Adventitious Synesthesia
Recontextualizing the Gallery Space and EDM Performance

Katie Elizabeth Jacquez

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School of Art and Design
The University of Michigan
“In individuals with synesthesia, sensory experience in one modality leads automatically to experiences in another modality”\textsuperscript{3}. Cohen Kadosh et al. (2009) chemically induced the sensory experience of seeing a particular color after seeing a particular digit. Many types of synesthesia have been known to occur\textsuperscript{4}, including sensing a color after hearing a sound. A topic of study among psychologists, many visual and audial artists have taken an interest to the synthetic syncopation of light and sound. Many visual jockey’s (VJs) and a disc jockey’s (DJs) work together to create a sensory experience for the viewer at many concerts (image .1). Inspiration for my final project came from attending electronic dance music (EDM) events, generally known as “techno” concerts. Although I enjoy the culture associated with these events, the large crowds and loud sounds can be overwhelming. By isolating the coordination of light and sound in a gallery setting, the overwhelming factors were removed, allowing the viewer to focus only on the synesthesia of light and sound. The lights became recontextualized by placing them in a different environment (the gallery), playing several genres of music, and by presenting the whole to a different audience (image.2).

The finished installation is about 8 ft cubed and sits in a 16’ x 16’ space enclosed by three white walls. Five rectangular pillars stand on an 8’x8’ platform, and each pillar houses a different colored light: green, yellow, blue, pink and purple (image .3 & .4). The lights vary in height from 7’, 6’, 5’, 5’, and 4.5’ respectively. Each houses a four foot 40 watt florescent bulb with different colored gels wrapped around the tubes. Each pillar’s base is 9”x9” with three sanded acrylic sides and a structural side made of oriented strand board (OSB). The structural side supports the fragile acrylic and the florescent housing and bulb.
The varying heights suggest a cityscape and allows for the viewer to see all the pillars from any given vantage point. The platform acts as a stage but also conceals the wiring to maintain a seamless effect. The frosted acrylic diffuses the gel-covered lights, similar to the way stage fog diffuses stage lights. The colors are highly saturated and were taken from an “electric” palette, reminiscent of 80’s dance and seen on concert stages by artists such as MSTRKRFT and Boys Noize. Many EDM artists will use color changing tube lights, but I used one color per light due to complexity and cost. I placed the lights inside an isolated space with white walls so that the light may paint the inside of the room when a noise of the correct amplitude and frequency is emitted.

Underneath the platform, one color organ – a sensitive electronic device that syncopates ambient sound to strobing lights – sits under the green light and another under the yellow light. Three florescent lights plug into the color organ underneath the yellow light (yellow, purple, pink) and two plug into the organ under the green light (green and blue). (Image.5) Each light has its own dial on the color organ to change the sensitivity to sound. Sensitivity is determined by amplitude and frequency. Each color organ circuit was hand-soldered and placed in a non-conductive housing that then sits inside the platform. Each color organ has three AC power female plugs, one AC male plug, three potentiometers, and a microphone to pick up ambient sound. (Image.6 and .7) Speakers run inside the platform and are placed next to the color organ so that the microphone may catch more music rather than ambient noise when a song is played. In order to play music, a flash program was created listing thirteen songs that the viewer may choose from.
My intention was to choose a variety of songs and genres so that any viewer could relate to and appreciate the syncopation of light and sound, as not everyone enjoys EDM: the viewers could choose from ambient music to electronic to classical. The artists are Buena Vista Social Club, Tchaikovsky, Thunderheist, Bambi (motion picture sound track), The Charleston Chasers, Royskopp, Sigur Ross, Chris Clark, Lusine, Thievery Corporation, Michael Jackson, AhHa, and a recording of birds chirping. Because each pillar was set to a different sensitivity to sound, each light would react differently to each song. The lights were also reacting to ambient sound, although this was not as obvious. On opening night, I brought my opera singing mother along. She sang, making the lights react only to her voice. It was quite moving, exciting, and the viewers loved it. Again, this showed me the piece was interactive, not passive. The audience was empowered to alter their lit environment through sound.

Initially, I was interested in fashion photography and wanted to base my thesis on series of images of women. What I discovered was that my underlying interest in fashion photography had to do with the creation of an atmosphere for the viewer. Here, the model was the actor and the frame was the stage. Rather than showing a specific environment I had already created in a still image, I wanted to create a live environment the viewer could enjoy actively. With a photograph, the moment has already been captured. With the lights, there is an element of surprise; a guessing game going on between the lights and the viewer. Which sounds will make a light go off? Which song will look best? Are the lights responsive to ambient sound, or just the computer?

My project has ended up a culmination of all my interests to date. Photography has always been a passion of mine and has opened many doors to other interests,
specifically EDM. At the beginning of my junior year I photographed members of the Michigan Electronic Dance Music Association where I was exposed to dance music the coordination of images and sound. Although I was taking photographs of a frozen moment, an audial memory would be triggered when viewing the images. Others who attended the events would have a similar experience when they looked at my photos, but ultimately their interaction with the images was passive. I also wanted to shed light on the EDM culture through a photojournalistic approach.

In the 1980’s there was a large political campaign and social grudge against EDM because of its association with raves and the drug scene. Although many fans and DJ’s are against drug, the subject still arises. At its core, the dance culture values peace and acceptance of other cultures. Paul Van Dyke, a German based DJ, states in an interview with the Michigan Daily “The whole nature of this music, the reason why this music works is because it's global, it's because it's cosmopolitan, it's because it is respectful and tolerant of other people's cultural backgrounds.” Like many genres of music, it is internationally recognized. A look at Armin Van Buuren’s – ranked as the worlds top DJ in 2008 - event calendar shows that he plans to play in 9 different cities in the month of May 2009. The EDM community also includes a technology savvy crowd I hoped to reference and establish my place in by use of the color organs. The minimalistic form of the installation – five pillars on a white base – cannot be attributed to one culture or group of people. Any viewer can relate to Adventitious Synesthesia.

Michael Govan, LACMA CEO and Wallis Annenberg Director states "…because Flavin is known so well as one of the founders of minimalism… (and )… was one of the inventors of what we now know as 'installation art' … I count him among the most
important figures in twentieth century art."vii I cannot help but reference Flavin in the creation of my piece. My piece is a minimal installation utilizing industrial materials, specifically florescent lights, the exact medium Flavin chose to work with. We both strive to alter the environment in which the light is placed. Although the main inspiration for Adventitious Synesthesia has been EDM concerts more so than gallery artists, Flavin has been a definite influence. The New York Times article, The Dark Side of Success, states that “Flavin chose instead standardized, commercially available materials, and focused on the light itself: its color, its intensity and how it filled and altered the space around it.” viii Similarly, I am also observing lights ability to transform an environment, particularly when synchronized with music.

In June 2007, the Los Angeles Contemporary Museum of Art held an event called “late night at LACMA”ix offering free summer nights of art, music and food. For this particular event, Flavin’s lights were displayed and a local DJ, Steve Aoki, spun in the lit gallery spaces. Although Flavin’s lights did not strobe to the music, the neon colors on the white gallery walls coupled with music redefined the space and created an alternative gallery and EDM experience for the viewer.

My piece references the stage and the gallery but is also a technological, structural, and electrical feat involving the collaboration of many fields and individuals. Ultimately, this collaboration references the diverse array of individuals that make up the dance music community and is a commentary on what can or should be placed in the gallery. Traditionally, gallery work is seen as being passive. Adventitious Synesthesia makes the gallery space interactive and exciting for the viewer. The installation takes a
nod at gallery work, performance art, and electronic shows and empowers the viewer to define the space they occupy by their actions.

Images

Image 2) Installed in the space.

Image 3) Side view diagram of installation.
Image 4) Top view diagram of installation.
Light to color organ wiring, side view

Image.5) Side view diagram, light to color organ wiring.
Circuitry diagram for Graymark color organ. Illustrations by Graymark.
Image.7) Circuitry for Graymark color organ. Illustrations by Graymark.

Bibliography

<http://cytowic.net/Synesthesia/Synesth_Encyclo_/synesth__encyclo_.HTM>
iii http://www.usdoj.gov/dea/ongoing/raves.html

v Top 100 Dj’s, 2008. Armin Van Buuren.
<http://www.djmag.com/index.php?op=top100dj&top100dj_op=results&year=2008&search_op=display&top_100_id=1031&limit_num=150&page=1>
vvi Armin Van Buuren tour dates.
<http://www.arminvanbuuren.com/tourdates/pageskip/2/>


<http://www.nytimes.com/2005/01/02/arts/design/02alle.html?pagewanted=4&_r=1

> ix <http://www.lacma.org/events/latenight07.html#LATENIGHT>