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2023

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**Music as Art: A Study of Expressing Emotion Through Music and Art**

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December 2022

People have been expressing emotion with different art forms throughout history. Emotion has always been something that is hard for us to explain with words, so we have turned to painting, drawing, dancing, and music to add a visual or auditory explanation to what we feel. Depending on the chords or colors that are used, music and art can evoke specific emotions. There are many similarities between art and music, especially in the terms used to describe it. Both artists and musicians refer to their work as “compositions” and “pieces.” The musical term “timbre” means tone color and refers to the color provided by different instrument voices that make up an orchestration. Both art and music use motifs, themes, texture, and harmony. A common way that composers and directors will describe how they want a band to sound is by using the word “color.” Then the question becomes, “what color?” Of course, it is just an expression and a word to describe tone quality, but some artists have taken what they hear musically and they have translated it into an expression of color and shapes.

While paintings allow the viewer to contemplate the artist’s emotions, music allows the listener to be immersed in feelings. Music can create an atmosphere of emotions in a way that no words can describe. For example, in movies, the music sets the mood of a scene. “In a film, the dialogue and action tell us what the characters are thinking and doing, but the music can tell us what they are feeling (Douek).” In his article, composer Joel Douek explains how emotions can be created with music. He does a great deal of composing for films and has learned that people are much more music-driven than visual-driven when it comes to emotion. In the film world, there is a rule that the music has to change first, in anticipation of the next scene. Composers have tricks that they use to evoke specific emotions in their music. Different instrument

timbres can affect the emotion of a piece. According to Douek, a cello sounds melancholy, an oboe can be sad, the flute is mysterious, and the trumpet is bold. A tremolo in stringed instruments can cause feelings of instability and suspense (Douek). Listening to music activates many parts of our brain at the same time including the limbic system which controls motivation, emotion, learning, and memory (Beentjes).

Like composers, artists have many tricks to help show emotion through their art. Color is the most effective way to do that. Using a bright color with neutrals will add mystery. Black and white come across as nostalgic and larger than life. Painters also use abstraction to intensify emotion in their work. Sometimes the more abstract a work is, the more emotion it can contain (Reyner). Even the way that paint is applied to the canvas can have an effect on how emotion is conveyed. Fast brush strokes and highly saturated colors show excitement. Smooth strokes and colors that are blended together seamlessly create the illusion of quiet and calm (Raybould).

To explain how colors correspond with specific emotions, an article by R. D'Andrade and M. Egan refers to an experiment done by Odbert, Karwoski, and Eckerson where college students were asked to choose the color that best suited different emotions. They found that exciting was red, playful was yellow, tender was green, and sad was blue (D'Andrade and Egan). Out of curiosity, I decided to do a little experiment of my own. I posted nine different emotions on my Instagram story and asked friends and family to comment what color they associated with each emotion. The nine emotions I chose were joy, peace, anger, love, fear, surprise, calm, sadness, and hope. Using the first 35 answers that were submitted, I created a block of colors for each emotion. For a few of the emotions, one color dominated the responses. "Joy" was

overwhelmingly associated with yellow (figure 1), “sadness” was very blue (figure 2), and “anger” was viewed almost exclusively as red (figure 3). Some of the other emotions like fear (figure 4), surprise (figure 5), peace (figure 6), and hope (figure 7), were more difficult to assign with one specific color because of the many varied responses. “Fear” was mostly described with darker colors like black and purple. “Surprise” had many yellow and orange responses, but also had just as many purple. This is an interesting thing to note because orange and purple are on opposite sides of the color wheel. The emotion “peace” was the opposite of “fear” as one would assume, and was associated with lighter greens, blues, and even white. “Hope” included a few purple and yellow responses, but there was not one dominant color. It also was assigned pink, blue, gold, green, and orange. “Love” (figure 8) and “calm” (figure 9) were in between the others in terms of unanimous color choices. “Love” was mostly pink and red, and calm was mostly variations of blue with a few greens.

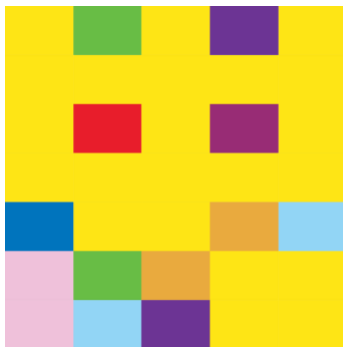
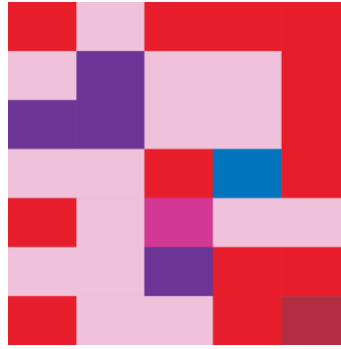
Fig. 1. Helleson, Cadence. *Joy*. 2022Fig. 2. Helleson, Cadence. *Sadness*. 2022Fig. 3. Helleson, Cadence. *Anger*. 2022Fig. 4. Helleson, Cadence. *Fear*. 2022Fig. 5. Helleson, Cadence. *Surprise*. 2022Fig. 6. Helleson, Cadence. *Peace*. 2022

Fig. 7. Helleson, Cadence. *Hope*. 2022Fig. 8. Helleson, Cadence. *Love*. 2022Fig. 9. Helleson, Cadence. *Calm*. 2022

One of the most well known artists in regard to color theory is Wassily Kandinsky, a Russian artist who was born December 16, 1866. From the time he was a kid, Kandinsky was interested in music and art. While he was in grade school, he learned to play piano and cello. He decided to take a more practical route for his career, so he studied law and got a job teaching at Moscow University. Around the age of thirty, he decided to give up his career to focus on painting. Kandinsky decided to move to Munich, where he studied at the Munich Academy of Arts. After a transitional period where he traveled throughout Europe and experimented with Expressionist style art, he came back to Munich and helped found Neue Kunstlervereinigung Muchen (NKVM, or New Artists Association of Munich). The organization was established to create a space for avant-garde artists whose style did not fit in at other art schools. In 1912, Kandinsky wrote a book called “Concerning the Spiritual in Art.” This book was the first theoretical foundation of abstractionism and is the basis for what we know about abstract art today (Biography of Wassily Kandinsky).

In Kandinsky’s book, *Concerning the Spiritual in Art*, he expounds on color theory and relates each color to the sounds of different musical instruments. According to Kandinsky, a light warm red is the sound of trumpets, violet is an English horn or

bassoon, and green is the middle notes of a violin (Kandinsky 61). Kandinsky has a very detailed explanation for each color and how the colors fit together to create art. In his book, he spends a great deal of time explaining the relationship between yellow and blue. Blue and yellow are justifiably on opposite sides of the color wheel. Yellow is considered a warm color, while blue is cool. Of the warm colors, (red, orange, and yellow) yellow is the lightest/brightest. In the same way, blue is the darkest of the cool colors (green, blue, and violet). Kandinsky explains that yellow seems to expand outside of itself toward the viewer while blue retreats into itself. To Kandinsky, yellow can be compared to a manic state as well as a shrill bugle. Blue is instead a peaceful, heavenly color becoming sadder as it darkens. A light blue is the sound of a flute, medium blue is a cello, dark blue is a double bass, and the darkest blue is an organ in the eyes of Kandinsky (Kandinsky, 59).

Paul Klee is another artist who taught with Kandinsky at the Bauhaus. He grew up in a musical household where his father was a music teacher, and his mom was a singer. His favorite music was classical, and he admired Mozart and Bach the most. In his opinion, composers like Wagner, Mahler, and Strauss represented a decline in artistic creativity. Klee believed that Mozart and Bach's multi-layered sound was timeless and more modern than the composers of the 19th century. For Klee, music is presented in a very linear way, but paintings on the other hand, can show space and dimension. Because of this, he thought multidimensional polyphonic ideas were better expressed through painting than music. (Kac, 132) Klee's color theory starts with a six color scale including, magenta, orange, yellow, green, blue, and violet. The colors that provide the greatest contrast according to Klee are blue and orange, magenta and

green, and yellow and violet. (Kac, 127) That is different from Kandinsky's view of contrasting colors, and he would say that the most contrast possible between colors is created by blue and yellow. When two primary colors are separated by a secondary color such as red, orange, yellow or blue, purple, red, Klee considers it to be creating continuous motion. In relation to music, a quiet spot or a pause is best represented with the use of a tertiary color. Tertiary colors are created when three primary colors (or a primary and secondary color) are combined. According to Klee, there are many ways movement can be represented in a painting including repetition, inversion, rotation, or reflection (Kac, 127).

Color theory during Kandinsky's time would have been a bit different from color theory today. Until recently, artists have considered red, blue, and yellow as the three primary colors, and this is what Kandinsky would have taught at the Bauhaus. Their color wheel displayed red, blue, and yellow as the primary colors, and orange, green, and purple as secondary colors. (figure 10)

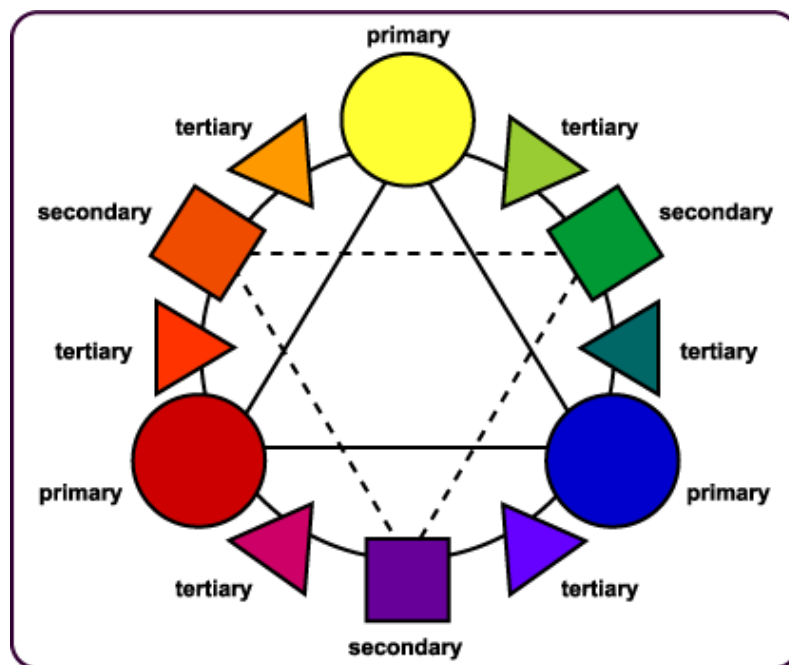


Fig. 10. The Artist's Toolkit. The Color Wheel.



Traditionally, it has been thought that you could combine red, yellow, and blue in a variety of different ways in order to create all other colors. Recently, it has been discovered that a more accurate set of primary colors is magenta, yellow, and cyan. Magenta and cyan are in the red and blue families, so the color wheel is similar, but the combination of those three colors provides a wider range of possibilities than the standard red, yellow, and blue. In fact, red can be created by mixing yellow with magenta and blue is made by mixing magenta with cyan making red and blue secondary colors in this system (Chiu). (figure 11)

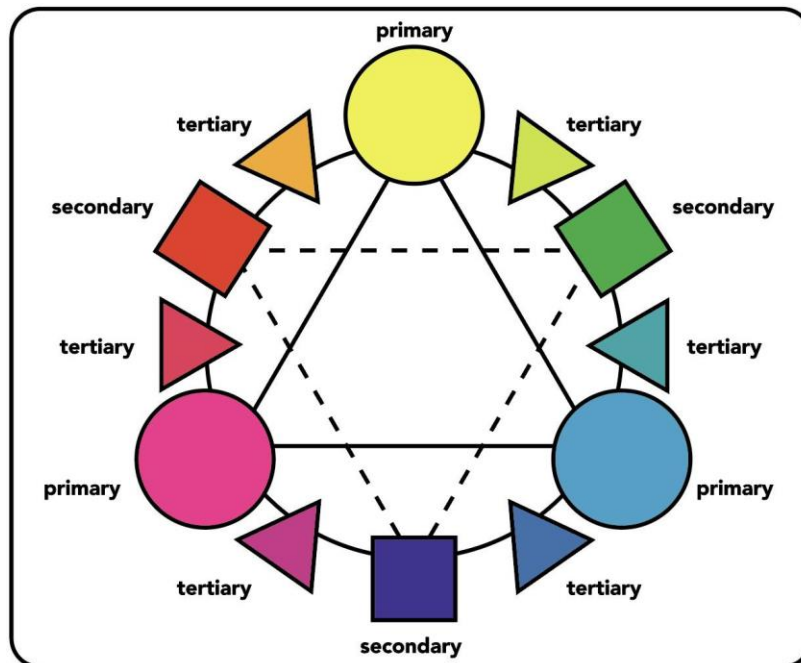


Fig. 11. Helleeson, Cadence. The CMY Color Wheel. 2022

After looking at a couple of 20th century artists, it is time to move on to a few contemporary artists. Dr. Christopher Strickland is an assistant professor of art education and graduate program chair in art education at the University of Nebraska.

He creates abstract watercolor paintings often inspired by nature, literature, and music. When asked about his painting process he expressed, “95% of the time I will have music playing when I paint.” For Dr. Strickland, low notes are associated with cooler colors such as blue and violet, and higher notes are warm colors like red and orange. In collaboration with saxophonist, Dr. Nathan Mertens, Dr. Strickland created a watercolor work of a saxophone piece called *Night Bird*. The painting takes inspiration from the sky, transitioning from dusk to the darkness of the night.

Growing up, Dr. Strickland was in choir as well as musical theater. Music is a part of his creative process, and he states, “Music can inspire the visualization of my painting, or reinforce and evoke the affective nature of my expressions.” Dr. Strickland believes that engaging in various art forms opens up more opportunities for a person to express ideas, feeling, and meaning (Strickland).

In my research, I came across another artist who used her knowledge of artists like Paul Klee and Duncan Grant to create her own painting of the second movement of Bach’s “Concerto for Two Violins in D Minor.” As the thesis for her doctorate, Juliet Kac wrote, “The Painting of Music - The Music of Painting: The Relationships Between Music and Painting, With Special Reference to Kupka and My Personal Practice.”

Dr. Kac explains her process for this painting project in the third chapter of her thesis. She was playing around with Bach’s movement two “Largo” long before deciding to turn it into a research project. She began by experimenting with color and form to represent major themes as well as rewriting the score into proportional notation (Kac, 27). Proportional notation is “a way of scoring music that uses space between notes to indicate their approximate and relative duration and placement (Hansen).” Dr. Kac

decided to assign each of the three instruments in the piece to a different color. The instruments are Violin 1, Violin 2, and Keyboard. She chose to use blue-green to represent Violin 2 because it opens the piece on its own, creating the feeling of space which she associates to those two colors. She chose yellow-orange to represent Violin 1 in order to provide contrast, and Keyboard is red-violet because of its wide range of pitch and dynamic progression of chords.

Dr. Kac explains that she associates low pitches with darker colors (Kac, 158). Comparing her own color association to Kandinsky's, when she paints music, she first determines what emotion the music is relaying and then relates that emotion to a color. Like Kandinsky, Kac sees calmness as the color blue. One major difference between the artists is in Kandinsky's eyes, each instrument's sound has its own color that always remains the same, but that is not the case for Dr. Kac (Kac, 160).

One obvious similarity between the contemporary artists Dr. Strickland and Dr. Kac is that they associate low notes with dark, cool colors and high notes with bright, warm colors. This is in contrast to Kandinsky, who associates instrument timbres to different colors rather than pitches. For Kandinsky, it seems that it does not matter if the english horn is playing in the bottom of the range or the top, it is violet in his mind. Dr. Kac, on the other hand, may associate dark blue with a low trumpet part in one song, and may later think of a different trumpet range as bright red.

After studying these other artists, I decided to create my own painting based on the first movement of Jacques Ibert's *Concertino da Camera* using the research that I have done on color associations and artist's processes. Jacques Ibert is a French composer who was born in 1890. He grew up in a musical family where his father was

an amateur violinist, and his mother was a pianist. Ibert studied music from a very young age. He learned solfege syllables before he even knew the alphabet. Even though his family was musical, his father wanted Ibert to go into the family business and disapproved of his desire to become a full-time musician. Ibert followed his father's wishes, but he continued to study music in secret. Shortly after he began working in the business world, he quit to pursue composing full time. One of the things most helpful to his composing was Ibert's gig playing music for silent films. He would improvise melodies on the spot to fit the mood of different scenes and was able to hear the audience's immediate reaction to his impromptu compositions. Getting that immediate feedback helped him understand his audience better and write melodies that he knew would appeal to them. He wrote about 60 film scores in his life, but he also wrote for a variety of other genres including opera, ballet, dramatic music, orchestra, chamber, and solo instruments, radio, and television (Graves, 13).

In regard to his compositional style, Ibert used basic classical forms such as sonata, rondo, concerto, and fugue. His music, though structured within standard forms, uses ideas from romanticism, impressionism, jazz, and dance music. Ibert's music is usually tonal, but includes lots of chromaticism and fluctuates between different modes. Another characteristic of Ibert's compositional style is his use of rhythm. He uses a large amount of syncopation and asymmetrical meters throughout that provide challenge for the performers. One unique thing about Ibert is that he almost never used a piano to compose while writing a piece that included an orchestra. Most composers will start by plotting out melodies on a piano before adding instrumentation, but he would write the full score immediately, composing melodies for specific instruments from the beginning.

He focused intently on orchestral color and would often use unique combinations of instruments to bring out different instrumental colors in his compositions (Graves, 25)

Ibert's *Concertino da Camera* for saxophone and eleven instruments is one of the most well-known pieces for saxophone and orchestra. It was requested by Sigurd Raschèr, a German saxophonist who increased the popularity of classical saxophone playing and expanded the range of the instrument from two and a half octaves to nearly four (Martin). Written in 1935, *Concertino da Camera* is one of the oldest saxophone works that is still a standard in the repertoire. The title means "small chamber concerto (Graves, 32)." A concertino is a "work with solo instrument, or instruments, less ambitious in scale than a concerto, often with few movements, or cast in one movement with changes of speed and character (Hutchings)." *Concertino da Camera* has two movements, but the second begins with a slow introduction before moving to the lively ending, giving the illusion of a concerto style, three movement work.

The first movement of *Concertino da Camera* by Jacques Ibert is a piece with which I have become quite familiar during the past year as I prepared to play it for competition and auditions. Before sitting down and listening to it for the purpose of choosing colors, I envisioned the painting being mostly red. I b this had something to do with the fact that I was frustrated with my progress on the piece, and I always associate frustration and anger with the color red. Upon closely listening to the entire orchestration of the piece, I concluded that it does not sound angry at all, but instead is very light and energetic.

When I started painting, I began by covering the entire canvas in white paint— a trick I learned from Bob Ross to help colors blend more easily on the canvas. I put the

song on repeat and listened to it a few times, choosing a few spots that stood out the most. I began painting what I heard during the middle, development section of the piece first. That is where the melody slows down a bit, and rhythms are simplified. The saxophone plays it first and then becomes a background character while the violins are featured. That section of the piece is quite peaceful and calm compared to everything around it, so blue and green were the colors that jumped out at me. The melody at that point is also very flowing and circular, so I started the painting with a swirl of green in the center of the canvas. The green represents the repetition of the melody of the violins. I then painted the first iteration of the melody as played by the saxophone by using a light blue going over top of the green.

The first thing that always catches my attention in the piece is a trumpet fanfare at the beginning of the movement that leads into the first entrance of the soloist. The trumpet starts playing a rhythmic motive along with other instruments, but quickly comes above the texture and crescendos into a flutter that introduces the saxophone. In Kandinsky's color theory, trumpets are represented by a light, warm red. I completely agree that the timbre of a trumpet has red qualities, so I knew that I wanted a bright shade of red to reflect the harsh, brash trumpet sound in the opening of the movement. There is a prominent trumpet motive leading into the development of the piece as well – a rhythmic passage that consists of three eighth notes followed by four sixteenths. That phrase is echoed by a horn and by the saxophone as it takes over the melody. In the painting, I represented that sequence with seven dots – one to represent each note. The first set is played by the trumpet and is represented with red just like the other trumpet fanfare. The final statement of that motive, played by the saxophone, is a dark

blue because it is low on the horn and much more mellow than the trumpet version. The middle set of growing dots is the repetition by the horn and is painted purple to indicate that it is somewhere between the trumpet and the saxophone sound. Where the trumpet has a bright sound, and the saxophone's is dark, the horn is the perfect middle ground between the two, bridging them together.

Surrounding the blue and green swirls that represent the calm, melodic development of the piece is an explosion of warm colors. Ibert's first movement is in sonata form which signifies it has an exposition, development, and recapitulation. This means that the piece starts and ends with generally the same theme. To communicate that, the figures in my painting follow a circular pattern, as if the music were coming full circle. The far left side of the painting has two big orange swooshes that echo each other. These express the first saxophone melody in the piece. I chose orange because the saxophone is energetic and fiery at this moment. It also repeats the same phrase twice which is why the swoosh is echoed. Because the ending starts in the same way, I have a similar set of swooshes reflected onto the right side of the canvas. There are myriads of notes throughout the opening/closing of the piece, so I knew that it could not be represented by a single swoosh. I decided to use a large paint brush, and I combined red, orange, and yellow and tapped those colors onto the painting to represent the lively, energetic feel of the piece. I used the same technique to represent the accompaniment part during the exposition as well, but I used purple, blue, and red to create a warm, dark mood, representative of the subdued development.

When the piece transitions from the development to the recapitulation, the bassoons join in with the melody from the beginning. Instead of finishing the phrase, the

other woodwinds take those few measures and pass them around the section. It keeps growing and getting more frantic until the saxophone comes in again with a loud low note repeated three times. The little woodwind moment is represented in a dark, dull, purple for two reasons. In Kandinsky's color theory, purple is the color of low woodwinds, especially double reeds. The reason it is dark and dull is because it sounds frantic and almost fearful at that moment, and fear is often associated with dark colors. That color is organized into an arc of circles, starting out small and neat and growing until the last few are no longer circles but a large messy swirl. Underneath my purple woodwind fear blob are three heavy blue lines (the same color as the phrase leading into the development). This is where the saxophone cuts off the orchestra to bring us back to the main theme. The very last phrase in the movement is a short coda, ending abruptly, with two staccato eighth notes. I decided that this needed to be included in my art as well, so in the middle of the canvas, I added a vertical, yellow line. It is the only straight line in the entire painting and acts like a quick cut off (figure 12).





Fig. 12. Helleson, Cadence. Concertino da Camera. 2022

### Note from the painter

I approached this project in a logical way. Every aspect of my painting has a purpose based on what I heard in the music. I was very careful with my color and shape choices throughout, and could easily defend any of the artistic decisions that I made. That is not necessarily the case for all abstract art, but I think when you are trying to recreate someone else's work in a new form, it is important to justify the choices that you make. As a highly logical person, I do not usually create art that is abstract. Everything that I have painted in the past looks like something, so I knew this project

would provide an interesting challenge for me by pushing me to do something that I have never done before. I think basing art on a piece of music gave me a way to have structure within the chaos of this abstract piece.

As you can see, music and art have been tied together throughout history. They are related art forms in the way that they allow a non-verbal expression of emotion. We also have a similar way of talking about and describing both of them. Artwork has harmony and music has texture. Music and art play a big part in human expression, especially when it comes to explaining emotions. Every artist and musician has their own processes that allow them to say everything they want through their work. Artists who paint music and composers who turn art into song are able to translate their fellow artists' feelings into a different medium.

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