2010.

VAC – International exhibition of contemporary arts on visual music (VIVA, School of Art, Valletta, Malta, 2018)

Motto: Music-like visual forms and visual-like music forms. (the word ‘music’ refers to audio/sound, in this case)

I have started to organize different symposia and exhibitions in connection with visual music for nine years. The first edition was held in Budapest (“Hear the pictures, see the sound! – Visual Music in the contemporary arts”), the next was in relation to an art festival at the Balaton lake in Hungary (“Hearing the eye, seeing the ear”), – after it had a new (projected) edition in Budapest too. The third was an international symposium taken place at Kaposvar University titled “VACOU” in 2015. The last event in connection with the theme was delivered on Malta in 2018. The title of this last exhibition was: “VAC – Visual Acoustics”.

The last one, the VAC exhibition does not intend to be representative of every aspect of current work in visual music/acoustics. This is a very small sample of the thinking and practice of the field. The artists’ definitions of the theme are actually as broad as their work indicate, having no restraints set by any boundaries. Emanating from the (classical) pure silent visual music tradition, the exhibition looks at how artists using current technology recreate this form; where the disposition of the computer as a tool with a natural proclivity of combining visual and aural structures, contributes to the quantity and quality of works. In most cases, these works present experiences that have not undergone research in the classical tradition, but rather lean towards the interest artists have in the use of such unconventional media and the excitement of experimentation.

The invited artists for this event come from Malta, Hungary, Sweden, Poland, Germany, and Austria. They use different techniques and tools, such as eye-tracking equipment, 3D mapping projection, interactive installation, audio-video, data-generation, sound texture, and printing. The common thread throughout the exhibition is in its common goal – that of an approach that reflects the general feeling of our contemporary society and its relationship with the ever-changing technology.

This exhibition could give new, special answers to the arising questions. The individual examples, this exhibited works of art together, side by side offer some perspectives in connection with the specific type of art. One new issue is that the interactive “narration” how can initiate new ways, how can generate new ideas according to visual acoustics/music.



So the artistic approaches are different but just give a special character to the exhibition. The intended setting of the works of art leads the viewers in a way that can help interpret the different concepts. The contrasts could operate as sparks; stopping to rethink the had seen. It is a dialogue between the artists, the curator, and the audience. We ask good questions and the answers are often off. The visual and aural aspects of experiences can be said; it is an eternal issue of life and art too. The visual aspects always generate aural things and vice versa. So experimenting in this field is always “modern”.

The next part of the text focuses on some characteristic features of the visual music/acoustics related to contemporary art stressing some works of art of the “VAC – Visual Acoustics” exhibition.

Jerzy Olek’s installation “Silent Existence” was made by mixed technique; CDs, papers and collage.

The CDs as the carrier of sound become the surface of different visual elements. So the installation became a particular collection of different “musical scores”. Everything could be musical notation if suit to the special common structural basis of correspondence. (Fig. 2)

Gábor Palotai is a Swedish–Hungarian artist, graphic designer, and professor. Since 1981 he lives and works in Stockholm. Palotai is working across genres in both art and design. The “Odysseus” animated film based on the graphic design novel “Odysseus” by Palotai. In his artist’s book “Odysseus” (2007), he replaces the verbal with the visual. In Greek mythology, Odysseus spent his life condemned to be on a journey. Every trace he left of his life in motion became an endless narrative to be retold and reinterpreted. But, Odysseus is a verbal voyage out of joint: the storyteller makes up the storytelling and is, at the same time, the listener interpreting his own story told by himself. Read as a story without words, this opus visualizes a blown-up novel, creating a broken cosmos where language disappears. With its hypnotic effects the black-and-white-pulse blasts the mind. The original music of Tamás Ungváry with the continuously visually changing abstract-geometrical “walls” form together with a structurally integrated intermedia work of art, in which sounds and images are given equal importance. (Fig. 3)



Vince Briffa is a Maltese artist, curator, professor, and writer, who produces gallery and site-specific artwork, objects and installations integrating traditional artistic practices with digital and electronic media. His exhibited work “Ripples in a Pond” is an elegy to the destruction of Amatrice’s earthquake of the 24th August of 2016. It is a score that is humanly impossible to play, as it is written by the earthquake itself, without any consideration for anything that is musical, even though it is written in the language of music. It is a translation/transcription of the seismic data in x, y

and z co-ordinates gathered from the Seismology Department of the University of Malta, and re-interpreted through notation software through a personal intervention that envisaged it from a purely visual standpoint. The work concerns the process of drawing, and like a map, it charts the physical movement of the earth in those fateful minutes and reinterprets them as a linear drawing, read in the western convention, of left to right. “Ripples in a Pond” is presented within the musical aesthetic, as a score on four music stands. Any data can be visualized with the aid of new techniques. These special transformations/transcriptions render countless new possibilities for contemporary artists. (Fig. 4)



Matyou Galea is a hyper-media sculptor and researcher working out of the island of Malta. His research and practice focus primarily on the integration of software and sculpture. His piece “Contactless Soundscape Tapestry” is physically constructed from a tapestry, electronics, and software. The electronics connect the tapestry to the whole building through the electrical system of the building. Engaging with the artwork is engaging with the whole building, and vice versa. A change in electrical load, a lightbulb switchmen on or off, can change the relationship that the artwork

has with space and its audience. The electronics connect the audience’s engagement with the computer and the change in voltage becomes a change in signal, which is used to drive a digital sample based synthesizer over a MIDI protocol. The samples are composed of a number of layers: digital instruments, vocal clips, samples from previous sculptural situations and short extracts from the book “The Secret Garden” (1911) written by Frances Hodgson Burnett. This work also works with expectations, the audience’s expectations, and as the artifact system is unstable and continuously changing, these expectations are continuously being challenged. Computers by nature tend to glitch, overheat and crash; this leads to the death of the artifact. This artwork is constantly generating and reinterpreting data, from multiple sources in order to generate its own version of reality. (Fig. 5)

Pierre Portelli lives and works in Malta. His works mainly in conceptual art and installation. Underneath the dreamy evocation of the minimal sculpture, “Economies of desire” dwells on issues of exploitation, human trafficking and the demand and supply economy of the commercial sex industry. An industry that spans the world, energized by the power of globalization that targets defenseless populations disrupted by war, poverty, and oppression, who become the merchandise in an insidious slave economy. Facing the pillow at close proximity, a very deep rumble is activated by the unsuspecting viewer, vulnerable and supine. (Fig. 6)

Picture and sound on one side are very different forms of expression, but on the other side, these forms generate each other. The constantly changing movements, the time-based forms are pointing, leading to music/sound. Maybe, the real visual acoustics/music would be the dance itself, where the vibration is connecting the medium of a holistic world.

Error, Abstraction and Hybrid Media

Unusual uses of applications or software open new horizons. The (experimental) artists are consciously looking for possibilities to make the program fail. They are playing against the apparatus. (Flusser, 2000: 81)

The technical-communication error, – which is equal to technical “deheroisation”, “defetishisation” and contrasting act against the apparatus – it modifies the original communication in parallel (for instance deheroisation and defetishisation of stars; Nam June Paik: Beatles Electroniques, 1966-69).

The early, classical video art, due to the disadvantages of technology, as low resolution, unsharpness/blur, ‘electro-colors’, etc. – produced a much more abstract, picturesque and artistic world. (See for example Nam June Paik: Global Groove, audio-video, 28:30 min., 1973.)

Errors are the result of the purposeful (human) mistakes. The artifacts result from errors. So artifact is the product of an error (mistake and error can’t be split really).

The error can’t be controlled (too). That’s why so exciting...

As in most art-making person, the mentioned type of works entails a play of trial experimenting with the tools, techniques in order to produce the desired effect, appearance.

In most cases, it is difficult to precisely envision what will happen to an electronic/digital file when we apply a series of modifications. In most cases, we feel like a chance because we don’t understand the rules. Error and chance are not far from each other.

The endless loop is a clumsy moment of hesitation; a kind of stumbling. (Verini, 2016: 24-25)

Artificial is constantly laden with errors, which create part of the creative method. In this aspect, errors include for example the loop, a video with an abstract world of images, or rather unorthodox uses of the software. Maybe the humankind is the error!

Art has been based upon the mimicry. Anyway, it is true for the last half millennium. The art represented the audible-visible world experienced in outside in a special way. The abstract visual-art expressions in this coherence can be passed for errors. The electronic technique, the new audio-video made it possible to create a new abstract world of art.

What does it mean a mistake in art? The (communication) error is a human thing. Medial communication is saturated by its own nature, with errors. This communication can be opposed to the “perfect” audible-visible world (for example the medial features like graininess, over-coloring, spatial modification, flatness; see the afore-mentioned idea, that these are the “mistakes”). In art, the uniqueness, the style generator, is the mistake itself. This was and will be always. Make a mistake; that is so cool, so creative, so real!

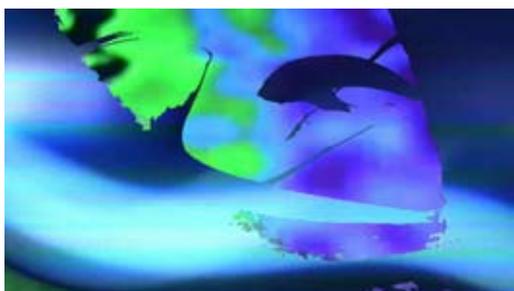
Hybrid techniques make it possible to fix the errors in the abstract motion picture’ and sound’s world. We/I illustrate these issues with some examples of contemporary arts, where analog technics with fusing digital methods create new artistic quality.





Shusaku Kaji uses a random electrical signal (CV signal) oscillated by the analog step sequencer (*Fig. 7*). The Big Note is an audiovisual piece about oscillation, or vibration and evolution. It is based on the hypothesis that the origin of space and life is not a single vibration. The first oscillation draws a gradation; then more oscillations are added, and so the evolution continues. Shusaku made it while discovering an unintended beauty by adding various modulations to the video pattern drawn by the modular synthesizer.

Other modulated improvisations are my latest series, where hybrid technique and errors produce a specific artistic expression too. (*Fig. 8*) In this case, I started with an ink hand-drawing. These are approximately 150 calligraphies on cardboard. After I bound the sheets to a flipbook.



Recording with a digital video camera the motion book, it became the basement of the final video. On the other side, I produced different loops, like GIF animations and oscilloscope videos. The aesthetics of fault played role in different phases, like at the incorrect using of the flipbook, or at the recording of the analog motion. The “stupefied” VHS technique provides a unique, picturesque visual expression. The result is a multi-modified hybrid artifact.

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