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Paint and Sound: A Dialogue

Alyse Emanuel

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from Hamline University
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“To harmonize the whole is the task of art” – Wassily Kandinsky, *On the Spiritual in Art*

Preface

Paint and Sound: A Dialogue is a synthesis of my Musical Arts and Studio Art majors at Hamline University. My aim is to challenge the separateness of my own artistic sensibilities of sight and sound to achieve a synesthetic-like experience. My process began with an exploration of the intersections that exist between visual and musical art forms, how they relate and create dialogue. The idea for this project was initially sparked by my research into the influence of synesthesia on the paintings of Wassily Kandinsky for the Hamline course *20th Century Art in Europe and the U.S.* This research inspired me to look into the work of other artists who were synesthetic, were inspired by music in their own visual art making, and/or inspired by art in their music making. Of the many permutations of sense combinations that can be found among synesthetes, seeing sound and hearing images were most interesting to me. The overlap of formal concepts that I had experienced in my painting and music courses further piqued my curiosity and provided a framework for my explorations; when critiquing a painting, we talked about the *rhythm* of the piece, and in music history, the *shape* of the phrase was discussed. This inspired me to explore the relationship between visual and musical arts in my own artistic work. As a non-synesthete, I also had the underlying question while working, “can I become synesthetic?”

In the winter of 2014, I had the opportunity to take a course that engaged me in active, personal exploration of the visual and musical arts intersection: *Special Topics:*

Sound and Image. This class provided a structure to explore the relationship between music and painting with the common concepts of form, such as line, shape, color, rhythm, space and figure-ground relationship. Using formal concepts to think about the relationship between visual and musical arts avoids clichéd metaphorical ideas and creates visual and aural pieces that correspond without relying on a narrative to make the connection. For example, I wanted to avoid superficial relationships such as interpreting shades of blue with minor chords, or painting a picture of a saxophone with colors pouring out of the bell. It occurred to me that the abstract, formal concepts of both music and visual art would be the most direct and natural way for me to connect the two art forms. This project begins with historical research of artists who explored the dialogue between visual and musical art forms, including synesthetes, and then delves into my personal exploration of this territory.

Introduction

The phenomenon known as synesthesia allows people who experience it to perceive more than one sense simultaneously, most commonly sight and hearing. It is unknown how many people are truly synesthetic because it is expressed very individualistically and it is likely that many people have the condition without realizing it. However, scientists now believe that about four-percent of the population has some form of synesthesia (Eagleman). While most people are only aware of experiencing one sense for each stimulus, such as hearing a sound or seeing a shape, a synesthete experiences more than one sensation arising from one stimulus, such as hearing a certain sound, which triggers the perception of a certain color. Richard E. Cytowic, a neurologist who has done extensive research on synesthesia since the 1970s, found in his groundbreaking research that synesthesia is likely a neural process that we all experience without knowing it. The difference with synesthetes is that they are aware of the mixing of sensations.

Synesthesia has been recognized as a psychological phenomenon for over two-hundred years, but the term did not come about until the 1860s and 1870s. When Cytowic was beginning to research synesthesia in the late 1970s and early 1980s, he found that the topic was met with defensive and hostile responses from his colleagues in medicine (*Tasted Shapes* 36). Based on similar responses toward other neural experiences that could not be easily quantified into objective data, he concluded that the individual nature of synesthesia led it to be easily dismissed as a figment of the imagination. However, Cytowic himself did many different experiments with synesthetes and non-synesthetes and observed that it was a very real and concrete experience for the individual.

Furthermore, it happened exactly the same way every time. For example, his main synesthetic subject had taste/touch sensory mixing. Whenever the subject would taste or smell mint, it would coincide with the feeling of smooth columns. The subject could reach out and feel the columns in front of him, sometimes intensely and sometimes more subtly, but the flavor/shape combination stayed the same every time.

Eventually new technology allowed Cytowic to observe this subject's brain activity while experiencing synesthesia. He found that a highly unusual brain pattern was taking place during synesthesia. The subject's cortex, the "logical" part of the brain, almost shut down completely during synesthesia, and the limbic system, where emotional functions take place, lit up. This observation provided Cytowic with strong evidence that synesthesia was not only real, but likely occurring in many of our brains on the subconscious level, which left him with the question of whether our way of ordering the world around us in dichotomies, such as objective and subjective, is what might, in fact, be imaginary.

Oliver Sacks is a neurologist known for studying exceptional neurological cases that often involve artists, including a synesthetic painter who became colorblind from injuries sustained in a car accident. This artist not only lost his ability to see color, but he also lost his synesthesia; no longer could he see the colors that had, for his whole life, been induced by music. This case caused Sacks to believe synesthesia was "a physiological phenomenon, dependent on the integrity of certain areas of the cortex and the connections between them" (Sacks 179). Sacks agrees with Cytowic that, especially with functional brain imaging technology, "there is little room for doubt, anymore, as to the physiological as well as the psychological reality of synesthesia" (Sacks 193).

People with synesthesia “have an unshakable conviction that what they see is real” (*Tasted Shapes* 77). Synesthetes do not imagine or metaphorically explain a color/pitch or a shape/flavor combination, but they have what Cytowic calls a “noetic” experience during synesthesia. The term noetic comes from the Greek word for intelligence or understanding and means “knowledge that is experienced directly” (*Tasted Shapes* 78). It is also often used in definitions of religious ecstasy to describe the feeling of certainty that accompanies the direct experience of knowledge. I found it fascinating that synesthesia and ecstatic mysticism both share this unique feeling of certitude.

In my research, I found that many avant garde artists at the turn of the 20th century were interested in the idea of the arts expressing an “inner knowledge” that logic cannot fully comprehend; art that had to be felt rather than rationalized. This idea contributed to the breaking down of previous barriers between the arts in an effort to express truths that words could not. As Cytowic wrote about both synesthesia and artistic vision, “Both are ineffable, both truly indescribable” (*Tasted Shapes* 116).

As a senior majoring in music, studio art, and religion, I felt that this was the perfect time for an exploratory, interdisciplinary project such as *Paint and Sound: A Dialogue*. I have long had an interest in learning as many instruments as possible and have never been satisfied with mastering the performance of a single instrument. Creating music, regardless of the tool, was most important to me. Beginning with piano lessons, I have also studied percussion, drum set, guitar and bass guitar. In high school I had the opportunity to play in a steel drum ensemble for two years and take workshops on playing the gamelan, an Indonesian percussion ensemble. At Hamline, I took lessons in piano, percussion and violin as well as composition classes in popular music and jazz. I

played in a Brazilian percussion group and African Drum Ensemble for a semester, have played drums in the Jazz Ensemble for five semesters, and continue to collaboratively compose and perform with my rock band of seven years, Cadence and the Wolf.

As a studio art major at Hamline, I have learned the formal concepts behind what makes a piece work, which has increased my confidence as an artist in my perception and creation of art. I had the opportunity to take a class abroad in Jamaica that greatly developed my interdisciplinary thinking about visual art. The class combined biology and art and made me contemplate how two seemingly opposite ways of thinking about the world, artistically and scientifically, can relate and inform each other.

Through my religion major, I have studied Eastern religions and self-cultivation practices, such as Zen meditation and yoga. These studies have brought to my awareness dualisms that are commonplace in the Western world, but not typical assumptions in many Asian cultures and religious traditions. Western thought emphasizes the “self” as separate from the rest of the world while East Asian practices often focus on breaking down dualisms and approaching reality in a more holistic way. For instance, Buddhism claims that most people experience the world as split between subject and object and that this duality is an illusion that causes suffering. In fact, many Eastern belief systems think of everything as being part of an interconnected network instead of being separated into dichotomies. Knowledge of this way of thinking was crucial to my exploration of unity between the senses.

Paint and Sound: A Dialogue is a challenge I present to myself to experience the inextricable interconnectedness of multiple senses and what the implications would be for how I perceive and create art. Who had explored this artistic territory before me?

History

Throughout history artists of all kinds have ventured into other art forms beyond their primary area of focus and talent, from Michelangelo's sonnets to Mendelssohn's watercolors. However, it was not until the 19th century that many artists began to experiment with borrowing concepts from other art forms, even taking inspiration from synesthesia's fusion of senses. "A union of the senses appeared more and more frequently as an idea in literature, music, and art" (*Tasted Shapes* 54). At the beginning of the 20th century, artists began crossing the boundaries between the aural and the visual with translations of fugues into paintings, such as Paul Klee's *Fugue in Red* in 1921, stage works that included music and corresponding colored lights, such as Wassily Kandinsky's abstract performance *The Yellow Sound*, 1909, and more. This new level of exploration between the arts corresponded with a sentiment among Expressionist artists that a work of art was valuable for its inner meaning; the art form or medium was purely working as a channel to express something deeper.

World-shaking scientific discoveries that were made near the turn of the 20th century, such as the theory of evolution, Freudian theory, and Albert Einstein's space-time cosmology, caused traditional boundaries between various fields to be questioned. Suddenly, the idea of a static universe was shattered and humans had to grapple with the new idea of the universe as shifting and expanding. Microscopes led to the discovery that Newton's atoms, which made up the universe, consisted largely of empty space. Things were no longer solid, permanent entities but ever-changing and evolving. This new cosmology resonated through the artistic community as well, breaking down of traditional concepts, rules and boundaries between the arts.

By the mid-19th century, composers and artists were actually exploring synesthetic possibilities in their work. This exploration was inspired in part by the spiritual movement of Theosophy. Founded in 1875, Theosophy included a belief that synesthesia was a necessary effect of reaching a high level of spiritual advancement. Perhaps there is a “mysticism inherent in colored music—synesthetic or deliberate;” which was a common trait in late romanticism after Richard Wagner (*Tasted Shapes* 115).

Richard Wagner’s work and ideas had a strong influence on artists of all varieties. One of his ideas was the *Gesamtkunstwerk*, or “total work of art.” This new artwork was a synthesis of art forms under the framework of musical drama. Though certainly not the first to unite different art forms on the stage, Wagner popularized the idea of *Gesamtkunstwerk* in the mid-19th century by devoting much time and energy to the idea in many of his published writings. This idea influenced visual artists over the next decades, including Kandinsky, who described in his treatise *On the Spiritual in Art* (1911) what he foresaw as the next step in the arts: “monumental art.” This new artwork was to unite “musical movement, pictorial movement and dance movement” in a work for the stage (Vergo 150).

Wagner’s theories included the idea that language and the human voice were part of the world of conscious thought while music expressed feelings from the unconscious that could not be put into words. He put this idea to use in the form of dramas, utilizing the symbolic power of words and the emotional power of music. Inspired by Wagner’s work, visual artists created some of the first non-representational, abstract paintings in an effort to express unconscious emotions that figurative visual art could not accomplish.

Considered one of the most “musical” painters, British artist James Abbott McNeill Whistler was on the forefront of abstract art in the late 19th century. In 1872, *The Times* newspaper quoted Whistler’s definition of painting as “the exact correlative of music, as vague, as purely emotional, as released from all functions of representation” (Vergo 72). Whistler was likely an inspiration for Claude Debussy’s orchestral *Nocturnes*, ironically, as Whistler was using the term in its musical context. “Where Whistler had borrowed the term from musicians, musicians were finding new inspiration in his paintings” (Vergo 82). As this statement implies, it was the visual concepts employed in the paintings themselves that inspired Debussy’s musical compositions. Debussy looked to the work of Whistler and other Impressionist artists of his time, including Claude Monet, who tried to “reveal the depth of experience accessible through close attention to the most mundane objects,” as inspiration for the way he composed (Auner 29). Monet used common, everyday objects like haystacks as his subjects but painted them in a new way that broke with tradition; he scrutinized and conveyed his perception of the light playing across the haystacks at different times of day. The subject was just a vehicle for the exploration of color and light. Similarly, Debussy used familiar chords in new contexts, extracting them from their old functions and abstracting them like colors.

Expressionism was an art movement that arose in Germany during the first decade of the 1900s and continued into the 1920s. Unlike most art movements, which tend to encompass only one form of art, ideas behind Expressionism were applied to many arts including visual arts, literature, and performance. Inspired in part by Symbolist ideas of the late 19th century, the main goal of Expressionism was to create art that came from

within the artist, expressing emotions rather than depicting a perception of the outside world. This was a reaction against Impressionism, which had emphasized accurate and scientific representations of the outside world. The desire to express the world as it is *felt* from the subjective perspective of the artist also led to total abstraction in visual art.

Kandinsky was adamant about the idea of abstract art expressing an inner meaning that words could not. As a visual artist and an amateur musician, he was deeply influenced in his visual pieces by music, which he embraced as the most non-representational of all the art forms. He sought to paint musically, in that he painted “compositions which shall have on the spectator an effect wholly divorced from representative association” (Kandinsky xix). He titled many of his abstract pieces in musical terms such as “Composition IV” and “Improvisation 10.”

Kandinsky is also believed to have been synesthetic; he described many experiences of “colored hearing,” the perception of color, shape or movement in response to everyday sounds, voices and especially music. For synesthetes, these sounds can trigger an experience like fireworks; colored moving shapes rise up and then fade away. Kandinsky described experiences like this, where music triggered visual elements like color and line. A specific experience Kandinsky wrote about occurred when he was listening to Wagner’s *Lohengrin*: “I saw all my colors in my mind! They stood before my eyes wild, almost crazy lines were sketched in front of me” (*Wednesday* 98).

Impressionists and Expressionist both broke away from using narratives in their art by using unusual combinations of familiar elements. Expressionist artists did not just borrow from other art forms but began working side by side with each other. Kandinsky and Franz Marc, both interested in abstraction of color and form in painting, started a

kind of artists' collective called Der Blaue Reiter (The Blue Rider) in Munich, 1911. A foundational belief of the group was the expression of spiritual truth through the arts. The group was comprised of both artists and musicians, including August Macke, Gabriele Muntz and Arnold Schoenberg. Der Blaue Reiter was interested in challenging the traditional limits of sensory perception, similar to earlier Impressionists, though the two groups did so in very different ways.

Der Blaue Reiter artists reacted to the Impressionists exploration of the outside appearance of the world by looking inside, toward their own emotions and spirituality, for inspiration. "More important than the outer appearance of things were the feelings they aroused...the artist's job was to examine, expose, and confirm the permanent tension between the inner and the outer worlds" (Vogt 1). Der Blaue Reiter exemplified this changing consciousness with their belief in inner meaning and unification of all types of artists, especially visual artists and composers.

Der Blaue Reiter began publishing their interdisciplinary ideas in an almanac. The first edition of the *Blaue Reiter Almanac*, published in May 1912, included eight articles on music and six on painting and was largely about the relationships between the art forms. One of the music articles was "The Relationship to the Text" by the composer Arnold Schoenberg, in which he discussed the relationship of music and words. Though Wagner wrote extensively on this topic in the context of drama, Schoenberg had a more Expressionist impulse about music's own inner meaning that words cannot speak to, but can only accompany (Vergo 147).

Arnold Schoenberg, though not synesthetic, explored the idea of colored music in his opera, *Die Gluckliche Hand*. "Shifting colors" went with the music and were meant to

express the emotions of the characters. In a letter to Kandinsky in 1911, Schoenberg emphasized the direct expression inherent in “form-making” and the role of the unconscious in art: “Art belongs to the *unconscious!* One must express *oneself!* Express oneself *directly!* Not one's taste, or one's upbringing, or one's intelligence, knowledge or skill. Not all these *acquired* characteristics, but that which is *inborn, instinctive*” (Auner 113).

Schoenberg also contributed to the breaking down of traditional barriers in music with his idea, *Klangfarbenmelodie*, or tone-color melody. This idea is often expressed with a sequence of the same chord or note in different timbres. For example, a more literal *Klangfarbenmelodie* might be a chord, such as Schoenberg's *Farben* chord consisting of the notes C-G#-B-E-A, that is repeated on different instruments creating different textures with the same “colors.” *Klangfarbenmelodie* illustrates the breadth of the breaking down of musical traditions; more than just exploring dissonance, composers were also creating new rules in terms of timbre, rhythm, dynamics and texture.

Der Blaue Reiter visual artists, such as Franz Marc were hugely influenced by the music of Schoenberg, and responded to his musical ideas conceptually with visual art. Franz Marc in a letter to friend August Macke attempted to describe his impression of a Schoenberg concert in Munich, 1911, in relation to Kandinsky's “large Composition:” “I listened to the music, which lets every note sounded stand by itself (like the white of the canvas appearing between the patches of color!). Schoenberg starts from the principle that the concepts consonance and dissonance simply don't exist. A so-called dissonance is simply a further removed consonance, an idea that now obsesses me constantly in painting” (Vergo 182).

Marc saw a common result in Schoenberg's dissonant music and Kandinsky's use of the white canvas as part of a painting. Both techniques ended up creating a dialogue between figure and ground; notes that don't seem to share a common tonal center can still relate just as white canvas and painted marks can work together to create a unified visual artwork.

Kandinsky's impulse to unite art forms was less focused on the use of formal concepts; perhaps because of his synesthesia. He wrote, "The relationships in art are not necessarily ones of outward form, but are founded on inner sympathy of meaning." (Kandinsky xv). This idea is probably more comprehensible to a synesthete than the concepts Marc used of figure/ground, consonance/dissonance to draw parallels between the arts, but both were clearly inspired to find the commonalities between music and abstract painting. Kandinsky addressed the similarity: "A painter, who finds no satisfaction in mere representation, however artistic, in his longing to express his inner life, cannot but envy the ease with which music, the most non-material of the arts today, achieves this end. He naturally seeks to apply the methods of music to his own art." (Kandinsky 19).

Parallel to Kandinsky's painterly perspective, Russian pianist and composer Alexander Scriabin (1872-1915) was fascinated with the idea of breaking down traditional rules in music. A new music, he believed, could bring in a "new world." During the last years of his life he worked fervently on the creation of *Mysteriya* (Mysterium), a synesthetic extravaganza that was to be performed in the Himalayas. Though never finished, it was written for many instruments and voices, dance, colored

lights and even perfume. This multi-sensory performance was planned to “transport all the participants to spiritual enlightenment” (*Music in the Twentieth* 45).

The German artist Ludwig Hirschfeld-Mack was also drawn to unite the senses of vision and sound. Unfulfilled by the static quality of painting, he began to see “animated light” as the new form of expressing visual images. He took part in a seminar led primarily by Kandinsky in which students placed pieces of colored paper in different orders and analyzed the “tensions” and “illusory movement” that could be created by the arrangement of the papers (Vergo 287). Hirschfeld-Mack saw the next step as actually creating literal movement in the form of what he called “light plays.” His earliest light plays used lamps and other lighting tools accompanied by music. He saw music as crucial to his light plays, partly based on his own reaction to silent films that had no musical accompaniment, which he found unsettling and difficult to follow. This solidified his belief that music provided an important role in “structuring our visual perceptions” (Vergo 288).

Olivier Messiaen, a composer born in Avignon, France in 1908, used color to structure his music, an inversion of Hirschfeld-Mack’s approach. As a synesthete with colored hearing, he experienced sound and color as inextricably connected. His synesthesia caused certain movements of colors to be elicited by certain chords and vice versa. This inevitably had a strong influence on his compositions. In *Couleurs de la Cité céleste*, color determined the form of the music. In addition to the use of *Klangfarbenmelodie* in early sketches of the work, he noted in the preface of *Colours* score, “the form of the work depends entirely on colours. The melodic and rhythmic themes, the complexes of sounds and timbres evolve in the manner of colours” (Hill 256).

He also explained that the work “turns on itself, lacing its temporal blocks, like the rose window of a cathedral with its brilliant and its invisible colours,” illustrating the importance of color to the structure of the work (Hill 256).

These are a few examples of artists who explored music in their visual art and visual art in their music, but many more have been inspired to seek a union, or at least a dialogue, between art forms, as I have myself.

Framework for the Experiment

Synesthesia is a direct, immediate and abstract experience. My was to explore my own possible synesthetic capabilities in the creation of visual and musical works that derived from each other in the same way that the senses give rise to each other and mingle in a synesthetic experience. I used three paintings and one piece of music as initial stimuli for a responsive piece in the other art form. I chose these particular visual and musical works because I felt that they exhibited formal concepts, including depth of space, tension and release, and rhythm, which would be a good starting point for a responsive piece in the other art form.

I tried first to create musical responses in the computer program GarageBand, but was unsatisfied with the results. Realizing that I was not capturing the intuitiveness that I wanted in the musical aspect of the project, I decided to try responding to the visual aspect on live instruments, record them and later use GarageBand to make any changes or adjustments to the recordings. I also wanted to try collaborating with other musicians to utilize melodic instruments that I am not proficient on myself, and to experience their intuitive reactions and how they might be different from mine. I invited multi-instrumentalist Taylor Nelson, whom I had worked with before in the Hamline Jazz Ensemble, to improvise on trombone and guitar while looking at my paintings.

Though I wanted to capture intuitive ideas from my collaborative musician, I fundamentally wanted to explore my personal artistic interpretations of the overlap between the music and the visual art. I had the goal of the final product of the pairings feeling connected and whole to me.

I set up the work as an installation in the lobby of Anne Simley Theatre on Hamline University campus with the paintings hung on a wall and two computers and

sets of headphones set up in front of the paintings with the musical pieces available on a PowerPoint presentation. I wanted spectators to be able to look at the visual art and listen to the music simultaneously and decide for themselves, based on what they saw and heard, which paintings and music pieces corresponded. I titled the four visual pieces (“a,” “b,” “c,” and “d”) and four musical pieces (“1,” “2,” “3,” and “4”) so that there was no description to influence the audience’s experience. I created each musical piece and visual piece to correspond with a piece in the other art form. I did not want there to be a definitive answer as to which pieces were meant to be pairs because I knew that no viewer/listener would have exactly the same experience, just as no two synesthetes have the exact same kind of sensory fusion. I assumed that each participant would bring to the installation their own personal interpretation of how visual and aural senses might speak to each other. My process was as follows:

The visual piece “d” and its corresponding sound piece “1” were created at different times. The painting was created first and informed the musical aspect. I saw rhythm and movement as very important concepts in “d”. The synesthetic drummer of the Grateful Dead, Mickey Hart, defines rhythms as “patterns moving through time” (Hart 12). In this painting, the repetitive patterns of lines and shapes are very rhythmic. The long, horizontal composition gives the feeling of time and movement. I ended up experimenting with playing drums and other percussion instruments while looking at the piece, almost reading it, from left to right while recording these sounds so that later I could listen to what my intuitive, musical response was to the painting and make adjustments.

I entered the piece musically with transparent sounds, or cymbal rolls, with occasional hits underneath the cymbals coming through and then receding like the black and white lines. The thick white line that interrupts this section suggested a silence or simplifying of the sounds. Then a crash cymbal interrupts the white line and leads into a louder section. Visually, this section was a little more opaque but still very layered. I responded by playing rhythms that were a little more repetitive and louder still. In the middle section of the painting, with more color and faster paced lines, the drumming also intensified and sped up, the two arts mirroring each other in density and intensity. This led into the black shape with lines emanating in all directions. The drumming became much more chaotic here. After this section, the painting seems to become quieter, with fewer distinctive lines and fuzzier layers, until the end, which has a few sharp, black and white lines. On the drums, I played some tom rolls with shifts in dynamics so that the sounds would appear to come forward and recede into space, like the many layers of greys. At the end, I hit a couple of distinct and separated notes, one on the bass drum and one with the bass drum and ride cymbal together, like the sharp black line and the final black line that becomes very soft in the upper half of the painting. However, these black lines also alternate with white lines, which could also be interpreted like the final hits, which emphasizes the play between figure and ground, notes and silence. Both are equally important and require the “other” to stand out.

Painting “b” was a visual response to the main concept that I picked out of the sound piece, “2.” This musical piece is the introduction of a song by *Cadence and the Wolf*, a band for which I am the drummer. This section of the song sounds like a strong tension and release because of the slightly dissonant chords and syncopated rhythm that

create a tension that eventually dissolves into more consonant chords and a more stable rhythm. Tension and release is a concept in visual art that I find intriguing. I had been playing with circles made by stamping an inked rim of a cup on different surfaces and wanted to incorporate this type of mark into the piece. After listening to the piece a few times I decided that the snappy snare drum hits sounded like a sharper-edged shape than the circle. I made a stencil with two small triangular shapes and added them into the visual images I was playing with. Soon I had a variety of different surfaces with different kinds of inked and painted circles and triangles that seemed to dissolve off of the paper if I arranged them in a certain way. The only thing missing was a satisfying “start” to the painting. There wasn’t an area of the painting that seemed to mirror the explosiveness of the the music at the beginning. I continued to try things to add tension and strength to the painting such as making the blacks, greys, and whites more opaque, creating larger shapes and layering them further than the other areas of the painting, until I was satisfied that the painting was not being overpowered by the music. The “beginning” of the painting seemed to explode into existence and fracture and dissolve as the eye moved across it, which mirrored the music.

Pairings “c” and “3” began with the painting. I saw the painting as being mostly about different surfaces and the relationship of the warm orange and cool blue colors. When I thought about what it might sound like in musical terms, I saw the varying surfaces as loud and soft areas shifting back and forth, and the colors as, at times, consonant and at other times dissonant in their relationship to each other. Because of the importance of color in this piece, I thought that a melodic instrument was necessary. The timbre of a horn seemed like it would correspond with the softer textures of the painted

shapes. I invited Taylor Nelson, a musician with advanced improvisational skills, to collaborate with me. I asked him to react to painting “c” musically with his trombone. I set the piece on a music stand in front of him and he began to improvise, which lasted for about two minutes. I had given him very little direction and was curious to find out how he had gone about the task of responding musically to visual art. He said that he had taken inspiration from his initial response to the painting and then eventually began building off of his musical ideas. We recorded this improvisation and I later tweaked some of his ideas in the computer program GarageBand. When I listened to his musical ideas while looking at the painting, I felt that some of them did not fit with what I was seeing visually. Perhaps this was because, as he had said, his ideas had branched away from a direct, intuitive response to the visual art. Because of this, I decided to further tweak the recording and cut and layer sections of his improvisation to achieve more of a unity with the visual piece. I thought that there appeared to be much more going on in the visual piece than in the music. One instrumental voice did not seem to be able to achieve the kind of conversation I was seeing between colors and surface textures. I layered melodic lines to create a kind of dialogue between the colors and a feeling of shifting areas of color and space.

Later, I altered the painting and found it to correspond more directly with the music. I shifted the two pieces of paper, arranging a more vertical composition than before to emphasize the lack of linear movement in the painting and music. This created three main lines that were slightly off-centered, emphasizing a visual theme of repetition and variation that had existed in the painting and the musical melodic lines that I had layered and arranged in a kind of call-and-response.

The pair “a” and “4” had a very similar process of creation. The painting also came first, and while creating it I had been thinking about how tonality, or lights and darks, can create the illusion of different depths of space. Taylor Nelson, again, collaborated on this piece, but this time reacted to painting “a” on electric guitar. Again, I set the piece in front of him and recorded his intuitive musical response to the image. He played for about two minutes, and then I turned the painting so that what had been the left side was now the bottom side. This direction resonated much more with Taylor and he improvised for about thirteen-minutes on guitar with me occasionally building on his ideas on the drum set. In reflection I believe that the new direction of the painting resulted in much more visual depth, with a foreground, middleground and background almost like a landscape, but with vertical lines disrupting the image and creating shapes and different spaces. He remarked later that it reminded him of looking through a broken lens.

From this recording, I cut out musical ideas that sounded to me like they really spoke to the image and the idea of space. As the improvisation continued for minutes, I felt that some of the ideas did not respond directly to the painting. For instance, there were times when Taylor began experimenting with different modes, which seemed to completely change the palette of colors, so I decided not to use this section. His first musical reaction to the painting was to make the bell-like sound of harmonics. These harmonics sounded spatial to me because of how they echo and resonate. To increase this feeling of space, I layered several sections of harmonics at different volumes, shifting the dynamics so that one layer seemed to go back into space and another move forward at different times. Areas of the painting also play with your eye, seeming to come forward

one second and the next recede into a deeper space. Adding the drums creates another layer that enriches the texture and responds to the guitar--an additional layer of dialogue.

Since painting “a” is square and not long and horizontal, it gives the feeling of suspended time. Because of this, I picked out an idea from the improvisation that felt didn’t necessarily have a beginning or an end, but could be listened to at any point during the piece and provide the listener with a snapshot of the whole musical idea. I chose these particular musical sections because they had a subtle rhythm as a framework, like the repetitive vertical lines in the painting, as well as a tonal center that made the notes seem like they came from the same family, like the palette of colors used in the painting.

Conclusion

What I discovered from this intentional effort to exercise my synesthetic capabilities was that I did not become a synesthete. However, thinking in this way of uniting visual and musical formal concepts began to feel more natural. After a while I started to wonder how all visual art pieces I saw could be musical. I would hear a song and start thinking about how a painting corresponding to that piece might look. I found that, like synesthesia, an intuitive connection between musical and visual arts is made easier with a less conscious, logical effort. I have a greater understanding and appreciation for Cytowic's claim: "you know more than what you learn through rational thought and language, although you most likely are unaware that you know it" (*Tasted Shapes* 156). Though a union of the senses does not happen on a conscious level for me, I found that it might be possible to tap into a subconscious place where everything becomes obviously connected to a greater whole.

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