Visualizing Music

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I have been studying both music and art for the majority of my life. Countless connections can be made between these disciplines, with their shared visual representations. A piece of music may be interpreted in a variety of ways, and a piece of art may be perceived differently. With this in mind, I designed a system for visualizing music.

I began with an instrument part. Each instrument part was scored with different colors representing different pitches within the musical composition through the visual system. The most telling aspects are the shape of the pieces, indicating the dynamic shape and movement of the piece, as well as the color palette, which changes depending on the key of the piece. The pieces may be interpreted on their own, or can better understood by listening to the included audio tracks of the original songs. The information below provides insight into the process and gives a basic explanation of the information being interpreted.

**RHYTHM**

Rhythms are represented horizontally by the lines with thicker lines indicating measures. The pieces themselves are a way,CreatedAt of the piece. Therefore, it makes sense that the length of a note be determined by its duration in the visual system, though they help to create a sense of movement through the space. Although drum parts rarely have audible pitches, they typically do not play a large role in the harmonic composition of a piece. Therefore, drum parts were omitted from these pieces, as they would simply further confuse the system.

**DYNAMICS**

Dynamics refer to audible volume in music theory. Volume is determined by shape in this system. The further from the center line the form gets, the louder the piece. Conversely, what a piece of music may look like. The pieces themselves are, in this system, though they help to create a sense of movement through the space. Although drum parts rarely have audible pitches, they typically do not play a large role in the harmonic composition of a piece. Therefore, drum parts were omitted from these pieces, as they would simply further confuse the system.

**PITCH**

Pitch was the hardest factor to determine. First, the colors of the visible spectrum, including secondary and tertiary colors, were paired up with notes of a standard scale. Then an order of pitch intervals was determined using a visual representation of the harmonic. Each color was then paired with a pitch, beginning with its starting color on the right. Each musical key has its own "color scale" that determines the order for the various pitches within the musical scale. For example, the colors of the original colors represent higher notes of the scale. The relationship between the visual system and the piece was determined by the order of colors in the music, where no pitch is sounding within that instrument part.