

Summary of Project in Lieu of Thesis Presented to the
Graduate School of the University of Florida in Partial
Fulfillment of the Requirements for the Degree of
Master of Fine Arts

DA DA DA DA DA DA
DA DA DA DA DA
DA DA DA DA DA DA
DA DA DA DA DA DA DA
CLICK CLICK CLICK DA
DA DA DA DA CLICK
DA DA DA DA DA DA CLICK
VERBAL PERCUSSION
LESSON I

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fig. 1 Participants interacting with *Verbal Percussion: Lesson 1*.

ABSTRACT

Comprehending the visual language system of traditional music notation can be a deterrent for people who want to participate in the percussive arts. As a trained percussionist, I too, have battled memorizing the numerous rules and symbols that comprise traditional Western music notation. In fact, it was the daunting task of translating music notation that led me to lose interest in continuing my percussion career. Shaped from the desire to reconnect with my passion for drumming, *Verbal Percussion: Lesson 1* explores an alternative: communicating through a different visual language called verbal percussion. Using an alternative visual language in place of standard percussion notation accomplishes two goals: it challenges conventional methods of music composition and sound visualization, and it elevates interest in the percussive arts and notation design for both the viewer and myself. To address that interest, I have designed an interactive experience that allows participants to engage with a snare drum as a part of a call and response activity (fig 1). This interaction is didactic in nature, allowing people of all ages to learn by doing. At the same time, participants actively visualize percussive sound through typography. In addition, video documentation is presented to support the definition of verbal percussion, as well as showcase how it can be used as an educational tool.

INTRODUCTION

Verbal percussion is a visual representation of an oral and aural communicative tool used by drummers who are rehearsing and performing music called vocal percussion. Advanced from vocal percussion, inspired by concrete poetry and formed by expressive typography, verbal percussion's focus is placed on using onomatopoeia-like words to emulate the sounds of a percussion instrument; a simplistic example is the phrase "ping-pong." The words' phonetic value provide pitch, allowing a percussion instrument to be dedicated to each word. Once a word is attached to a sound/instrument, verbal percussion serves as a typographic notation system for reading, writing, performing and visualizing drum music.

Ideally, *Verbal Percussion: Lesson 1* provides a means to strengthen the relationship between music and graphic design (for both designer and viewer) through various methods of interdisciplinary research. The combination of graphic design, digital media and percussive arts practices contributes to the expansion of design research as an interdisciplinary process through topics such as sonic design, visual language, visualization theory, notation design, musical communication, concrete poetry, interactive art, and didactic techniques. This combined effort of multiple topics and influences makes *Verbal Percussion: Lesson 1* a true exploration of an alternative visual language that can be used as



fig. 2 University of Florida Drumline.



fig. 3 Me and my Fraggle Rock drum set.



fig. 4 Me playing the snare drum in my high school's band.

a communicative tool for both music and design. It is my belief that discovering innovative vehicles for visualizing and delivering information is a key component in advancing the practice of graphic design.

With a primary goal of developing an innovative visual language through interdisciplinary research, I have drawn from an array of collected data from the University of Florida Drumline. Between August and December of 2008, I followed the UF Drumline (fig. 2) through their practice sessions, collecting a library of photographs, video, audio, and interviews. This collection process informed the development of ethnographic research and offered an opportunity to re-engage with the percussive arts from a personal standpoint. The “backstage” perspective of how a drumline operates and strives for perfection translated into a self-authored investigation of my work as a designer, visual artist and musician. More importantly, this research supports the advancement of the percussive arts and music education, through the power of graphic design, and it reinforced my belief that music and art education are not only vital to every child’s development, but can assist in improving mental health while building a sense of community among all types of people.

BACKGROUND

Not every child has the opportunity to learn to play an instrument. Luckily for me, at the age of 10 my mother enrolled me in middle school band, where I began formal training in music. From day one of class, I knew exactly what instrument I wanted to play – drums. My decision was likely initially informed by the Fraggle Rock drum set (fig. 3) my parents gave me at an early age, and solidified after watching my older brother playing the trumpet. The trumpet looked and sounded interesting, but drums proved to be where the action was. Together, multiple percussion instruments had a singular mission: get loud and supply the rhythm for the rest of the band. Being a drummer made sense to me.

Playing drums became my passion. From grades five to seven, I took private lessons in addition to band class at school. From seventh grade on I became a part of the West Union high school marching band’s drumline (fig. 4). Since my school had no football program, marching band took its place in the line up of seasonal sports, and I participated in both.

I gained valuable experience working as a team and being a leader in both programs, but I saw a special kind of success as a part of the drumline. We were acknowledged across Ohio as a premier drumline and a group of well-versed percussionists. We racked up awards and accolades both as a group and as individuals. But even though our accomplishments were outstanding, a feeling



fig. 5 Members of my high school drumline.



fig. 6 Participant interacting with the call and response activity.

of burnout overshadowed our success. The learning process and intense practice sessions had grown tiresome. I felt overwhelmed by the daunting task of reading and performing standardized compositions. By our junior year of high school, the majority of the drumline (fig. 5) had called it quits, including me. The intimidation of acquiring an excellent skill set in notation and composition comprehension – necessities and requirements to advance in music at the collegiate level – led me to an another direction. I wanted an alternative approach to engage with formal notation and composition as a stepping-stone in music education.

I put down the drumsticks over 10 years ago. Since then, I have been on a journey to reconnect with drumming. It wasn't until I started creating personal work again that I noticed a desire to re-evaluate my relationship with percussion. Additionally, the aspiration to inform others about marching percussion through design became apparent. With design as my instrument, my current work provides an introduction to the percussive arts through my eyes. *Verbal Percussion: Lesson 1* offers the opportunity to strike a drum and feel the same excitement of interaction I felt that Christmas morning with my Fraggie Rock drumset.

RESEARCH QUESTION

*Letters are signs for sounds.*¹ – Eric Gill

Traditional drum notation is effective and useful in communicating musical ideas, but can an alternative notation system use word-based typography to more accurately represent drum notation? *Verbal Percussion: Lesson 1* tries to answer that question, via exploration of an alternative visual language that can be used as a communicative and didactic tool for both graphic design and drum notation. Through an interactive call and response exercise (fig. 6), this work utilizes typography as a signifier for a stroke on a drum, visualizing verbal percussion as notation and composition. To reinforce the concept of verbal percussion and to help articulate and formalize key thought processes, it includes research video of the University of Florida Drumline. The primary goal is to inform others about drumming through typography, and offer an opportunity to interact with tactile items such as a drum and drum sticks, supporting the advancement of the percussive arts.

RESEARCH PROCESS

*Simply put, designers who can harness the power of research will help design become a more muscular discipline, acknowledging and utilizing its implicit power in explicit ways.*²

¹Alan Fletcher, *The Art of Looking Sideways* (London: Phaidon, 2001) 474.

²Brenda Laurel, *Design Research: Methods and Perspectives* (Cambridge, Mass: MIT Press, 2003) 18,19.



fig. 7 *Drum Words*, 2006, Vinyl on wall.

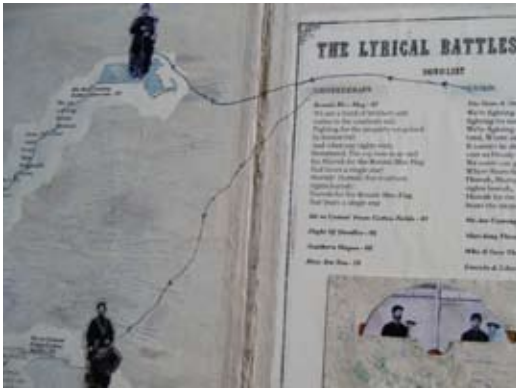


fig. 8 *The Lyrical Battles of the Civil War*, 2007, Collage.



fig. 9 *Gait Rhythm*, 2007, Digital video.

During the past three years, design with a focus on informing and/or educating has been my “design power” and theme. Because of my belief that transcription of information is the basis of a designer’s role in society, much of my experimentation has been on developing visual language systems that can be applied to sonic or rhythmic-based information such as drum notation or human gait. Designer Sam Gray said it best: “The biggest challenge in graphic design is making sense of the information in the world today instead of just being overwhelmed by it. We’re the ones organizing all that content and data and giving it a face that’s approachable.”³

I first experimented with verbal percussion and made an attempt to transcribe sonic or rhythmic-based information in a piece entitled *Drum Words* (fig. 7). This work displayed vinyl letterforms and glyphs to represent drum notation. A listening device was attached to assist the viewer in following work as a musical piece. Experimenting with materials and interactivity proved to be a valuable exercise in terms of lending to my following work. During the creation of *Drum Words*, my design aesthetic was influenced by researching the Futurist art movement, including Filippo Marinetti’s work *Zang Tumb Tumb*. His work changed my perception of the written word, and challenged me to use typography in more expressive ways.

The work that followed *Drum Words* again used typography to visualize information – this time, though, it mapped battle songs of the Civil War. Focusing on mapping practices, *The Lyrical Battles of the Civil War* (fig. 8) is a lyrical investigation of the Northern and Southern armies. In book form, each song’s lyrics are used to map the battle sites and imagery of the American Civil War. Influenced by the writings of Edward Tufte, I acquired guidelines in formulating a mapping framework to use in my future work. Tufte explains, “Mapping helps tell why the image matters.”⁴

Two works that concluded my visual experimentation and preparation for my project in lieu of thesis combined both visual language and mapping systems through video analysis. Working with video would prove to be my medium of choice to articulate my ideas. As an introduction to using video, *Gait Rhythm* (fig. 9) investigated human gait by comparing beats of a bongo drum to the footsteps of a person. Colored dots marked the footsteps to arrange a gait composition. This work immediately influenced an additional experiment (*stairs_I*) that utilized verbal percussion to map the sounds of person’s footsteps on a stairwell. The result of using verbal percussion as a mapping tool to describe the sound

³“Intelligent Design,” *Esquire* Aug. 2008: 108.

⁴Edward Tufte, *Beautiful Evidence* (Cheshire, Conn: Graphics Press, 2006) 45.



fig. 10 Me at the Musee du Louvre, Paris.



fig. 11 Wassily Kandinsky, *On White II*, 1923.
Oil on canvas. 105 x 98cm.
Centre Georges Pompidou, Paris.

of a footstep sparked a question – could verbal percussion act the same way in analyzing the action of drumming? With this question in my mind, I went to Paris, France (fig. 10) to gain a different perspective and reflect on my research and experiential work.

Learning to look around sparks curiosity encourages serendipity. Amazing connections get made that way; questions are raised – and sometimes answered – that would never be otherwise.⁵

While staying in Paris, I was privileged to see the works of Pablo Picasso, Wassily Kandinsky, Paul Klee, Piet Mondrian, László Moholy-Nagy, and current installation artist Sophie Calle; their work heightened a desire to expand my research outward, inspiring me to capture connections along the way. I found those connections soon after returning home from Paris; my attention turned to experimental music/sound and notation design as I reflected upon Kandinsky's *On White II* (fig. 11), a work that expressed visual music through graphic elements. Kandinsky's synesthetic technique led me to other artists who proved to influence my research and creative interests: John Cage, Steve Reich, Norman McLaren, Hans-Christopher Stiener, György Ligeti, and Evelyn Glennie. Each contributed to contextualizing the experimental music/sound process for me. Their work implied that it is acceptable to see and hear music/sound in alternative ways, which gave me confidence that the concept of verbal percussion could be validated.

Building on the concept that music/sound can be separated from conventional methods of display, my research became more dedicated to alternative notation and composition systems and how they can be presented. I found similar concepts in composer Ed Sueta's systematic method for teaching drumming based on syllables, which leads to a sound rhythmic perception. I also found parallels in George Grant's *Drum Talk*, a modern approach to an ancient method of combining drumming with talking in order to teach children how to play drums. Additionally, I noticed how the video game *Rock Band* (produced by Harmonix Music Systems) incorporated a karaoke-type interface that uses game play to introduce notation as a color-coded system. Among the three methods I explored – Sueta, Grant and *Rock Band* – *Rock Band* seemed to be the most intuitive due to its visualization techniques, seemingly answering critics who have expressed that a lack of visualization graphics can be a barrier to success in enjoying producing music from notation compositions. But at the same time, *Rock Band* lacks notational qualities, which may

⁵John R. Stilgoe, *Outside Lies Magic: Regaining History and Awareness in Everyday Places* (New York: Walker and Co, 1998) 5,6.



fig. 12 Marching snare drum.



fig. 13 University of Florida Drumline at rehearsal on campus.

hinder the experience of performing music. As an improvement on music-oriented game play, Nintendo released *Wii Music* as a more accurate performance-centered interaction. All four methods provided examples of alternative notation systems and interaction with composition that I could infuse in my work.

METHODOLOGY

As a result of my research process (experimental design, the trip to Paris, exploring alternative notation systems and modes of delivering information for educational purposes), I was eager to start toward the development of verbal percussion, and in particular the goal of employing verbal percussion as a visual language to assist participants in learning to play drums. I wanted to combine my research with personal experience of using vocal percussion, morphing vocal into verbal by instilling typographic words as percussion notation. These typographic compositions would hopefully allow participants to be more accepting of engaging with this form of music notation. To avoid overwhelming participants who might shy away from multiple percussion instruments, I narrowed down the selection to just one drum – a marching snare drum (fig. 12). This decision allowed research to be more focused and intense, and it also provided a stable jumping-off point for introducing the concept of verbal percussion; the snare drum is the instrument I was trained to play as part of a marching drumline. The snare drum is a key part of a marching percussion ensemble (also known as a drumline or battery) that requires the ability to play fast at multiple heights.

With the snare drum as a focus, I began video recording and photographing practice sessions of the University of Florida Drumline (fig. 13). During this documentary process, I found vocal percussion to be an integral part of the group's rehearsal regimen. Excited and with direction validated from that finding, I began sketching notation compositions, transcribing instances of vocal percussion into verbal percussion via typographic words. I also began to video myself performing these new typographic compositions. Along with the captured footage, photographs and sketches, my documentation also included interviews of friends and family – ones both with and without percussion backgrounds. Obtaining their feedback and suggestions as an outside perspective on verbal percussion assisted me in advancing my creative process. Analysis of my documentation and feedback resulted in the identification of some core areas of importance that needed to be highlighted in explaining verbal percussion. Before embarking further into the creation process, I divided these areas into three main categories: ones visualizing the typographic, communicative and didactic qualities of verbal percussion.



fig. 14 Filippo Marinetti from *Words in Liberty*, 1919.
Collage on paper.
Milan, Italy.

Typography

*Humans cultivate the ability to create and respond to rhythm before they are confronted with the complexities of written and spoken language. The pulses, beats and vibrations of structured rhythm and melody – music – represent a language that is naturally and universally felt by individuals, no matter what their geographic origin.*⁶

Structure, motion and time are common aspects of both typography and music. Combine these three aspects and the result is rhythm, which is described by music theorist Carl Schachter as “the organization of time, more significantly as organized movement in time.”⁷ Organization lends to structure, driven by a system of motion and time. Speech relies heavily on rhythmic structure, and since typography is the visualization of a spoken language, verbal percussion can manipulate motion and time to form typographic and musical compositions.

An example of how verbal percussion could operate in a composition is concrete poetry. According to author Johanna Drucker, “the term concrete poetry is used to designate all manner of shaped, typographically complex, visually self-conscious poetic works.”⁸ It is from concrete poets like Filippo Marinetti (fig. 14) that we see typography expressing sound, action and movement through onomatopoeic language, birthing a specific visual aesthetic for compositions and verbal languages. Designer and author Frank Armstrong writes: “verbal languages can be both denotative (a communicative function, as in prose) and connotative (an aesthetic function, as in poetry). Like language, typography can also communicate on an aesthetic or semantic level, higher than its syntactic surface structure.”⁹

Typography and music can both be poetic in structure, combining the visual qualities of motion and timing to produce rhythmic compositions. Verbal percussion borrows from these ideals to assist in visualizing percussion notation as a graphic design composition. The notation system of verbal percussion provides a visual documentation of the temporal action of a spoken language and music.

⁶Matt Woolman, *Sonic Graphics: Seeing Sound* (New York: Rizzoli, 2000) 12.

⁷Carl Schachter, *Unfoldings: Essays in Schenkerian Theory and Analysis* (New York: Oxford University Press, 1999) 36.

⁸Johanna Drucker, *Figuring the Word: Essays on Books, Writing, and Visual Poetics* (New York: Granary Books, 1998) 110.

⁹Frank Armstrong, “Hearing Type,” *American Institute of Graphic Arts* 27 June 2005, 17 Sept. 2008 <<http://www.aiga.org/content.cfm/hearing-type>>.



fig. 15 Instructor Chip Burkner utilizing vocal percussion.

Communication

*Communication through language is about presenting a comprehensible message to the user, as well as understanding peoples use of language.*¹⁰

To present a comprehensible message to its user, verbal percussion visualizes the spoken language of vocal percussion through typographic words. As a part of a visual language, verbal percussion represents the sound of a percussion instrument and communicates this verbal notation system developed by drummers. The design challenge is to give a face to this notation system by presenting a language that both a percussionist and non-percussionist can comprehend.

Verbal percussion's language is constructed by the visual form of vocal percussion, which consists of producing drum sounds via voice. The typical users of vocal percussion – singers, beatboxers and drummers – use its functionality as a rehearsal and didactic tool. Of these users, the one particular group my research investigates are percussionists: marching drummers. From collective research and personal experience as a trained drummer, vocal percussion is a working oral and aural language for both the instructor and performers of a marching drumline (fig. 15). Through a call and response activity, the instructor gives a call (vocal or drum stroke) and the performer reacts by mimicking the call. Basically, a follow-the-leader exercise is established between instructor and performer. This type of communication activity builds rhythmic, improvisation and reaction skills, contributing to the participants' elevation in confidence and musical awareness.

Education

The communicative and didactic relationship between instructor and performer can be seen in other communities of the world. The lead drummer of the Jabo tribe of Eastern Liberia controls the procession of group meetings by signaling participants to perform certain rituals. Additionally, the Jabo's lead drummer is an official of the town's law-enforcing authority.¹¹

In North India, Tabla drumming is a form of hand drumming that is based on oral traditions. To facilitate learning and communication, tabla uses a syllable system that allows a word (bol) to identify a particular stroke on a drum. The syllables have

¹⁰Agnes Kukulska-Hulme, Language and Communication: Essential Concepts for User Interface and Documentation Design (New York: Oxford University Press, 1999) 4.

¹¹David Crystal, The Cambridge Encyclopedia of Language (Cambridge: Cambridge University Press, 1997) 400.



fig. 16 Overhead view of me playing the snare drum.



fig. 17 Kinetic typography applied to video.

no literal meaning; therefore bols can define a composite or improvised phrase. As a part of improvisational drumming, tabla uses a call and response activity as a performance and didactic tool.¹²

Verbal percussion can borrow from both the Jabo tribe's signal system and tabla's syllable system to construct participants wanting to learn to drum in a more improvisational way. Through typographic signifiers (notation) and verbal representation (syllables), verbal percussion can utilize a call and response method to communicate a visual language that is comprehensible and approachable. Building a communicative link between instructor and performer allows a co-dependent relationship to form, strengthening verbal percussion's ability to assist the educational process by way of visualization.

EXPLORATION AND DESIGN

As my research process concluded, I began to review possible means of production and presentation for my project in lieu of thesis. From my previous experimental work and research of music's space, time and rhythmic motion, a time-based medium seemed to be an appropriate method of production. In addition, learning new technical skills to enhance my design work contributed to my interest in digitally inspired methods and presentation. I challenged myself to rethink my design process and incorporate new channels of communication by blending video, sound and interactivity into a multi-sensory experience that would showcase verbal percussion.

Video

Using Herbert Zettl's book *Sight Sound Motion: Applied Media Aesthetics* as a guide to video production, I began filming myself playing the snare drum (fig. 16), and applying kinetic typography (fig. 17) to that footage as verbal percussion. Around the same time I began to document practice sessions of the University of Florida Drumline to capture instances of verbal percussion. To frame the information I was collecting as ethnographic research, I turned to television. New media author Jessica Helfand writes, "As the screen becomes a stage upon which media of all kinds must perform, our collective cultural experience of watching television offers innumerable cues for deciphering the alleged innovation of contemporary media."¹³ Video and kinetic typography are elements of contemporary media that complement the ability for verbal percussion to be delivered as a multi-sensory experience.

¹² Robert S. Gottlieb, *Solo tabla drumming of north India: Text & commentary* (India: Motilal Banarsidass Publishers Pvt. Ltd., 1998) 17.

¹³ Jessica Helfand, *Screen: Essays on Graphic Design, New Media, and Visual Culture* (New York: Princeton Architectural Press, 2001) 8.



fig. 18 Paul Klee, *KN der Schmied*, 1922.
Oil on canvas, 33 cm. x 36 cm.
Musée d'art moderne, Centre Pompidou, France.



fig. 19 Multiple computers communicating via Max 5.

Sound

Through kinetic typography, motion enables verbal percussion to represent sound's movement. Since typographic words were now moving as sound could, I began contemplating whether verbal percussion was more about the absences of sound – maybe, in fact, verbal percussion did not need the accompaniment of sound. After experimenting with verbal percussion with and without sound, I concluded that a balance of both assisted in understanding their close relationship. However, the use of sound can be a crutch when constructing visual communication. To see how other artists have treated this subject, I looked at abstract painters Paul Klee (fig. 18) and Wassily Kandinsky's painted canvases as visual sound. Klee's polyphonic layering and Kandinsky's geometric compositions stretched my imagination of two-dimensional work projecting sound through shapes and color. After seeing their work, I began exploring how visual sound could be represented through kinetic typography, and reviewed the qualities of music: structure, motion and time producing rhythm. Of these, time, which I see as the space between objects, is a major element that can allude to visual sound. Therefore, if verbal percussion uses typographic words as notation, then letterspacing can produce sound – or, importantly, the absence of sound.

Interactivity

*It doesn't matter whether the object is a toaster, an email program on your laptop, or a networked database. All of these objects can be connected if you can figure out how they communicate.*¹⁴

Object-oriented programming is a term described by professor Tom Igoe as “a style of software developed in which programs and subprograms are thought of as objects.”¹⁵ Until the beginning of this project in lieu of thesis, I had never been exposed to programming concepts. But for verbal percussion to become truly interactive and communicative, a programming environment had to be introduced. Recognizing verbal percussion's potential to interact and communicate with an audience, digital media professor Dr. Jack Stenner assisted in the development of a Max patch via programming software made by Cycling '74 called Max 5. With Max, I experimented with multiple computers communicating actions among each other through Ethernet connection (fig. 19). Additionally, the Max patch incorporated a live microphone feed to capture and react to sound. This experimentation was a breakthrough and the final piece to the puzzle in completing my design process. Verbal percussion could now be a true visual and communicative language, opening up the pathways for machine and human to interact.

¹⁴Tom Igoe, *Making Things Talk* (Sebastopol, CA: O'Reilly Media, 2007) X.

¹⁵Igoe, *Making Things Talk*, X.



fig. 20 Computer one (caller) and computer two (responder).

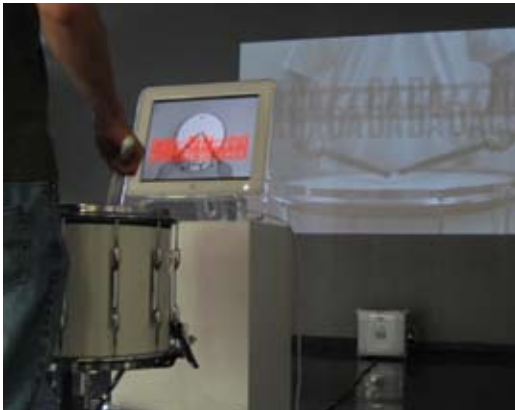


fig. 21 Computer two (responder) reacting to a drum stroke.



fig. 22 Alexander Rodchenko, *Dobrolet*, 1923.
Poster. Offset color lithograph, 34.9 x 45.4 cm.
Museum of Modern Art, New York.

THE CREATIVE PIECES

I. Installation Space

Management of the installation space where my work was presented played a crucial role in the success of the overall experience. Because sound is an important element of my design, I decided to present my work as a solo installation. Visual segments such as a call and response exercise, process videos and an informational display all benefited from the openness of the individual space. Utilizing the area's square footage and wall space, I was able to resemble a musical arch, as well as project large format video. More importantly, the space provided the opportunity for participants to engage with each segment, which made the installation more approachable (plate 1).

2. Call and Response

Hierarchy plays a major role in the exercise to designate caller and responder. The projected screen (caller) is run by computer one, and the smaller monitor screen (responder) is controlled by computer two (fig. 20). Connected by Ethernet cord, the software Max 5 directs computer one to play a video, while computer two waits for its conclusion. Once computer one finishes the video computer two then plays its video. This activity continues and is looped to guide the participant through a call and response exercise. Computer two's video acts as a cue for the participant to respond to computer one's call, as well as, provide direction for hand placement and drumstick grip (plate 2).

To incorporate interactivity, computer two (responder) captures live sound from a microphone attached underneath the drum. Max 5 is programmed to read the live feed and apply a mathematical equation to control the contrast of the color that is produced by the participant's drum stroke. As a reward for hitting the drum correctly, typography is illuminated in red, an accent color that contrasts with the grayscale color scheme represented throughout the whole body of work (fig. 21).

Using grayscale video and red typography was inspired by research of the constructivist color palette, where red was marked as the color of the Communist Revolution in Russia. (A strong example of the constructivist aesthetic can be seen in Alexander Rodchenko's poster titled *Dobrolet* (fig. 22)). I investigated constructivist style, led by designer Paula Scher, as a compliment to the Futurist's written work I had already reviewed. Both works use typography to demand attention and speak at a high volume. Scher's work can be seen being loud as well. Borrowing her typeface (Knockout) used in the 2008 redesign of New York's Public Theatre, I captured the deep but sharp sound of the marching snare drum. The sans-serif typeface is versatile, suggesting modernist structure, while referencing wood block type used in many poster and book cover designs. Designed by Hoefler



fig. 23 Composition 1.



fig. 24 Composition 2.



fig. 25 Composition 3.



fig. 26 Video two showing verbal percussion in action.

& Frere-Jones, Knockout provided me with a variety of widths to express the powerful sounds of a snare drum, cymbal and rim-click. Knockout’s well-organized structure and modernist voice assisted in the visualization of typography representing percussive sound, within multiple compositions.

The typographic compositions are produced by drum strokes and incorporate spacing as a musical element. The movement is sharp and direct, as the typography builds into three separate compositions. Each symmetrical composition has a degree of difficulty regarding drum rudiments – composition one is the easiest; composition three is the most difficult. All three compositions (fig. 23–25) layer the typography to provide a sense of vibration. Reducing the opacity of the letterforms allows the composition to overlap, producing a texture that activates the background. “DA” is the sound word used to represent each stroke on the drumhead, and utilizes a heavier, weighted version of the typeface. “CLICK” represents the wooden stick hitting the metal rim of the drum. This stroke is a higher pitched sound, requiring a thinner version of the typeface.

3. Video One: Instruction

Featuring the University of Florida’s Assistant Band Director Chip Burkner, this video captures the essence of verbal percussion in its natural state. Mr. Burkner performs vocal percussion to his students as a didactic tool. He calls out his representation of drum notation, expecting an identical response from the drumline’s collective sound. This video introduces the concept of vocal percussion, leading into verbal percussion’s visual appeal, showcased in additional process videos included in *Verbal Percussion: Lesson 1* (plate 3).

4. Video Two: Field

Comparable to “Call and Response”, vocal percussion is now viewed as verbal percussion. In this video the drumming motion is slowed down, displaying expressive typography. Represented by verbal percussion, the sound of a cymbal and snare drum are examined. “TING” acts as the signifier of the sharper pitched metal cymbal, and uses a lighter weighted version of the typeface, in comparison to “DA” and “CLICK” (fig. 26). Masked boxes are introduced to center the focus and eliminate unwanted background noise (plate 4).

5. Video Three: Marching

Much like “Field,” this video uses verbal percussion as a signifier for a drum stroke. What differentiates this examination is that multiple drummers are in view, including the snare drum and bass drum. This view is an opportunity to see how synchronization is a part of a drumline’s ultimate goal. Also, the drumline can be seen moving and playing, another element of what makes marching drumline unique (plate 5).



fig. 27 Video four capturing quick hand and stick movements.

6. Video Four: Line

To summarize the high-energetic action of a drumline, this video captures the snare drummers “jamming” at the end of rehearsal. Additional process photographs are incorporated as stills, freezing the quick movements of their hands and drumsticks (fig. 27). A visual rhythm is set up between the stills, motion and sound of the drums, highlighting their movements (plate 6).

7. Informational Display

In the corner of the gallery project information is presented to guests. In addition, sponsor Studio Percussion of Gainesville, Fla. provided free drum lesson certificates to give away. A comment booklet accompanies the project statement and certificates, providing an opportunity for participants to leave feedback (plate 7).

CONCLUSION

Discovering innovative vehicles for visualizing and delivering information is a key component in advancing the practice of graphic design. Making sense of information is why visualization design is so important and relevant to the development of verbal percussion. For many, standard music notation can be a barrier for participation in the percussive arts. As an alternative language, verbal percussion assists in the visualization of musical information. My investigation has led me to conclude that typographic words have proven to be a stronger representation of sound than a graphic note. Additionally, an onomatopoeia-based system tends to be more natural, since it is connected to speech – therefore making verbal percussion a fun and approachable way to interact with the percussive arts.

As an investigation of interactive design, *Verbal Percussion: Lesson 1* proved to be fun and approachable, as many participants engaged with its offerings. I noticed people of all ages and skill level attempting to follow along with the call and response activity. One participant wrote in the comment booklet, “I find this very interesting. I think I will start learning to drum after seeing your show.” Many were excited to have the opportunity to interact with a drum and drumline in a gallery setting. An audience member wrote, “Finally, I can listen to a drum in a gallery.” More importantly, participants acknowledged the interdisciplinary portion of the installation, as one viewer wrote, “Music and community, something that is vital to our youth and is consistently being cut back. Thanks for highlighting music at all.” Overall, I was pleased with the outcome, due to the large amount of interest the installation acquired throughout its creation and display.

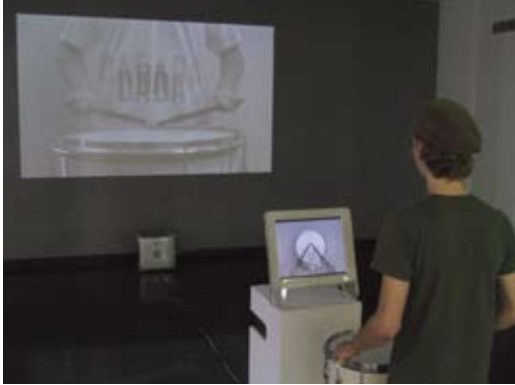


fig. 28 *Verbal Percussion: Lesson 1* opening night.

Through the creation of *Verbal Percussion: Lesson 1*, I reconnected with percussion by sharing a language and experiences of a community that I was once a part of. The research process urged me to contact past instructors and old friends that I haven't spoken to in many years. Working with the University of Florida Drumline contributed to new acquaintances, and allowed me to reflect on my times as a member of a drumline. More importantly, this process has challenged me as a designer and person, expanding conceptual thinking, visualization methods, new media practices, and ethnographic research. The skills gained from this investigation will contribute to my future practices as an educator and designer by reinforcing the potential of typographic research and design.

FURTHER DIRECTIONS

Verbal Percussion: Lesson 1 (fig. 28) is an introduction to the visual language of verbal percussion focusing on a marching drumline. Eventually, this language could expand to additional percussion instruments and include higher levels of difficulty regarding drum rudiments. To engage more participants through interactivity, multiple live actions could be introduced, such as: digitally documenting participant's interaction, providing a menu of options for user control and enhancing typographic manipulation to better reflect the participant's response on the drum. As an opportunity to involve the public, I plan to develop a website from my research that offers a shared experience of verbal percussion.



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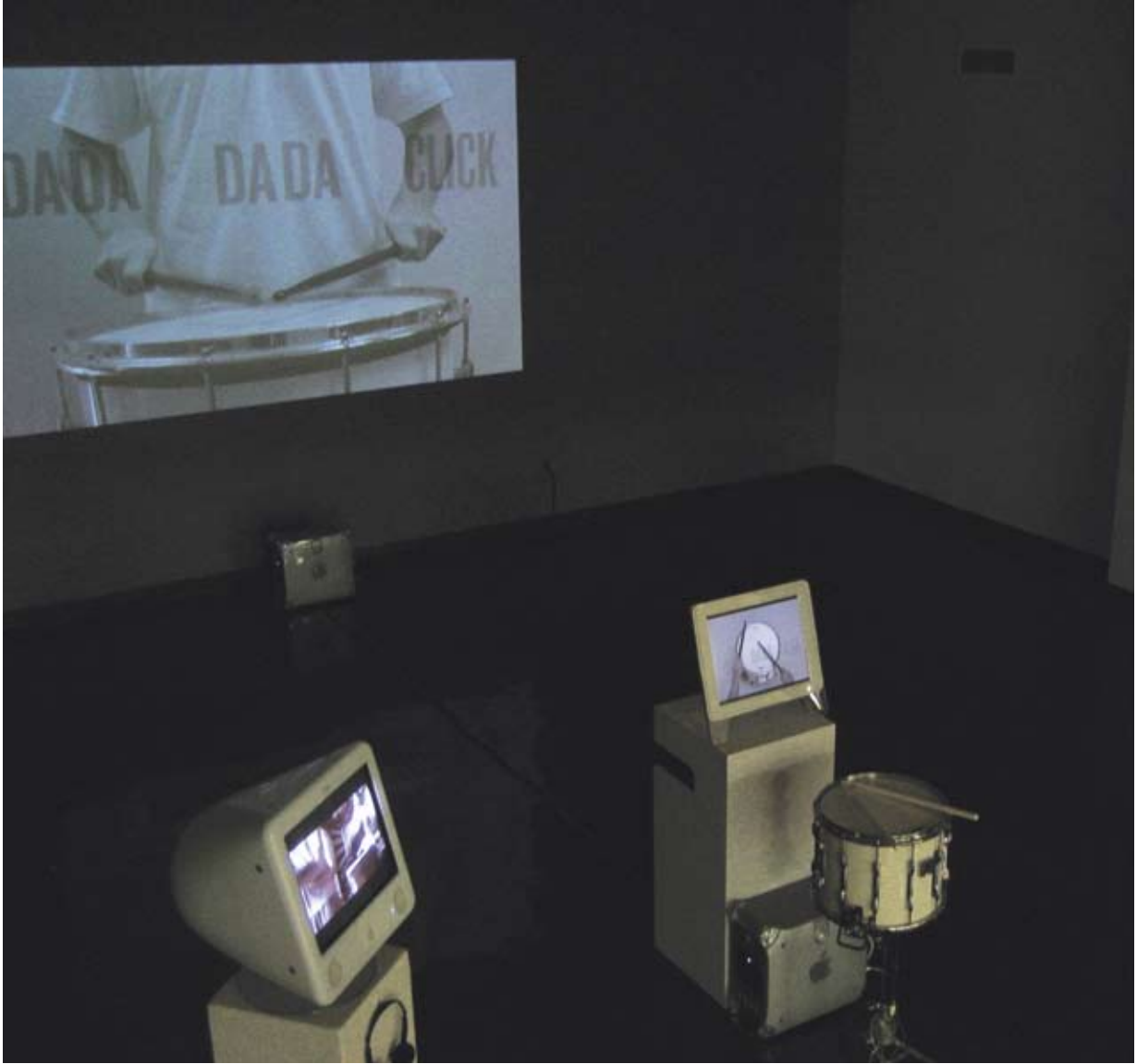


Plate 1 *Installation Space*, 2009.



Plate 2 *Call and Response*, 2009.



Plate 3 *Instruction*, 2009, Digital Video.



Plate 4 *Field*, 2009, Digital Video.

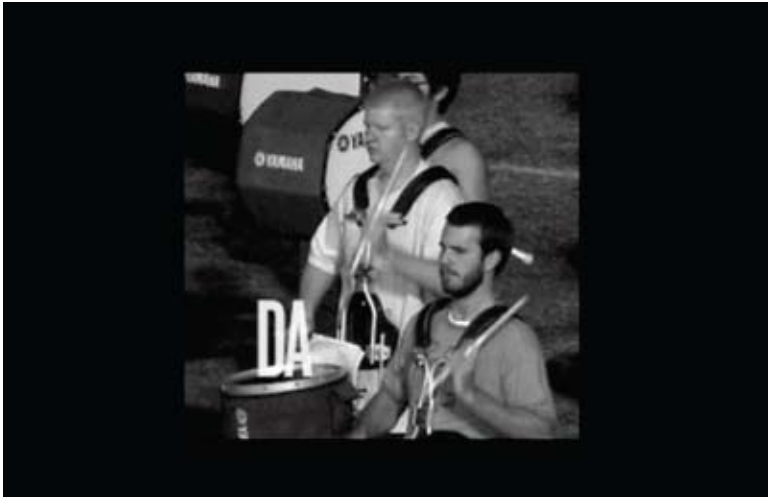


Plate 5 *Marching*, 2009, Digital Video.



Plate 6 *Line*, 2009, Digital Video.



Plate 7 *Informational Display*, 2009.



ACKNOWLEDGMENTS

First I would like to thank my committee members Brian Slawson, Jack Stenner and Connie Hwang for their guidance and support before and during this process. I would also like to thank faculty and staff members Maria Rogal, Katerie Gladdys, Lauren Garber Lake, Mary Lane Rockwood, and Mike Christopher for their assistance over the years. I respect you all as educators and consider you my friends.

A special thank you should be given to my graduate classmates Doug Barrett, Matt Grady, Kyle White, Nancy Schreck, Abby Chryst, Gaby Hernandez, and Patrick Lemieux. Thank you all for challenging me to be a better student of design. Good luck to you all in your future endeavors.

Additional thanks goes to Studio Percussion Inc., Stephen Rockwood and the University of Florida Drumline, Carrie Smith, Mike Barnhart, and Jennifer Rogers. Thank you for assisting me in the development of my ideas. It's been a pleasure including you in this process.

This project would have not been possible without the love and support of my friends and family. Michael, Brandon, Ross, Cameron, and Danielle I thank you for always being there for me in my times of need. To my grandparents Kirk, Jean, and Jessie, thank you for your support and interest in all that I do. Lastly, I would like to thank my brother Adam and parents, Tom and Janie, for their continued support of my dreams. Thank you for taking this journey with me and for always believing that I could do it, even when I didn't. Words cannot describe how much I love you all. Thank you.



BIOGRAPHICAL SKETCH

Aaron Kirker was born in Cincinnati, Ohio, in 1980. He received his Bachelor of Arts in Studio Art with emphasis in Graphic Design and a minor in Advertising from Morehead State University. After completing his undergraduate research in 2004, Aaron worked as a designer for a sports marketing/association management firm in Lexington, Kentucky. In 2006, he enrolled in the M.F.A. program at the University of Florida. While a graduate student at UF, Aaron studied graphic design and worked as a Teaching Assistant for the course entitled Experimental Typography/Letterform.