

Visual Music

last updated Aug 21, 2021

Harry Baya harry@baya.net [[Click Here for related web pages](#)]

I believe that current digital technology is capable of creating dynamic visual experiences that could become an art form as important to humans as music. This possibility did not exist prior to digital technology.

Though I think these future visual experiences will have some overlap with the mental experience invoked by music, I believe they will also be impacting other parts of the human psyche. Because the visual experience I am discussing does not yet exist I find it useful to discuss some of the similarities to music.

What we call “music” includes everything related to the process of creating music as well as the experience of those listening to music. Music today is the result of thousands of years of evolution of the tools used to create music as well as the wide range of rules, guidelines, conventions and preferences that have evolved. Some obvious ones are the 7 note scale used in most western music and the many named rhythms used around the world (waltz, rhumba, etc.). The independent evolution of different forms of music in different cultures adds to a rich infrastructure based on a constantly changing ecology of tools, skills and preferences.

Though the dynamic visual experiences will be able to use music as a model for some development, it seems likely to me that it will also explore experiences with no parallel in music.

One fun perspective on what current digital technology offers is to consider the impact of giving a primitive culture some of our important musical tools. Consider the impact of an unlimited supply of permanently well-tuned grand pianos being made available in cultures around the world thousands of years ago. We are there with the potential for visual experience.

The simplest start would be something like a TV screen with a display of moving arrangements of colored pixels that would be perceived as two dimensional shapes that were moving and changing (shape, color etc.) on a two dimensional surface.

A higher level would be a flat screen showing colored 3D shapes moving in 3D space.

The highest level I can conceive of is a Virtual Reality 3D space in which the observer could move around in the space while observing 3D shapes changing and moving within their view. This would be a passive experience by the observer. Though they could move around they could not change what was happening.

The next level moves closer to the experience of creating music rather than listening to it. I see two approaches here. In one the artist(s) start with an empty space (an empty 3 dimensional canvas) and create the visual experience. This could be a visual creative experience something like improvisational jazz, or the artist could spend as long as they wanted to complete a creation. Part of my vision for at least a major part of this new art form would be that there would a visible pulse, a rhythm, in the on-going experience.

In the other approach the artist(s) would start with a previously created visual experience and modify it. They could do this in real time like improv jazz, or they could do it with a process akin to re-writing a score – by trying different modifications and keeping those they liked.

In this experience the observer can change the visual experience using the possibilities technology provide. At the simplest level this would consist of adding an overlaying visual track with shapes moving in the VR space, sort of like adding an instrument track to a recorded piece of music. At a higher level the artist(s) could change the entire composition in many different ways.

Our current music evolved over many years and it seems likely that a similar evolution would occur with the “dynamic visual experience” I am describing.

It should have an entirely new name. Though there are strong parallels to music, the art form I envision would be exploring and developing human experiences quite different from sound and should be allowed to become its own essence. For that we would need a new name. I don't need to name it, I am happy just to conceive of it. Let the name come into being in the future as the art develops. A simple name, for now, might be DEVE, dynamic evolving visual experience. The history of music would then be DEAE, dynamic evolving audial experience.

Possible developments for audial music

Digital technology also opens new paths to music.

Listeners to today's music cannot change the experience, other than singing along. Skilled users of technology, if they have appropriate hardware and software, can change music by adding or deleting tracks, and can change any other aspect of the music (pitch rhythm, loudness of a particular sound, etc.).

Modern technology could provide amateur artists new ways to create and interact with music.

Imagine a booth in which hand motions, finger motions (possibly foot and toe motions), body movements, and facial expression, all were monitored and could be associated with some impact on the music being played. Developing appropriate sets of controls that artists would love to learn and use would be a big challenge and might take a long time. If the human race survives, we will have a long time. Let's go for it.

However, the technology for doing this, just like the technology for doing it with a visual experience, is available. We would just have to evolve some appropriate sets of controls. It occurs to me that there might evolve many different sets of controls and each one might have as distinct an identity as a particular musical instrument.

I cannot adequately convey the imaginations that lead to these thoughts. However, I would like to think that I have given enough information that others, using their imagination, can conceive of related concepts as exciting to them as mine are to me.

How does this relate to Harry's Boppers:

My thoughts about Harry's Boppers over the years led me to this line of thought. If you are not familiar with Harry's Boppers here is a link to more than you would ever want to know about it. [<https://boppers.net/boppers/>]

My concept of Harry's Boppers was to provide a construction set that could be used to create a visual experience synced with a previously recorded piece of music such as a pop hit or a classical piece. I still think that will happen some day and will be a wonderful addition to the world of human art. However, the above

thoughts go into a far greater, and I think far more important, range of possibilities.

The DEVE (dynamic evolving visual experience) and DEAE (dynamic evolving audial experience) described above are capable of becoming as significant to the human race as music is now. When combined into a single experience with both sound and vision **(like ballet -or any kind of dance to music, animated films with music, light shows, or superbowl halftime shows)** this will be an even more important art than either would be alone.

Oh to live long enough to see these possibilities come into being and evolve toward their highest potential. So it goes.