

Play | Record | Repeat

By Marco Cibola

A thesis exhibition presented to OCAD University in partial fulfillment of the requirements for the degree of Master of Fine Arts in the Interdisciplinary Master's in Art, Media & Design Program.

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Abstract

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Keywords: visual art, sound, remix, gestalt, grid, play, record, system.

My practice formulates a modular system that generates visual compositions, which act as sketches for the execution of new visual and sound work. My project examines the intersection of remix theory, common to sound practices, and gestalt theory, common to visual practices, revealing a shared focus on the relationship between the *parts* and the *whole*. The *parts* are the elements that make up a visual or aural composition, and the *whole* is the total and complete work. Despite the commonalities between music and visual art that are revealed through my thesis research, there are fundamental differences — both spatial and temporal — in how we perceive artworks from each discipline. These differences in perception, I argue, make gestalt theory a useful tool for initiating translations of parts of visual art to sound, whereas translating the essence of the whole visual composition to a whole sound work is better achieved through intuitive processes.

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For Anne, Sadie, and Tom.

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1. INTRODUCTION

My research examines sampling and remixing, which are common processes in contemporary music practice. It also explores how gestalt theories guide the production and perception of visual art. My work looks at how remix theory, common to sound practices, and gestalt theory, common to visual practices, intersect to reveal a shared focus on the relationship between the *parts* and the *whole*. Here the *parts* are the elements that make up a visual or aural composition, and the *whole* is the total and complete work. From within this relationship, I develop a methodological system for making visual art and music that builds on the intersections between the two disciplines. My thesis practice reveals that the application of remix theory to my visual art practice yields successful outcomes, whereas the same cannot necessarily be said when gestalt theories of visual perception are applied to my music practice.

To better understand how my visual practice (a discipline based in space) can be translated into sound (a discipline based in time) I refer to the representation of time as two-dimensional space in traditional music notation; space along a horizontal plane is a representation of elapsing time. Visual gestalt principles offer efficient methods of understanding how visual art is perceived, which in turn, I argue, can successfully inform the process of translation from one visual discipline to another. I also argue that in my practice, the same visual gestalt principles are less effective tools for the translation of visual compositions into musical compositions. There is a strong relationship between the process of making visual art and the process of making music, due to the temporal nature of process itself. Despite this commonality, there are fundamental differences — both

spatial and temporal — in how we perceive artworks from each discipline. These differences in perception, I argue, make gestalt theory a useful tool for initiating translations of parts of visual art to sound. However, translating the essence of the whole visual composition to a whole sound work is perhaps better achieved through intuitive processes.

The organizational structure of the grid — a visual representation of divisions of both space and time — serves as common ground for my two disciplines. The grid is a structural framework for the material outcomes of my thesis project. My practice operates within the realm of remix, which I conceptualize as a series of alternating actions categorized as either play or record. Here, *play* describes the spontaneous act of assembling, dividing, and reassembling temporary compositions using samples of my own work. And *record* is an exploration of various forms of documentation that investigates the similarities and differences between the acts of documenting, copying, and translating from one medium or discipline into another. Transformation through repetition, in various forms, is at the core of my thesis project.

1.1 Personal Position

I have been studying and practicing as a graphic designer and illustrator — which I will at times refer to in this paper as my commercial practice — for more than 15 years. I also studied music for seven years through the Royal Conservatory of Music (RCM), and more recently I have been engaged in independent research and practice-based studies in experimental music. Through ongoing reflection on the processes and outcomes of these practices in visual art and music, I have become increasingly interested in the parallels that exist between the two disciplines. More specifically, questions about the functions of process and methodology within the systems that guide my practices have become central concerns of mine.

The terms *process*, *methodology*, and *system* are closely related. As such, it is necessary to make a distinction between these terms for clarity. I consider a process a series of actions that lead to an end. A methodology, on the other hand, I consider to be a set of principles and rules employed by a practice. So if the process is a set of actions, the methodology imposes rules and guidelines on those actions. In my practice, the two mutually impact each other. The methodology is informed by observation and reflection on process, which then, in turn, guides the process forward. The interaction between and interdependence of process and methodology forms a *system* that guides my practice.

A focus of my research has been on how systems can guide production. Systems are formed through a reflection on personal as well as collectively shared processes and methodologies. As a designer and illustrator, I develop my own systems by drawing upon — and often adopting — systems that have been developed and shared by established

historical and contemporary practitioners. Commercial projects often present specific challenges that require a designer to consistently produce effective and appropriate solutions. I have found that employing established processes and methods ensures efficient results. For example, as an illustrator I work with my clients through a process that includes the use of style boards, mind mapping, thumbnail drawings, and rough drawings before completing a final illustration. Similarly, just as the way of working has a guiding process, so too does the method of evaluation. The outcomes of this working process are evaluated through established design principles, which themselves are based on principles of perception. The process is dependable and the outcomes are predictable. As such, working within a system is a key part of my commercial practice.

I also rely on systems in my music practice, which I believe was informed in some ways by my training at the RCM. Specific tasks are outlined by the RCM, and it is clear to the student what those tasks are. The RCM's system for learning involves repetitive practice and leads to the ability to read and play compositions scored by composers. The role of a classical pianist, in this context, is one of a scripted performer, and it is within these parameters that I learned to play the piano.

Playing a musical instrument for me was not an act of creation. Rather, it was a structured, performative act — a reading, a repetition, a copy. A musical score contains all of the instruction needed in order to execute a performance: the tempo, melody, rhythm, amplitude, pitch, and timbre are all predetermined. However, even within these strict boundaries, the work is manifested through human performance, resulting in shifts, however slight, within each player's performance. Later I became interested in jazz, where scores set looser guidelines for the performer, allowing for variance and

improvisation within each performance. Although I did not formally study jazz as a pianist, I was influenced nevertheless by the rhythms of jazz, and I recall the small but significant transformation that took place when I applied a syncopated¹ rhythm, typical of jazz music, to a classical composition. The original elements were still in the music, but the small shift in rhythm resulted in something new. The manifestation of something new was achieved through a process that both adhered to the core instructions of the score, and allowed for intuitive or experimental interpretation. It is an experience that parallels some of the key objectives of my thesis project. I seek to create a system that will initiate creative actions, provide guidance through methodology, and allow for intuitive and experimental play in my visual and sound practices.

¹ Syncopation is a process of playing certain notes in a sequence slightly behind or ahead of where

1.2 Objectives

My primary objective is to formulate a system that employs sampling and remixing — methods commonly associated with music production — to guide and facilitate an intuitive process of composition in visual art. I aim to establish an engaging practice that playfully generates and archives multiple compositional sketches that instruct the emergence of new works generated by the act of recording the sketches into other forms. Principles of perception — largely gestalt principles — influence material and medium choices through the process of recording the sketches into other visual forms such as painting, drawing, and photography. These principles are also explored as tools for translation between disciplines as the visual compositions are used to provoke musical compositions. Practice-based inquiry provides the opportunity to engage with the process of making and reflect on the relationship between visual art and music. My project examines the inherent makeup of one discipline against the inherent makeup of the other in order to develop shared methodologies that guide the conceptualization and production of unlikely or unexpected outcomes in both my visual art and music practice.

Through an investigation of the grid's prevalent use as a visual framework in music notation and visual art, I strengthen my understanding of how it can function as a foundation for composition in both disciplines. I also use the grid as a device for facilitating translation between visual art and music.

My larger objective is to establish a reliable trajectory for my practice that continuously forms new possibilities for composition and material practice — in visual art and music — through a looping and evolving self-reflective process.

1.3 Thesis Questions

Can sampling and remixing — processes commonly used in music production — be an effective process for composition in my visual art practice?

Can principles of perception based on gestalt theory — used extensively to understand and predict visual perception — be used effectively as a tool to translate my visual compositions into music?

How can the grid be used as a tool to investigate composition and the relationship between music and visual art?

2. METHODOLOGY

2.1 Process

In my thesis research my process precedes and informs my methodology. My methodology, in turn, helps to guide and continue my process. Process is the act of making work, it is part of the work, and it is in fact *in* the work. Methodology, however, is formed from *outside* the work. It is clearly understood from a point of view of reflection on the process.² Therefore, before discussing the reflection on the work, it is necessary to first outline the beginnings of my material practice.

The practice component of my research developed out of two earlier projects: 1) an untitled series of paintings from 2008 (that I will refer to as the 2008 paintings); and, 2) a series of modular paintings titled *Red Tiles* that I completed early in this graduate program (2013). The 2008 paintings were my first visual works that focused on the relationship between music and visual art. Influenced primarily by instrumental electronic music,³ where melodic and organic soundscapes drift over calculated and repetitive percussion, these works attempt to visually emulate the formal structures of the music. I saw the underlying grid acting as the calculated percussion and the overlaying forms

² This is an idea borrowed from self-reflexive auto-ethnography that states that leaving the familiar allows a “deeper and different” understanding of it. Christiane K. Alsop, “Home and Away: Self-reflexive Auto-/Ethnography,” *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 3, no. 3 (2002): accessed December 14, 2014, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0203105>.

³ Much of the music I was listening to at the time would fall under the minimal house and techno genres, and included releases by record labels such as Dial Rec and Liebe Detail. Other experimental artists like Vladislav Delay and Gavin Bryars also influenced the paintings.

standing in as either repeated melodies that follow the percussion or subtle shifting soundscapes that diverge from the grid (figure 1). These paintings did not attempt to illustrate a *particular* piece of music; instead they were an effort in translating the relationship between elements in a musical composition into visual works.

Informed by the grid structure of this work, as well as my experimental explorations using music software,⁴ I developed a repetitive process of painting for *Red Tiles* that resulted in a modular system for composition. I repeated the process of producing one red and white geometric painting on a six-inch square wood panel (figure 2) over and over to eventually generate more than 90 painted panels. I then arranged and re-arranged the panels into various compositions, exploring the possibilities that could emerge from this process (figure 3).

Despite working within this structured system, the act of composing with the panels is playful, and the results were unexpected. Although the modularity, materials, and actions that make up the process used in the *Red Tiles* seem to be effective grounds for exploration and discovery, the graphic painted form on the surface of the panels was repetitive and calculated, resulting in limited and predictable compositional outcomes. I needed to revise the graphic forms to provide an opportunity for greater compositional outcomes and retain the element of chance and surprise that first attracted me to the process. To borrow a term from music production and remixing, I needed to use new *samples*.

In the context of sound, a sample and a recording are in essence the same thing. Both capture a piece of a larger whole. According to author Eduardo Navas, sampling “is

⁴ I have been experimenting with electronic sound and music production since 2006, using primarily Ableton Live and Propellerheads Reason software applications.

the key element that makes the act of remixing possible. In order for Remix to take effect, an originating source must be sampled in part or in whole. However, sampling favors fragmentation over the whole.”⁵ Applied to the use of panels in my practice, I realized that samples that represent fragments of a whole would generate more variety for later use. To that end, I joined several primed white panels together to increase the surface size of my paintings. These larger paintings — again, made up of multiple panels — would then be fragmented, allowing me to break apart the painted form. As this was the beginning of something new, I needed a starting point. As such, I started with a representation of what basic design theory identifies as the most basic design element — a single point (figure 4).⁶ From there, “a series of points forms a line. A mass of points becomes texture, shape, or plane.”⁷ From the simple beginnings of a point, theoretically anything could be made.

Once completed, I began the process of arranging and rearranging the panels, photographing the results of each composition. A gestural line defined the edge of the original form, and when coupled with the hard edges generated by the fragmentation of the whole along the panel lines, unexpected organic forms resulted. The forms navigated in and out of the calculated grid (figure 5).

These compositions illustrate the two central actions that make up my material

⁵ Eduardo Navas, *Remix Theory the Aesthetics of Sampling* (Vienna: Springer, 2012), 12.

⁶ A point is technically a spatial position with no visual properties, however, to be seen it takes on the form of a small dot. In this case, I have made a circle, a larger dot, as a representation of a point, filled with smaller points to define the surface of the circle. I am aware that this drawing is not an accurate circle. I deliberately drew the circle using one line, in a single take, without revising in an effort to avoid the predictable outcome that resulted from the accurate geometry of the *Red Tiles*.

⁷ Ellen Lupton and Jennifer Cole Phillips, *Graphic Design The New Basics* (New York: Princeton Architectural Press, 2008), 13-14.

practice: *play* and *record*. I am calling the game-like reconfiguration of the panels *play*, and the documentation of the results — in this case through photography — *record*.

Figure 5 depicts a selection of records resulting from remixing the initial circle form. It is evident that after a certain amount of play, all possible panel arrangements, although numerous, could eventually be recorded. In order to continue the practice, production of additional forms was necessary to generate new samples and renew the process. Rather than starting from new random forms — another circle, a square, or a triangle, for instance — where the new forms bore no relation to previous practice, I decided that the second form would be a composition that resulted from a process of remixing the first form. Thus, a cyclical trajectory was created that could theoretically continue indefinitely. In other words, enacting the system I have established can always generate new work.

Additionally, records or recordings can take many forms, including text, visual, and sound. My project accepts an expanded, cross-disciplinary concept of recording, and produces both visual records — based on visual arts practices, such as photography, drawing, collage, and painting— and sound recordings that each act as a *record of play*. My project encourages a process of guided, ongoing material and media exploration to allow for continued transformation through repetition.

Concluding the cycle that began in figures 4 and 5 is an example of two additional recordings of the composition shown in figure 5F. Figure 6A, for instance, shows an example of a pencil drawing as a final recording. Whereas figure 6B shows how the form, recorded across new panels, has generated additional panels to be added to the collection of samples that enable the play process to continue (figure 6).

2.2 Action Research

The guidelines set forth by modernist graphic design and grid systems, that I follow in my commercial practice, were built on “the belief that research in design [...] should be founded in scientific objectivity and positivist formulas.”⁸ They do not, in my experience, allow enough room for more subjective and experimental investigations. The playful process of arranging panels allows for both experimentation and quick recording of compositions for observation and reflection before returning to the play process anew. This methodology, consisting of play, record, observe, reflect and repeat, aligns closely with the cyclical nature of action research — a methodology often used in social sciences and education. A simple action research model maps a repeating and evolving cyclical trajectory consisting of a plan, action, observation, and reflection before returning to a new plan and thus repeating the four steps.

Based on one of the cycle outlined above, I developed a detailed and project-specific visualization of the methodology that I use, which demonstrates the oscillation between play and record (figure 7).

The play and record cycle drive my project forward and function together to inform an exploratory material practice in both visual art and sound that is based on the concept of remix. This remixing, in turn, is dependent on the grid for both physical manifestation and theoretical grounding (figure 8).

⁸ Cal Swann, “Action Research and the Practice of Design,” *Design Issues* 18, no. 1 (2002): 50.

3. CONTEXT

3.1 *Relevant Literature*

Although I do not draw heavily on philosophical literature in my research, Jacques Derrida's *Archive Fever* (1995) stimulated and altered my thoughts about archives, records, and who controls them. Derrida introduces the archive via its Greek origin, explaining that it is a house, a residence to the superior magistrates who make, keep, and control the archive — the archon. Derrida's analysis of the authoritarian role that the archon has over the archive emphasizes history as a construct. All historical records are created, and not necessarily by fact, but rather by the creators and keepers of the archive.⁹ Derrida's text prompted awareness in the separation between action/event and documentation. Moreover, for me, it called to attention the relationship artists have with their own work, and it informed my interest in exploring the distinction between an artist's practice (actions performed in the studio) and an artist's archive (the collection of records that results from the practice).

Particularly influential to my way of thinking about practice and process are the seminal ideas of Sol LeWitt (1928-2007), who, in his 1967 essay "Paragraphs on Conceptual Art" and subsequent essay, "Sentences on Conceptual Art" (1969), articulates his definition of conceptual art and its application. These writings, functioning at times like a manifesto or set of rules, establish the primacy of the idea in art practice. LeWitt's hierarchy positions the medium or discipline specificity as secondary to the concept.

⁹ Jacques Derrida, *Archive Fever: A Freudian Impression*, trans. Eric Prenowitz (Chicago: University of Chicago Press, 1998), 2.

When LeWitt states that, "... no form is intrinsically superior to another, the artist may use any form,"¹⁰ he allows for ideas to travel fluidly between disciplines — a notion that has generously informed the interdisciplinary aspects of my project. LeWitt focuses on the role of the artist with respect to the process of art production: "It is the process of conception and realization with which the artist is concerned. Once given physical reality by the artist the work is open to the perception of all, including the artist."¹¹ LeWitt locates the central focus of art production in the artist's process and their relationship to their work, rather than in a concern with public perception. An emphasis on the artist's process has been critical to the development of my thesis project, as this approach is contrary to that of my commercial practice. The methodological approach that LeWitt adheres to in his practice has influenced me to observe and reflect on my own process as a method of generating new directions for my practice.

Pierre Schaeffer's (1910-1995) diaristic approach to his experimental work in music reflects a similar methodology. Schaeffer regularly documented his ideas, experiments, reflections, successes, failures, and conclusions as he developed the foundations of *musique concrète* — a form of music composed using recorded material — in a series of journals that he kept from 1948 to 1952. He demonstrates that organized documentation is necessary in order to analyze and understand one's own practice. Motivated by Schaeffer's approach, I kept a visual journal of outcomes throughout the course of my study that proved to be crucial to the advancement of my practice. In addition to his self-reflective methodology, Schaeffer's analysis and work with sound has

¹⁰ Sol Lewitt, "Sentences on Conceptual Art," in *Conceptual Art: A Critical Anthology*, ed. Alexander Alberro and Blake Stimson. (Cambridge, Mass.: MIT Press, 1999), 107.

¹¹ Sol Lewitt, "Paragraphs on Conceptual Art," in Blake and Stimson, *Conceptual Art*, 13.

had an impact on my approach to composition. Schaeffer's experimental sound work led him to uncover the possibility for sound to be physical through an analysis of recorded sound fragments, which he called "sound objects." Schaeffer writes about using techniques of montage, a physical editing process of cutting and pasting film reel, as the only precise way of composing using sound objects. He writes: "... note by note, chord by chord, we replace playing an instrument with scissors and glue."¹² Schaeffer understood that sound fragments, or samples as we have come to know them, emphasized the plasticity of sound, which provoked new methods of composition that owed more to the plastic arts than the traditional written form of composition. This compositional method, first informed by film techniques, eventually became commonplace in popular contemporary music from the 1970s and 1980s onward. Unknowingly, I was inspired in my visual art practice by a methodological approach to music composition that was itself initially informed by visual art.

The practice of sampling is a necessary step in the concept of remixing, a practice which is indebted to the experimental work of Schaeffer. Eduardo Navas, in his book *Remix Theory* (2012), examines the history of mechanical reproduction in order to uncover the roots of remixing. Navas acknowledges that Remix "starting in the nineteenth century, has a solid foundation in capturing sound, complemented with a strong link to capturing images in photography and film."¹³ Navas's interpretation of Remix goes beyond its

¹² Pierre Schaeffer, *In Search of a Concrete Music*, trans. Christine North and John Dack (Berkeley and Los Angeles: University of California Press, 2012), 175.

¹³ Navas, 6. Navas explains that he capitalizes the "R" in Remix whenever he refers to Remix as discourse. I will follow his formatting whenever I am referring to Navas's use of Remix. Navas writes, "discourse is commonly understood in the humanities as an ever changing set of ideas up

mainstream application in music remixes and video mashups and expands the concept to include various disciplines. Navas asserts that the “principles found in the act of remixing in music become *conceptual strategies* used in different forms of art, media and culture.”¹⁴ It is an understanding of remixing as conceptual strategy that has significantly influenced the conceptual underpinnings of my process. As demonstrated through my practice, there is considerable overlap between the concepts of recording, remixing, copying, and translation, all of which can be defined as forms of repetition. My thesis depends upon the simple idea that when something is recorded or copied and repeated, it changes and becomes something new.

Steve Reich’s (1936) music depends almost entirely on the idea of transformation through repetition. In “Music as a Gradual Process,” a short text in *Writings About Music* (1974), Reich describes how his musical work shows process *as* composition. Reich’s music delineates the trajectory of small sequences that repeat over and over slowly transforming with every instance. Reich explains: “I am interested in perceptible processes. I want to be able to hear the process happening throughout the sounding music.”¹⁵ The notion that process can be audible or visible in the final finished work relates directly to my own approach. In my practice, repetition, particularly with a grid as an underlying structure, plays a central role.

for debate in written and oral form, However, I also consider discourse to include all forms of communication...” Navas, 3.

¹⁴ Ibid.

¹⁵ Steve Reich, *Writings About Music* (Halifax: The Press of the Nova Scotia College of Art and Design, 1974), 9.

My project's dependence on the grid has led me to several theoretical positions on the subject. My first interest in the grid stems from my graphic design practice and Josef Müller-Brockmann's classic textbook, *Grid Systems in Graphic Design* (1981). Müller-Brockmann presents a rational system and argument for its use. I continue to rely on grid systems to design what I believe is clear visual communication. Although its impression on my design practice and understanding of spatial organization cannot be minimized, the positivist claims that Müller-Brockmann makes about the impact that the implementation of the grid in design work would have on culture and society leaves, in my opinion, too little room for subjectivity. Similarly, for Rosalind Krauss, the grid is inextricably linked to modernism. However, unlike Müller-Brockmann, Krauss locates the limits of the grid in its connection to modernism. In her 1979 article, "Grids," Krauss argues that although countless artists have been devoted to exploring the grid, they could not "have chosen less fertile ground."¹⁶ She sees the use of the grid as an emblem of modernism, one that is isolated spatially and temporally in modernism. Although I agree that the grid is a clear characteristic of modernism, I do not see it solely as a modernist system. Where Krauss sees the grid as a strict and austere framework to which everything must comply, I see the grid as a flexible framework that can shift, bend and adapt to various contexts. Especially useful to my understanding of what can be considered a grid and how one functions is Hannah B. Higgins's *The Grid Book* (2009). Higgins subverts the strict modernist notion of the grid as presented by Müller-Brockmann and Krauss to include an expanded concept of the grid. She discusses the grid throughout history, her examples dating back to the earliest forms of construction with the handmade brick, and her text also includes

¹⁶ Rosalind Krauss, "Grids," *October* 9, summer (1979): 50.

present day digital networks. Grids, according to Higgins, existed in ancient cities, maps, ledgers, moveable type, and music notations. Her study highlights the persistence of the grid and claims that, “once a grid is invented, it never disappears.”¹⁷ Higgins demonstrates that through destruction and rebuilding, the grid evolves, and she argues that it is through *use* that the grid is brought to life.¹⁸ My project involves active engagement with the grid as it provides a structural framework for the processes of play.

Johan Huizinga’s theoretical analysis of play in his book, *Homo Ludens: A Study of The Play Element in Culture* (1950), informed my understanding of how play functions in art practice. In addition to his analysis on the particular characteristics that helped me define the processes of play within my project, Huizinga emphasizes how play functions in art with specific attention to music and the plastic arts. He argues that there is an undeniable quality of play in music, evidenced by its manifestation as performance. But due to the objectivity of the plastic arts and their manifestation through production, Huizinga has more difficulty perceiving play as a valid function in visual art.¹⁹ As I engage with Huizinga’s characteristics of play in the Material Practice section, I will highlight how my visual arts practice moves beyond standard production processes, which allows it to align more closely with play and music.

Similarly to my dependence on grids in my graphic design work, basic design theory and the laws of visual perception greatly inform my process of making visual work as well as my understanding of the way images are perceived. Charles

¹⁷ Hannah B. Higgins, *The Grid Book* (Cambridge, Mass.: MIT Press, 2009), 7.

¹⁸ *Ibid.*, 11. Emphasis hers.

¹⁹ Johan Huizinga, *Homo Ludens: A Study of The Play Element In Culture* (Boston: Beacon Press, 1955) 165-166.

Wallschlaeger and Cynthia Busic-Snyder's *Basic Visual Concepts and Principles for Artists, Architects, and Designers* (1992) offers an introductory discussion to a vast array of visual principles. In my practice this book acts as an expanded glossary for visual principles and often initiates directions for the visual recording aspect of my practice, which I will discuss further in the Material Practice section. Psychologist Rudolf Arnheim's *Art and Visual Perception* (1974) provides a much deeper discussion of art and psychology, analyzing the organizational structures behind visual perception. Arnheim specifically applies gestalt theories, which I will discuss in the Theoretical Framework section, to the perception of visual art.

3.2 Theoretical Framework

I look primarily to gestalt theory as a framework to reflect upon my material practice with the intent to investigate the relationship between visual art and music. Gestalt theory is a set of principles based in psychology, first introduced to my practice through graphic design pedagogy, which outlines a way of understanding human perception. Austrian psychologist, Max Wertheimer, helped develop gestalt theory by building on holistic views already embedded in western thought at the time, that saw the universe as a complex, dynamic system that could only be rightfully understood by examining the interrelationship of the parts within the whole.²⁰ In a foreword to “Gestalt Theory,” a published lecture delivered in 1924 by Wertheimer, Kurt Riezler details the problem that the perfect musical melody presents for Wertheimer: “The melody cannot be explained by starting from elements and building up the form as a sum of relations between these elements. The single tone is what it is in the whole—as part, not as piece; and the whole breathes in every part.”²¹ Christian von Ehrenfels, an Austrian philosopher with whom Wertheimer studied and who developed early concepts of gestalt, proposed that the whole is *more* than the sum of its parts.

Wertheimer expanded on this notion and developed the central defining idea of gestalt theory: the whole is *other* than the sum of its parts.²² This definition is often misquoted. Frequently, *other* is substituted with *greater*. The substitution misconstrues Wertheimer’s idea. Wertheimer’s son, Michael Wertheimer, a psychologist and scholar

²⁰ Michael Wertheimer, “Music, Thinking, Perceived Motion: The emergence of Gestalt Theory,” *History of Psychology* 17, no. 2 (2014): 131.

²¹ Max Wertheimer, “Gestalt Theory,” *Max Social Research* (Spring 1984): 305-306.

²² Michael Wertheimer, 131.

who has written extensively on gestalt theory, reveals the oversimplification at work in common misrepresentations of his father's central idea:

... the whole is *not* 'more than the sum of its parts'; the whole is entirely different from the sum of its parts plus something else. It is prior to its parts. It is the whole that determines the nature of its parts, on the basis of each part's place, role and function within that whole. This has nothing to do with the summation of parts. A whole is not equal to the sum of its parts. But it is not more than the sum of its parts either. It precedes its parts and by its own nature determines what its parts are and what their attributes and interrelationships must be.²³

The creation of meaning, then, can be viewed as a reflexive loop, a series of interconnections, between the parts *and* the whole. Evidence of this relationship between the parts and the whole exists in the perception of visual art. The classic optical illusion depicted in figure 9 provides a visual representation. A triangle can be seen that does not actually exist in either the parts or the summation of the parts, however it clearly emerges as apparent in the whole. The triangle is not one of the parts, nor is it a sum or more than the sum, it is born out of the whole.

An understanding of the parts can vary, depending on their context within the whole. Illustrative of this is Josef Albers's almost-30-year investigation into the perception of colour in his well-known works *Homage to the Square* (1950-1976). Over this period, he produced hundreds of the nested squares using various uniform colours. In each work, two or three colours frame a central square. Even when the hue of the central square does not change, altering the surrounding colours causes it to appear different. His works

²³ Ibid., 133.

demonstrate that the perception of a given colour is affected by surrounding colours. Individual *Homage to the Square* examples illuminate how an understanding of a part is dependent on its context within a whole. However, it is in the context of the whole series that Albers's squares are best understood, which further exemplifies the interrelationship between parts and a whole. The significance of this relationship between parts and a whole is equally apparent in music, as evidenced for example in music rooted in remixing practices, which relies on disparate parts to form the whole.

The instrumental arrangements heard in early hip-hop in the late 1970s through to the late 1990s are built on parts sampled largely from jazz and soul music from decades earlier. Hip-hop, as a genre, is not understood as a sum of parts of jazz and soul music; it is understood as something new, something all together different. Moreover, the musical parts, or samples, that have been repurposed in hip-hop are now embedded with multiple meanings. There is the understanding of the sample in relation to its new whole in its hip-hop context, as well as the understanding of the same sample in relation to the original jazz or soul song. Even though the samples are exactly the same, they are perceived differently based on their position within their respective wholes. Navas's description of remixing as "the activity of taking samples from pre-existing materials to combine them into new forms..."²⁴ parallels the central idea of Gestalt theory discussed earlier. The remix not only forms a new whole, but keeping Wertheimer's discussion of the whole in mind, it follows then, that it alters the nature of its parts. In my practice, I refer to remixing to describe the repeated use of the panels (parts) in various compositions

²⁴ Navas, 65.

(wholes). Playing with their position, rotation, alignment, and proximity to other panels modifies the visual context, allowing them to be used again and again to produce entirely new works. From this comes endless opportunity for new forms to emerge from existing parts.

Gestalt psychology, as noted earlier, provided the grounding for the development of art and design principles of visual perception. In my work, these principles are used extensively to reflect upon visual work to understand its effectiveness. Artists and designers, myself included, embrace gestalt theory in part because of its seemingly scientific approach to human perception.²⁵ It is a theory, particularly relevant in my commercial work, that I can depend on to predict outcomes and viewer interpretation. The main concept behind most gestalt principles is that we have a natural tendency to organize visual information through grouping: “we tend to perceive objects that look alike, are placed close together, connected by lines or enclosed in a common space as belonging together.”²⁶ These principles of similarity, proximity, and continuity, due to being used extensively in my commercial practice, have become intuitive devices that I rely on when creating and assessing my compositions using the panels. They are also used as translating tools in my process of *recording*, which I will expand on in the Material Practice section. Through making — and reflecting on — both visual and musical compositions, I recognize the numerous methodological and aesthetic similarities between the two disciplines. As such, I question whether these visual principles can somehow be applied to music composition. I hypothesize that this would be achievable

²⁵ Roy R. Behrens, “Art, Design and Gestalt Theory,” *Leonardo* 31, no. 4 (1998): 301

²⁶ Bang Wong, “Gestalt principles (part1),” *Nature Methods* 7 (2010): 863.

by assuming a commonality between space (in visual art) and time (in music).

An analysis of the use of the grid in visual representations of music, as evidenced in traditional music notation, suggests that a spatial understanding of time had already been established for centuries. Here, notes placed vertically along horizontal lines indicate a change in pitch, and measures, or bars, defined by vertical lines placed at horizontal intervals, indicate regular divisions of time. I build upon this graphic-to-sound translation of horizontal space to time by establishing further speculative relationships between elements from visual art and music. Establishing additional parallels such as colour to timbre, tonal value to pitch, and pattern to rhythm, for example, could hypothetically be used to translate the visual relationships of proximity, similarity, and continuity in my visual compositions into musical compositions. This is what I set out to do as part of my material practice when I record visual works as musical works.

4. MATERIAL PRACTICE

4.1 *Play*

I refer to the actions of assembling, dismantling, and remixing the panels that result in various compositions as *play* throughout this paper. The active process of arranging the panels evokes a childhood feeling of play characterized by heightened focus on gameplay and a sense of time as fleeting. It also recalls the sensation of temporarily departing everyday reality that occurs when immersed in sport. It is a feeling that is removed from work, and aligned instead with games, sports, and entertainment. As such, it is difficult for me to understand the actions as anything but play. The artistic actions that comprise my practice parallel Johan Huizinga's definition of play. Huizinga characterizes play as:

a free activity standing quite consciously outside "ordinary" life as being "not serious", but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules in an orderly manner.²⁷

The characteristics of play, as outlined by Huizinga, align closely with the panel-based process of composition in my practice. Similar to games and sports — activities commonly understood as play — there is no material gain in my manipulation of the panels. As discussed, in my thesis project, the panel compositions themselves are not the final works. Instead, the actions only exist in recorded form. Without a record of the arranged compositions, through photography or any other form of documentation, there

²⁷ Huizinga, 13.

would only be play.

Huizinga's findings identify the characteristics of music as clearly correspondent to those of play; however, he finds it more difficult to draw the same parallels in his examination of visual or plastic arts. In addition to the obvious linguistic parallels — one *plays* music — Huizinga reasons that it is the way in which music manifests itself that it links so closely to play: “The ‘music’ arts are action and are enjoyed as such every time that action is repeated in performance.”²⁸ Of course, this assumes that music is repeated through performance. He struggles to find the same relationship when looking at the plastic arts. If music is conceived ethereally through performance, Huizinga suggests that the plastic arts are produced concretely through labour.²⁹ Huizinga proposes that, “the absence of any public *action* within which the work of the plastic art comes to life and is enjoyed would seem to leave no room for the play-factor.”³⁰ This suggests that *action* in manifestation and reception is a defining criterion for categorizing a discipline as play.

My process of making visual art, including the assembly of new compositions using panels, as well as the act of drawing and painting, consists of actions in the studio. As such, I argue that the process in my visual art practice aligns closely with play and the process of playing music that Huizinga outlines. In the process of drawing and painting there is a repetitive rhythmic action of mark making and movement that unfolds over time, and reflects the actions of playing music. Following this observation, I experimented with making audio recordings of myself working in the studio. The edited recordings, divorced from the visual results of drawing, act as sound-based works that, in

²⁸ Ibid., 165.

²⁹ Ibid., 165-166.

³⁰ Ibid., 166.

my experience, blur the line between the process of making visual art and the process of playing music. Moreover, the edited recordings blur the line between creation and documentation. Through my practice I am afforded the opportunity to engage with the process of making visual art and sound. The shared methods that emerge from this process produce unexpected outcomes in my sound work.

Written in 1938, Huizinga's *Homo Ludens* could not possibly reflect upon contemporary music practices that have informed my project. Additionally, Huizinga focuses on the musical performance when discussing how music is presented, but does not discuss how recorded music affects the perception of music. Can recorded and remixed music, assembled through recorded samples — what Schaeffer, again, calls “sound objects” — align certain genres of music more closely with visual art? Do contemporary processes that include the act of recording, editing, assembling, and building music change the way music is perceived? I do not pursue these questions in my research, however, I hypothesize that due to the structural and laborious process that some contemporary music is born out of, the perception of music can be aligned more closely with outcomes of visual art practice in contemporary culture than at the time of Huizinga's writing. Experiencing the processes of making music in contemporary practice provides a platform for drawing proposed parallels between the disciplines.

4.2 Record

The term *record* or *recording*, in my practice, includes reproducing or copying through various mediums, as well as translating compositions from one discipline to another. The compositions made from the panels are recorded in several ways. Initially, they are quickly recorded photographically, usually under less-than-ideal lighting conditions using a camera phone. The photographs are then printed and archived in a physical composition book, which acts like a sketchbook. The book is consulted later in order to produce other recordings or versions based on the archived compositions. The photographic records of the compositions function as preliminary sketches or starting points for a recording activity that demonstrates how transformation can happen through repetition. As described in the Methodology section, some compositions are copied onto new panels that add to the growing archive of panels used in the arrangement process of making new compositions. Others are made into highly detailed recordings of the panel compositions through high-resolution scans and prints. Others still diverge from the originating compositions through an interpretive and intuitive process that alters considerations such as medium, colour, pattern, and scale. The records often result in a kind of re-interpretation or *remix* of the panel composition. The following subsections discuss how medium choices and material practices are used, as well as how theories of visual perception — derived largely from gestalt theory — function as tools for translating the initial visual compositions or sketches into other visual works and sound works.

Figure - Ground

Reflection on the visual forms that emerge from the assembled compositions reveals that there is a clear and consistent distinction in these works between figure and ground. A simple description of the perceptive distinction between figure and ground is that a viewer has the ability to perceive what is a figure (positive form) and what is background (negative space) in a visual composition. In 1921, perception psychologist, Edgar Rubin, outlined seven differences in the way we see and understand figure and ground:

1. When two fields have a common border, it is the figure which seems to have shape while ground does not.
2. The ground seems to extend behind the figure.
3. The figure appears to be object-like (even though it may be an abstract shape) while the ground does not.
4. The color of the figure seems more substantial and solid than that of the ground.
5. The ground tends to be perceived as farther away and the figure nearer the observer even though both are obviously at the same distance.
6. The figure is more dominant and impressive and tends to be remembered more easily
7. The common border between figure and ground is called a contour, and the contour appears to be a property of the figures.³¹

More recent studies show that we perceive and identify figure from ground based on contrast: “contrast in value, color, texture, or depth cues allows for differentiation between what is perceived as figure and what is perceived as background.”³² In my panel compositions, this distinction between the perception of figure and ground is clear due to the use of the primed white surfaces as a consistent ground across all panels. Using Rubin’s term, contours are filled with colour — repetitive coloured marks — leaving the white primer to show behind and around the filled forms. When translating the panels into other visual forms through visual recording (other than scanning and photography),

³¹ Daniel J. Weintraub and Edward L. Walker, *Perception* (Belmont, CA: Brooks/Cole, 1969), 11, quoted in Charles Wallschlaeger and Cynthia Busic-Snyder, *Basic Visual Concepts and Principles for Artists, Architects, and Designers* (Dubuque, IA: Wm C. Brown Publishers, 1992), 356.

³² Wallschlaeger and Busic-Snyder, 356

the clear divide between figure and ground in the originating composition allows for experimentation and deviation in the secondary works with respect to colour, value, and texture. For instance the white (ground) areas can be re-imagined as coloured, and hues or values of coloured areas (figures) may drastically shift from their initial qualities (figure 10). Provided a clear amount of contrast is kept to ensure that the perceived figure-ground relationship remains similar to the originating composition, the essence of the composition remains the same.

As the figure-ground relationship present in the panel compositions is translated into sound recordings, a focus on contrast enables an interpretive approach, which ultimately results in an outcome that effectively captures the whole of the originating composition. For example, it was challenging initially to interpret the white areas (negative spaces) of the panel compositions as anything *but* silence in sound. This literal and seemingly rational translation first resulted in gaps in the sound recordings. These gaps were confusing and disruptive, and did not effectively reflect the physical presence of the ground in the visual compositions. The ground can become a more clearly present and audible sound in the sound recording when there is sufficient contrast between the sounds that represent the figure and the ground. This resolves the issue of interruptions or gaps in the sound work, and unifies the sound recording into a whole that more clearly represents the whole of the originating composition.

Similarity

There is a hierarchical division of spatial elements, such as colour, texture and shape, in my visual compositions. The distinction between figure and ground presents the clearest

and most consistent contrast between the graphic elements in my compositions, and as such, I perceive the figure-ground division as primary. In addition to this primary division, there are subdivisions into various figure parts and ground parts. These parts appear to be unified or divided through the law of similarity, which states that, “viewers tend to see similar shapes as belonging together and similar figures as a group.”³³ Arnheim argues that this grouping of similarities extends beyond shapes and figures to include all aspects of a visual composition including “shape, brightness, color, spatial location, movement, etc.”³⁴ Similarity of colour, shape, and spatial location all play crucial roles in the perception of unified or whole figures in my panel compositions. I view the white ground in my panels as a unified whole by following the same law of similarity. Arnheim asserts that, “similarity is a prerequisite for the noticing of differences.”³⁵ As such, subdivisions of figures are perceived when there is a change (or difference) in similarity. A break or irregularity in similarity can be caused in my work by a change in elements such as colour, shape, brightness, and proximity. The amount of change in that element determines the extent to which there is an impact on perception. Differences often occur when panels are placed side by side creating a sudden change. Following the figure-ground relationship, the highest level of contrast is achieved when a panel that contains a form perceived as a figure is placed next to a panel with a form perceived as a ground (figure 11). But when two different panels with various forms perceived as figures are placed side by side, they simultaneously form both a new whole and a subdivision of that whole (figure 12). When various similar but different forms,

³³ Ibid., 420-421.

³⁴ Rudolph Arnheim, *Art and Visual Perception: A Psychology of the Creative Eye* (Berkeley and Los Angeles: University of California Press, 1974), 79.

³⁵ Ibid.

acting as figure, are assembled into a composition, they form hierarchical subgroups based on the laws of similarity — for instance, similar colours, similar spatial locations, similar direction, or similar shapes will form a group. The law of similarity and the understanding of how perceived subdivisions are formed through differences in similarity prove to be useful tools in recording, copying, and transforming the compositions into other visual works. Colours, patterns, shapes, and textures can change from the originating composition, and the complex hierarchy of similarities can be interpreted and reproduced, all while keeping the overall perception of the whole intact.

Similarity is also significant in the translation of the panel compositions to sound. Grouping by similarity, according to Arnheim, “occurs in time as well as in space. Aristotle thought of similarity as one of the qualities creating mental associations, a condition of memory linking the past with the present.”³⁶ A reliance on this temporal-spatial relationship allows for similarities in aspects of visual work that unfold over space to be translated into aspects of sound work unfolding over time. For example, similarity in spatial location translates into similarity in temporal location; similarity in shape and colour translate into similarity in timbre and pitch; similarities in value or brightness translate into similarity of amplitude. Establishing and following a translational system like the one modeled here, allows for a sound recording of my visual compositions that theoretically keeps the structure of the originating panel composition.

Good Continuation and Consistent Shape

Differences in similarity that define figure from ground and divisions within or among

³⁶ Ibid.

perceived figures in the panel compositions create visual tension and visual focal points. The differences break the continuity of similarity and define the contours of the forms that make up each composition. These contours occur organically at times, and at other times, they align with the borders that physically define the edges of each panel. Because of the grid-like configurations of the assembled panels, the formal contours that align with the panel edges also align with the grid lines. In the visual recordings, depending on the intuitive choices that are made to diverge from the originating composition, the overall visual grid lines that are formed by the borders of the panel arrangement are often omitted. However, the formal contours that once aligned with the visual grid represent fragments of the grid and allow a viewer to see the grid even when it is not actually present. The capacity of the viewer to create the grid intuitively can be explained through the gestalt law of good continuation and what Arnheim refers to as consistent shape.

Gestalt law of good continuation occurs when “a figure or group of figures is arranged in such a way as to have direction and seem to continue. This can be a property of figures or a property of a group of figures.”³⁷ The consistent vertical and horizontal properties of certain contours in my compositions seem to continue and connect with others, forming a perception of the grid. For Arnheim, the grouping principle of consistent shape involves a reliance on “the intrinsic similarity of the elements constituting a line, surface, or volume.”³⁸ He highlights our impulse to make forms out of constellations as an example of this principle at work.

The ability to make wholes out of physically distant parts, through the law of good continuation and grouping principles of consistent shape, is explored in some of my

³⁷ Wallschlaeger and Busic-Snyder, 422

³⁸ Arnheim, 83

visual recordings where I isolate and keep the forms that I perceive as figures and I physically omit forms that I perceive as grounds. Using a large panel composition as a sketch, I recreate proportionally accurate figure forms out of plywood, physically cutting along the form's contour. These forms, painted as versions of the forms from which they are derived, are hung on the gallery wall in the same proportional configuration as the compositional sketch. The gallery wall, although acting as the new ground, is not physically part of the work. However, the alignments and relationships of the vertical and horizontal fragments of the contours described earlier create a perceptual trace of the grid that forms a supporting visual structure for the whole composition (figure 13). Highlighting the presence of negative space by physically removing it makes it possible for me to see the figures as individual parts of a whole even though they are not physically bound by a common ground.

Using the perception of continuation and consistent shape in sound highlights the differences in the way we perceive music and visual art in time and space, respectively. Using the grid as a structural tool to divide space and support visual work, as discussed previously, can be very successful in drawing connections between otherwise organic and random forms. However, using a grid to divide time and recreate the spatial elements in the panel compositions across the linear nature of time does not offer the same structural effect. The outcome, even though it translates the divisions of space into time as accurately as possible, sounds more random than structured. It is difficult, if not impossible, to hear the structural connections that are immediately apparent in visual art through the law of good continuation and consistent shape. In his essay "Gestalt Concepts and Music: Limitations and Possibilities," Mark Reybrouck offers an explanation for why

this may be:

Gestalt-theoretical concepts and their experimental research focused primarily on visual experiences. The translation of insights from the visual to the auditive domain is highly speculative, since music, as a temporal art, is essentially discursive. In contrast with a geometrical figure, that is described as a whole when looking at it, a musical figure needs a successive presentation.³⁹

In visual art, the whole is immediately perceptible. By contrast, in music, the whole cannot be discerned instantly. The immediacy of visual connections is impossible to reproduce in music since those connections in music can only be made through the memory of experience.

I speculate that loop-based music and highly repetitive music (the genres of music that initially inspired this project)⁴⁰ more easily represent a sense of the whole because of their tendency to repeat the same musical phrase over and over. I believe this repetition allows for a different kind of listening and analysis of musical forms that is perhaps more akin to the modes of perceiving visual art than other genres of music. The looping action allows for a repeated analysis of the relationship between musical elements, one that relies on less memory and imagination than the traditional linear format of music.

The recordings are transformed copies of the originating panel compositions. I use visual gestalt theory to guide the recreation of the relationship between the parts and the whole in the panel composition with the intent of producing a recording that reflects the essence

³⁹ Mark Reybrouck, "Gestalt Concepts and Music: Limitations and Possibilities," in *Music, Gestalt and Computing*, ed. Marc Leman (New York: Springer, 1997), 64.

⁴⁰ I am referring mostly to genres and sub genres of techno and house, where percussive elements are looped, and the work of minimalist composers like Steve Reich and Terry Riley.

of the originating composition. Although this analytical method of understanding the parts in relationship to the whole can be useful, gestalt theory also states that the whole is *other* than the sum of its parts. This notion of other than is perhaps best translated, not through an analysis of the relationship of the parts, but through more intuitive methods. Many decisions with respect to colour, mark making, scale, and medium are often based simply on intuition. My work in music with respect to pitch, timbre, rhythm, and melody is also largely dependent on intuition. There are many times when I trust my own judgment to make a decision about when a work “feels right” or looks or sounds finished. I do not always question or justify these decisions in the same way that I do here with the recordings using gestalt theory. This lack of scrutiny is not to minimize the contribution that intuition makes to the overall work. Instead, and significantly, the process of recording the panel compositions into other visual and auditive formats is meant to provide a place for intuitive processes to happen freely. As such, I propose that gestalt theory can act as a loose guide to steer the recordings. But it is best applied in conjunction with intuitive decisions that specifically address the translation of the whole rather than only the relationship of the parts.

Display

The results of my material practice can be divided into two forms of output — visual works and sound works. My practice results in numerous panel compositions and multiple visual and sound recordings. My composition book, which archives the panel compositions, also acts as a visual narrative of my trajectory, documenting the evolution of the play and record processes. The work displayed in my composition book, in addition to being too wide in scope to display in the exhibition, would reveal my process too didactically in my opinion. It also has the potential of being too personal as it documents the results of my studio work in great detail— my studio is a private space, while the exhibition space is by nature a public one. As shown in the graphic visualization of my methodology in figure 7, not all archived work is intended for display. As such, I opted to display works that strategically reveal only parts of my process. Works in the exhibition display a small selection of visual and sound work, while a printed book accompanying the exhibition reveals an alternate view of the visual work and studio process.

Composition and Version

The title of each work in my exhibition can be divided into two segments. The first is a *composition number* (comp), which references the original panel arrangement that the visual or sound work is based on. These numbers are generated sequentially and are assigned when the composition is first assembled and archived in my composition book. The second is the *version*, which acts as a very brief description of the specific working

method or aesthetic quality of the recording of the composition. For instance, the title *Composition 136 (Scan Version)* indicates that the work is based on the panel composition 136 and that it is a high-resolution photographic reproduction of the original panels.

The composition number positions each recording as a direct or indirect outcome of the corresponding numbered panel compositions. The version allows me to identify and classify the way that the work was recorded. The version is also a direct reference to dub music, which is often cited as one of the most important influences on contemporary electronic music and more specifically, on remixing.

Simply put, a dub is the instrumental version of an existing recording of a dancehall reggae song. Typically the dub removes the vocal track and emphasizes the drums and bass creating a stripped down version of the original that provides a space for the producer to manipulate samples from the original track and experiment with effects such as delays, reverb, and echoes. These musical soundscapes laid the foundation for what is currently called a remix.⁴¹ Navas states that, “dub is often linked to the term *version*; it is also cited in relation to Reggae *B-sides* which at times were seen as *instrumentals*, but in the end, ... a dub recording has come to be understood as a thing of its own.”⁴² This emergence of something else, something *other*, through combined action of repeating the reference while isolating and altering its parts, is what I aim to do in the recording part of my practice. What appeals to me about the term *version* is that it signals sameness to the thing that is referenced as well as difference from that thing. In dub music, versions are very open ended — there can be several, sometimes hundreds of

⁴¹ Navas, 39. Italics his.

⁴² Ibid.

versions of a song. The term version itself, does not lend itself easily to definition. A version can be anything from a cover to an instrumental and often becomes something quite different from the song that it is referring to. David Toop, in his essay *Replicant: On Dub*, describes the transformation that occurs in dub as “spreading out a song or a groove over a vast landscape of peaks and deep trenches extending hooks and beats to vanishing point.”⁴³ There are times when a version becomes so autonomous that its relation to the original is no longer aesthetically recognizable, and the only thing left that indicates it is indeed a version is the title.⁴⁴ A drastic shift from the original often occurs in my project as the visual compositions translate to sound works. Without the title, it would be impossible to link the sound recording back to the original panel composition. I use both composition number and version to contextualize the work and provide a brief narrative map that allows the viewer to better understand the trajectory of each work.

Exhibition

The focus of my thesis project has been on the process of making visual and sound work as well as my own reflection on the outcomes. This personal (almost private) approach was a critical step away from my commercial practice, where a prediction about public perception often drives the process. Concentrating my efforts on personal interests and concerning myself primarily with *my* perception is what drove my thesis project forward. However, I now welcome the opportunity to display the outcomes and open the work to public perception. Unlike my commercial practice, where there is a fairly narrow window

⁴³ David Toop, “Replicant: On Dub,” in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum, 2004), 355.

⁴⁴ Navas, 39.

for multiple readings — my commercial work must clearly communicate an intended message — I present the work in this exhibition with an acknowledgement that, inevitably, multiple interpretations will result. My intent is to present the work in such a way that the viewer can begin to understand the system that generated the work, as well as the relationships that exist between the various parts. The perception and interpretation of the work, however, is left open.

The exhibition is made up of two spaces, a large exhibition space to display visual works and a small exhibition space to present sound works. The large space shows the outcomes of various approaches to visually recording the panel compositions. Through my thesis practice, I come to understand the play process of assembling and reassembling the panels into compositions primarily as a means to develop compositional sketches for future works. I see the panels as re-useable studio materials and not as actual components of finished artworks. The exhibition, in my view, is a space to display completed work, therefore the actual physical panels are not included in the exhibition. After experimenting with a number of photographic, drawing, painting, collage, and digital recording formats, I opted to show a sampling of work in a limited variety of formats. This allows for the display of multiple works in each format resulting in a dedicated display of the possibilities for each endeavor. I believe that exhibiting too many singular experiments and formats risks being received as cursory and indecisive in the context of my thesis research.

The sound work is presented in the second room without any visual accompaniments. Test displays made early on in my thesis process, where sound works and visual works were presented in the same physical space, resulted in unintentional

connections between specific sound and visual works. Spatially isolating the sound work in one room and the visual work in another allows for general connections to be made between the two disciplines as wholes, rather than specific connections between particular sound works and visual works. Returning to gestalt theory, grouping all the visual work that is similar (due to it being visual) and in close proximity (due to it being in one enclosed space) creates a sense of a whole. The sound works, adhering to the same laws of similarity and proximity, forms another whole. Moreover, in the context of display, the sound room and the visual room can also be understood as two distinct parts of a whole — the exhibition. I intend for reflection on the work in my exhibition to unfold through this specific gestalt-based organization that I am establishing through the installation.

Viewing and hearing are different processes. I consider viewing as a decisive and targeted activity, with the viewer having autonomy about the direction and duration of their gaze. An amplified sound, conversely, surrounds and imposes itself on the listener. In order to more closely reflect the autonomous quality of the viewing process, I choose to present the sound works as repeating loops on headphones. In addition to allowing the listener to determine *where* they direct their attention, this format also allows them to determine the *duration* of their attention. I believe that headphones provide a more private and autonomous listening experience that enables a reception of music that can more closely reflect the experience of viewing visual art.

CONCLUSION

My initial objective was to model a system to guide and facilitate the process of composition in visual art using methods more commonly attributed to music production. The panel compositions, which are freely and abundantly created by the play process of my thesis practice, provide inspiration and compositional guidance for my project to continue to evolve. As guides, the panel compositions provide structure and support while also facilitating experimentation with different visual formats. Having a compositional goal at the outset of a new work allows me to focus my efforts on materials and the process of making. Gestalt theories, which guide the transformative recording of the panel compositions into other visual formats, proved to be a positive theoretical framework to depend on in evolving my visual practice further. The short duration of my thesis project, approximately one year long, allowed for a fairly limited exploration of visual formats. As I continue my practice, I am interested in exploring the possibilities of working with textiles and printmaking as well as venturing into three-dimensional work with sculptural translations of the compositions. I speculate that through continued production of panel compositions, new visual work will continue to be initiated and developed, and that gestalt principles will continue to guide and inform their translation into new formats that were not investigated in this project.

My objective to use the same gestalt theories to further record the panel compositions into sound works proved to be less consistently successful. The panel compositions are effective in initiating an intuitive musical action, but ultimately it is difficult to use gestalt theories to translate a visual composition into a sound work to

reliably good effect. I argue that the discrepancy in successful outcomes between visual-to-visual and visual-to-aural recordings is the result of differences in perception.

Specifically, I locate this discrepancy in the differences in the perception of the parts and the whole in visual art and music.

I believe the goal in translating one work into another is to translate the perception of the whole. And, as Wertheimer (and gestalt theory) states — the whole is not merely a sum of the parts, it is in fact *other* than the sum of the parts. However in recreating or translating something whole, there is a rational impulse to first break it down into its parts, to then copy or translate those parts, and to finally build up the new parts in the same order to recreate the new whole. There is an expectation that the new whole be an accurate representation of the original whole. Gestalt theory would suggest that although this may be an accurate representation of the *sum* of the parts, the essence of the whole is lost. In my thesis project, I found this to be especially true in the translation of visual art into sound. Even though the sound work may be a rational recreation of the sum of the parts of the visual work, the way we perceive the whole visual work is entirely different from the way we perceive the whole sound work. Visual work is presented as a whole in one instantaneous moment, whereas sound work is presented successively over time. The relationship between the parts and the whole can be seen at once in visual works, whereas in music this relationship must be reconstructed through memory. This temporal difference in perception between visual art and music is what makes gestalt principles better suited to inform the production of visual art than to inform the production of music.

Perhaps a better visual system to guide the production of sound based work would be a temporal one, such as film. Or, conceivably the translation of visual compositions into sound requires an entirely different approach — one that relies more on intuition and improvisation than a consistent guiding system for production.

ADDENDUM

The exhibition and thesis defense generated discussions that highlight possibilities for future work that I wish to address here. The exhibition was intended to focus on the system that I initiated and followed to generate the work. The work on display was grouped through gestalt principles of proximity and similarity in order to demonstrate distinct ways that new work can be generated from the panel compositions through intuitive decisions. The result was a series of groups — based on *versions* — that relate to one another through their underlying formal characteristics, while each group shared further similarities in medium and execution that formed more strongly unified, and distinct, bodies of work. The greatest distinction was made between the sound work and the visual work, both through medium and spatial positioning in the exhibition. During the defense, discussion was largely centered on the work and exhibition as a whole with a focus on the system at the heart of that discussion, however the possibilities for future work emerged from discussions on the isolated groups of versions. As such, the focus for future work is the exploration of possibilities within a group of versions. While the system that I initiated will always act as a foundation for beginning new work, I feel that it is not necessary to make this as transparent or a focal point for future work and exhibitions. In relation to the gestalt theory that I have discussed throughout my thesis document, I intend to direct my practice from a focus on the whole to a focus on the parts.

Although I addressed the work of Pierre Schaeffer from a methodological perspective and as an influence to contemporary music practices —manipulating recorded

sound as a method of composition — I did not address the tension that Schaeffer uncovered between music and sound. The sound work that I created for my thesis project uses synthesized and sampled sounds to emulate musical instruments and the result has been rightfully interpreted as being quite musical. This sound work, like the groups of versions in the visual work, represents one specific approach for how the visual work can be translated into sound. Further compositional explorations using sounds that are less musical in nature may result in sound works that reflect the tension between music and sound that Schaeffer examines in his research. It was suggested in the defense that I could explore composition more as a sound artist rather than as a musician. I believe this approach will open up a range of sound work that I have not yet explored. Additionally, an investigation into recording sound to capture not only the sound, but also the physical space where the sound was generated and projected may draw further connections between sound and visual art through a focus on the spatial qualities of both disciplines. Another approach still would be to lean more heavily on the grid as a framework for translating the visual compositions into sound and making the visual grid *audible*. Calculated percussion found in popular music would be one way to translate the grid, however a slow and steady underlying pulse of noise or less commonly used percussive sound may produce more varied results that more closely recall the visual work.

Joanna Demers, scholar and Chair of Musicology at USC Thornton School of Music, seeks to examine the vast array of genres and subgenres of contemporary electronic music through aesthetic theory in her book *Listening Through the Noise: The Aesthetics of Experimental Electronic Music*. I believe that further investigation into Demers's research will inform my understanding of how Schaeffer's work has been

reflected in contemporary music practices and will in turn open up new directions for my sound work.

My process, which is informed by the system that I developed, has been central to my discussion and, as stated previously, drove many of the display decisions in my exhibition. However, displaying the work allowed me to step away from my process and provided an opportunity to disconnect myself from the work. This distancing, coupled with hearing viewer reaction (including the defense committee's), allowed me to better understand how a viewer may engage with the work upon seeing it for the first time. My focus on the process, however important it is to me, may not be as important as I originally thought for the viewer to understand. I now feel that the underlying structure that is present in the work may be felt as a connecting element throughout, but a clear understanding of the system that generated the structure may not be necessary. Instead, I saw how people reacted to the work and engaged with it. I anticipate that awareness and further reflection on how a viewer may engage with the work with a focus on affect will in turn inform directions for future work.

Due to the limited production time, I did find myself taking less chances and being less open to making work that I was uncertain of. One of the suggestions made by the committee that strongly resonated with me was to "let go" a little bit and to be more irrational and take more chances with both the visual work and sound work. Chance and surprise were initially very appealing parts of my project. But as the project came closer and closer to completion, I started to fear surprise and chance, assuming uncertain results as failures. I am keenly aware that failure and chance are important aspects of my

practice, and the feedback and discussion generated through the committee has reminded me to embrace and explore them.

The thesis defense, and this reflection on it, has provided me with a better understand of how my thesis project operates and perhaps more importantly has generated multiple directions for future work.

BIBLIOGRAPHY

- Arnheim, Rudolph. *Art and Visual Perception: A Psychology of the Creative Eye*. Berkley and Los Angeles: University of California Press, 1974.
- Behrens, Roy R. "Art, Design and Gestalt Theory." *Leonardo* 31, no. 4 (1998): 299-303.
- Boon, Marcus. *In Praise of Copying*. Cambridge, MA: Harvard University Press, 2011.
- Derrida, Jacques. *Archive Fever: A Freudian Impression*. Translated by Eric Prenowitz. Chicago: University of Chicago Press, 1998.
- Higgins, Hannah B. *The Grid Book*. Cambridge, Mass.: MIT Press, 2009.
- Huizinga, Johan. *Homo Ludens: A Study of The Play Element In Culture*. Boston: Beacon Press, 1955.
- Krauss, Rosalind. "Grids." *October* 9, summer (1979): 50-64.
- Lewitt, Sol. "Sentences on Conceptual Art." In *Conceptual Art: A Critical Anthology*, edited by Alexander Alberro and Blake Stimson. Cambridge, Mass.: MIT Press, 1999.
- Lewitt, Sol. "Paragraphs on Conceptual Art." In *Conceptual Art: A Critical Anthology*, edited by Alexander Alberro and Blake Stimson. Cambridge, Mass.: MIT Press, 1999.
- Lupton, Ellen and Jennifer Cole Phillips. *Graphic Design The New Basics*. New York: Princeton Architectural Press, 2008.
- McLachlan, Neil. "A Spatial Theory of Rhythmic Resolution." *Leonardo Music Journal* 10 (2000): 61-67.
- Müller-Brockmann, Josef. *Grid Systems in Graphic Design: A Visual Communication Manual for Graphic Designers, Typographers and Three Dimensional Designers*. Sulgen, Switzerland: Arthur Niggli Ltd., 1981.
- Navas, Eduardo. *Remix Theory the Aesthetics of Sampling*. Vienna: Springer, 2012.

- Reich, Steve. *Writings About Music*. Halifax: The Press of the Nova Scotia College of Art and Design, 1974.
- Reybrouck, Mark. "Gestalt Concepts and Music: Limitations and Possibilities." In *Music, Gestalt and Computing*, edited by Marc Leman. New York: Springer, 1997.
- Sauer, Theresa. *Notations 21*. New York: Mark Batty Publisher, 2009.
- Schaeffer, Pierre. *In Search of a Concrete Music*. Translated by Christine North and John Dack. Berkeley and Los Angeles: University of California Press, 2012.
- Swann, Cal. "Action Research and the practice of design." *Design Issues* 18, no. 1 (2002): 49-61.
- Tenney, James and Larry Polansky. "Temporal Gestalt Perception in Music." *Journal of Music Theory* 24, no. 2 (1980): 205-241.
- Toop, David. "Replicant: On Dub." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 355-357. New York: Continuum, 2004.
- Wallschlaeger, Charles and Cynthia Busic-Snyder. *Basic Visual Concepts and Principles for Artists, Architects, and Designers*. Dubuque, IA: Wm C. Brown Publishers, 1992.
- Wertheimer, Max. "Gestalt Theory." *Max Social Research* (Spring 1984): 305-327.
- Wertheimer, Michael. "Music, Thinking, Perceived Motion: The emergence of Gestalt Theory." *History of Psychology* 17, no. 2 (2014): 131-133.
- Wong, Bang. "Gestalt principles (part1)." *Nature Methods* 7 (2010): 863.

APPENDIX A: FIGURES

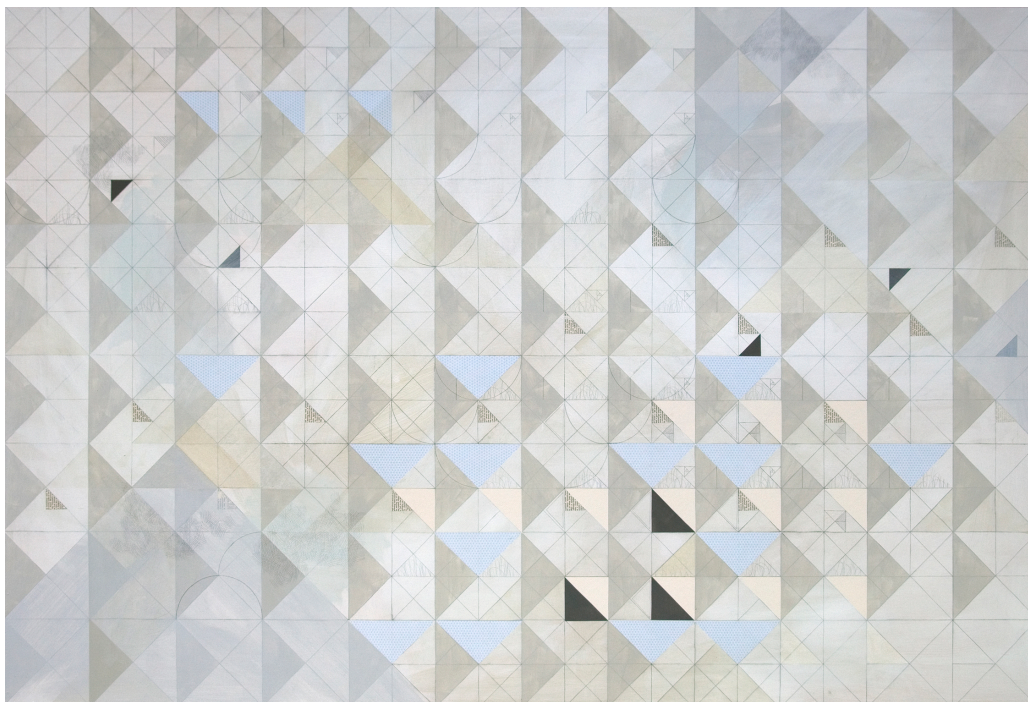


Figure 1. *Comp 0208*, 2008.

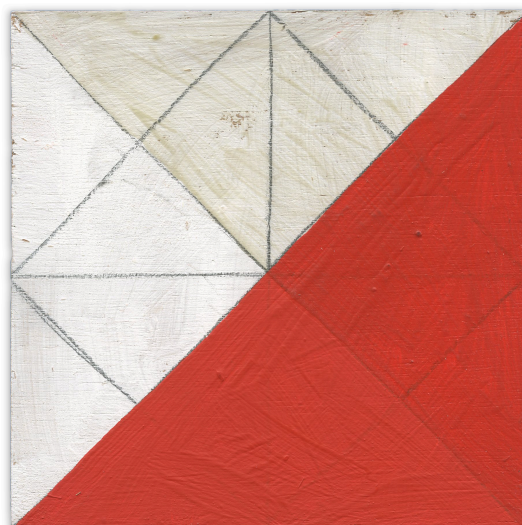


Figure 2. *Red Tiles (detail)*, 2013.

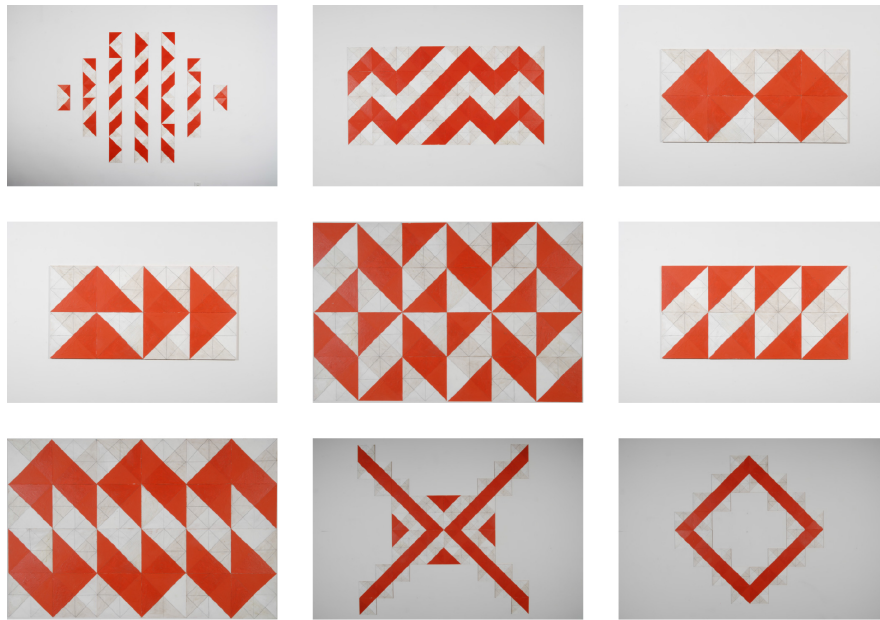


Figure 3. *Red Tiles*, various compositions, 2013.



Figure 4. A graphic representation of a point across multiple panels.

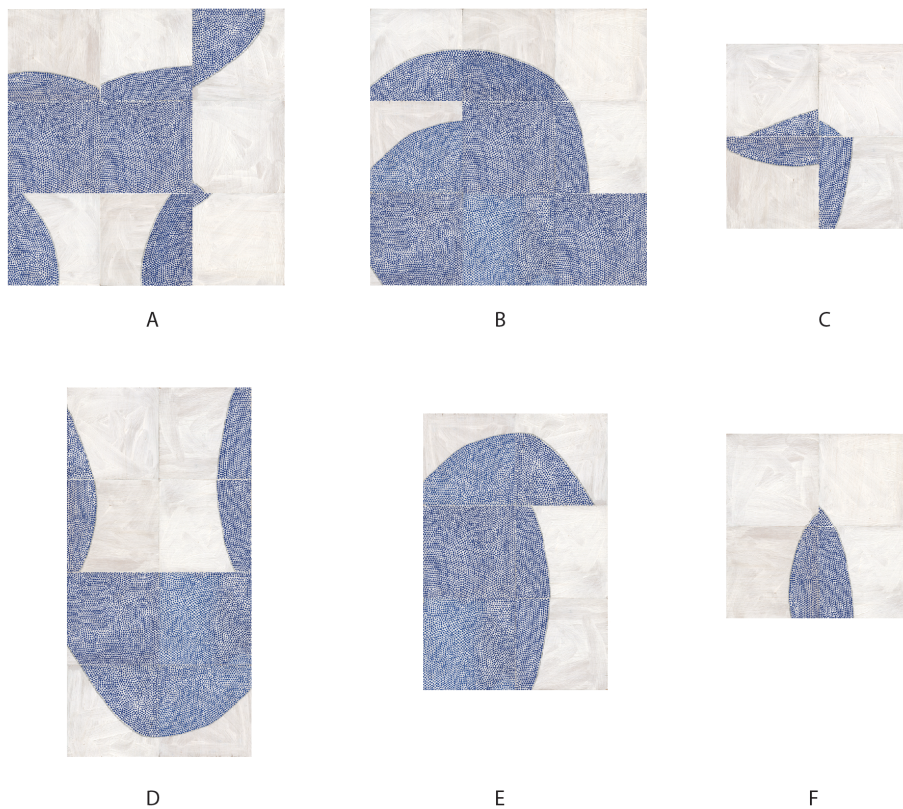


Figure 5. Various panel compositions.



Figure 6. Two records of 5F.

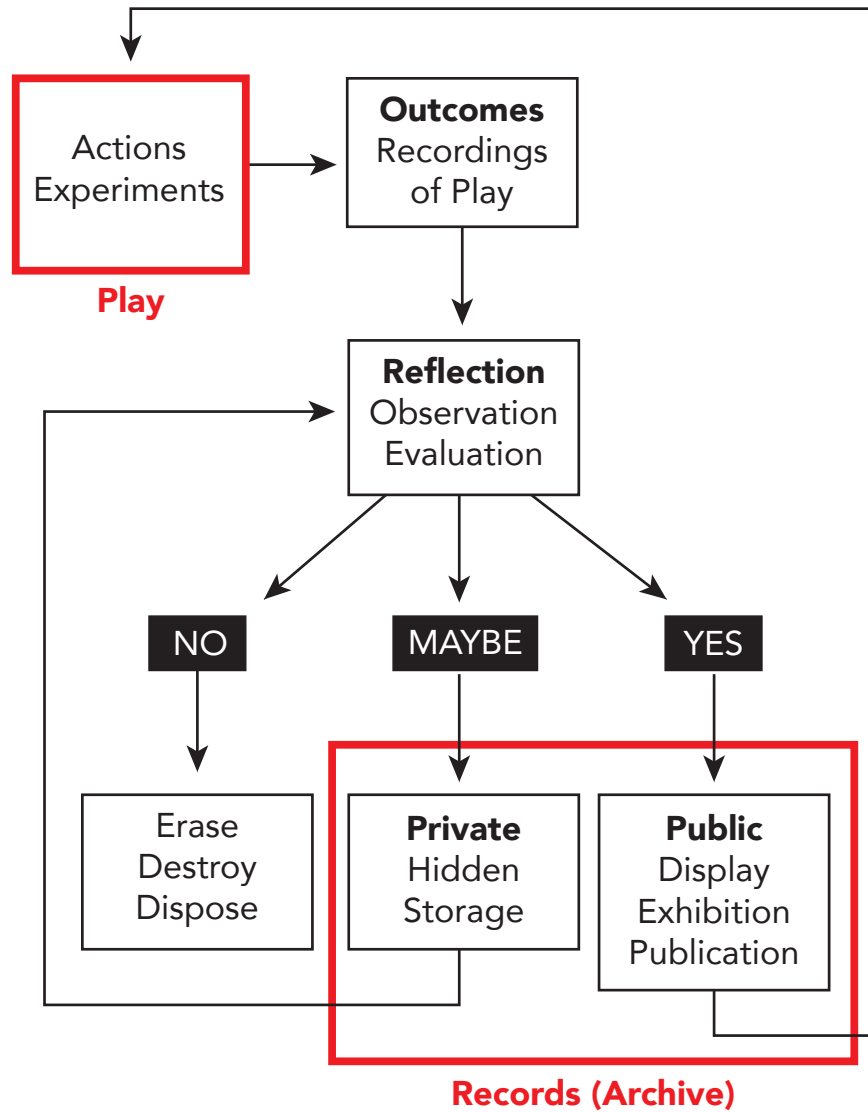


Figure 7. My research model.

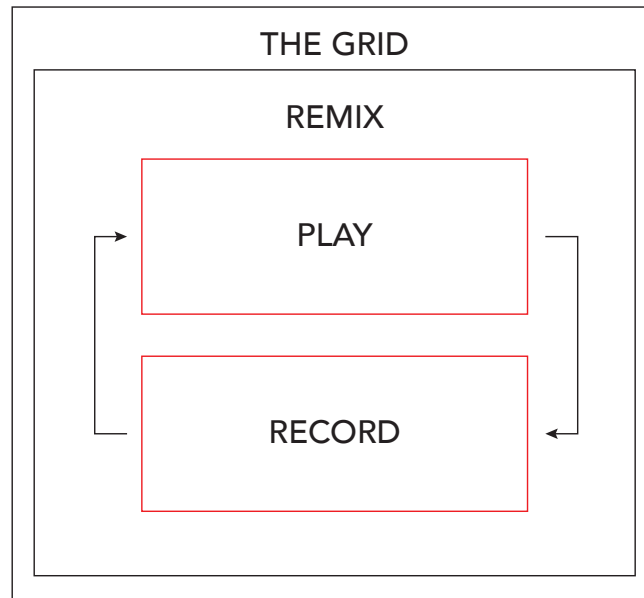


Figure 8. My remix model in relation to the grid.

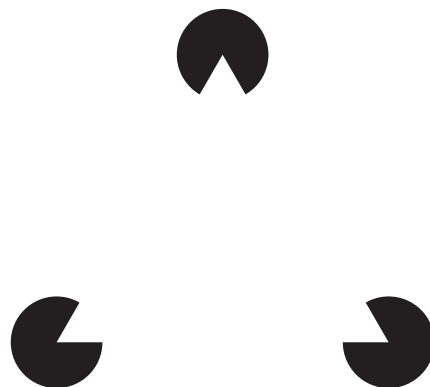


Figure 9. Gestalt illusion.

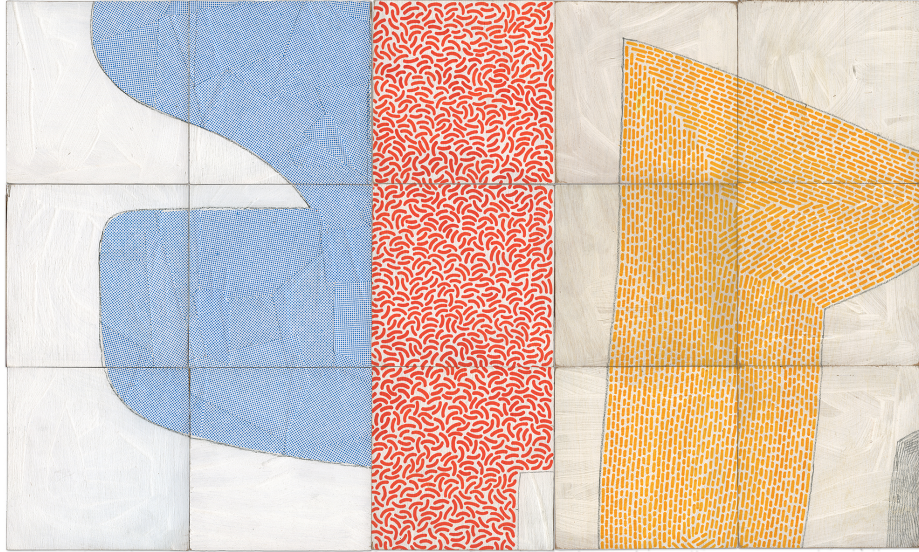


Figure 10. Figure ground transformation of Composition 167



Figure 11. Ground placed next to figure (detail of Composition 134)



Figure 12. Two figures placed side by side (detail of Composition 134)



Figure 13. Composition 165 (Cutout Version)