

The State of the Art

Synchronous Form in Visual Music

By Michael Betancourt

Throughout the history of visual music, both on film and in other media, there has been a remarkable consistency in approaching the question of how to synchronize sound and image: structure is provided by a pre-existing piece of music, the form of which is systematically translated into the visual realm. Early in the sound film era, Sergei Eisenstein discussed how his montage aesthetic in the “Battle on the Ice” sequence in *Alexander Nevski* is intended to be a visual dramatization of the Prokofiev composition that forms the soundtrack (Eisenstein 1975). Eisenstein’s approach here is essentially no different than Oskar Fischinger’s animation of shapes and forms synchronized to music. In both cases the musical form is taken as given, which then determines the structure and arrangement of the visuals designed to accompany it.

In the realm of visual music, approaches to sound and image rarely move outside the established framework of synchronizing visuals to a predetermined score. Experiments in the direct and simultaneous translation of image and sound are rare, but they do exist. Take the work of the Whitney brothers, or Norman McLaren, or more recently by composer/CGI animator Dennis Miller; in the

hands of these artists, sound and image are often technological representations of the same thing. These examples are exceptional precisely because they are atypical. However, the resulting works these experiments produce serve to “naturalize” the arbitrary nature of their construction, implying that the only appropriate relationship between sound and image is one where they are locked into an absolute, synchronous form. In works such as these, there can be no counterpoint between sound and image. Technologically speaking, whether recorded on film/video, or “live” in an interactive environment as with contemporary work by Golan Levin or Leo Villareal, works such as these present approaches to sound/image interaction akin to lip-sync in dramatic film. The music and the image correspond to each other upon precise points of conventionalized synchronization.

The influence of Fischinger’s work with tight synchronization cannot be underestimated. Close synchronization is the most common variety of visual music partly because it is the most commercial. William Moritz has noted in his discussion of Fischinger’s films that he used “tight synchronization partly because of his commercial ties with record advertising and partly because he found that audiences would more easily accept abstract visual art if it were linked to recognizable music (abstract auditory art) they already approved of” (Moritz 1996:228). The implication of this comment is clear: abstract visuals present particular difficulties for audiences. So in order to ensure the commercial viability of his films, Fischinger was forced to adopt an approach dependent upon

the use of familiar auditory material as the foundation for his visual creations. And many have followed his lead in creating works of visual music based on the subservience of image to sound.

Furthermore, it should be observed that music is rarely heard as a collection of disparate pieces, but is instead understood as an unfolding over time. The linkage between images and sounds, where one image is changed for another following the music in a rhythmic montage, results in a visual music that is extremely distant from what is heard. In emphasizing the rhythmic aspects of music, all the aspects of harmony, melody, and development over time visually disappear. While the rhythm-based approach may be very common, it ultimately offers the fewest aesthetic potentials for visual music.

Alternatives are possible. Image and sound can be synchronized in any number of ways other than the direct linkage of note to visual motif on points of rhythm. The phrase and measure can be treated as distinct entities analogous to shorter blocks of sound upon which synchronization is conventionally based; separation of image components can be based on the components of musical instrumentation; and the relative dynamics of the music can serve as guidelines for dynamic equivalencies within the image. John Whitney's ideas about "visual harmony" illustrate another approach to creating visual music, one where the structural design of both image and sound proceed from the same basis; they do not directly correspond in the manner of tight synchronization, but they are founded upon the same principles (Alves 2005). Each of these potentials would

qualify as “visual music” but would not necessarily follow the specific parameters of tight synchronization or subservience of one realm to the other. Instead, the result would be to introduce the potential for sound and image to exist in a relationship of counterpoint that moves beyond the matching of sound and image on points of rhythm, and beyond the need to place one sense above the other in the hierarchy of compositional organization.

Sources Cited:

Eisenstein, Sergei. (1975). *The Film Sense* (Jay Leyda, Trans.). New York: Harvest/HBJ, 174-216.

Moritz, William. (1996). Visual Music and Film-as-an-Art Before 1950. *On the Edge of America: California Modernist Art, 1900-1950*, Paul J. Karlstrom, ed. Berkeley: University of California Press, 228.

Alves, Bill. (2005, Winter). “Digital Harmony of Sound and Light” in *Leonardo Computer Music Journal*, 29, 4, 45-54.

Bio:

Michael Betancourt is an avant-garde theorist and artist/historian. Recently, he edited a two-volume anthology on visual music technologies called *Visual Music Instrument Patents*, a collection of Thomas Wilfred’s writings on *Lumia*, and produced the iotaCenter’s DVD *Visual Music from Iota*. He also makes abstract movies.