Between 1971 and 2007, Karlheinz Stockhausen and George Crumb composed twenty-seven works for flute featuring the integration of music and lighting art, according to research conducted as part of this dissertation project. My premiere of *I Dream of Coloured Inks for Two Flutes and Computer* (2013) by Michael S. Rothkopf became the next contribution to flute and light repertoire; and in an effort to further explore this intermedia art form, I commissioned four new flute compositions by Anna Meadors, Kyle Rowan, Stuart Saunders Smith, and Jacob Thiede. This document provides a narrative of background information, aesthetic discussions, lighting performance guides, and scores for these works. The lighting performance guides are informed by my performance of the compositions and collaboration with their respective composers. Appendices include a list of works for flute and light by Karlheinz Stockhausen, interviews with all five composers, and an interview with George Crumb. Cinematic videos made with the help of audio and visual team Wayne Reich and Ben Singer, along with a cast of performers, are embedded in the document, completing the project. Ultimately, this project serves to facilitate future performances of these flute compositions and inspire the advance of music and light intermedia as a holistic art form.
AND THEN THERE WAS LIGHT: LIGHTING ART IN FLUTE REPERTOIRE

by

Krisztina E. Der

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Approved by

______________________
Committee Chair
DEDICATION

“In Him was life, and the life was the light of men. And the light shines in the darkness, and the darkness did not comprehend it… That was the true Light which gives light to every man coming into the world” (John 1: 4-5, 9).
This dissertation written by KRISZTINA E. DER has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

Committee Chair

Mark Engebretson

Committee Members

Erika Boysen

James Douglass

Randall McMullen

Date of Acceptance by Committee

Date of Final Oral Examination
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CHAPTER I
INTRODUCTION

In 2013, Dr. Michael S. Rothkopf approached me with the idea of combining lighting art with a piece he was writing for me. In performance, I found the result of this combination to be inspiring and compelling; it suggested to me the idea that lighting art could be combined with music in a way that the two phenomena could be treated as equals within a single work of art. My interest in this line of inquiry deepened as I reflected on the Aristotelian concept of “essence” and how it might be applied to energy, sound and light.¹ I think it is deeply fascinating that both sound and light are forms of kinetic energy, and in fact can be viewed as the same thing (waves) with vastly different properties.

Nineteenth century theater theorist Adolphe Appia once reflected: “like music, light can express only what belongs to the ‘inner essence of all vision…””² He noted the complementary nature of these mediums, suggesting the idea that music temporally and light spatially impacts the subconscious.³ Additional musical benefits may result from the

³ Appia further explains that movement synergizes the union of art forms; see Adolphe Appia, The Work of Living Art and Man is the Measure of All Things, translated by H.D. Albright, (Coral Gables, FL: University of Miami Press, 1960), 7-8.
thoughtful unification of the mediums. In my interview with George Crumb, the composer reflected:

I don’t know why more music performances aren’t sensitive to the fact, the psychological fact, that… when the eye is released of so much concentration [for example, any kind of unnatural, bright light], the ear picks up and… the hearing becomes intensified… The power of hearing is somehow increased.\textsuperscript{4}

The synthesis of Appia’s and Crumb’s ideas results in the implication: while light can express subconscious emotion independently, it also can serve to enhance the subconscious emotions expressed in music.

Rothkopf, a composition professor at the University of North Carolina School of the Arts, completed \textit{I Dream of Coloured Inks} for two flutes and computer in December of 2013. He expanded the piece’s Max software program to include computer-controlled, colored lighting when he was given the opportunity to collaborate with the university’s lighting department. The preparation for the premiere of \textit{I Dream of Coloured Inks}, on April 30, 2014, motivated this dissertation project. I had been given the opportunity to experience the synergy of light and sound. Inspired by this experience and the concepts presented above, I sought to further study the union of these mediums.

This research has ascertained that only two composers have largely contributed to the flute and light intermedia, heretofore: George Crumb and Karlheinz Stockhausen.\textsuperscript{5}

\textsuperscript{4} George Crumb, interview by Krisztina E. Der, personal phone interview, January 12, 2017.

\textsuperscript{5} This conclusion was drawn after extensive article and dissertation searches in \textit{International Index to Music Periodicals}, \textit{Repertoire International de Litterature Musicale},
Their contributions include Crumb’s *Vox Balaenae* and *Lux Aeterna* and portions from Stockhausen’s opera cycles *LICHT* and *KLANG*. As part of this dissertation project, four American composers have been commissioned to create musical works that integrate flute music and lighting design innovatively. They are: *At Daybreak* by Anna Meadors, *Komorebi* by Kyle Rowan, *The Circle of Light* by Stuart Saunders Smith, and *And everything in-between* by Jacob Thiede. These new pieces, along with the Rothkopf, were premiered in a recital on September 17, 2016 in Brown Building Theatre at the University of North Carolina Greensboro. This document contains a detailed lighting performance guide of each composition, complemented by cinematic video recordings, scores, and composer interviews—all to provide documentation for future use and inspiration for the renewal and innovation of this genre.

I.1 Definition of Intermedia

What is the proper nomenclature for music with prescribed lighting? The idea of mixing artistic mediums has manifested itself throughout Western art history, from the time of ancient Greek *moûsike* and medieval mystery plays to the development of the opera and music theater. Before deciding on a term, however, a few initial parameters must be established.

In the broadest sense, the concept being discussed is the presence of two or more artistic mediums within a single work of art. Should these parameters be adopted,

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Dissertations and Theses Global, and WorldCat. Works lists in *Grove Music Online* were also consulted. However, it is possible that other flute and light works exist.
however, one could argue that all of artwork contains sensual overlap; for example, a musician has a physical appearance, and a recited poem in iambic pentameter has a set rhythm. A narrower definition, then, is required.

Historically, the concept of *Gesamtkunstwerk* (or “total work of art”), developed by Richard Wagner in the late nineteenth century, has been used to describe theatrical works “[involving] the fusion of different arts.” Wagner’s term, however, connotes the most extravagant, grandiose variety of the idea: the culmination of all visual and performance arts in one elaborate work (hence the “total” in “total work of art”). While Wagner’s concept has had a wide-reaching impact on theatrical music of the twentieth century, a more fitting term is required for similar works of smaller proportion.

Due to their experimental nature, these smaller-scale works have often propagated confusion in use of terminology. In music, the terms “mixed media,” “music theater,” “multimedia,” and “intermedia” have been used interchangeably to a degree that makes it challenging to determine their distinct characteristics; moreover, the terms’ relationship to the development of electroacoustic music further complicates their definition. Nevertheless, various dictionaries betray subtle differences based on etymology and time of origin. For instance, the term “mixed media” may seem most appropriate; yet, it is often associated with pioneering, theatrical compositions of the

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1960s, including those by John Cage and Karlheinz Stockhausen. These works, composed amidst the genesis of the electronic music movement, resulted in the term’s association with tape music. “Music theater” suffers a similar time-sensitive fate, being inextricably linked to post-WWI, small-scale musico-dramatic works. Interestingly, the term “multimedia” redirects to the definition for “mixed media” in both Grove’s *Dictionary Online* and the *Harvard Dictionary of Music*; and in the former, it is also used to describe computer coding in music. However, the term “intermedia,” coined by Fluxus artist Dick Higgins in 1965, is distinguished from the others by its etymology. While the term has increasingly come to suggest the incorporation of digital data and emerging technologies, “intermedia” denotes a work in which diverse media are integrated rather than merely simultaneously present.

It is true that there is overlap between the terms listed here, a natural consequence of cross-pollination and concurrent development. Nonetheless, I have determined that

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“intermedia” is the most accurate term to describe this project. Given that “intermedia” is a general term, used to describe a broad spectrum of artwork, this research will further limit itself to the study of intermedia pieces for flute with prescribed lighting.

I.2 A Brief History: Music and Light

At present, a detailed history of music and light does not exist. Indeed, the limited academic work related to this field generally focuses on musical analysis, referencing lighting as accoutrements. While an exhaustive history of the use of lighting in music is beyond the scope of this research, I have provided a brief history of music and light, followed by a brief history of flute and light. Both provide context for the lighting performance guides in subsequent chapters to spark interest in a more comprehensive study of this subject.

Note that an all-encompassing history of music and light would include large-scale, theatrical productions. Though there are many related examples of music with light in opera and ballet, these works fall outside the purview of research specifically concerned with music and light intermedia, a genre distinct in two ways: it requires smaller forces of musicians and it revolutionizes the use of the concert hall, as opposed to the theater or opera house. Using the first example of flute and light intermedia as a paradigm (George Crumb’s *Lux Aeterna*, 1971), this brief history of music and light, then, focuses attention on works written for a maximum of five musicians.

Franz Joseph Haydn’s “Farewell” Symphony H. 45, also known as the “Candle Overture,” is important to a music and light history as it is likely the first example of
concert music with lighting instruction. During a performance of the work, members of
the orchestra extinguish candles. This eighteenth century example, however, appears to
be an anomaly; the realm of music and light intermedia must wait until the twentieth
century for further advancement, perhaps a consequence of the development of the
virtuoso-centric, nineteenth-century recital à la Franz Liszt. Nonetheless, the nineteenth
century is significant in a study of music and light intermedia as an inheritor of the
tradition and spirit of the period’s large-scale works and advances in technology.

It was not until the nineteenth century that producers began to make an art of
stage lighting, with the advent of gas lighting in theaters (1816) and the later invention of
the Edison light bulb (1879). Prior to this time, lighting served merely as a function of
visibility. At the turn of the century, notable set designer and Richard-Wagner-enthusiast
Adolphe Appia, desiring to serve the “inner drama” and music of operatic works, was the
first to propose the use of “living” light, or mobile light used to create shadow in contrast
to what he called “diffused” light, a general atmosphere produced by a stationary source
of light, variable from scene to scene by color and intensity.

12 Ernest Praetorius, “Revisionsbericht,” in Symphony, No. 45, Farewell by Joseph
Haydn, I-II (Zurich: Edition Eulenburg, G, m.b.H., 1936), I.
13 William Weber, "Recital," in Grove Music Online, Oxford Music Online,
14 Oscar G. Brockett and Franklin J. Hildy, History of the Theatre, Ninth edition, (Boston:
15 See Adolphe Appia, “The Lighting,” in Penetrating Wagner’s Ring, ed. by John Louis
Drama, (Basel: Birkhäuser, 1982).
Artists of the nineteenth-century Romantic Era sought to heighten consciousness and transcend everyday experience of the world by glorifying the senses and exceeding the bounds of conventional artistic forms. This pursuit influenced the development of Richard Wagner’s Gesamtkunstwerk, though it led others to explore realms such as synesthesia, “in which stimuli to one sensory input will also trigger sensations in one or more other sensory modes,” most commonly manifesting as colored musical pitches.16 While theories pertaining to color-music connections can be traced to ancient philosophers (Aristotle, De sensu et sensibilibus), numerous instruments and artistic movements were developed to explore the color-music question, including the “Clavier à Lumières” (color organ, c. 1900) and Farblichtmusik (color-light music, 1925).17 Aleksandr Skryabin is arguably the most important composer of the early twentieth century in a study of music and light, completing what is thought to be the first composition written with color organ in 1910: the tone poem Pométhée, le poème du feu (“Prometheus: the poem of fire”).18 The instrument was designed to “produce a scale of colored lights in direct relation with the modulations and variations of tone colors” that

were then projected on a screen. Of course, technological and scientific advances aided the explosion of experimentation and invention, resulting in a wealth of currently obsolete instruments.

The development of the 1960s experimental music theater movement—characterized by small-scale, avant-garde works exploring “nontraditional relationships between… music and theater”—was the fruit of all that had come before, with the addition of a postwar economy, aesthetic, and politics. Music theater was greatly influenced by silent film, sound recording, radio, and the chamber music of Arnold Schönberg, Igor Stravinsky, and others. Composers of music theater—including musicians Luciano Berio, Harry Partch, György Ligeti, and John Cage—denounced the idea of grossly extravagant Romantic opera in favor of drama with music, even emphasizing theatrical elements over music. It is easy to suspect that the concept of music theater was also affected by the development of mixed media and perhaps even Gebrauschmusik, resulting in works for music and lighting such as Phonophonie: Four

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19 Ibid.
Melodramas by Mauricio Kagel (for two voices and other sound sources, 1963-4),
Sequenza V by Luciano Berio (for trombone, 1966), and General Speech by Robert Erickson (for trombone, 1969).^{23}

How do the early music and lighting works of the 1960s compare to works written later in the century? What has stimulated the substantial body of research in music and color, compared to the lack of research in music and light? Why has lighting design, a staple element in popular music performance practice, only recently been considered part of concert performances? How have further advances in technology influenced the use of lighting in musical compositions? These questions and others, while beyond this research’s parameters, deserve further contemplation and study.

I.3 A Brief History: Flute and Light

As with the history of music and light, the narrowed history of flute and light intermedia requires future study; a comprehensive history of flute and light intermedia is outside the scope of this dissertation project. Research conducted as part of this project has determined that the compositions with lighting that have existed in the flute repertoire were written by George Crumb and Karlheinz Stockhausen. These are, in chronological order, George Crumb’s Lux Aeterna (1971) and Vox Balaenae (1971), followed by twenty-five works by Karlheinz Stockhausen, mostly derived from his opera cycles

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LICHT: Die Sieben Tage der Woche, composed between 1983 and 2003, and KLANG, composed between 2004 and 2007. Other works may exist, but if so, they have not been discovered by this research. The lighting in these pieces will be considered, prefaced by an introduction to the composers.

I.3.1 George Crumb

American composer George Crumb is influenced by both the head and heart of music—the mechanics and the “spiritual impulse”—while connecting his compositions to the world with vast expanses of time and space. His haunting compositional style was distinguished from other composers of the 1960s both by its use of timbre as a key musical element and its loyalty to “the human in music” in a time of electronic experimentation. Perhaps the most memorable characteristic of his compositions,

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24 The composition of Donnerstag aus LICHT began as early as 1977. However, because Samstag Aus LICHT (the second in the cycle) is the first to contain flute, the years here reflect the composition from Samstag to Sonntag: “Karlheinz Stockhausen, August 22ND 1928—December 5TH 2007: Short Biography,” Stockhausen Foundation for Music, accessed December 28, 2016, http://www.karlheinzstockhausen.org/karlheinz_stockhausen_brief_bio_Menu English.htm.


26 His compositional aesthetic was established after his completion of Five Pieces for Piano in 1962; See James M. Keller, “George Crumb: An Appreciation,” from George Crumb and the Alchamy of Sound: Essays on His Music, ed. by Steven Bruns and Ofer Ben-Amots, 1-11, (Colorado Springs, CO: Colorado College Music Press, 2005), 6-7.
however, is found in their live performance and “new performance practice,” as explained in Robert Shuffet’s 1979 doctoral dissertation:

George Crumb is one of a number of composers, who during the past decade, have displayed unparalleled sensitivity to various parameters of musical performance. Deft and tasteful incorporation of virtuosity; of newly discovered instruments, instrumental resources, and sounds; of improvisation; of the contrast between counted time and psychological time; of electronic additions, alterations, and amplification; of performance space; and of theatrical aspects have been among those elements to be exploited.27

While not expressed overtly by Crumb, the concept of music theater and influence of opera has a subtle presence in his music, possibly inspired by John Cage in Crumb’s works of this period.28 According to Crumb in a 1977 interview:

The theatrics [in works composed between 1971 and 1975], such as masks, lit candles, processions, special lighting, etc., were gestures which seemed to come out of the musical ideas themselves. An idea such as a procession can be expressed in purely musical terms; if in fact it exists, it is of course made more concrete. Apart from the symbolism carried by such ideas, the aural factor of sound moving in the performance hall is also a consideration… I can’t account for all of the theatrical touches logically, except to say that they occur as part of the initial conception of a piece.29

Lux Aeterna for Five Masked Musicians (1971), the first of Crumb’s works to include lighting instructions, is also believed to be the first intermedia work for flute with light. Scored for soprano, bass flute (doubling soprano recorder), sitar, two percussionists, and optional dancer, the work features a number of theatrical effects. These include the performers’ stage direction to sit in lotus position in addition to their apparel: black masks “of the vizor or domino types” and black robes. Furthermore, two dimensions of light are indicated in Crumb’s expressive performance notes:

The stage should be totally dark before the performance begins, with the instrumentalists and the conductor in position onstage. A deep red lighting gradually comes up, at which point the soprano slowly walks on stage. She lights the candle (positioned at stage center), and the performance begins. At the conclusion of the work, the soprano walks over to the burning candle and extinguishes it. Then the deep red lighting fades to total darkness.

The text, from the Latin Requiem Mass (“May eternal light shine upon them…”) is particularly striking when juxtaposed with either the ephemeral, low red light or the fragile, fleeting glow of a candle.
In the same year, George Crumb composed the work *Vox Balaenae for Three Masked Players* (“electric flute, electric cello, and electric piano”), perhaps one of the composer’s most widely known works.\(^{34}\) In the performance notes, Crumb explains that the theatrical use of black masks effaces “a sense of human projection… [symbolizing] the powerful impersonal forces of nature (nature dehumanized).”\(^{35}\) His further directions for deep-blue stage lighting, while optional, “further [enhance]” the theatrical effect.\(^{36}\) The careful crafting of both musical and theatrical elements aid in transporting the listener to another world, providing an encompassing atmosphere and creating a symbiosis of mediums that is comparable to the text-music relationships found in German Leid—the individual mediums reinforce each other to create a completely synthesized art form that is altogether more beautiful and effective together than apart.

I.3.2 Karlheinz Stockhausen

Karlheinz Stockhausen’s music is of cosmic proportions, as are attempts at its theoretical or aesthetic analysis. The following discussion of Stockhausen’s works for flute and lighting, therefore, will not endeavor to delve the depths of their mechanics or rationale. Instead, his works will be viewed collectively as they pertain to lighting.

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A great deal of legend shrouds the enigmatic person of Karlheinz Stockhausen, not the least of which is the myth of his origins from the planet Sirius.\textsuperscript{37} He was visionary, propelling music through the twentieth century and into the twenty-first century, at times quite literally (as in his \textit{Helikopter-Streichquartett} from \textit{Mittwoch aus LICHT}) but primarily in his contributions to electronic music, extended techniques, and music theater.\textsuperscript{38} If there is a single, unifying element to all Stockhausen works, it is in his dedication to the spirituality of his music, the tenets of which are as obscure as the composer himself.\textsuperscript{39} Indeed, as explained by Stockhausen:

\begin{quote}
In my experience, it is by emphasizing the strangeness, and not trying to do away with it or diminish it, that you are more likely to reach the truth. For the moment you try to explain things that appear to be strange, and you think you have explained them, then you have completely missed their message and their importance.\textsuperscript{40}
\end{quote}

In composing his first work of music theater in 1961 (\textit{Originale: Musical Theater with Kontakte}), Stockhausen laid the foundation for his concept of intermedia, drawing on elements of Wagnerian \textit{Gesamtkunstwerk}. He did not see \textit{Gesamtkunstwerk} as “a synchronous combination of the arts—but rather an unceasing obliteration of all borders


between the arts and their integration into one…”

His interest in light dates as early as 1953, with the publication of his essay “Orientierung:”

Coinciding with his discovery of Le Corbusier [Charles-Édouard Jeanneret] and his book Le Modular, in which the Swiss architect… compares the Modulator to the equal-tempered scale in music… Mathematics, Le Corbusier declares, is a gateway to a realm of numbers by which the universe reveals itself to a mankind ‘entranced by so much dazzling, all-pervading light.’ Music rules all things, the architect avers; harmony ‘is the spontaneous, indefatigable and tenacious quest of man animated by a single force: the sense of the divine, and pursuing one aim: to make a paradise on earth. It is not just Le Corbusier’s mystical metaphor of light that touches Stockhausen, but the architect’s association of light dimension and proportion, his analogy of music with architecture, and ultimately his method of architectural design, which Stockhausen adapts as a method of composition.

The opera cycle LICHT is a culmination of these ideas; it is “Stockhausen’s attempt at creating cosmic world theater that summarizes and intensifies his lifelong concern: the unity of music and religion.” In his adaptation of Gesamtkunstwerk, “singing, instrumental music, tape sounds, movement, costumes and lighting—everything that happens musically or theatrically—is conceived as one unity.”

While a culmination, LICHT also represents the development of Stockhausen’s compositional aesthetic, as the composition of the opera cycle was a twenty-six-year process (1977-

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42 Ibid., 406.
In 1987, ten years after publishing the groundwork for the entire opera cycle, the composer described his developments in woodwind performance practice:

Even while composing for these traditional instruments, I constantly feel that I am a student on the threshold of a new development in instrumental performance. In my works since 1970, a new performance practice has been continuously developing: playing from memory; singing and playing without a conductor, and knowing the parts of the other musicians from memory; stylization of all movements, often according to detailed notation; a “concert” is either a single work without interruption, or a composition of “pieces” which are connected to each other by way of a spatial or temporal process; designing special costumes for each composition, if possible; arranging characteristic lighting for each work; avoiding all inartistic actions… Creativity itself has become content and form for each work [emphasis in original].

These are lofty statements, “arranging characteristic lighting for each work” not the least among them. They beg the question: can a performance of a Stockhausen work be considered authentic when devoid of theatrical elements? While questions of authenticity are often Gordian knots, the answer here—from Stockhausen’s perspective, at least—is clear. If all aspects of the compositions are unified, then the removal of even a single element would not be in the spirit of the composer’s intent. In the biography Other Planets, Robin Maconie implies that Stockhausen’s works, occasionally belaboring

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45 This quote is found in the publication of Ave for basset horn and alto flute; Wayla J. E. Chambo, “The Devil and the Details: Negotiating Virtuosity, Agency, and Authenticity in Karlheinz Stockhausen’s Kathinkas Gesang Als Luzifers Requiem for solo flute,” (DMA Dissertation, University of North Texas, 2015), 42.
musical ideas, are often redeemed by “the visual presentation, and especially… the sound distribution.” To confirm this conclusion, Stockhausen further established this opinion in instructing a performance of Kathinka’s Gesang als Luzifers Requiem, stating that a performance of the piece could never take place without the stage set-up (including the lighting)!47

While opera scenes have generally been determined outside the realm of this research and many of Stockhausen’s flute and light compositions were originally scenes from various operas, Stockhausen permits their performance “either staged or in a quasi concert version.”48 Many of these scenes were specifically adapted from the opera for independent performance. Of Stockhausen’s works for flute with lighting, Kathinkas Gesang als Luzifers Requiem, for instance, was originally intended for flute and six percussionists. A version for flute and electronic music was realized at IRCAM a year later (1984), in which Stockhausen expressly stipulated:

Kathinka’s Chant as Lucifer’s Requiem for flute and electronic music is a special version of the original… the 2nd scene of the opera Saturday from LIGHT. It is intended for concert performances, and may not be performed as scene 2 of the opera.49

Susani’s Echo is an even more extreme adaptation, only drawing upon musical ideas from Botschaft (or Message, a scene in Act III of Montag aus LICHT), initially intended for basset-horn, alto flute, choir, and modern orchestra. Stockhausen notes: “The flute part of Message is not completely identical with Susani’s Echo.”\textsuperscript{50} Similarly, Xi for alto flute or flute is derived from Montag-Gruss (in Montag aus LICHT), originally for basset horn; moreover, it is a realization of Stockhausen’s score by flutist Kathinka Pasveer, originally “for a melody instrument with micro-tones.”\textsuperscript{51} Stockhausen’s works, then, are considered within the parameters of music and light intermedia for purposes of this research.

Because the works for flute and light by Karlheinz Stockhausen are numerous and outside the purview of this project, further discussion of these works will be left to future study of the history of music and light. A list of solo and chamber works by the composer for flute and lighting is found below in Appendix A, confirmed by flutist and Stockhausen Foundation for Music council member Kathinka Pasveer.\textsuperscript{52}

\textsuperscript{50} Karlheinz Stockhausen, “Introduction,” from Susani’s Echo für Altflöte aus Eva’s Zauber vom Montag aus LICHT, I-III, (Kürten, Germany: Stockhausen-Verlag, 1991), I.
\textsuperscript{52} Kathinka Pasveer, e-mail messages to Krisztina E. Der, January 22 and 24, 2017.
I Dream of Coloured Inks for Two Flutes and Computer (2013), a work dedicated to me by Dr. Michael S. Rothkopf, features Max programming that controls both computer-generated sounds and stage lighting. As stated in the introduction, it was premiered on April 30, 2014, at the University of North Carolina School of the Arts in Winston-Salem, North Carolina. The preparation and performance of this piece sparked my interest in music and light intermedia, resulting in my commission of four new pieces for flute and light in the spring of 2016: At Daybreak by Anna Meadors, Komorebi by Kyle Rowan, The Circle of Light by Stuart Saunders Smith, and And everything in-between by Jacob Thiede. The commissions and premiere performance of these works were partly financed by a UNCG 2016 Summer Assistantship and UNCG Graduate School Association Thesis/Dissertation Funding.

The chapters below provide background information, aesthetic analysis, and a lighting performance guide for each piece, beginning with Michael S. Rothkopf’s I Dream of Coloured Inks. Each lighting performance guide includes a narrative of the compositions’ preparation and performance, with notes pertaining to essential equipment and personnel. If any adaptations or modifications for future production are advised, this

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53 See page 2.
information is indicated. Scores for each work are also included in Appendix B, printed here with permission from the composers for educational purposes only. Interviews with George Crumb and each composer are in Appendix D. *At Daybreak* by Anna Meadors, *Komorebi* by Kyle Rowan, *The Circle of Light* by Stuart Saunders Smith, and *And everything in-between...* by Jacob Thiede were premiered on September 17, 2016 in Brown Theatre at the University of North Carolina Greensboro (UNCG). To supplement this research, cinematic video recordings of the five works (including Michael S. Rothkopf’s *I Dream of Coloured Inks*) were created, partially funded by a 2017 UNCG Special Projects in Music Award; links to these videos are located in Appendix C.

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54 Score purchase information is provided, when available.
CHAPTER III

MICHAEL S. ROTHKOPF: I DREAM OF COLOURED INKS

III.1 Background and Aesthetic Analysis

Dr. Michael S. Rothkopf, composition faculty member at the University of North Carolina School of the Arts, has been a fellow at Columbia University, Carnegie Hall, and the National Orchestra Association.\textsuperscript{55} He earned both of his graduate degrees from Columbia University, where he studied with composers Mario Davidovsky and Normand Lockwood. Over the last fifteen years, he has been working with electronic media; and recently, he has found his work “moving in the direction of integrating music with other mediums.”\textsuperscript{56}

I was first introduced to the world of interactive music in the summer of 2013, when Dr. Michael S. Rothkopf asked me to perform an updated iteration of an earlier work, \textit{Improvisation for Flute and Computer}.\textsuperscript{57} This piece, composed in 2001, transfers


\textsuperscript{56} Michael S. Rothkopf, interview by Krisztina E. Der, personal correspondence interview, December 23, 2016.

the live interaction between chamber musicians to a single performer and technology.\textsuperscript{58}

My performance of this piece resulted in Dr. Rothkopf’s composition of a related work, \textit{I Dream of Coloured Inks for Two Flutes and Computer} (2013).

Upon close scrutiny, \textit{I Dream of Coloured Inks} contains a few seemingly contradictory ideas. One such paradox is that of a composed improvisation, though this concept is perhaps less provocative in the context of contemporary music history.\textsuperscript{59} The delicate balance of such contrasts, both those inherent to the genre of interactive music and also those specific to the piece, is precisely what makes the work exciting.

\textit{I Dream of Coloured Inks} is a composed improvisation with computer. The possibility for interaction with computer has only been available since Miller S. Puckette’s authoring of Max programming software in 1988 and the circa 1993-1994 add-on Max Signal Processing (MSP), developed by Puckette and David Zicarelli.\textsuperscript{60} This software allows for real-time computing of soundware samples, “making the computer into a complete musical instrument capable of live performance.”\textsuperscript{61}

Rothkopf’s interactive Max program models “active improvisation and interpretive musical decision-making,” simultaneously balancing the ideas of

\textsuperscript{58} Michael S. Rothkopf, “Creating Interactive Music” (paper presented at Aesthetics plus Creative Pathways: the 13\textsuperscript{th} Biannual Symposium on Arts and Technology, New London, CT, May 1-3, 2012), 100.


\textsuperscript{61} Ibid., xi.
improvisation, programming, and composition. Virtual improvisation is actualized through a series of sub-programs that analyze sound, store data pertaining to the score, make decisions based on a probability table, and respond with sound. Importantly, in *I Dream of Coloured Inks*, the program is further employed to make color decisions, sending color values to the lighting fixtures. These impressive technological capabilities make the computer a seemingly sentient artist. A symbiosis between the performers, the interactive program, and the lighting is thus attained through real-time interaction with technology.

Inspired by the color field painting of Mark Rothko and lighting art of James Turrell, Rothkopf’s original lighting concept features three pervasive lighting units that cast various color combinations behind the performers. The lighting design primarily consists of computer-improvised lighting sequences with assigned color regions at specific points of the piece. As with the computer-generated sound, a sub-program of

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63 The composer developed this Max program for earlier works such as *Improvisation for Flute and Computer* (2001).

64 For a full description of Dr. Rothkopf’s improvisatory programs, read the article “Creating Interactive Music.”


66 *I Dream of Coloured Inks* begins with yellow lighting, the Japanese letters section is green (Rehearsal E, Figure 3.2), and Rehearsal K is assigned dark, warm colors. Yellow returns with the prayer (Rehearsal M, Figure 3.3), and the piece ends with white light. See “Compositions,” Michael S. Rothkopf, *Composer*, accessed July 6, 2016, http://www.michaelsrothkopf.com/About-Us.html.
the work (“IDCIColorDecComments”) receives signals from the probability table, determining the color values being sent to the lighting units (see Figure 3.1).

Figure 3.1. *I Dream of Coloured Inks*, “IDCIColorDecComments”

*I Dream of Coloured Inks*’ title is derived from a poem by Dezső Kosztolányi (“Mostan színes tintákrol álmodom”), a whimsical reflection on the Hungarian poet’s desire to “colour in [his] life.” The stream-of-consciousness nature of the poem is reflected in Rothkopf’s improvisational aesthetic. Rather than providing harmonic guidelines from which to create an improvised melody (vertical improvisation) as is often

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67 All *I Dream of Coloured Inks* score and Max examples are used by permission (see Appendix E).
68 The poem “I Dream of Coloured Inks” is from a collection of Kosztolányi’s poems entitled *A szegény kisgyermek panaszai* (*The poor little child’s complaints*). A translation of the poem is found in the score (see Appendix B); Dezső Kosztolányi, “Mostan színes tintákrol álmodom,” trans. by Peter Zollman, in *Babelmatrix: Babel Web Anthology*, accessed July 6, 2016, http://www.babelmatrix.org/works/hu/Kosztol%C3%A1nyi_Dezs%C5%91-1885/Mostan_sz%C3%A9nes_tint%C3%A1kr%C3%A1l%20%C3%A1lmodom/en.
heard in jazz and popular musics, a series of “melodic phrase-paths” are given to the three musicians, resulting in the freedom of purely linear improvisation.\textsuperscript{69} This creates a fluid polyphonic texture, in which:

Performers are encouraged to attempt the greatest possible range of melody, rhythm, timbre, gesture and phrasing (dynamics and articulation) within the context of their improvisation. At all times the performers should maintain a sensitivity toward each other… with the goal of shaping the performance into a coherent, improvised, collaborative musical experience.\textsuperscript{70}

The poem is almost exclusively a wild, expressive list of visual colors, occasionally interrupted by a vivid image. Similarly, Rothkopf balances his linear improvisation with two contrasting features: moments of vertical improvisation, and even more dramatically, moments of entirely composed music. The latter are used to paint images from the poem: the Japanese characters and bird (Rehearsal E, Figure 3.2), and “a prayer in gold ink” (Rehearsal M, Figure 3.3).\textsuperscript{71} In the first example, the music is delicate, ornate, and intricate—an aural depiction of Japanese artistry. The second is a chorale for three voices, a rare moment of unity, with all the solemnity of Western sacred music. Like the music, the lighting design in \textit{I Dream of Coloured Inks} is balanced between artistic freedom and composed order. As suggested above, in these composed

\textsuperscript{69} Michael S. Rothkopf, “I Dream of Coloured Inks for Two Flutes and Computer Performance Notes,” in \textit{I Dream of Coloured Inks for Two Flutes and Computer} (N.p.: American Composers Alliance [BMI], 2013).

\textsuperscript{70} Ibid.

\textsuperscript{71} Dezső Kosztolányi, “Mostan színes tintákrol álmodom,” trans. by Peter Zollman, in \textit{Babelmatrix: Babel Web Anthology}, accessed July 6, 2016, http://wwwbabelmatrix.org/works/hu/Kosztol%C3%A1nyi_Dezs%C5%91-1885/Mostan_sz%C3%ADnes_tint%C3%A9r%C3%B3l_%C3%A1lmodom/en.
sections, the lighting color regions are prescribed; Figure 3.2 occurs in a computer-determined variety of green light, while Figure 3.3 is yellow.

Clearly, color is an essential element of both Kosztolányi’s poem and Rothkopf’s composition. The colors listed in the poem are not necessarily vibrant in their hue, but they are certainly vibrant (“szerméremet, szerelmes, rikitó,” or “naked, enamored, brilliant”) in their symbolism of human feeling and experience. Though the lighting in *I Dream of Coloured Inks* is optional, it enriches the emotional and psychological content of the piece, visually depicting both the poem’s imagery and the thickness of textures with progressively darker, then lighter, colors. The computer-generated lighting and sound both contribute to *I Dream of Coloured Inks*’ intricate visual-sonic symbiosis in their real-time interaction with the live performers.

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72 My own translation; in effort to maintain poetic diction, the Peter Zollman translation is not always accurate. *Ibid.*
Figure 3.2. *I Dream of Coloured Inks*, Rehearsal E

Figure 3.3. *I Dream of Coloured Inks*, Rehearsal M
III.2 Lighting Performance Guide

III.2.1 Lighting Preparation

Performances of *I Dream of Coloured Inks* without the lighting aspect are permitted by the composer; however, the lighting has gone through several variations in effort to allow its performance in varied venues and with different equipment. The world premiere and cinematic video both featured *I Dream of Coloured Inks*’ original, pervasive lighting concept (Lighting Option 1). This iteration of the lighting involves the use of three Chroma-Q® Color Force™ LED lighting units, connected to an ENTTEC DMX USB Pro interface. The Chroma-Q® Color Force™ lighting units are placed to create three vertical color regions in the performance space, similar to the color field style of a Mark Rothko painting. Ideally, the performers are also illuminated with a spotlight.

The color intensity and twenty-six-foot wash of Chroma-Q® Color Force™ lights make them the preferred lighting units for performance of *I Dream of Coloured Inks*. Because these lighting units are not readily available for purchase or rental, however, the composer has suggested several possible lighting design adaptations. Perhaps the most

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74 Note that while *I Dream of Coloured Inks*’ lighting is not addressed in the score, it is found in the piece’s corresponding Max program (see “IDClColorDecComments,” Figure 3.4 and 3.5).

75 The ENTTEC DMX USB Pro is necessary for direct communication between the Max program and the lighting units, making the interaction between human performers and visual improvisation possible; “DMX USB Pro,” ENTTEC, accessed on December 30, 2016, https://www.enttec.com/?main_menu=Products&pn=70304&show=description.


straight-forward of these is to substitute the Chroma-Q® Color Force™ units with other lighting units (Lighting Option 2). If this adaptation is endeavored, the lighting units used must be able to receive signals from three-channels.\textsuperscript{78} Other alternatives include a PowerPoint projection created by the composer, timed to transition colors with the music (Lighting Option 3).\textsuperscript{79} A fourth, unrealized option has also been proposed: the use of Jitter software to create a projection in which visual colors are determined by the Max program.\textsuperscript{80}

III.2.2 Set-up and Max Instructions

The score to \textit{I Dream of Coloured Inks} is located in Appendix B. Its corresponding cinematic video is in Appendix C. The full score with performance notes and Max program is available from the composer.\textsuperscript{81}

For all performances of \textit{I Dream of Coloured Inks for Two Flutes and Computer}, an updated version of Max software must be installed on a computer with sufficient processing capabilities (a MacBook with an Intel Core i7 or better is recommended). A

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\textsuperscript{78} Three channels enable to the computer to send the lighting units information pertaining to red, green, and blue output.

\textsuperscript{79} This option replaces the improvisatory, interactive lighting with predetermined color slides. Though this diminishes the level of visual unpredictability and excitement, it does make a performance with lighting more feasible. For this lighting option, an additional computer is needed to run PowerPoint, along with an overhead projector, appropriate cables and adapters, and a projector screen.

\textsuperscript{80} Jitter is a visual Max program add-on; see “About Max,” Cycling ’74, accessed on December 30, 2016, https://cycling74.com/products/max/.

sample version of the software can be downloaded for a month, free of charge. The *I Dream of Coloured Inks* Max program folder (or computer program for the piece) should be placed into the Max program folder to enable its launch on the computer. Similarly, the performers must ensure that the ENTTEC DMX USB Pro drivers have been installed; this information is printed in the installation instructions that come with purchase of the interface. An additional driver developed by Olaf Matthes must also be downloaded and installed.

When setting up *I Dream of Coloured Inks*, it is essential to remember that the computer screen must be visible to the performers. Similarly, the computer space bar must be accessible to the performers in order to launch the program. Loudspeakers and an external microphone are needed. Placement of the external microphone is determined by the need to receive input from both flutists simultaneously. After setting up the external microphone and speakers, the microphone should be configured as the Max Input Device. To ensure that the program is successfully receiving sound through the microphone, the “IDCIListen” object (see Figure 3.4) can be double-clicked to open the

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82 A full Max software package is necessary when a new ENTTEC DMX USB Pro is being used for the Max program to recognize the new equipment address. The same is true when setting up the Max program with lighting option 2. For the free software, see “Downloads,” Cycle ’74, accessed on December 30, 2016, https://cycling74.com/downloads/.
83 This driver gives Max software the ability to access the DMX USB Pro; see “dmxusbpro - DMX 512 external for Max,” Olaf Matthes, accessed on December 30, 2016, http://www.nullmedium.de/dev/dmxusbpro/.
84 The Max program computer screen flashes rehearsal numbers to aid the timing of the performance.
85 A headphone jack or USB microphone is sufficient. The main purpose of the microphone is to feed information into the Max program probability table, not amplify the performers’ sound.
86 This is done by going to the toolbar and selecting Options> Audio Status.
“IDCIListen” sub-program window; if the Max program is receiving input, the values in this sub-program’s tables will change with altering pitch. Other performance specifications include Rothkopf’s request that the performers wear white.

In Lighting Options 1 and 2, the three lights are located behind the performers to create three vertical color regions in the performance space. The two outside lighting units emit the same colors and can be set to the same channels; the middle lighting unit should be set to different channel. The Max program must also be set to send information to the lights on the correct channels; these channel numbers are located at the bottom portion of the Max program (Figure 3.5).

If the “dmxusbpro” object is brown, the ENTTEC DMX USB Pro drivers are not in the necessary file path; the Matthes driver must be in the Max Program folder specific to I Dream of Coloured Inks. When configured properly, the Lighting Instrument Box will allow the performers to change “None” to the ENTTEC’s address. After the appropriate address is selected, the white “X” on in the Toggle Box activates the signal from the ENTTEC to the lighting units.

The remaining Max instructions are relatively simple. Before running the piece, the lighting and sound can be reset using the “Reset Lighting” and “Reset Counter”

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87 For example, if the two outer lights are set to channel 1, they will receive red, green, and blue information on channels 1, 2, and 3. The middle light could then be set to channel 4, sending the information to channels 4, 5, and 6.

88 In Figure 3.7, the three lights have been set to the following channels, as seen in the objects with the dollar symbol (“$”): 73 (73, 74, 75), 37 (37, 38, 39), and 7 (7, 8, and 9); these numbers can only be altered in the Max program with a full Max software download.

buttons (circular objects, see Figure 3.4). To begin a performance with lighting, the “Enable Lighting” Toggle Box must be activated. Hitting the spacebar or clicking the large “Start Program” object will launch the program.\(^{90}\)

When performing with PowerPoint (Lighting Option 3), the above Max program directions apply, without the lighting unit and ENTTEC instructions. The PowerPoint lighting projection must be provided by a second computer.\(^{91}\) PowerPoint software is necessary; alternative software will not allow the colors to transition as the composer intended. The two computers should be positioned so that their spacebars can be hit simultaneously, launching the PowerPoint and Max programs in tandem.

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\(^{90}\) Upon hitting the spacebar, rehearsal letter A will flash on the Max program screen, and the lights will change from blue to yellow. The computer will only enter audibly after the flutists begin their improvisation.

\(^{91}\) A second computer allows for the use of full-screen PowerPoint presentation mode concurrent to the full-screen Max program running on the primary computer.
Figure 3.4. *I Dream of Coloured Inks*, Max Program, Top of Screen
Figure 3.5. *I Dream of Coloured Inks*, Max Program, Bottom of Screen
CHAPTER IV

ANNA MEADORS: AT DAYBREAK

IV.1 Background and Aesthetic Analysis

Maryland-born composer and saxophonist Anna Meadors’ growing accomplishments include the 2015 New York City premiere of her chamber opera Manifesto on the Ledge; a 2016 album release with the “punk jazz fuzz rock” saxophone, bass, and drum trio Joy on Fire; and receipt of the Naumburg Doctoral Fellowship at Princeton University, where she is pursuing a Ph.D. in composition. During Meadors’ graduate studies at the University of North Carolina Greensboro, I was given the opportunity to premiere her work Of Lightness for thirteen musicians. In February of 2016, after receiving the UNCG Summer 2016 Assistantship to help fund my flute and light premiere project, I commissioned her to write a work for flute with a lighting component. At Daybreak for flute and percussion was completed in August of 2016 and revised after initial rehearsals later that month.

Though composing a work from an extramusical concept is not Meadors’ typical modus operandi, At Daybreak was inspired by Italian author Italo Calvino’s short story about the origin of light with the same title. According to Meadors:

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[Italo Calvino’s story] was about the creation of light, a humor story where space matter is personified. His language had so many descriptors that I thought could be applied to musical ideas, so I decided to challenge myself to try to come up with musical ideas in response to his phrases. Each section has the quote from the story that inspired the musical material, only for the musicians to see, as a way to set up the musical expression I was going for. For example, the first quote is “We were underneath, as if we had been tucked in under a layer of fluid, grainy matter. There was no way of telling time...” which became the flutt... 

At Daybreak —scored for glockenspiel, almglocken, crotale, suspended cymbal, and kick drum—is a study in visual and sonic color. Changes in musical ideas are supported by changes in visual color, together depicting the atmosphere and course of Italo Calvino’s story. Musically, the piece’s gradual opening is nebulous, characterized by a sparse timbral trill motive (Figure 4.1) and fragmented gestures illustrating “faint bursts of laughter.” It is complemented by very cool-colored, slow-moving lighting.

This slow “shift[ing] and chang[ing]” (Figure 4.1) foreshadows the dynamic nature of Meadors’ lighting concept. Soon, the composer not only asks for movement of the colored lighting, but also for change in the speed of the lights’ movement (Figure 4.1

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94 This is a Calvino quote in the score; Anna Meadors, At Daybreak, (N.p.: Self-published, 2016), 2.
95 Ibid., 1.
and Figure 4.2). The resulting fluid, animated movement of the lights evokes a sense of powerful mystery and energy.

In *At Daybreak*’s opening, the visual and sonic elements thus serve as a gestation similar to the formation of a star: particles unifying through nuclear fusion and the gravitational pull of density enhancements and perturbations. The timbral trill and “laughter” gestures become more frequent, thrusting *At Daybreak* forward to a culmination, where the speed of the shifting lights is increased (Figure 4.2).

![Music notation](Image)

**Figure 4.1.** *At Daybreak*, m. 1, Timbral Trill and Cymbal Roll

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97 “Beneath us, the nebula’s matter, instead of fluid as it had always been, was beginning to condense;” see Anna Meadors, *At Daybreak*, (N.p.: Self-published, 2016), 3.

98 Changes in speed of lighting movement occur two additional times. There is a single moment when the composer asks for the sudden suspension of all light movement in the groove section described below (Figure 4.4). The original, slow shifting of the lights return at the end of the piece after a sudden blackout.

99 All *At Daybreak* score examples are used by permission (see Appendix E).
Figure 4.2. *At Daybreak*, Beginning of m. 30, Cymbal Solo

The second section of *At Daybreak* is a contrast to the first, visually and sonically. The nebulous rhythms are abandoned for a formulaic pattern developed from a small motivic gesture (Figure 4.3). As the groove evolves, the motive is altered, ornamented, and subjected to unique textural transformations; it is characterized by dovetailed, quasi-*fortspinnung* (or, “spinning-out”) passages between the flute and glockenspiel, in a manner similar to Richard Wagner’s “Magic Fire Music” from *Die Walküre* in its glimmering relentlessness. A kick-drum is also added to the instrumentation, contributing a sense of weight and propulsion.

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100 The accompanying Calvino quote is: “We were peering into this darkness, crisscrossed with voices, when the change took place…”; Anna Meadors, *At Daybreak*, (N.p.: Self-published, 2016), 4.

While the lighting design retains its dynamic quality, the essence of its change is no longer found in its accelerated or decelerated movement. Instead, the changes in this section are characterized by a shifting of the prevalent color. Red and other warm colored lights are gradually added to the lighting design as the groove develops. Similarly, at the climax of the piece, the performance space is abruptly “engulfed” in “only” white or yellow light before it is thrust into complete darkness (Figure 4.4).

The life of a star is cyclical. Just so, *At Daybreak* ends with the visual and sonic material from the beginning of the piece. Meadors’ intermedia composition for colored light and music thus vibrantlly expresses “the arc of [Calvino’s] story, before light, the

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buildup, the creation of light, and then its disappearance again, at nightfall,” transferring the palpable energy of Calvino’s language to live performance:

We were all burning in the fire. Or rather: we weren't burning, we were immersed in it as in a dazzling forest; the flames shot high over the whole surface of the planet, a fiery air in which we could run and float and fly, and we were gripped with a new joy.103

IV.2 Lighting Performance Guide

The *At Daybreak* lighting score is in Appendix B. Its corresponding cinematic video can be found in Appendix C. The full score with performance notes is available from the composer.104 To facilitate *At Daybreak*’s performance, Meadors has made allowances for performances of *At Daybreak* without lighting. She has also proposed projecting a color video following the lighting score, should a performance occur in a space with insufficient lighting equipment.105

If a full performance with lighting is endeavored, a third member of the ensemble is required: a lighting designer.106 The role of the lighting designer is two-faceted; prior to performance, he or she must construct an interpretation of Meadors’ lighting score and, in performance, execute the lighting score with the musicians. A performance of *At

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105 Anna Meadors, interview by Krisztina E. Der, personal correspondence interview, December 12, 2016.
106 A lighting designer may be unnecessary if a lighting video is created.
Daybreak with real-time manipulation of the lighting instruments is conceivable; however, if a memory lighting board is available, the lighting designer may prefer to program a preset lighting sequence.\textsuperscript{107} Ideally, the lighting designer should be able to read music, enabling him or her to follow the score while operating the lights.\textsuperscript{108}

The lighting instructions provided by the composer are broad. This gives the lighting designer the flexibility to create within the lighting score’s parameters. For instance, the lighting equipment and colors are never specified; additionally, the mechanics for “shift[ing]” the colored lights are left unexplained. These omissions make At Daybreak’s lighting concept adaptable, allowing the lighting designer to interpret the lighting score in a manner that suits the capabilities of the available lighting equipment.\textsuperscript{109}

My performances of At Daybreak have emphasized primary colors (blue, red, and yellow) in the lighting design to further stress the primal nature of Italo Calvino’s etiological myth.\textsuperscript{110} The moving lights were not facilitated by the movement of the lighting units. Instead, certain lighting units were designated to generate the primary color (blue, red, or yellow), with secondary units providing short bursts of another color.

\textsuperscript{107} A preset lighting sequence gives the lighting designer the ability to move from one lighting cue to the next with the push of a single button, allowing for smoother transitions and greater precision.

\textsuperscript{108} If such an individual is unavailable, a collaboration between the lighting designer and another musician in the lighting booth is advised.

\textsuperscript{109} Anna Meadors, At Daybreak, (N.p.: Self-published, 2016), 1.

\textsuperscript{110} This lighting design interpretation was first pioneered by lighting technicians Katie Martin and Jonas Hess in my premiere performance and later developed by Katherine Ward for the cinematic videos.
across the stage to give the illusion of motion. A final note to the lighting designer: in order to prevent flash blindness for the performers and audience, each large-scale lighting transition should occur as gradually as possible.

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111 For example, in my performances of the opening, the primary lighting units cast a deep blue light, while the secondary lights slowly flashed purple across the stage.

112 This is especially important in the addition of the prominent red light, and, finally, the change to white or yellow light.
CHAPTER V

KYLE ROWAN: KOMOREBI

V.1 Background and Aesthetic Analysis

A recent Ph.D. graduate of the University of California San Diego, Dr. Kyle Rowan is a composer with a dedication to creating dynamic textures, an interest in composing small-scale opera, and an attentiveness to time structures.\textsuperscript{113} He has been commissioned by the Kallisti Ensemble, the Palimpsest Ensemble, the Austin Flute Project, and the San Diego State Wind Symphony, among others. I met the composer at SoundSCAPE Composition and Performance Exchange in Maccagno, Italy, July 2011, where I was given the opportunity to premiere his work \textit{Tercets, expanding} for flute, clarinet, and saxophone.\textsuperscript{114} Aware of Rowan’s interest in opera, I introduced the composer to my intermedia project in February of 2016 after securing the UNCG 2016 Summer Assistantship. He agreed to a commission, completing the work \textit{Komorebi for solo flute and light} on August 17, 2016.

\textit{Komorebi} is a duo for flute and light, in which the two mediums are both responsive to each other and irrevocably intertwined. Rowan’s lighting concept is

\begin{flushright}
\end{flushright}
characterized by four shifting shadows, each directed toward a different colored light. According to Rowan, these shadows even influenced the sound world of *Komorebi*:

The shifting of the shadows made me think about shading the flute timbre in different ways—through harmonics, multiphonics, airiness vs. full tone, microtonal fingerings, etc. So the piece became very much about these subtle shadings, especially microtonal fingerings and multiphonics... Ultimately the piece is not specifically programmatic—the title [*Komorebi*] came at the end, as I thought about the flickering and shading that resulted from these techniques and how it's like an interplay of light and shadow. I came across the term *komorebi* online somewhere in a Google-driven title hunt, and thought the phenomenon of light flickering through the trees in a forest as being a perfect fit to what happens sonically—it's simultaneously about the way the light finds its way through tiny spaces between leaves, the way the leaves block the light to create shadow, and the way the movement of the leaves creates a shifting texture on the ground...  

Upon studying the lighting score, each color loosely correlates with a different musical motive (see Table 5.1). Blue (Light 8), for instance, occurs with harmonics, while green (Light 7) is assigned to microtones. Purple (Light 5) and yellow (Light 6) are less straight-forward; however, purple light occurs with articulated passages (both lyrical or pointillistic), and yellow light is eventually associated with airiness or multiphonics. Furthermore, each of these colored lights have a corresponding shadow. Figure 5.1 is a diagram of the lighting design from the first page of the composer’s lighting score; it is

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116 Kyle Rowan, interview by Krisztina E. Der, personal correspondence interview, December 6, 2016.
best understood with Figure 5.2, which illustrates the direction of each shadow cast. In both figures, the numbers 1 through 9 are used to label each light; Lights 1 through 4 cast shadows, and Lights 5 through 9 emit color.

Table 5.1. *Komorebi*, Visual and Sonic Correlations

<table>
<thead>
<tr>
<th>Color</th>
<th>Shadow</th>
<th>Associated sonic motive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light 5 (Purple)</td>
<td>Shadow 3</td>
<td>Articulated Passages</td>
</tr>
<tr>
<td>Light 6 (Yellow)</td>
<td>Shadow 4</td>
<td>G-sharp, later airiness and multiphonics</td>
</tr>
<tr>
<td>Light 7 (Green)</td>
<td>Shadow 1</td>
<td>Microtones</td>
</tr>
<tr>
<td>Light 8 (Blue)</td>
<td>Shadow 2</td>
<td>Harmonics</td>
</tr>
<tr>
<td>Light 9 (Orange)</td>
<td>None</td>
<td>Orange spotlight</td>
</tr>
</tbody>
</table>

Figure 5.1. *Komorebi*, Lighting Design

117 All *Komorebi* score examples are used by permission (see Appendix E).
Because the sonic and visual components of the work are so closely tied to each other, it is impossible to analyze the former without considering the latter. The symbiotic relationship of the two mediums is especially evident when considering the form of the work. The instructions for the orange center spotlight (Light 9) betray the piece’s simple binary form. This light is engaged for nearly the entire duration of the piece, with two exceptions: at the very beginning, and again at Rehearsal D. If these lighting cues are considered indicators of larger structural forms, the resulting sections (A and A’) appear to have subsections with nearly identical motivic content (see Table 5.2).

While the second section (A’) does not necessarily adhere to the motivic order of the first section (A), the corresponding subsections do feature the same motivic elements.

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The primary difference between the two sections is found in A’, where the ideas from A are both expanded and subjected to variation.\textsuperscript{119}

Table 5.2. \textit{Komorebi}, Formal Structure

<table>
<thead>
<tr>
<th>A</th>
<th>A’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Page 1, System 1 motives:</strong></td>
<td><strong>Rehearsal D motives:</strong></td>
</tr>
<tr>
<td>● A-flats</td>
<td>● G-sharps (air tone)</td>
</tr>
<tr>
<td>● No light, Light 9 fades in.</td>
<td>● Light 9 fades out and back in.</td>
</tr>
<tr>
<td><strong>Page 1, System 2 motives:</strong></td>
<td><strong>Rehearsal E and F motives:</strong></td>
</tr>
<tr>
<td>● Articulated passages</td>
<td>● Articulated passages</td>
</tr>
<tr>
<td>● A-flat to B-flat gesture</td>
<td>● A-flat to B-flat (8va) gesture</td>
</tr>
<tr>
<td>● Harmonics</td>
<td>● Microtones</td>
</tr>
<tr>
<td>● Microtones</td>
<td>● Rehearsal F, Harmonics</td>
</tr>
<tr>
<td><strong>Rehearsal A motive:</strong></td>
<td><strong>Rehearsal G motive:</strong></td>
</tr>
<tr>
<td>● Microtones</td>
<td>● Microtones</td>
</tr>
<tr>
<td><strong>Rehearsal B motives:</strong></td>
<td><strong>Rehearsal H, I, and J motives:</strong></td>
</tr>
<tr>
<td>● Articulated passages</td>
<td>● Articulated passages (airiness)</td>
</tr>
<tr>
<td>● Harmonics</td>
<td>● Harmonics</td>
</tr>
<tr>
<td>● Microtones</td>
<td>● Microtones</td>
</tr>
<tr>
<td><strong>Rehearsal C motive:</strong></td>
<td><strong>Rehearsal K and L:</strong></td>
</tr>
<tr>
<td>● Articulated passages (lyrical)</td>
<td>● Articulated passages (lyrical)</td>
</tr>
<tr>
<td></td>
<td>● Multiphonics</td>
</tr>
<tr>
<td></td>
<td>● Harmonics</td>
</tr>
</tbody>
</table>

\textit{Komorebi} is at essence a game of color and shadow, both with lighting and sound. The lighting score discloses subtleties of this game that may be otherwise overlooked. As described in Table 5.1, the lighting generally serves as a visual cue corresponding to sonic motive; however, the shadows in the piece also provide the work direction. In some cases, they literally foreshadow the use of color. An instance of such foreshadowing

\textsuperscript{119} For instance, A’ includes extended techniques not found in A, such as airiness, multiphonics, and microtonal glissandi reminiscent of Karlheinz Stockhausen’s \textit{Xi}.\textsuperscript{119}
occurs in the third system of the work, where Shadows 2 and then 1 are both briefly visible (Figure 5.3). Shadow 2 occurs with a harmonic, stretching in the direction of the blue light with which it is later associated (Light 8). Similarly, Shadow 1 fades in and out over a series of E-flat microtones, toward the green light (Light 7) to which it later corresponds.

If shadows give Komorebi visual direction, special attention must be given to those sections which either contain many shadows or none at all. In some cases, the use of colors, shadows, and sonic motives correspond exactly as prescribed in Table 5.1.120 At other places, the shadows appear independent of their corresponding colors, though with their sonic motives (Figure 5.3, above).

In contrast, there are two points in Komorebi where all the shadows fade in and out haphazardly (Rehearsal C and H). These sections create a visual tension in their confused direction, generating both suspension and eventual propulsion toward a resolution in the manner of a tug-of-war rope. According to Table 5.2, the visual tension in A’ occurs slightly before the visual tension of A. This is done, however, to facilitate

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120 For example, at Rehearsal G, multiphonics and articulated passages are featured with green and purple light (Lights 7 and 5) and the corresponding Shadows 3 and 5.
the expansion of A’ and allow for the introduction of a new, suspended atmosphere in Rehearsal K to the end. The visual tension that precedes Rehearsal K drives *Komorebi* to an ending featuring pure, colored light, devoid of shadow. All four shadows puckishly return on the last note of the piece for a final instance of visual suspension.

*Komorebi* is an earnest study in the synergy of light and sound media. While both mediums are exploited for their individual techniques and potential theatrical elements, they are combined in a manner that makes it impossible to consider one without the other. Furthermore, the intricate, delicate symbiosis conjured in *Komorebi* is precisely what gives music and light intermedia its kinetic potential.

V.2 Lighting Performance Guide

As a duo for flute and light, *Komorebi* requires real-time manipulation of the lights; therefore, its performance requires a venue with adequate lighting equipment. Rowan’s original lighting concept requires nine different lighting units, each controlled by a fader (Lighting Option 1).121 In my video recording session at the University of North Carolina Greensboro’s Brown Building Theatre, the ETC Ion lighting board submaster faders were programmed for real-time, human performance.122 However, I was

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121 Both preset and memory lighting boards are capable of live control of these lighting units. The latter is achieved by programming the memory lighting board submasters.

unaware of how lighting presets could be assigned to submaster faders until after the premiere performance. For the premiere, my lighting designer programmed the Brown Building Theatre lighting board with a preset lighting sequence, akin to tape music (Lighting Option 2).

Rowan is also open to other lighting variations, should a performance venue be limited technologically or spatially:

I am in favor of adapting my own piece for different spaces as necessary. It wasn't designed for a specific space, and I am generally in favor of reasonable accommodations when strict adherence to the letter of the score would prevent it from being played at all. For example, the way the lighting is designed, it could be done with three instead of five colors, with a left-center-right design [Lighting Option 3], or even with just changing the color globally if necessary [Lighting Option 4].

On September 29, 2016, I performed Komorebi with a variation of Lighting Option 4 in a University of North Carolina Pembroke guest artist recital. After familiarizing the composer with the constraints of the concert space, he recommended I perform the work with five different global lighting changes that were preset into the performance space’s lighting system. I thus assigned each lighting preset to a different color number (Lights 5-9) and had my lighting technician change the global setting at each light entrance in the lighting score.

According to the composer, Brown Building Theatre was not the ideal performance space for the Komorebi. Rowan originally envisioned a larger venue that

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Kyle Rowan, interview by Krisztina E. Der, personal correspondence interview, December 6, 2016.
allowed for both greater spatial isolation of each color area and long, Alberto Giacometti-like shadows (Figure 5.1). Thus, neither my premiere performance or cinematic video recording fully captured the composer’s original visual concept.

A duo requires the collaboration of a second performer, and a lighting technician is essential to all variations of Komorebi’s performance. The lighting technician must be able to read music, or be assisted by someone who can. In Lighting Option 1, with the live manipulation of lights via submasters, I used two lighting technicians: one to perform the four shadow parts and the other to perform the five color parts. One lighting technician was sufficient for Lighting Options 2 and 4.

Three errata exist in the current lighting score in Appendix B.124 At Rehearsal K, the shadows should fade out on Lights 2 and 4, not Lights 1-4. At Rehearsal letter L, the fade out on Light 6 (Yellow) should be deleted and left on until the fade out notated on the next page. Finally, the yellow light at Rehearsal D should be Light 6, not Light 5, as notated. The full score, with performance notes and fingerings, is available from the composer.125 Its corresponding cinematic video can be found in Appendix C.

124 These corrections are from the composer, communicated in an email; Kyle Rowan, “Re: Komorebi permissions and questions,” email message to author, January 26, 2017.
CHAPTER VI

STUART SAUNDERS SMITH: THE CIRCLE OF LIGHT

VI.1 Background and Aesthetic Analysis

Maine-born composer and percussionist Stuart Saunders Smith has faithfully communicated his artistic voice—a receptive, eclectic aesthetic often including theatrical elements—throughout his compositional career.126 Dr. Smith was a composition and theory professor at the University of Maryland Baltimore County during my undergraduate studies at the school. While I never personally studied with the composer, I had abundant opportunity to listen to performances of his compositions. In contemplating my commission project for this dissertation in February of 2016, Dr. Mark Engebretson suggested I contact Dr. Smith to determine if he might be interested in this dissertation project.127 Dr. Smith accepted my commission, writing The Circle of Light: A Ceremony for solo flute and eight lumanists in a mere few weeks; I received the completed work on March 8, 2016.128

The Circle of Light: A Ceremony for solo flute and eight lumanists epitomizes a solemn sense of ritual in its complete entity. Moreover, it unifies those experiencing a

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127 This commission was funded through a UNCG 2016 Summer Assistantship.
128 By “lumanist,” Smith refers to performers holding flashlights under their faces. This term is rare and, in fact, may have been coined in this context by the composer.
performance of the piece in their mutual experience. The piece must therefore be
analyzed holistically, with each element examined in light of the whole. While this unity
is certainly reminiscent of Richard Wagner’s and Karlheinz Stockhausen’s concepts of
Gesamtkunstwerk, it is best attributed to the influence of nineteenth-century New England
Transcendentalism’s social and spiritual focus on “Oneness” in Smith’s work.129

This “Oneness” does not equate to homogeneity of ideas and individual
voices. Rather, each person’s divine worth grants them autonomy of
thought and agency… Amongst the Transcendentalist notions displayed
in Smith’s music, pacifism and anti-technologism appear in his use of
intricate rhythms. A Thoreauvian anti-materialism can be found in
Smith’s limited use of instrumentation… Moreover, the
Transcendentalist non-teleological stance is reflected in Smith’s
tendency to write evening-length pieces that disregard form… Finally,
the idea of Oneness is demonstrated through Smith’s endeavor to level
the roles of composer, performer, and audience, shown particularly in
works that Smith categorizes as “trans-media systems,” “mobile
compositions,” and “co-existence pieces.”130

Smith’s organic compositional process is yet another manifestation of the
Transcendental ideas considered above. No single element is ever contrived or
engineered. Instead, an entire piece is developed from a series of acceptances, beginning
with a title. As explained by the composer:

The whole world is vibrating at different speeds, and if you are attentive
and at first non-judgmental, you will receive the sounds and proceed

129 For more information on Wagner’s idea of Gesamtkunstwerk see page 4, and for
Stockhausen’s adaptation of the idea see page 15; José Augusto Duarte Lacerda, “Self-
Actualization: Transcendentalist Discourse in the Work of Stuart Saunders Smith,” (DMA
dissertation, Bowling Green State University, 2015), iii.
130 José Augusto Duarte Lacerda, “Self-Actualization: Transcendentalist Discourse in the
Work of Stuart Saunders Smith,” (DMA dissertation, Bowling Green State University, 2015), iii.
with what you’re doing. So, it’s a listening process, not a making process. It’s a receiving process rather than pushing things around with ego and engineering skills. So, I start with a pitch, I listen to that pitch, and of course it’s a vibration. So, I listen to see what that pitch wants next. Then I find that pitch, and then I do the same with the two pitches. Then I hear another; and then once you have about three pitches, the rest of them come rather easily to form little phrase-lets and a large phrase. Then I do it again, and again and again. And then wonder how this all wants to cohere together formally; but, again, that emerges from the details, not the details forming a form. And then, I go back and I allow my listening to dictate the durations of all the different pitches. And that’s changed over the years as I’ve become more sensitive to what the pitches want. And then I get those in and do the entire work like that. Then I begin to add dynamics in order to let the player know what the small phrases are in their relationship to the larger phrase.\footnote{Stuart Saunders Smith, interview by Krisztina E. Der, personal phone interview, November 15, 2016.}

Therefore, while \textit{The Circle of Light’s} nested rhythms and free form may indeed be allusions to Transcendental anti-materialism and anti-technologism, at a more basic level, they are simply the result of a deeper kind of “Oneness:” that of conscious sensitivity to the vibrations of the world.

The flute writing in \textit{The Circle of Light} is remarkably lyrical in its distinctive use of large intervals (Figure 6.1).\footnote{This compositional style is characteristic of Smith’s contributions to flute repertoire since his composition of the duo \textit{Women in meeting}; see Stuart Saunders Smith, \textit{Women in meeting: for two flutes}, (Baltimore, MD: Smith Publications, 2005).} Indeed, the composer’s disregard of the instrument’s registral limitations result in expressive, expansive melodies that soar with the abandon of Icarus. These large intervals, combined with the piece’s complex rhythms, contribute to the sense of natural, unconstrained singing—as in humming or crooning—resulting in a unique atmosphere that is simultaneously unobtrusive and pervasive.
Musically, *The Circle of Light* is comprised of a few recurring melodic phrases that are varied and transformed throughout the work, interspersed with either fragments from the recurring phrases or gestures that occur a single time. Of these, the primary recurring theme (Figure 6.1), found in the first three systems of the piece, gives the entire work a sense of unity and familiarity.\(^{133}\)

The key to the lighting performance of the piece is found in its subtitle, *A Ceremony for solo flute and eight lumanists*. The work is to be performed in darkness, the flutist entering the stage after all lights have been extinguished. Eight lumanists slowly surround the flutist in a semicircle, holding flashlights under their faces.\(^{134}\) At the conclusion of the flute solo, the lumanists individually turn off their flashlights and recite text written by the composer in the darkness (Figure 6.3). Eighty-nine seconds of silence are observed, followed by the performers’ exit. The stage lights then take fifty-five seconds to rise; and the composer has “gently asked the audience not to have applause,” their inaction serving as a form of active participation.

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\(^{133}\) Figure 6.1 is the piece’s most frequently repeated—but also the most varied and fragmented—series of phrases.

\(^{134}\) The formation of the semicircle should take the entire duration of the flute solo, approximately ten to thirteen minutes.
Figure 6.1. *The Circle of Light*, Systems 1-3, Central Theme

Figure 6.2. *The Circle of Light*, System 17, Variation of the Central Theme

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135 *The Circle of Light*, by Stuart Saunders Smith. Copyright Sonic Art Editions. All *The Circle of Light* score examples are used by permission of Smith Publications, 54 Lent Road, Sharon, VT 05065. (See Appendix E).
Figure 6.3. *The Circle of Light*, Text

*The Circle of Light* creates a unifying social environment between the performers, audience, and composer in a manner more subtle than the “‘trans-media systems,’ ‘mobile compositions,’ [or] ‘co-existence pieces’” mentioned above.\(^{136}\) Instead, *The

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\(^{136}\) It could be argued, however, that *The Circle of Light* is type of “co-existance piece,” with the concurrence of two loosely-related performances: that of the flute and the lumanists. José Augusto Duarte Lacerda, “Self-Actualization: Transcendentalist Discourse in the Work of Stuart Saunders Smith,” (DMA dissertation, Bowling Green State University, 2015), 88-98.
Circle of Light equalizes its active participants—all involved in the giving and receiving of the music—experientially. According to Smith:

[The function of the lumanists is] to have the visual element of a kind of disembodied spirit gradually surround the sound of the flute and hold it, as well as create a kind of simple design of humanity to hold it. And then, at the end, act like a Greek chorus—literally, like a Greek chorus. Greek chorus’ commented on the plot in Greek literature. This piece, the Greek chorus comments on the title, the theatrical moment they find themselves in, and the flute music—because you are singing, and it says, “we all sing…” light comes in community… we are responsible for each other’s light and enhancing each other’s light. And I think that that feeling—not idea, but feeling—comes across… [the lumanists are] holding [the flutist]. They’re holding the sound as if it was their sound; and then as a chorus commenting on [the flutist’s] singing and saying to the audience, “we all sing,” and that means the audience, too, because they just sang. And what they just sang was The Circle of Light in their ears and mind...137

The Circle of Light thus achieves “Oneness” between many disparate elements. The composer experienced the vibrations that organically determined the piece’s mechanics; furthermore, all those experiencing the piece participate in its performance. Composer, flutist, lumanists, audience, music, light—these “All sing.”138

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137 Stuart Saunders Smith, interview by Krisztina E. Der, personal phone interview, November 15, 2016.
VI.2 Lighting Performance Guide

_The Circle of Light_ performance notes and final page of the score are in Appendix B. A complete copy of the score is available from Smith Publications. The corresponding cinematic video can be found in Appendix C.

A lighting designer is not necessary for the piece’s performance; however, the lighting instructions for the end of the piece will require a manual or programmed 55-second fade-up. Because _The Circle of Light_ is to be performed in the dark, the flute solo requires memorization. The performance program should include a note asking the audience to hold applause both before and after _The Circle of Light_. To ensure this instruction is not overlooked in my performances, I have made a brief announcement about the piece at the beginning of the concert, asking the audience to refrain from applauding and also informing them of the dark performance environment.

The composer has stressed the importance of having eight lumanists, no fewer. All performers should wear black. The composer does not give many specific lighting instructions, leaving many visual elements of the piece open to interpretation. For example, while Smith clearly instructs for the use of eight flashlights, the type of flashlight is not specified. The flashlights I procured for _The Circle of Light_ performances are uniform, each emanating the same amount of light. Because the flashlights are to be rhythmically extinguished one by one at the end of the flute solo, I decided that it was

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best to use flashlights that make an audible clicking sound when turning them off. I also determined that the flashlights should be held so that the face of each luminist is illuminated as comfortably as possible, with the lumanists’ arms resting at the their sides, as this position must be held for an extended period of time.

In the performance notes, the composer asks for the lumanists to enter the stage “one by one,” with their flashlights on and in position. Smith only instructs that the lumanists form a semi-circle. The path they take will vary depending on the nature of the performance space. For instance, the “T”-shape in Figure 6.4 is a depiction of the lumanist path taken for the cinematic recording (Appendix C), but the lumanist path in the premiere performance was different, as a projection screen was positioned at upstage center. Many other performance alternatives are possible.

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140 The extinguishing of each flashlight is a quarter note in an 8/8 measure.
142 For performance, I used phosphorescent gaffer tape to spike the path and standing place for each lumanist (see Figure 6.4).
143 For example, the odd-numbered lumanists could cross from stage right to arrival points at stage left and the even numbered lumanists could cross from stage left to arrival points at stage right, should that be deemed more visually appealing. Nor is it necessary for the performers to enter in the alternating fashion I employed. Other considerations may include lumanist height.
After the premiere, Smith determined that, in order to maintain visual interest, the lumanist semicircle should take as long as possible to form within the duration of the flute solo.\textsuperscript{144} The composer also suggested that the lumanist entrances be timed irregularly.\textsuperscript{145} Upon arrival to their place in the semicircle, the lumanists should endeavor to look purposefully in a single direction, standing as still as possible. Because most of the lumanists are required to maintain this position for over ten minutes, appropriate shoes are advised. Additionally, lumanists should be warned not to lock their knees in performance.

\textsuperscript{144} For the cinematic recording (Appendix C), the lumanists counted to five for every step toward their positions in the semicircle.

\textsuperscript{145} To accomplish irregularly-timed entrances for the cinematic recording (Appendix C), I gave each lumanist a different number to count before their entrance. They began counting this number upon the preceding lumanist’s arrival to the appropriate marked position.
The location of solo text performers A, B, C, and D is not stipulated in the score. The text, written by the composer, should be performed as described by the composer (Figure 6.3): in a “normal conversational voice—not overly dramatic.” “If you don’t try to act, then the acting is superb.” Nonetheless:

Make sure that each performer says their lines clearly and at a dynamic level that can be very well perceived by the audience. And... make sure that they articulate the ends of words.

The final line of text is to be performed by all of the luminists in unison: “when they’re saying things together, they’ve got to be right on the money; they’ve got to be absolutely together.” This is a challenging task, especially as the text must be performed together in the dark, without the aid of visual cues. For this reason, I have devised the solution illustrated in Figure 6.5, suggesting the adoption of the illustrated rhythm to assist with the luminists’ unison delivery of the text. I have asked Performer A—the first lumanist to speak—to lead the ensemble with an audible breath (the “inhale” in Figure 6.5) signaling the two-sixteenth-note anacrusis. This rhythm also allows for the appropriate stress of the word “All,” yet again emphasizing the piece’s many layers of “Oneness.”

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146 For both the premiere and the recording, I decided to evenly space my speakers: Performer A was lumanist 1, B was 2, C was 5, and D was 6. Moreover, I deliberately sought to include both female and male speakers in all performances.


148 For further insight, Smith recommended the following resource: David Mamet, *True and False: Heresy and Common Sense for the Actor*, (New York: Pantheon Books, 1997); Stuart Saunders Smith, interview by Krisztina E. Der, personal phone interview, November 15, 2016.

149 Stuart Saunders Smith, interview by Krisztina E. Der, personal phone interview, November 15, 2016.

150 Ibid.
Figure 6.5. *The Circle of Light*, Solution for Final Line of Text
CHAPTER VII
JACOB THIEDE: AND EVERYTHING IN-BETWEEN

VII.1 Background and Aesthetic Analysis

Currently a PhD student at the University of North Texas, composer Jacob Thiede’s works have been premiered by the Red Clay Saxophone Quartet, the Italian 15.19 Ensemble, and the STACKS Duo, among others.\(^{151}\) He has had works selected for performance at the 2016 and 2017 National Student Electronic Music Event, the latter of which involved my performance of *And everything in-between: For Flute and Computer*.\(^{152}\) I was first introduced to the composer’s thoughtful, enthusiastic compositional aesthetic in a UNCG Laptop Ensemble course, during the composer’s graduate studies at the University of North Carolina Greensboro. After receiving the UNCG 2016 Summer Assistantship, I contacted Thiede about composing for this dissertation project. He accepted my commission, completing the score to *And everything in-between: For Flute and Computer* on July 16, 2016. The accompanying Max program went through a series of revisions and was completed on August 21, 2016.


Does all music have a narrative, or at least a narrative arc? How might preconceived notions of narrative inform an answer to that question? Such considerations are of interest to Thiede; *And everything in-between* demonstrates both the observing and defying of traditional narrative structures. As the composer mused: “I like to think that [*And everything in-between*] defies what we conceive as [concrete elements of narrative].”¹⁵³ Yet:

There really is definitely a narrative… We need to talk about the balance between the abstract and concrete elements in art, because you can’t escape them…¹⁵⁴

Thiede began his compositional process with the conception of its framework: a large ternary form, according to the composer.¹⁵⁵ While *And everything in-between* may loosely follow an ABA’ structure, however, it also hints at a through-composed technique with a fluid transformation and processing of musical ideas. Of these, the most striking is a descending perfect-interval motive (see figure 7.1).¹⁵⁶ For instance, at the B section (Figure 7.2): “[the listener is] kind of teased and [the perfect interval motive is] cut off

¹⁵³ Jacob Thiede, interview by Krisztina E. Der, personal phone interview, conducted on December 15, 2016.
¹⁵⁴ Ibid.
¹⁵⁵ Ibid.
and it kind of shatters and it breaks.” The motive is only broken, however, to be built into descending triadic figures (Figure 7.3) and eventually, a groove (Figure 7.4).

A’, the very end, it’s like, trying to create, like, a stained-glass image of what A originally was… [it] reorganizes it, and you have these… fragments put together [that] kind of resemble A, but it’s less organic and more mechanical and sharp.

Figure 7.1. And everything in-between, mm. 35-37, Arpeggio Motive

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157 Jacob Thiede, interview by Krisztina E. Der, personal phone interview, conducted on December 15, 2016.


159 Jacob Thiede, interview by Krisztina E. Der, personal phone interview, conducted on December 15, 2016.

160 All And everything in-between score and Max examples are used with permission (see Appendix E).
Figure 7.2. *And everything in-between*, mm. 58-62, B Section

Figure 7.3. *And everything in-between*, mm. 95-100, End of B Section

Figure 7.4. *And everything in-between*, mm. 104-105, Groove
But the ending of And everything in-between contains a surprising twist to its narrative. There is a finality to this energetic flute-and-computer unison groove, evoking an expectation of closure. Instead, however, the computer continues the groove while the flute, at first lyrical, devolves to the fragmented arpeggiations recycled from the end of the B section (Figure 7.5). Plot twists in literature often generate a sense of unexpected clarity through use of various plot devices. In contrast, And everything in-between’s narrative is unresolved, with an ending characterized by a unique accumulation and ultimate disintegration of layers.

![Figure 7.5. And everything in between, mm. 126-129, Ending Arpeggios](image)

As implied, this musical narrative is paralleled in the electronic portion of the work.\textsuperscript{161} Though the beginning of the piece employs some looping (specifically, a ten-second delay), the computer part is primarily made up of sustained sine tones with the occasional addition of other effects.\textsuperscript{162} The B section contains sounds that are distorted,

\textsuperscript{161} For more information about Max software, a description can be found on page 23.  
\textsuperscript{162} Jacob Thiede, interview by Krisztina E. Der, personal phone interview, conducted on December 15, 2016.
contributing to the idea of shattering. Perhaps the most significant contribution of the Max program is found at the commencement of the groove (Figure 7.4), where a beat drops with the entrance of a synthesized drum kit (the 808). Mirroring the narrative twist of the music at the end of the piece, the electronic sounds become increasingly distorted, finally concluding the piece with a very clipped kick drum.

If the deliberate distortion and glitches in And everything in-between do not betray Thiede’s penchant for popular music, then the groove section of the piece certainly does. The composer actively seeks to fuse the realms of classical and popular musics in his work, often transcribing pop tunes for various chamber ensembles and composing such works as Forgotten Places, Abandoned Buildings for Pierrot Ensemble and Metal vocalist. The groove found in And everything in-between was particularly inspired by the song “Panda” by hip hop artist Desiigner, in addition to the Baroque album by violist Nadia Sirota. In response to the concept of the potentially fictional line distinguishing classical music from popular music, the composer has asserted:

Good art doesn’t have to be innovative. Good art can be just simple and clear—and taking off from something else. And it doesn’t have to be new, it doesn’t have to burst the bubble. It’s a fine balance… I’d like to think that, you know, pop culture art—you know, yes, we should question it. We should question where mass media is coming from. But on the other

---

163 Ibid.
hand, it’s still an expression of the human experience… Why should we undervalue it?  

The lighting narrative of the piece, inspired by color theory and the light spectrum, is controlled by the Max program. The title of *And everything in-between* is a reference to the piece’s primary inspiration: the unlistable infinities that exist between two whole numbers (e.g. 0 and 1). For this reason, the complete visible light spectrum—red, orange, yellow, green, blue, indigo, violet—is projected onto a screen in backwards order over the course of seven minutes, a visual metaphor for all in-betweens. The Max program also contains an interactive lighting element that creates a synergistic bond between the visual and sonic narratives: the Max program responds to the flutist’s amplitude with intensity of color, allowing the lighting to mirror what is happening in the music. At a forte dynamic, for instance, the color appears at its most saturated hue. The nuanced visual narrative of the piece adds to its energy, encompassing the gamut of visible light in a manner that is both active and vibrant.

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166 Jacob Thiede, interview by Krisztina E. Der, personal phone interview, conducted on December 15, 2016.
VII.2 Lighting Performance Guide

The score to *And everything in-between* is located in Appendix B. A complete copy of the score with Max program is available from the composer.168 Its corresponding cinematic video can be found in Appendix C.

A performance of *And everything in-between* requires the following equipment: Max software and a computer with sufficient processing capabilities (a MacBook with an Intel Core i7 or better is recommended); a sound system (with speakers, a monitor, a mixing board, and an interface); an external microphone (e.g. a lavalier microphone); a USB foot pedal; an LED projector and appropriate VGA adapters; and a projection screen. As discussed in Chapter III, a sample version of Max software can be downloaded for a month, free of charge.169 The *And everything in-between* Max program is designed for use with a PCsensor USB foot switch, but it is possible to cycle through scenes in the Max program by typing “b” on the computer keyboard.170 To facilitate page turns in performance, the composer has suggested the use of an iPad and Air Turn (or equivalent technology).171

To enable the *And everything in-between* program’s launch on the computer, the *And everything in-between* Max program folder must be placed into the Max software

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171 I have preferred to perform with a hard copy of the music.
Upon opening the program, the following two windows will appear: the And everything in-between Max window and a smaller Jitter sub-program window (Figure 7.6). The computer’s display screen should be extended so that the Jitter sub-program window can be dragged onto the extended screen being displayed by the LED projector. To activate the Jitter sub-program, the objects within the Max program should be selected in the following order: first (under the heading “Light Settings”), “test lighting ON,” “test lighting OFF,” and “fullscreen ON.” Selecting the “test lighting ON” object will cause the Jitter window to feature a color, typically either purple or blue; and selecting the “fullscreen ON” object will cause the Jitter window to fill the projection screen. Finally, the toggle object, under the heading “Flute Input” (Figure 7.6), must be switched on to launch the computer’s performance of the piece.

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172 An important note: if the Max program is started without first setting up an external microphone, a feedback loop will be generated. For this reason, practicing the piece with either headphones or an external USB microphone is advised.

173 The projection should not mirror the desktop screen.
If the program is receiving input from the foot pedal, depressing the foot pedal will cause the numbers in the “Scene Number” box to increase by a single digit each time it is cued. While the composer may create a rehearsal Max program for *And everything in-between* in the future, the current Max program only allows for full run-throughs of the piece. It is thus impossible to immediately jump to later portions of the Max program for practice purposes. Similarly, the current Max program does not automatically end at the

---

174 During performance, the number in the “Scene Number” box should reflect the rehearsal number of the music being performed. For example, at the beginning of the B section, the “Scene Number” box should read “14” (see Figure 7.2).
conclusion of the piece; I have resolved this problem by having a sound engineer turn the sound system off at the end of the piece.\footnote{175}

Since the intensity of the \textit{And everything in-between} Jitter light projection is determined by the flute input amplitude, the gain on the interface should be adjusted accordingly. Moreover, the light projection is most vivid when performed without the interference of full stage lighting. I have performed it in two variations. At the premiere in Brown Theatre, a spotlight directly above me was set to half power, enabling the projection screen behind me to be the predominant light source while making my music visible (Lighting Option 1). In the second scenario, all house and stage lights were turned off (Lighting Option 2).\footnote{176}

\footnote{175 Otherwise, the computer will keep distorting the sounds being input through the microphone—including applause.}
\footnote{176 Because the light from the projection screen is not always sufficient to illuminate the music, stand lights or an iPad with Air Turn may be necessary for Lighting Option 2.}
CHAPTER VIII
CINEMATIC VIDEOS

The cinematic videos in Appendix C are a complement to the chapters above, providing visual support to the above discussion. They function as artistic interpretations of the compositions discussed in this document.\footnote{177 For didactic examples, it may be useful to compare these cinematic videos of my premieres; “Premieres: flute/light,” Krisztina Dé, Flutist, accessed on March 3, 2017, https://krisztinader.com/premiers/} All recording for the Meadors, Rowan, Smith, and Thiede was completed on December 3, 2016, in the University of North Carolina Greensboro’s Brown Building Theatre; the Rothkopf was recorded on January 22, 2017 in Crawford Hall at the University of North Carolina School of the Arts.\footnote{178 These recording projects involved the help of many individuals, all of whom are listed above in my acknowledgements.}

Flutist Sarah Busman is featured in the \textit{I Dream of Coloured Inks} video. It was recorded with the help of the UNCSA Design and Production Lighting Department, Joshua Selander, Aaron Bobeck, and Drake Calo. I was joined by percussionist Erik Schmidt and lighting technician Katherine Ward in the video of \textit{At Daybreak}. Katherine Ward and Abigail Simoneau were lighting technicians for the video recording of \textit{Komorebi}. The lumanists in \textit{The Circle of Light} video were, in order of appearance: Bethany Uhler, Noah Cline, Janine Neprud, Stephany Saunders, Erik Schmidt, Amy Karnes, Asher Carlson, and Abigail Simoneau. Noah Cline, Bethany Uhler, Erik Schmidt, and Asher Carlson were the solo speakers (Performers A, B, C, and D,
respectively). In my video recording of *And everything in-between*, Asher Carlson and Abigail Simoneau served as grips, and lighting technician Katherine Ward provided a suitable lighting environment for Thiede’s color projection.

The cinematic videos were created by audio and visual team Wayne Reich and Ben Singer with my own input on the artistic presentation. They were partly funded by a UNCG 2017 Special Projects in Music Award. Any changes made to my performance of the compositions for the purposes of recording have been noted in the lighting performance guides above. These videos represent the synthesis and culmination of all information detailed in this document, completing my flute and light intermedia project.

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179 Lighting technician Katherine Ward aided with *The Circle of Light* video’s fifty-five second fade-in.
CHAPTER IX
CONCLUSION

The five compositions detailed in this dissertation are new additions to the lineage of flute and light intermedia established by George Crumb and Karlheinz Stockhausen, inheritors of twentieth century music theater tradition. While a comprehensive history of music and light intermedia requires further study, this project has conducted five new experiments in the genre. In each, music and light are integrated holistically, despite their diverse methods of implementation.\textsuperscript{180} Theater theorist Adolphe Appia once mused:

If poetic-musical expression and visual expression, functioning separately, vary in their appeal according to the sensibility of each individual in the audience, the union of these two, organically established by the music, creates an independent \textit{life} superior to each individual’s limitations. For this organic whole is based upon “the inner sense of phenomenon,” and if on that foundation the total expression embraces all our facilities, then individual limitations will be transcended.\textsuperscript{181}

It is my sincere hope that this dissertation project will stimulate further adventures in music and light intermedia, encouraging an increase in its performance and advance in its effectiveness as a holistic art form.

\textsuperscript{180} These methods include the live interaction of \textit{At Daybreak}, \textit{Komorebi}, and \textit{The Circle of Light}, in addition to the interactive technologies in \textit{I Dream of Coloured Inks} and \textit{And everything in-between}.

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Pasveer, Kathinka. E-mail message to Krisztina E. Der. January 24, 2017.


## APPENDIX A

**KARLHEINZ STOCKHAUSEN FLUTE AND LIGHT WORKS LIST**

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th><strong>Instruments</strong></th>
<th><strong>Derived From</strong></th>
<th><strong>Year</strong></th>
<th><strong>Lighting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AMOUR, Werk Nr. 44 1/2</td>
<td>Flute (originally for clarinet)</td>
<td>N/A</td>
<td>1976/1981</td>
<td>Found in Saxophone version: 5 circles of light prepared on the stage</td>
</tr>
<tr>
<td>ANTRAG (PROPOSAL), Werk Nr. 1. ex 64</td>
<td>Soprano, bass, flute, basset-horn, electronic music</td>
<td>Freitag aus LICHT</td>
<td>1994</td>
<td>Stage lighting (Left, Middle, Right), 5 x 2 spotlights, dimmer rack</td>
</tr>
<tr>
<td>AVE, Werk Nr. 58 1/2</td>
<td>Basset-horn and alto flute</td>
<td>Montag aus LICHT</td>
<td>1984/1985</td>
<td>YES</td>
</tr>
<tr>
<td>BIJOU, Werk Nr. 2. ex 49 1/2</td>
<td>Alto flute, bass clarinet and tape</td>
<td>Donnerstag aus LICHT</td>
<td>c. 1978-1980</td>
<td>5 spotlights lighting musicians, light ellipse</td>
</tr>
<tr>
<td>ENTFÜHRUNG, Werk Nr. 1. ex 58 2/3</td>
<td>Piccolo</td>
<td>Montag aus LICHT</td>
<td>1986</td>
<td>Stage lit dimly</td>
</tr>
<tr>
<td>FALL, Werk Nr. 6. ex 64</td>
<td>Soprano, baritone, flute, basset-horn, electronic music</td>
<td>Freitag aus LICHT</td>
<td>1994</td>
<td>Stage lighting (Left, Middle, Right), 5 x 2 spotlights, dimmer rack</td>
</tr>
</tbody>
</table>

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182 This list has been confirmed by flutist and Stockhausen Foundation for Music council member Kathinka Pasveer; Kathinka Pasveer, e-mail message to Krisztina E. Der, January 22, 2017; Kathinka Pasveer, e-mail message to Krisztina E. Der, January 24, 2017.
<table>
<thead>
<tr>
<th>WORKS</th>
<th>TYPE</th>
<th>DURATION</th>
<th>LIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FLAUTINA, Werk Nr. ex 56 1/2</strong></td>
<td>Flute with piccolo and alto flute</td>
<td>Montag aus LICHT</td>
<td>1989</td>
</tr>
<tr>
<td><strong>FREIA, Werk Nr. 9 ½. ex 64</strong></td>
<td>Melody-instrument</td>
<td>From ELUFA, Freitag aus LICHT</td>
<td>1991</td>
</tr>
<tr>
<td><strong>KATHINKAs GESANG als LUZIFERs REQUIEM, Werk Nr. 52 1/2</strong></td>
<td>Flute and electronic music</td>
<td>Samstag aus LICHT</td>
<td>1983 (electronic version, 1984)</td>
</tr>
<tr>
<td><strong>DER KINDERFÄNGER (THE PIED PIPER) Werk Nr. 58 2/3</strong></td>
<td>Alto flute with piccolo/2 synthesizer players, percussionist, tape OR Alto flute with piccolo and tape</td>
<td>Montag aus LICHT</td>
<td>1986</td>
</tr>
<tr>
<td><strong>KLANG – 6th Hour SCHÖNHEIT (BEAUTY), Werk Nr. 86</strong></td>
<td>Bass clarinet, flute and trumpet</td>
<td>KLANG</td>
<td>2006</td>
</tr>
<tr>
<td><strong>KLANG – 7th Hour BALANCE, Werk Nr. 87</strong></td>
<td>Bass clarinet, English horn, flute</td>
<td>KLANG</td>
<td>2007</td>
</tr>
<tr>
<td><strong>KLANG – 21th Hour PARADIES (PARADISE), Werk Nr. 101</strong></td>
<td>Flute and electronic music</td>
<td>KLANG (layers 3 - 2 - 1 from COSMIC PULSES)</td>
<td>2007</td>
</tr>
<tr>
<td>Work Title</td>
<td>Instrumentation</td>
<td>Date</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>LICHT-BILDER (LIGHT-PICTURES), Werk Nr. 77</td>
<td>Basset-horn, flute with ring-modulation, tenor, trumpet with ring-modulation, synthesizer, light-picture (ad. lib.)</td>
<td>Sonntag aus LIGHT 2002/2003</td>
<td>Light pictures</td>
</tr>
<tr>
<td>PICCOLO, Werk Nr. 1. ex 47</td>
<td>Piccolo</td>
<td>Dienstag aus LICHT 1977</td>
<td>Darkened room, follower spotlight</td>
</tr>
<tr>
<td>REUE (REPENTANCE), Werk Nr. 8. ex 64</td>
<td>Soprano, flute, basset-horn, electronic music</td>
<td>Freitag aus LICHT 1994</td>
<td>Stage lighting (Left, Middle, Right), 5 x 2 spotlights, dimmer rack</td>
</tr>
<tr>
<td>SUKAT, Werk Nr. 2. ex 60</td>
<td>Basset-horn and alto flute</td>
<td>N/A 1989</td>
<td>Green and Blue light</td>
</tr>
<tr>
<td>SUSANIs ECHO, Werk Nr. 3. ex 58 ½</td>
<td>Alto flute</td>
<td>Montag aus LICHT 1985</td>
<td>fade in/out, spotlight, “moon”</td>
</tr>
<tr>
<td>TIERKREIS, Werk Nr. 41 9/10</td>
<td>Trio version: clarinet, flute and piccolo, trumpet and piano (originally for music boxes)</td>
<td>N/A 1974/ 1983</td>
<td>Found in Trio version</td>
</tr>
<tr>
<td>Work Title</td>
<td>Description</td>
<td>Date</td>
<td>Lighting Effects</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>------</td>
<td>-----------------</td>
</tr>
<tr>
<td>XI, Werk Nr. 3. ex 55</td>
<td>Melody-instrument with microtones (alto flute version)</td>
<td>Montag aus LICHT 1986</td>
<td>spotlight</td>
</tr>
<tr>
<td>YPSILON, Werk Nr. 4. ex 59</td>
<td>Melody-Instrument with microtones (flute version)</td>
<td>Montag aus LICHT</td>
<td>1989</td>
</tr>
<tr>
<td>ZUNGENSPITZENTANZ, Werk Nr. 9. ex 53</td>
<td>Piccolo, dancer, synthesizer, and percussion (OR Piccolo solo)</td>
<td>Samstag aus LICHT</td>
<td>1983</td>
</tr>
<tr>
<td>ZUSTIMMUNG (CONSENT), Werk Nr. 5. ex 64</td>
<td>Soprano, bass, flute, basset-horn, electronic music</td>
<td>Freitag aus LICHT</td>
<td>1994</td>
</tr>
</tbody>
</table>
## APPENDIX B

### SCORES

<table>
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<td>116</td>
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<tr>
<td>Jacob Thiede Performance Score</td>
<td>118</td>
</tr>
</tbody>
</table>
I Dream of Coloured Inks for Two Flutes and Computer Performance Notes

Accidentals apply only to the note they precede. Several melodic phrase-paths are given by following the arcs connecting the notes of the written melodic row. Durations are to be determined by the relative spacing of the pitches on the staff. Overall durations of the melodic rows are given at the end of each section. Performers are encouraged to attempt the greatest possible range of melody, rhythm, timbre, gesture and phrasing (dynamics and articulations) within the context of their improvisation. At all times the performers should maintain a sensitivity toward each other and the computer with the goal of shaping the performance into a coherent, improvised, collaborative musical experience.

The computer playback setup is shown in the diagram below. The microphone lines should be sent to separate mixer channel inputs then output only to the computer audio inputs via a mixer auxiliary outputs. The computer audio output performing the MaxMSP program should be sent to two channel inputs (panned left and right) then output to the amplifier for playback via the main mixer outputs. Insert the computer playback CD into the computer’s CD-ROM drive. Open the “I Dream of Coloured Inks Playback” file and click on “Start Program” as indicated in the score. Professional quality playback equipment should be used in performance. A Macintosh G4 level computer running Mac OS X.4 (or higher) is needed for the Computer Playback version. The speakers should be spaced far enough apart for the audience to hear the stereo panning and close enough to the player to clearly hear the playback and adjust to the cues and dynamic balance.

Computer Playback Setup
Mostan színes tintákról álmodom
Legszebb a sárga. Sok-sok levelet
e tintával írnék egy kiszlávynak,
ey egy kiszlávynak, akit szeretek.

Kríkszokszokat, japán betűket írnék,
es egy kapcsolópont, kedves madarat.

És akarok még sok másszínű tintát,
bronzot, ezüstöt, zöldet, aranyat,
és kellene még sok száz és ezer,
és kellene még aztán millió:
tréfás-lila, bor-színű, néma-szürke,
szemérmétes, szerelmes, rikítő,
és kellene szomorú-violá
és téglabarna és kék is, de halvány,
akár a szines kapublak árnya
auguszta mindig a kapuján.

És akarok még égü-pirosat,
vészszínűt, mint a mérgez alkonyat,
és akkor írnék, mindig mindig írnék.
Kékkel húgannak, anyámnak arannyal:

arany-imát írnék az én anyámnak,
arany-tüzet, arany-szót, mint a hajnal.
És el nem unnám, egyre-egyre írnék
egy vékony toronyba, színes-szünetlen.
Oly boldog lennék, Istenem, de boldog.

Kiszínezem vele az életem.

—I dream of coloured inks. Of every kind.
The yellow is the finest. Reams and reams of letters could I write in yellow ink
to her, the little schoolgirl of my dreams.

I'd scrawl something that looks like Japanese,
then try a bird, most intricately scrolled.

And I want other colours, many more,
like bronze and silver, emerald and gold,
and then I want a hundred more, a thousand,
or rather, I will have a million:
dumb-charcoal, funny-lilac, drunken-ruby,
enamoured, chaste or brash vermilion.

I ought to have some mournful violet,
a palish blue, a brick-red-like maroon,
like shadows seeping through a stained glass window
against a black vault, in August, at noon.

In reds I want a blazing, burning one,
and blood-red, like the blood-stained setting sun
and then I'd go on writing; with a blue
to my young sister, mother will get gold,

I'd write a prayer in gold ink to my mother,
a golden dawn with golden words re-told.
I'd go on writing, in an ancient tower.
My colour set, so fine and exquisite,
would make me happy, oh my God, so happy.

I want to colour in my life with it.
Rothkopf Performance Score (Cont.)
...I'd write a prayer to gold ribb...
Anna Meadors Lighting Score

At Daybreak
For Krisztina Dé
Anna Meadors
Inspired by the short story At Daybreak by Italo Calvino

Copyright © 2016 by Anna Meadors
Meadors Lighting Score (Cont.)

At Daybreak
Slightly faster, rhythm and tone keep up very fast
playful

[Musical notation image]

Lighting cues

[Lighting cues notation]

---

100
At Daybreak

Fl.

Perc.

Pitched Perc.

Lighting Cues

[Notation and musical symbols]

At Daybreak

Fl.

Perc.

Pitched Perc.

Lighting Cues

[Notation and musical symbols]

Breath in, do whistle's mimic sound of breeze, or a bird shores from nest beginning in croak...

Wizard may cymbal, changing shape until he hits bell, then edge of ride, head of ride, and hand gradually get higher, and you two work in the way as, approximately 8 seconds...

If possible, fast movement of cool colors across stage...
Meadors Lighting Score (Cont.)

At Daybreak

Perc.

Picked Perc.

Lighting Cues

Approximately 4/4, very slowly

The rhythm here is tricky. Be sure you vary the duration of the notes, especially the long ones. Be especially careful to keep the long notes clear and distinct.

Return to previous;
Very low light, only cool colors.
Shift and change slowly.

Quick fade out of all lights.
Kyle Rowan Lighting Score

Komorebi - lighting design

Lights 1-4 arranged around performer. White lights, used primarily to create a shadow of the performer on the floor, and positioned such that the shadows are of different lengths.

Lights 5-8 are pale-colored lights illuminating circles on the floor around the performer, positioned with their centers near the ends of each shadow. The lights should create circles of noticeably different sizes. These lights should be somewhat hazy, never at full brightness. Colors in the lighting score: 5 – Purple, 6 – Yellow, 7 – Green, 8 – Blue.

Light 9 is a standard spotlight on the performer, colored pale orange.

<table>
<thead>
<tr>
<th>Lighting Score - Notation Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
</tr>
<tr>
<td>X-Z</td>
</tr>
<tr>
<td>...</td>
</tr>
<tr>
<td>...</td>
</tr>
</tbody>
</table>
Rowan Lighting Score (Cont.)

Lighting

Komorebi

(sunlight filtered through the trees)

for solo flute and light

for Kristina Déér

Kyle Rowan

Cautionly \( \text{(}\frac{~}{~} \text{=} 60\text{)} \)

Quick, more certain, but still a bit reserved \( \text{(}\frac{~}{~} \text{=} \text{ca.} 80\text{)} \)

(fade out slowly over fermata)

confidently

©2016 Penguinman Music. All rights reserved.
Rowan Lighting Score (Cont.)

Komorebi • Rowan

\(1-4\)

(continue fade out over fermata)

\(\text{mf} \quad \text{p} \quad \text{mf} \quad \text{pp} \quad \text{ppp} \quad \text{p} \)

\(1-4\)

\(\text{a tempo, pressing forward slightly} \)

\(\text{p} \quad \text{pp} \)

\(\text{j = ca. 96} \)

\(\text{mf} \quad \text{p} \quad \text{sf} \quad \text{p} \quad \text{pp} \quad \text{f} \quad \text{p} \)

\(\text{f} \quad \text{pp} \quad \text{sf} \quad \text{p} \quad \text{pp} \quad \text{f} \)
Rowan Lighting Score (Cont.)

Komorebi • Rowan

1. Steady, quiet, still
2. Expansive, with a flexible tempo ($\text{\textit{C}} = 60-80$)
3. freely
4. air tone
5. ord.
6. air tone
7. calming
8. pp

---

1. $f$
2. $f^\sharp$
3. $p$
4. $pp$
5. $mf$
6. $p$
7. $f$
8. $p$
Rowan Lighting Score (Cont.)
Rowan Lighting Score (Cont.)

Komorebi • Rowan
Rowan Lighting Score (Cont.)
Rowan Lighting Score (Cont.)

Komorebi • Rowan

\[ \text{Musical notation image} \]
Rowan Lighting Score (Cont.)
Rowan Lighting Score (Cont.)

Komorebi • Rowan

Steady, quiet, still
The Circle of Light (2016)
A Ceremony for Solo Flute
And eight luminists (8 Flashlightists)

Best wishes, Staging:

1. The Flutist slowly moves to center stage where he begins the Solo Flute music. It should be by heart.

2. Slowly one by one the luminists enter.
Each holds a Flash light (can) under the chin, slightly shining the face of each performer form a semi-circle around the Flutist.

3. When the solo is finished the Flash lights go out one by one, then the text is performed. One version is the Flutist performs the text. Version two is the text is divided among the luminists, like a good cheese. I like version two best.

4. After the text is finished there is a 39". Afterwards the performer slowly leaves the stage.

5. No house lights. Slowly rise taking 55" The audience in a program note, is invited to applaud.
Smith Score Excerpts (Cont.)

The Circle of Light
is the light
in each one.

(Clearly today
from tomorrow)
1. Perform

(Clearly really gone)
2. Perform

For the circle of light
1. Perform

And we all sing.
3. Unison

Slowly leave the stage.
Once the stage is empty.
2.9 of Silence

From End of Act I

A Saunders 2016 Vermont
Performance Notes:

Articulations with letters
- t = standard tonguing, like saying “tu” or “ta”
- k = begin articulation with back of tongue, like saying “ku” or “ka”
- p = begin articulation with lips, like saying “pu” or “pa”
- oo = articulation beginning with the breath
- thp = the end of note with tongue ram into the lips cutting off air (sounds like a reverse of standard attack)

Notation

= triangle notehead, play as high as possible by overblowing/harmonics

= diamond notehead, play harmonic with specified fingering
  (in example, lowest D and E-flat)

= foot-pedal cues, using a sustain pedal (or any pedal sending CC64) or the KingMas USB Game Foot Control Keyboard Action Switch Pedal HID (preferred)

= the foot-pedal cues correspond with the “scene” number in the Max Patch

Lighting
Included in the patch is a video for the “lighting” component of this piece. Press “f” to go fullscreen on the desired monitor or projector and “esc” to exit the fullscreen.

Any other questions regarding performance notes and notation can be sent to: thcedemusic@gmail.com
Thiede Performance Score (Cont.)

Program Notes

And everything in-between began as an attempt to reflect the “different types of infinities” into a musical form. Originally, this was done by thinking that the beginning and end of the piece represent 0 and 1, respectively. By composing “everything in-between,” the music (or “real numbers”) between these points became my infinite array of possibilities. As the piece unfolded, I was compelled to write music that reflected a through composed form. Much like a real number continually changes by adding more values after the decimal point (0.1, 0.11, 0.111, 0.1111, 0.11111, etc.), I wanted to change the value of my music by keeping the same reference point (tempo or “decimal”) but changing the rhythmic values (half notes to triplet-sixteenth notes or “one tenth” to “one hundred thousandth”).

The inspiration for the lighting was the idea of “everything in-between” the spectrum of light. The beginning of the piece starts with the (infra)red side and slowly goes to the (ultra)violet side. Artists that inspired such a decision were Mark Rothko, Barnett Newmann, and James Turrell.

[Ultimately, I would be influenced by Douglas's "Paths" to create a flux pattern existing in a cycle of pieces of music with an overly thought out design.]
Thiede Performance Score (Cont.)

Flute and computer cues

And everything in-between

commissioned by and dedicated to Kristina Dér

Jacob Thiede

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Email the composer if performed at: theedeemusic@gmail.com
And everything in-between
Thiede Performance Score (Cont.)

And everything in-between

-3-

Fl

Compy

wait 'til compy fades

soundscapes slowly evolving

Fl

Compy

Fl

Compy

Fl

Compy
And everything in-between

-4-

Fl

Compy

Fl

Compy

Fl

Compy

Fl

Compy

Fl

Compy

Fl

Compy

Fl

Compy

Fl

Compy

Fl

Compy
And everything in-between

Fl

Comp'y

\( \text{And everything in-between} \)

\( \text{Fl} \)

\( \text{Comp'y} \)

\( \text{Fl} \)

\( \text{Comp'y} \)

\( \text{Fl} \)

\( \text{Comp'y} \)

\( \text{Fl} \)

\( \text{Comp'y} \)

\( \text{Fl} \)

\( \text{Comp'y} \)

\( \text{Fl} \)

\( \text{Comp'y} \)
Thiede Performance Score (Cont.)

And everything in-between
And everything in-between
And everything in-between
Active links to the cinematic videos are available online at the addresses below.\footnote{These Vimeo video links were accessible as of March 27, 2017.}

The videos embedded below are compressed and accessible when viewing this document with Adobe Acrobat Reader.


Jacob Thiede, *And everything in-between*, https://vimeo.com/207286219
Michael S. Rothkopf Video
Kyle Rowan Video
Stuart Saunders Smith Video
Jacob Thiede Video
APPENDIX D

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\textsuperscript{185} The personal phone interview transcripts included in this document have been edited for filler words; moreover, portions of the interviews unrelated to the dissertation have been omitted.
George Crumb Interview

Personal Phone Interview, George Crumb
Conducted on January 12, 2017.
KD, the author
GC, George Crumb

KD: Do you mind if I ask you if I could record [this] conversation?
GC: Oh, sure, that’s fine…

KD: Just for a little more background on my dissertation: I’ve been interested in
intermedia art since I was middle school; but I had two motivations for the project... My
first motivation was my first experience hearing Vox Balaenae live. I was really struck by the all-encompassing, synergistic nature of your art. It creates an atmosphere that really, I think, transports your listener...

GC: Yeah, you know, actually, all these things that I’ve done—it’s sort of really[laughs] comes originally from opera. You know, it’s not tremendously innovative, only in that, like, a chamber piece borrows some of the operatic elements, you know. Of which one is lighting—stage lighting. [Laughs] So that seemed natural—to provide a under-sea illumination, you know… I’ve used it—let’s see, I’m trying to remember where I’ve used it—I don’t recall. Sometimes, my work—I have a string quartet called Black Angels—and sometimes that’s presented in kind of a blazing red light... I don’t know whether I suggested that to somebody, I’ve forgotten, you know. I don’t think it’s in the score, actually.

KD: I don’t think so, either. I was looking at that, actually; I was looking to see what pieces you’ve actually provided lighting instruction in.

GC: Well, the other type of lighting is an absence of lighting. I think in a couple works I suggested that the stage goes dark, gradually towards the end. Maybe in the last minutes of the piece, the light is fading. And then, after the work is over, you know, for a few seconds after the music stops, then the lights come again. [Laughs] That means that the piece is over. But it’s a gesture, too, of a kind. It’s of course not colored light, but it’s—whatever light was there is not...

KD: I’m interested in all of it... What I’ve found is that there’s really no history of music and light, so my introduction includes a general music and light history, and that includes pieces by Handel, like his Farewell Symphony, and the Scriabin tone poem Prometheus...

GC: Yeah, I was going to mention the name of Scriabin, who was one of the first composers, I think, to be interested in light in a—almost in a more structural way, I think, you know.
KD: What do you mean by that?
GC: Well, I think actually he thought of colors as having tonality and that sort of thing… So, I haven’t followed through on that because my thinking didn’t run in that direction. But he was an example—probably the earliest, you know. But I have to say, generally, that I would love to see traditional music, like a Beethoven string quartet, played with a certain stage lighting. You know, it always has to be just white. It kind of kills the romance and power—emotional power—of some of the works that are so tremendous...

KD: What I found interesting in... researching specifically the history of flute in lighting art, is that [only you and Karlheinz Stockhausen seem to] have written pieces with lighting instruction for flute... Yours were Lux Aeterna and Vox Balaenae, but you were just mentioning that you’re not sure if there are others?
GC: Well, I have another flute work for flute and drums. I don’t know if you’ve run into that piece. I call it—what do I call it… [Laughs] This goes back many years.

KD: Is it the Idyll for the Misbegotten?
GC: Exactly. That’s it. I’m not sure—I can’t remember whether I suggested lighting for that work. Maybe I didn’t. Have you seen the score to that piece?

KD: I have, yes; and I haven’t seen lighting instruction in that one. But it sounds like you’re open to the use of lighting, then, in just about any of your works.
GC: Yeah, not only my pieces. I think, psychologically, one of the worst things for detracting listeners from the music is kind of—any kind of white bright light. You know, I think if the eye is eased—the vision is erased a little bit by less than a great harsh light—the hearing increases, it goes more to the ear. I don’t know if, psychologically, that’s borne out; but that’s what it seems to me… When I was a kid, I used to enjoy playing recordings—78 recordings in the old days—in the dark room, absolutely dark. And the hearing is magnified immensely… But, of course, that’s impractical if it’s a live performance. You got to have enough light for players to play their instruments, you know... [Unless] the piece can be memorized, or, you know, the composer can play his own piece [and] does it by heart… I don’t know why more music performances aren’t sensitive to the fact, the psychological fact, that the ear gains—the music gains an intensity… When the eye is taxed, somehow the—rather take the inverse of that, when the eye is released of so much concentration, the ear picks up and it becomes intensified. The hearing becomes intensified, I think. I’ve noticed that even if you’re walking through a space that’s more dark or moving towards darkness, everything that’s registered by the ears is increased. The power of hearing is somehow increased. I don’t know how that’s explained psychologically. It’s like one sense takes over more if another one is diminished. I wonder if people who are blind have an incredible sense of hearing that we don’t even understand…
KD: There’s been a great amount of study on, for instance, the psychological influence of color, but not so much on the influence of light... They’re associated, or connected, for sure; but even with music and light, for instance, predominant research has been with color. [That’s] exactly what you were saying with Scriabin earlier, and even Messiaen.

GC: Yes, and even earlier than that: Wagner operas—like *Das Rheingold*, so much of it is kind of underwater, so to speak, you know [laughs]… You know, you just have to look at what the people who were designing lighting effects for operas do. It reflects the music very much. Or it reflects the time of day… or if it’s a psychological mood, it’s kind of oppressive, or something. Lighting can do something to increase that effect, I think, you know. It can become more frightening if the music is—let’s take an opera scene, like certain scenes maybe in *Wozzeck* that are scary. You know, they’re scary. And you can’t imagine it being done with the same lighting as, kind of, a celebration on a sunny day or something… I’ve also wished that in some of my vocal pieces that has a text, that, you know, it projects like, in my case a lot of Lorca or Walt Whitman or you know, other things—that [light] could be a part of the performance. And if it’s not absolutely pushed to an extreme, I think the musicians could read under certain amount of red light or blue light.

KD: Yes, I think so, too… Even in the blue lighting with *Vox Balaenae*, I’ve personally found that… it’s actually a little bit trickier to read with the masks than it is to read in blue light.

GC: That’s right. Yeah, [laughs] that’s right. I’ve had performers, you know, who’ve done that work say, “You know, the masks—that interferes already with my vision and then it’s the light—the absence of so much bright light—that complicates the matter.” Particularly the pianist, who play (sic) extended effects and so forth… The strings aren’t as easy to find as the keys!

KD: [Laughs] This is true… but I think it’s all worth the effort.

GC: Yeah! I would love to see, also, traditional concerts where maybe the lighting could change on each movement of a symphony or a string quartet, reflecting the mood, you know, of—the general mood of—that piece. I think it would be very effective; but some people [would] think it sounds crazy, I guess...

KD: I don’t think so. Actually, that makes me wonder, then… do you think that’s what music and light should mean, then—that the light reflects the mood of a piece?

GC: Yeah, exactly… I think that a lot of opera composers have actually in their directions suggested a certain kind of lighting, or—you know for a scene. You know, like a garish red—or a blue, if an opera has to do with, say, something—isn’t there a scene in *Wozzeck* where he throws something in the pool… Or, there are certainly a lot of scenes in opera, you know, that represent underwater suggestions… Or yellow from the moon if there’s a moon-lit scene or something...
KD: I think I mentioned the two pieces that I found that have specific lighting instructions in the score. And then, I found a third, called Yester-Year, but I couldn't find much information on it.

GC: That’s a fairly recent… piece, yeah. You know, it’s alluding to the, I guess, medieval poet in France. You know, [who] wrote the poem about the snows of yester-year. You know, it’s about a woman who has lost her beauty and so forth, from age. And so, I call it Yester-Year. And the recurring refrain in the poem is: “Where are the snows of yester-year?” Like, where is the beauty that was, you know? So, that’s a really recent piece. I don’t think I give any special— I’m thinking just now because it was performed here recently, near where we live… The singer, though, in that case—it’s not so much a lighting effect—the singer moves around with each… so-called station of the music. The singer moves to different places in the hall. So, that’s a little different thing…

KD: I was using a resource—it was a collection of essays—called [George Crumb and The Alchemy of Sound] about your music… It had program notes, most of which were written by you, as an [appendix]. And it mentioned that there was— because I have not seen a score to [Yester-Year] in particular—that there was red light…

GC: Oh. Yeah, that’s possible, you know. I’ve just forgotten. [Laughs.] I’ve forgotten that particular case… Yeah, yeah, I wouldn’t be surprised, ‘cause I was thinking there was a certain dramatic—oh, incidentally, another thing that might interest you: I’m putting the finishing touches on a new piece for just solo piano, amplified piano, which is kind of a latter-day Pictures at an Exhibition. In other words, ten of my favorite paintings—both the European and American. It’s written for Margaret Leng Tan, the Chinese pianist—born in Singapore but has lived over here most of her adult life, you know. She lives here. And, she’s going to use her own lighting for each separate one to try to find some distinct lighting for each piece. And also, another aspect would be the projection of these various paintings during the duration of that particular piece that’s connected with that painting… She’s going to choose some particular lighting, you know, that won’t interfere with the projected slide image of the painting. You know, just kind of a background. So, I’m anxious to see what she does with all that, you know… It’ll be premiered at the big art gallery in Washington D.C. I think in May [2017], some date in May, or late—maybe late April. It slips me right now. Anyway, I’m trying to finish the piece. I have a little to do yet… I hope you can come! I hope you like the piece… I sometimes think in sort of, terms of special effects increase the sense of the music, you know; but in this case, my pianist has been doing a lot of this, you know…

KD: So, it’s seems like the two realms, the aural and visual realms... are very connected [for you], then.

GC: Yeah. I think so. And the color, you know—color is all mixed in with it. I think a concert could be, really, a stage for more than the just sound—anything that would contribute to the emotional sense of the music, you know, might suggest some other things coming in to it, you know…
KD: Actually, related to that, I have two questions... Based on what you just said, I was wondering: would you say that you were at all [impacted] by, say, the music theater tradition of [composers] like Luciano Berio... I know in the 60s, postwar, that was something very big, and I wasn’t sure... what you thought about that.
GC: Sure. I like Berio’s music very much. He’s one of—I guess he’s one of my favorite European composers from that period up to now, very recently. And, yeah, he… wrote—what’s the series of works that he did, like, there’s one for trombone…

KD: Right, the Sequenzas!
GC: [Laughs.] That’s it. The Sequenzas—sequences! And, he was—some of it involves a little bit of acting, some of the pieces, you know… But, it’s funny, all of this comes out of opera, originally, you know… Opera combined all of the various possibilities...

KD: Would you say, then... that your work [doesn’t so much contribute], maybe, to that music theater genre but that it just grew out of your love of opera?
GC: Well, yeah, I love opera—certain works, especially. I’ve never gone into that because I feel that composers are either opera composers or they’re not. And I think I’m not [laughs]; although my music can be rather dramatic. But, it’s something separate from the opera approach, I think.

KD: Okay. What would you say that would be?
GC: Well, I think it’s a—much of my music is emotionally high powered, it’s very direct. But it’s not in operatic form, so to speak, you know. It just doesn’t use the whole apparatus of the opera, you know...

KD: Some of your work actually reminds me a little bit of—not necessarily musically, but more conceptually—of small chamber operas of Benjamin Britten...
GC: Yeah, some of my vocal works are actually—they’ve been called micro-operas, like Ancient Voices of Children. Somebody said that that’s really a micro-opera… two characters only: the boy and the singer—the female singer...

KD: The other question that I had from earlier is: you mentioned the color and how important the color is to you. And I was wondering, then, in Lux Aeterna and in Vox Balaenae—what would you say the function of the light is in those pieces?
GC: Well, with Vox Balaenae, I think it’s just the suggestion of the sea, you know. The whole auditorium should be… in this deep blue light which suggests that it’s underwater, maybe. In a sense, you know. It’s the world of the hunchback whale.
KD: And then, *Lux Aeterna* is in red light; but you also have... an instruction to both light and extinguish a candle at the beginning and end of the piece, respectively... And I wondered, because... you were talking about the “garish” red of Wozzeck... Does [red] have any significance?

GC: I guess it could have a lot of applications. You know, red is—but generally, it’s kind of a little bit of a garish color. It could be celebratory scenes [laughs]. It could be scenes that are—I think of opera scenes that are kind of frightening, you know... That’s an aspect of the red coloration. It could have other meanings. It could mean sunset, you know. So, it could mean the end of something—a pale red or something. It’s the color of blood, I guess, you know. Yeah... Yeah, I guess all of the colors have some significance. But I wouldn’t want to be too literal because I suppose that they could be applied to different situations, you know, and have slightly different meanings. Like a brownish cast over a stage—something that sort of suggests maybe decay or something that isn’t quite alive [laughs] or that it’s frozen in something. It maybe—I don’t know... It could illustrate something and then you see the color as coming out of the music that comes with it... [In *Lux Aeterna*] maybe I was thinking a red is just an intense light, you know. But, you know, one thought, too, when you think about it: before we had modern electricity and stage lighting, you know, all the operas were presented under candle light—you know, Mozart’s time. *The Magic Flute* and *Don Giovanni*, you know, were all seen under—and there’s kind of a flickering quality of candle light. So, it’s not as strong, I guess, even with a lot of candles, you know. Where it’s kind of tremulous—it can be a little tremulous, I think. So, it’s so different from modern stage lighting...

KD: And I guess it gives it a kind of energy then, as well.

GC: Yeah, I love candles. I guess, I used the candle because I love the candle light, you know—because it’s flickering, normally. It’s not a steady light like modern stage lighting...

KD: I read, too, in an interview you did in, I think, the 70s. You were talking about how all the theatrical elements of a piece were born at the original conception of a piece.

GC: I’m not sure what I meant exactly there with that. Was I speaking about the motions that performers make when they play their instruments? Because there’s a good bit of dramatic power just in that alone. And performers who are really into playing their instrument don’t look like investment bankers or something, you know. [Laughs.] They look like they’re passionately involved in their instrument. Pianists—even pianists, you know. Violinists—they’re always moving, you know. It’s a little different than in an orchestra, where they tend to be a little more quiet and, you know. But if they’re a soloist, particularly—a flutist or a violinist—their body is constantly in motion...
KD: I think you were referring to that—yes, the movement of the performer—but you were also referring to the lighting and the other theatrical elements, like the masks... Would you say that that’s still the case for you? That you conceive of the theatrical elements, I guess maybe, parallel to the composition of a piece?

GC: Yeah, but not in any kind of organized way. I think my music—even my later music—is available to—lends itself to, you know, different approaches. You know, like—any of these things we’ve discussed. You know... the movement of the players, the singers. Some sopranos are very elegant in their movements—bodily movements, you know—to express certain lines of maybe a song. And all of that is part of music, I think.

KD: Yes, I think, definitely... So often we’re not sensitive to how interrelated these mediums are, until [we’re] confronted with a performance that does integrate them [synergistically]... And that’s why I think your pieces are so effective, too...

GC: Well, it’s—you know, I think all music could lend itself to more special treatment. I’m thinking of Mahler symphonies. Mahler has always been one of my favorite composers, and the music sometimes just jumps out of the frame, you know; it’s so incredibly dramatic and suggestive of the psychological states... And even the expression—the expressive marks and the tempo marks of the composer can give clues as to what was on the composer’s mind—the conception of these pieces...

KD: I have maybe two more questions for you... One of them is very simple, just because I wasn’t able to find the information on this. I was wondering what the instrumentation of Yester-Year was.

GC: Yester-Year is, let’s see, it’s just—oh! Two percussion, piano—amplified piano—and soprano... That’s right. Yeah, you know, sometimes I have to think because sometimes I use kind of a double function with a performer. Like, a soprano may have to play a few percussion instruments—easy ones, you know, that anyone could handle. That happens in another recent work, another Lorca work [The Yellow Moon of Andalusia (Spanish Songbook III)], you know, for just a piano and soprano—mezzo soprano... The soprano has to play four, five separate little instruments. Metal wind chimes, for example; a large tam-tam—different things, you know. [Laughs.]

KD: They’re beautiful touches, too... And it’s exciting for the performer as well, I’m sure.

GC: Yeah, a lot of performers really love to do that sort of thing, you know—step outside their normal role... [Laughs.] They have to double up on other things, you know.

KD: And it’s exciting for the audience member, too, because you’re hearing a work for soprano and piano, in that case, and something unexpected happens.

GC: [Laughs.] Yeah...
KD: Do you have any thoughts about how I might continue as I pursue this [music and light] project past my dissertation?
GC: Yeah. Well, I think you'd be limited, of course, ‘cause the composer has to be alive; and Berio is not alive now, nor is—several of the, you know, recent composers. You know, so you'd have to investigate a little, you know, if you’re thinking about getting the composer’s deal on certain things. You mentioned Berio, for example, you know; and unfortunately, he’s not around, so. But, yeah, there was a lot of experimentation in different directions—I’m sure you’re aware of all that—during the last thirty years, particularly twenty years.

KD: What experimentation do you mean?
GC: All kinds, I mean—extended effects… reinventing instruments, you know. Like, a lot of composers of the past were always pushing the boundaries. Like Beethoven, you know. They added a few more keys for him to the piano, and they occurred in his next piece; or someone invented the *una corda* pedal and he includes that, you know. And he… actually used in one of his late string quartets, he has the bowing right up near the bridge, you know, the—what’s it called again—to get that nasal, kind of whistling sound. That’s in one of his—believe it or not, it’s in one of his last string quartets… Way early in the nineteenth century, you know… What’s that word again—you know, Bartók uses it a lot—*ponticello*… I love the sound. I’ve used it, and all the composers now have used it; but Beethoven was one of the first to use it, you know…

KD: So what you’re saying by that is just to continue to push the boundaries?
GC: Oh yeah, it was always, you know—it was constantly happening in the history music that a new composer would come along and suddenly reinvent the instrument. Like, Chopin in a sense reinvented the piano. A lot of his effects end on kind of a damper pedal that’s held open—the strings are held open for a long time, you know. So, he builds up a whole rainbow of overtones, you know…

KD: How would you apply that to visual elements, then?
GC: Oh, well, I’m not sure… how that would happen, but I can imagine that… There might be a new Scriabin [who] comes along and makes music entirely interplay with color, which is changing through the piece, you know. Or a search for associating certain harmonies with certain colorations, or whatever, you know...

KD: So it sounds a little bit like you’re saying that the entire development of music is constantly in flux and is constantly pushing bounds...
GC: I think so. I think it really is, you know, changing all the time…
KD: Thank you very much, Dr. Crumb! I really appreciate... your time and your thoughts!
GC: Oh, sure, yeah. I wish I had more to give you, but I just dabbled a very little in it. There must be composers out there that have done a lot more than I have in that particular area.

KD: You know... honestly, this isn’t something that’s really been explored... I hope that you write more work with light involved, as well!
GC: Yeah, maybe! Who knows. [Laughs.] Okay, good luck to you, now...

KD: Would it be alright for me to use some of this conversation in my dissertation document?
GC: Oh, sure, anything. Sure, yeah...
Michael S. Rothkopf Interview

Personal Correspondence Interview, Michael S. Rothkopf.  
Received on December 23, 2016.  
KD, the author  
MR, Michael Rothkopf

**KD:** What was your compositional process in writing I Dream of Coloured Inks? What ideas/concepts/stories inspired this piece?
**MR:** My process in writing I Dream of Coloured Inks was to start with a Cycling74 Max [program] I created and refined for a series of three improvisational works for solo instruments and computer and adapt it to this new improvisational work for two flutes. I then found my inspiration and a compositional plan in the poem by Hungarian poet Kosztolóányi Dezső titled I Dream of Coloured Inks. The poem references a list of colors in each stanza and speaking to the thoughts, memories, feelings and associations that poet recalls with each color. I wrote each section of music to correspond to a stanza of the poem and put the first phrase of each stanza in the score to guide the musicians performing the work.

**KD:** What is your previous experience with lighting art? Had you thought about the integration of music and light before my commission? What is your light “palette”? What does music with light mean to you (color, shadows, etc.)?
**MR:** I did not have any previous compositions with the intent of integrating music with colored lighting. However, I had just come back from a performance in Houston, Texas and while I was there, I explored the James Turrel exhibit at the Houston Museum of Modern Art and the Turrell works at Rice University. So I was thinking about light and music and to my mind, the poem demanded the integration color and music. I was also working with the UNCSA School of Design and Production lighting students on teaching them to create lighting control with Max. The students I worked with were Evan Higgins, Lisa Renkel, Alyssa Eilbott and Manuel Da Silva. I gave them an outline of the color palette for each stanza which they divided up; each taking a section of the piece and developing a refined list of RGB numbers (DMX red, green, blue intensity values) to serve as color lighting choices for the computer to choose and output during a performance of the work.

**KD:** What is the function of the lighting in your piece?
**MR:** The computer makes choices on both musical and lighting from “listening” to the improvisation between the two flutes. I don’t see a difference in the function of the music and the function of the lighting in this work. Both are intended to express the thoughts, memories, feelings, associations and form of the poem.
KD: If applicable, how did you determine lighting notation? Is the notation intended for musicians or lighting designers?

MR: There is no notation for the lighting in the score, however, there was some discussions on agreeing to variables in the lighting data when translating the RGB numbers into a format that Max and the DMX interface could both understand.

KD: After the premiere and subsequent performances, what was the difference between what was realized and what you imagined your piece would be like?

MR: The premiere performance of the piece was very close to what I envisioned when I created the work. The hall the piece was performed in did not have a spotlight to illuminate the performers, so the lighting was as envisioned but my intent was that the audience would also be able to see the performers…

KD: How could the execution of the work be made more compelling?

MR: I think the heart of this work is in the improvisation between the two flutists. The more creative their improvisation the more compelling the performance.

KD: After four visually distinct performances of your work, do you have a preferred lighting method and would you make any further modifications? Do you think that these works should be adaptable? To what degree can the work be adapted for alternative performance spaces?

MR: Each subsequent performance has been different due to the lighting equipment in the venues for each performance. So the work has been adapted to a new performance environment each time it has been performed. My feeling is that while there are differences in each performance, the core spirit of the piece is recognizable and that each performance has successfully expressed the intent of the work. As an improvisational work, arriving at a new perspective and experience is what I intended in creating this work.

KD: How do you think this project will be received? Will you continue to compose for this genre?

MR: My work is moving in the direction of integrating music with other mediums.
Anna Meadors Interview

Personal Correspondence Interview, Anna Meadors.
Received December 12, 2016.
KD: the author
AM: Anna Meadors

KD: What was your compositional process in writing At Daybreak? What ideas/concepts/stories inspired this piece?
AM: Italo Calvino’s short story, At Daybreak, inspired the piece. I was reading it when I was trying to figure out how to approach this piece—I usually start a piece with a strictly musical idea, like a riff or melody, that gets fleshed out, not an extramusical concept—but the story was perfect. It was about the creation of light, a humor story where space matter is personified. His language had so many descriptors that I thought could be applied to musical ideas, so I decided to challenge myself to try to come up with musical ideas in response to his phrases. Each section has the quote from the story that inspired the musical material, only for the musicians to see, as a way to set up the musical expression I was going for. For example, the first quote is “We were underneath, as if we had been tucked in under a layer of fluid, grainy matter. There was no way of telling time...” which became the fluttery, free alternate fingering trill and the cymbal roll. “With faint bursts of laughter that were like tiny cascades of dust” became for more 'playful' material, using the same notes as the alternative finger trill opening.

KD: What is your previous experience with lighting art? Had you thought about the integration of music and light before my commission?
AM: I don't really have any previous experience with lighting art, besides going to concerts that incorporated it to various degrees. I've wanted to integrate images and performance before, but never had a chance, and was grateful for getting to with this project!

KD: What is your light “palette”? What does music with light mean to you (color, shadows, etc.)?
AM: It starts with just low, blue light, since the story/piece begins before there is light. Red and warm colors are slowly added over the middle transition and the cool colors are removed, as “all the darkness was suddenly dark in contrast with something else that wasn't darkness, namely light” and it eventually becomes all white light. There is one sudden transition to complete darkness, and then the blue light from the beginning fades back in, along with the opening musical material, as the earth had made a turn in the story and it was only night.

KD: What is the function of the lighting in your piece?
AM: The function of lighting is to help tell the arc of the story, before light, the buildup, the creation of light, and then its disappearance again, at nightfall.

KD: How did you determine lighting notation? Is the notation intended for musicians or lighting designers?
AM: The lighting notation is fairly open, in part because this is such a new thing to me. I wanted to give them flexibility, and not need very specific things in case they were not possible, or so it could be adapted to different spaces with different capabilities. The notation is just instructions at various points in the score, so the lighting designer would have to have a basic idea of how the music goes to follow along with the timeline of the score.

KD: After the premiere, what was the difference between what was realized and what you imagined your piece would be like? Did the lighting enhance the music?
AM: The lighting definitely enhanced the music, it brought out the drama and connected the similar musical ideas.

KD: How could the execution of the work be made more compelling?
AM: I think there could have been a bit more action and changes throughout, some sections remained all one color without change and there could have been more slow shifts over the course of those sections.

KD: After having the work premiered, are there any modifications you would like to make?
AM: I think I would like to make the lighting instructions a bit more detailed, but musically I am very happy. Luckily, Krisztina and Erik were okay with me extending the material after our first rehearsal; it was really helpful getting to workshop the first version with them and hear that the music could sustain for a longer amount of time.

KD: Do you think that these works should be adaptable? To what degree can the work be adapted for alternative performance spaces?
AM: I think my work could be adapted; I believe the music would work without lights, but I was also thinking about adapting it for projection instead of lighting. If there was a video that used the same lighting instruction, but contained on a screen instead of the whole stage, it would have a similar effect.

KD: How do you think this project will be received? Will you continue to compose for this genre?
AM: I felt like the premiere of all these works was very effective and very well received. I love the idea of this total art, and thinking about the complete experience of the evening. I would definitely like to continue composing for this genre, and other related multimedia pieces.
KD: What is your previous experience with lighting art? Had you thought about the integration of music and light before my commission?
KR: The first time I'd really worked with lighting in an active sense was in 2008, I performed the Messiaen *Quatuor pour la fin du temps* at the University of Illinois. The room we performed in was a small, intimate chamber music room - a really nice space, but it had the drawback of having all-or-nothing lighting. We didn't think this lent itself well to the atmosphere we thought the Messiaen needed, so our solution was to use a string of white Christmas lights around the ensemble and a stand light for each player. When a player was not in a particular movement, the stand light was turned off. This created a really nice environment to play in, and helped us focus in on the solemnity and sacred themes of the work.

Otherwise, before this project, I generally left the lighting up to the production staff, and didn't really think much about it myself. After receiving the commission for the flute/light project, for the next several months I thought about how lighting was designed for every concert I went to, especially those held in black box theaters. The one that really struck me was a friend's flute recital of Ferneyhough's pieces. Each piece was performed in a different location of the space, and instead of a traditional spotlight, orange lights from either side cast long shadows away from her. This formed the basis of my own design for *Komorebi*.

KD: What was your compositional process in writing *Komorebi*? What is the function of lighting in your piece?
KR: When I finally started writing *Komorebi* (around mid July, I think), the first thing I did was work out what kind of lighting I wanted, and I thought back to the Ferneyhough concert. I thought about how the shadows of that concert were essentially pointing away from the flutist, and wondered what if they were oriented towards something instead - four shadows pointed toward four different fields of color surrounding the flutist, and the shadows and color fields could fade in and out with different musical materials of techniques.

Shortly thereafter, I began working on the music for the flute. The shifting of the shadows made me think about shading the flute timbre in different ways - through harmonics, multiphonics, airiness vs full tone, microtonal fingerings, etc. So the piece became very much about these subtle shadings, especially microtonal fingerings and multiphonics. In a lot of ways I worked fairly intuitively in terms of structure, with the different shaded pitches chosen in part through finding notes in Robert Dick's *The Other*
Flute that have a large number of fingerings that circle around them in an idiomatic way. This is especially true for the long articulated glissandi with very small gradations. The multiphonics were found in a similar process - choosing a bunch that circled, but never landed on, E-flat.

Ultimately the piece is not specifically programatic - the title came at the end, as I thought about the flickering and shading that resulted from these techniques and how it's like an interplay of light and shadow. I came across the term komorebi online somewhere in a Google-driven title hunt, and thought the phenomenon of light flickering through the trees in a forest as being a perfect fit to what happens sonically - it's simultaneously about the way the light finds it's way through tiny spaces between leaves, the way the leaves block the light to create shadow, and the way the movement of the leaves creates a shifting texture on the ground as a result.

I don't necessarily hold any specific meaning to light or shadow or any specific color with regard to music - the color assignments in the score are suggestions, and need not necessarily be followed exactly. I find that color- and light-based terminology often comes up, though, in discussion of orchestration, so in a way I think I thought of using the light as a way of orchestrating the visual space around the flute. The different colors are mapped loosely onto different musical characteristics - harmonics paired with blue light, shaded microtones with green, etc. Again, this doesn't mean that harmonic timbres are "blue" to me, or anything like that, but this simply gave me a way of choreographing lighting changes in an organic way that happened simultaneous with sonic events in a deliberate way while also not being extremely obvious about it - the connections are likely not consciously made by anyone in the audience. Also, these mappings are mostly to trigger onsets - the "offs" are not necessarily timed exactly for when the technique is no longer being played, often some time later instead, in order to create a sense of light-reverb in the space.

KD: How did you determine lighting notation? Is the notation intended for musicians or lighting designers?
KR: The notation for the lighting was designed to be performed live - I thought of it as if I was performing a piece of electronic music by sliding different faders. I use numbers to indicate each light, then wedges to indicate fade in and out. The shadow-generating lights use black wedges, while the colored lights have wedges colored light the light created. Dotted lines indicated places where the lighting direction aligns exactly with the flute part. It's certainly all designed to be performed by someone who could read music (and probably with some familiarity with contemporary music), and could likely be played by anyone who has experience performing electronic music. I hadn't actually thought about whether the lighting designer would be reasonably expected to read music, but I'm not sure if there's a better solution that would preserve the temporal freedom of the flutist while allowing the real-time performance of the lighting.
KD: After the premiere, what was the difference between what was realized and what you had envisioned? Did the lighting enhance the performance? How could the execution of the work be made more compelling?

KR: The main difference is that the space was smaller than I imagined. The lighting still enhanced the performance, I think, but I had imagined the color fields to be more distinct and separate from each other and the shadows to be more distinct period. But it still looked great and worked really well.

As I learned later from you, the lighting board wasn't designed for real-time performance, and presets had to be created, so some of the lighting changes weren't quite happening exactly with the music as intended (something only I could probably see and did not take away from the performance). This would easily be rectified if I wrote a second version of the lighting score with cues and presets laid out for the lighting designer to use, and is something I plan to do.

The other adjustment I might make is in regard to the lights used to generate the shadows. I found the shadows were getting a little washed about by the light creating them, so I might want to adjust the color either to match the orange spotlight or to match the color that were pointing towards. This should also help the pale colors from getting swallowed up in the bright white light as well.

KD: Do you think that these works should be adaptable? To what degree can the work be adapted for alternative performance spaces?

KR: I think it depends on the work and the space - in my own case, I am in favor of adapting my own piece for different spaces as necessary. It wasn't designed for a specific space, and I am generally in favor of reasonable accommodations when strict adherence to the letter of the score would prevent it from being played at all. For example, the way the lighting is designed, it could be done with three instead of five colors, with a left-center-right design, or even with just changing the color globally if necessary.

Ultimately, I think most of the pieces you played on the recital could survive some level of accommodation to different spaces (though of them the Stuart Saunders Smith piece may be the one that most needs a similar setup to the premiere). But the space may also dictate this - the hall I performed the Messiaen in, for example, would require such extraordinary accommodations as to be inappropriate for these works, but probably a space with even rudimentary lighting and color controls could probably be made to work for these works.

KD: How do you think this project will be received? Will you continue to compose for this genre?

KR: I think this project will be received extremely well - everyone I've discussed the project with in its infancy was immediately intrigued at the idea. I was especially excited to see the variety of approaches in the recital itself - every composer thought about the pairing of sound and light in very different ways, showing the immense possibilities in this medium (which bodes well for its reception).
I think I would like to make more pieces that include light - part of this would require the right project in the right space - but there's a lot of fruit to be harvested here. Working with and shaping light and shadow and how it can affect the perception of a three-dimensional concert space seems to me to be very complementary to working with sound.
Stuart Saunders Smith Interview

Personal Phone Interview, Stuart Saunders Smith.
Conducted November 15, 2016.
KD: the author
SSS: Stuart Saunders Smith.

*KD: What was your compositional process in writing The Circle of Light?*

SSS: My compositional process is as it’s always been since about... oh, I guess when I was sixteen; and that is, I listen to what should happen. I don’t have any pre-compositional plans. I use my conditioning, the musically I learned from playing over thirty Broadway shows in summer stock, to jazz playing, to commercial playing, and knowing all those tunes in my background...

The whole world is vibrating at different speeds, and if you are attentive and at first non-judgmental, you will receive the sounds and proceed with what you’re doing. So, it’s a listening process, not a making process. It’s a receiving a process rather than pushing things around with ego and engineering skills.

So, I start with a pitch, I listen to that pitch, and of course it’s a vibration. So, I listen to see what that pitch wants next. Then I find that pitch, and then I do the same with the two pitches. Then I hear another; and then once you have about three pitches, the rest of them come rather easily to form little phrase-lets and a large phrase. Then I do it again, and again and again. And then wonder how this all wants to cohere together formally; but, again, that emerges from the details, not the details forming a form. And then, I go back and I allow my listening to dictate the durations of all the different pitches. And that’s changed over the years as I’ve become more sensitive to what the pitches want. And then I get those in and do the entire work like that. Then I begin to add dynamics in order to let the player know what the small phrases are in their relationship to the larger phrase. But the first thing I come up with—I’ve neglected to say that—is the title. The title gives the ethos and emotional space that the piece has to be umbrellaed under. So, that even dictates the first two pitches.

Then, I go over it at least three times, editing, trying to find places perhaps that are too clichéd and change those: manipulate them or just cut them out. But over time—I’ve thought a lot about clichés—and clichés are a momentary thing, meaning: they’re historically defined, contextually defined. If our work together lasts several hundred years, we don’t know what the listener will consider cliché then, and not cliché. I’m thinking about the second movement of Ives’ fourth symphony. You know, it’s full of all kinds of tunes that I can recognize; but I don’t think your generation can. You hear it differently because you can’t recognize the tunes.

I was taking ________, one of my students, my only student right now, and I was saying, “I want you to listen with me to Ben Johnston’s tenth string quartet.” It’s microtonal, it has about a hundred and some-odd notes per octave. So, we’re listening;
and then the last movement breaks into: [hums “Danny Boy”]. You know, it’s “Danny Boy.” And she didn’t know the tune—never heard it before—and she thought, “Wow, what a lovely tune!” And I said, “Well, that’s ‘Danny Boy.’” It’s, you know, from the Anglo-Irish tradition.” And she said, “Oh, I recognized a hymn tune.” And I hadn’t. So, two hundred years from now, who knows what they’re going to hear, right? In a way, over time, I’m less concerned about cliché.

I’m reminded of a story I was told by a very fine poet. He was in a recording session reading his poetry to music, and during the break he saw that it was Wynton Marsalis and Cecil Taylor. Cecil Taylor is, like, you know, one of the great new music improvisors. And of course, Wynton Marsalis is a very fine trumpet player. And Wynton says, “Cecil, the trouble I have with your music is that it doesn’t swing.” And Cecil said: “Swing to who? People from Morocco? People from South Africa? People from Vietnam?”

KD: Right, it’s relative.

SSS: It’s relative. And then I heard a wonderful thing yesterday. Of course, Leonard Cohen died last week; and there was an interview program, and I listened to part of it. And this woman called with a distinct Indian accent. And she said that she heard first Leonard Cohen’s music in Bombay, where she grew up—that her boyfriend played it for her, and that was the first date they had, and they’ve been married for thirty-seven years, since. And during the Festival of [Lights] (now she’s an American citizen), which is of course a big festival for Hindus, they play nothing but Leonard Cohen songs as the musical focus of their ritual. So, again, it’s become a global phenomenon. Whatever we do, you release things on YouTube, you have no idea who’s watching, what influence it has.

There’s an Indian living in Stuttgart who plays jazz saxophone, and my son is a good friend of his. My son is a Sikh; they’re both Sikhs. And, my son gave him some recordings of my music, and the guy got back and said, “Aw, gee, this is my favorite music,” da-da-da-da (sic), that’s very nice. He said, “Ask your father what I should read next.”

I said, “read The Genesis of a Music by Harry Partch.” Well, apparently, he did, and now he’s invented his own saxophones. You just don’t know what kind of domino effect or ripple effect you’re going to have in the world.

So, that gets back to clichés. Again, when I go through my compositions and I find, oh I quoted this or I quoted that—if I enjoy it over three or four editorial scans, then I keep it. I just keep it.
KD: That makes sense. You mentioned that more recently your compositions are less—and I could be misunderstanding this, so please correct me if I am—you mentioned that the pitches become less important than [their] duration?

SSS: No. No, the pitches have taught me to become more and more sensitive to the durations and the durations they want. So, over the last eight to ten years, the nested polyrhythms have started to make themselves known to me.

KD: And that’s the motivation for the nested polyrhythms, then?

SSS: It’s not my motivation. It’s the motivation of what I hear… Think of it this way. The whole world vibrates, and everything vibrates at different speeds. Trees have their vibrations and intelligence. We can’t become an oak; we don’t know how to live just on air and water and minerals. We can’t become an earthworm; we can’t live like an earthworm can. All of these things are intelligent. If you tickle rat, it laughs; we just can’t hear it unless we bring down their laugh an octave or two, and then we can hear them laugh, just like humans, as an example.

KD: So, it’s the vibration you sense that is motivating the duration.

SSS: It’s creating the duration.

KD: Stemming from that, you mentioned the title [influencing] the ethos and space. So, that idea or that concept [inspire your pieces]?

SSS: Well, it doesn’t inspire the piece; it narrows what the piece can be. So, if you had a piece called Queen Anne’s Lace, which is a beautiful flower… (one of my favorites), and then you had another piece called Coca in Treblinka, they are not going to sound anywhere near the same.

KD: So, it’s limiting. It’s almost formal, but not at the same time, because you just said that the phrases come from the pitches and then the form comes from the phrase (or the phrases you’ve developed... that arise naturally).

SSS: Yes, think of ocean waves. The wave always come in slightly different (sic)—those are phrases. And then, as the tides move, it creates different designs on the sand—that’s form.

KD: I like that—that’s very organic... Then, specifically (and generally, too), how does a title come to you?

SSS: Pretty much in the same way as the pieces. It… comes in two ways: mostly it just comes. You know, I’m thinking about a piece to write next for something, and the title will just pop up. And sometimes, I struggle for the title, but eventually it comes. But it seems to come out of nothing.
KD: So it’s not as though you were seeking a title or a phrase in literature or anything like that; it’s something that comes from nothing, is what you’re saying?

SSS: You know, when poets write, they don’t normally have preconceptions about what’s going to happen. I’m thinking of “The Hollow Men.” I can’t imagine [T.S. Eliot] had a pre-compositional engineering principle. He was a very literate man, so there’s a lot of footnotes now… that he would make illusions to, but that’s just part of an intellectual, emotional history of his own readings and studies.

KD: And I get the sense that it’s [true] to your compositional process in that it is not contrived… You allow it to happen, and that is really beautiful. Building on that, did the text at the end of [The Circle of Light] come with the title, or did it come after or during?

SSS: You know, I’ve been saying to myself for years: I am sick and tired of writing texts. They’re really hard, and I’ve had it with putting texts in pieces—and then they just come. I finished the piece and, pop: there needs to be a text for these folks. And then I just wrote it down. It builds up during making the piece.

Then, sometimes, like what’s happening now, is I’ve read all three books of the essays of James Baldwin; and I’ve marked them up because I’ve realized that some of the writing is so universal that I would love to set it to music. So, I’m in the process of choosing the texts. And then the title came: Dignity. I don’t where that came from; all of a sudden, it popped up. These texts will dictate the pitch material and the rhythmic flow. So, that’s another way it can work; one way, the pitches dictate the text, like in The Circle of Light; and another way, it’s the other way around…

KD: It doesn’t seem like a fair thing to do, or an easy thing to do, to ask even a poet to translate his poem; but—so, the text and the title [of The Circle of Light] came to you. Do you think there’s an underlying—it seems really crass to call it “message.” Do you think that there’s an underlying concept?

SSS: You know, when I look back—and when you look back at something you can perhaps sum it up. In the summation, one reduces it. But certainly, it’s: light comes in community, that we are responsible for each other’s light and enhancing each other’s light. And I think that that feeling—not idea, but feeling—comes across.

KD: Another question for you, just knowing that you’ve written compositions for unconventional marriages between music and something maybe not traditionally considered music. Have you had any previous experience with lighting art? Had you thought about its integration [with music] before?

SSS: Yeah. Early in the late [seventies] and eighties… I had a group of musicians and we did experimental music. We did a lot of Cage, Earle Brown, Morton Feldman, Gitta Steiner, Christian Wolff; and others; and sometime in Cage’s work, he allowed for other mediums to be mixed with his artwork. And we used strobe lights, and we used slide projectors—you know, the current light media of the time—and we allowed them to be in relationship to each other, like Merce Cunningham’s dance and John’s work. So, we did a fair amount of experimenting with that; and then of course, my years in the theater as a
musician, you just soak up what a light can do… I’m thinking—it just popped into my mind—*Oliver!*, that English show… The woman is killed by that rather big, angry guy at the end; you can do that lighting so many different ways, and it can really make it seem even more violent if you use red, for instance, with blots of black. Or if you use just a strong spot; that’s another way of enhancing something awful. So, you know, that’s how I come to lighting as a musician—both the experimental and the very traditional.

And I would say that (you can say) is how I was raised as a musician. You know, when I started playing percussion at the age of six, I learned all of the different styles, whether it was a rumba, Dixieland, jazz, all kinds of improvised music, as well as very strict studies of rudimental playing and classical music, playing as percussionist. And that continued until I was about twenty-eight, that kind of playing—both highly experimental music and playing as a freelance musician in various commercial venues and styles…

*KD:* In this piece, specifically, but also in your former experience with light, if you had a light palate in the lighting you would use with music, what would that be?

*SSS:* Well, the first thing to think about isn’t light; it’s to think about theater. And then, once your theatrical idea comes into focus—then light. When I did *The Circle of Light*, however—I remember, as a kid, living without electricity in central Maine; and we had flashlights, and at night we would do fun things with them. And one of the things was to put the flashlight on—and of course it was as dark as anything—and of course it was as dark as anything—under your chin and try to scare each other. So, immediately, when I thought of *The Circle of Light*, I thought of that; and then I also thought of Greek chorus. So, it was very playful.

*KD:* What I find fascinating about that, too, is that, then, your idea for the light came from the title as well. It’s another organic result from the title.

*SSS:* Exactly.

*KD:* Thinking of that, what do you think the function of the lighting is in your piece?

*SSS:* It’s to have the visual element of a kind of disembodied spirit gradually surround the sound of the flute and hold it, as well as create a kind of simple design of humanity to hold it. And then, at the end, act like a Greek chorus—literally, like a Greek chorus. Greek chorus’ commented on the plot in Greek literature. This piece, the Greek chorus comments on the title, the theatrical moment they find themselves in, and the flute music—because you are singing, and it says, “we all sing.”

*KD:* Now that you’ve seen [my premiere] video, was there any difference between what was realized and what you had imagined?

*SSS:* Not really. I thought your idea of having them come in more gradually during the music… that’s what should happen. And when the piece is published, I will put that in the directions. That’s a very good suggestion.
KD: And I remember you mentioning that they should come out at different timings, so it shouldn’t be regular... You also mentioned that you struck the [original] option for the flutist to speak all of the lines. Are there any other modifications you are planning to make?
SSS: No.

KD: What you had mentioned, too, about the theater and putting the theater first: is there any way the execution of the work could be made more compelling?
SSS: No, I thought it was very well done. The only thing that could be done better, is that make sure that each performer says their lines clearly and at a dynamic level that can be very well perceived by the audience. And, one of the things is to make sure that they articulate the ends of words. If they articulate the beginning and end of a word, it’s going to be much more clear for an audience member to hear. And then, at the very end when they’re saying things together, they’ve got to be right on the money; they’ve got to be absolutely together. So, that would have made a better performance, but, you know, now we know. And now you can help them; when you tour with the piece, you can work with them on those things.

KD: Speaking of that, the enunciation of the words—I really like this about your instructions—you say not to perform the text theatrically, that it should be in a normal speaking tone or inflection. But, what you’re saying: you still want that, however, with more enunciation.
SSS: With clarity. You see, if you watch movies, the only stylization that should occur is within a tradition, for example: if you’re doing Noh, if you’re doing Kabuki, if you’re doing Moses and Aaron, if you’re doing Puccini. All of those have a style of language—or Robert Ashley, for that matter. But, if you’re doing theater, you watch Robert De Niro—he comes to mind—you can’t even tell if he’s acting or not. That’s fine acting, and that’s why I say: don’t try to act. If you don’t try to act, then the acting is superb.

KD: So, you’re more concerned about [the text] coming across.
SSS: That’s all. Yeah, make sure the words are clear...

KD: It’s helpful to me to know that what you’re wanting isn’t so much an everyday kind of speech, necessarily; but instead, you’re thinking you don’t want it to sound artificial. Is that right?
SSS: That’s correct. Think about this: in Zen archery, you have to practice all the time in order to hit the target, but the most important thing is how you release the arrow. But the greatest Zen archer, because he released the arrow with such spontaneity and discipline, never hit the target once. That’s another element of performance. If you listen to some virtuoso pianist, they drop about thirty percent of the pitches, but they play so well, they hit another target. That’s another element of performance…
KD: To what degree do you think The Circle of Light should be adaptable for alternative performances?

SSS: Well I hope that the notation is clear enough that other people can take up this piece and it will be recognizable as itself—interpretable, in other words, that one can put their own mark on it.

KD: In the past, I’ve asked if it would be possible to perform the piece with fewer luminists. You’ve discouraged that.

SSS: Yes. After seeing it, it really needs just that number…

KD: I have one other thought. It’s another rather general question, but I am interested in what you think, especially as you have been experimenting with light in the past. How do you think this project will be received, but by this project, I mean not only these five pieces, but also just the idea of integrating music and light, especially as the technology advances?

SSS: I think that it will be received by audiences very positively. Audiences love music theater; and if it’s done well, they really enjoy it because they’re raised as youngsters on music which is very visceral. They dance to it, and you go to a concert and it’s, you know, fireworks. [Laughter] And the musicians dance around on stage and have a grand old time. You know, and then, people get up on stage and they jump into the audience and people catch them—and it’s a circus, you know? It’s a wonderful circus.

And then they say, well, you know, this is cool, but, like, there’s got to be more to life. And they begin to get into going to live concerts and seeing orchestras and this that and the other. But you know, you notice what I said? I said seeing orchestras. You know, seeing and hearing go together. And, you know, you stand like I did, five—well, four—feet from Duke Ellington as he was playing. I soaked in the pitches and the rhythms, but I also soaked in his theatrical thing about how to swing and make sure you tap your feet on two and four rather than one and three ‘cause two and four is hip and one and three is square. You know? [Laughter] You know, he had a great time. And I remember seeing Ray Charles, five feet away. You know, you watch that guy play, and you know you could almost be deaf and, like, say: “my god, this is compelling.”

So, yes, you’re giving your audience something to see. It’s very much in the tradition of American pop music. I think that, [when] you get the right pieces (and you will over time), and ask the right folks, you’re going to have a program that will be really well received, indeed.

KD: Do you think you will continue to compose for the genre?

SSS: I don’t know. I am always involved from an early age, with theater. There’s a guy… doing [my composition] Songs I-IX; he’s doing a video version. In the first three songs, his head is totally, like, long hair—hippie-type head. Then… in the middle he’d got red and green and purple hair; and then the last one, he shaved his head. Now, is that lighting? Of course it is; we watch it. Theatrical things without special lighting is light. We don’t see without light. [Laughter] So, on the most fundamental level, you’re always
dealing with light. If you’re conscious about how you look playing the French flute tradition music—you know, the most… flute composers’ music—and you do it with a stunning body language that is organic to the music, audiences will go nuts. Because the performance is strong. Performance is theatrical always because we hear and we see.

KD: This is why the first chapter of my dissertation is going include limits for the term multimedia, because I think you’re absolutely right—you could argue that everything is multimedia for the very reasons you were just saying. We’re not listening to recordings that are disembodied, for the most part, anyway. We’re listening to live performances. Actually, that in a way is interesting to me because in The Circle of Light, you have kind of disembodied me. But then, I like what you’re saying in that, so: I’m disembodied, but this community is involved in the creation of the sound.

SSS: Not only that—they’re holding you. They’re holding the sound as if it was their sound; and then as a chorus commenting on your singing and saying to the audience, “we all sing,” and that means the audience, too, because they just sang. And what they just sang was The Circle of Light in their ears and mind...
Jacob Thiede Interview

Personal Phone Interview, Jacob Thiede.
Conducted December 15, 2016.
KD: the author
JT: Jacob Thiede

KD: We’re going to start off... [with me asking] about your compositional process in general, but also specifically for And everything in-between... especially when it comes to using Max.
JT: Yeah. I think with And everything in-between, I started with a structure—[an] overview in my head—and for the longest time—you approached me early in March, or earlier than that, February, the very beginning of 2016—and so, from then until about May, it was just kind of formulating and cooking and baking in my head. Maybe even ’til June. And in June I really put the pencil to the paper, just partly—mostly—because of the deadline. Or—was the deadline July 1st?

KD: [Laughs] The deadline was July...
JT: Okay, so, yeah. I put the pen to paper [at] the end of May and beginning of June. And… it wasn’t necessarily a “I don’t have time to do it;” it was just still really kind of processing and formulating… I’d like to say that I sketched down some ideas down physically, but most of them were in the chaos of the brain—in my brain. So, initially it was a big structure—a big architecture of seven minutes. You know, I [wanted] certain points to happen; and then, within that, it was mainly this ABA idea, or ABA’, where A was this development of material, a slow process. And then it kind of comes together, and then you’re kind of teased and it’s cut off and it kind of shatters and it breaks—and that’s what B is. And then the A’, the very end—it’s trying to create a stained-glass image of what A originally was—at least, that’s an artistic or poetic way of looking [from] the clouds, I guess, [at] And everything in-between… I’m glass-blowing, so to speak. And so, it’s a more organic thing; and then B shatters it together (sic). And then, [A’] reorganizes it, and you have these kind of fragments put together [that] kind of resemble A, but it’s less organic and more mechanical and sharp...

KD: Are there any motives that you recycle in A’?
JT: Yeah, that [sings open fifth 32nd-note figure at m. 36]. That fifth—splitting the octave into fifths and fourths in the major key. That was kind of a reoccurring theme. Yeah, I think that’s really the only one that kind of comes throughout...

KD: So, the B-section is where things start to break up, [where you have the repeated G’s]?
JT: Yeah… it’s not necessarily atonal, there’s no structure to it—well, there is a structure to it, there’s a process to it… The pitches that I chose—the registers were organized…
it’s: low-mid-high-mid-high, low-mid-high-mid-high, or something like that. And the pitches that are used, I tried to avoid using similar ones that were used before and after; but… the displacement of the registers was always consistent. Or, I tried to make it consistent.

KD: And is that in the B-section, or is that, just, globally?
JT: The B-section, yeah. Where [it’s] kind of timeless—you know, it’s in [the] various tuplets and rhythmic displacements...

KD: I think it’s interesting you used the glass-blowing analogy. To me, it seems like, in B… it reminded me of the formation of a star, if that makes any sense.
JT: Oh, wow, okay. You have these, different particles, but it’s gas kind of collapsing in on itself.

KD: Right, exactly. And it’s nebulous, a bit, too, so [that’s] maybe a different analogy, but it’s starting to form, and then it becomes this complete thing.
JT: Definitely, I agree...

KD: So, you figured out the form; did you put pencil to paper before you started writing the [Max program], or how did that work?
JT: Yeah, it was kind of a side-by-side thing. And there was like a good week or two where I was like, “I am so behind on this [program] on the coding. I have the music in mind; I know what I want to do. It’s just, I am not a proficient coder yet.” But it came together, definitely. And I’m surprised by how low the CPU load was when I would play it back, ‘cause…the sax piece [While it was raining in the woods] that I wrote with Max—I was just inefficient with all the coding and with all the processing and it just took so much computer processor speed… But the good majority of [And everything in-between’s Max patch] really is just… triggering the play-back of certain materials at certain times ‘cause there’s a timer when you first hit the pedal, and that timer activates different events as they go on… And really the only processing is just that quasi-glitch—it’s not very glitchy (I mean, it kind of sounds glitchy)—but it’s just kind of recording materials every ten seconds, always recording something new… From where you are and then ten seconds backwards it’s always recording new material and following you and recycling it and playing it at different EQ’s and at different points, randomly...

KD: Okay, so you wrote [the flute music and the Max program] together...
JT: Yeah, so it’d be kind of like side-by-side and it would be very through composed… Since I’ve been at [the University of North Texas] this semester, I’ve been really understanding the different ways of how a composer composes; and we read [from The Genesis of A Music] by Harry Partch… He’s a character. He points out… the difference between algorithm, tradition, intuition (and there was a… fourth component)… Understanding where algorithm [fits] within the musical process of composing, how are we influenced by tradition when we’re composing and what we know. And then how
much of it is based on intuition… based on what we think… [when] we intuitively say: “this sounds good” and “this sounds bad…”

[Looks up article on the internet.]

Yeah, it was body—algorithm, tradition, body, or intuition. And so, Partch talks about the body as, you know, like—what is music? Well, all that is required for music—you know, finitely, not abstractly—is… just vibrations (or something to vibrate), and something to receive the vibrations, a body to hear it. In the case of the human being, it’s our ears, it’s our whole—we perceive sound in music via… this whole body that receives it. And, so, how much of our bodies—I think (this might be totally missing the point, but from what I interpreted it as)—it’s, you know—especially with electronic music and fixed media, too, where you have twenty-four sound—the music in that case… it could be based on intuition, [tradition], and algorithm, but it’s also based on: how do we perceive this art of sound? How do we physically interpret it? So, those four things.

And so, when composing with Max, it’s very much, heavily based on intuition; and there’s a risk, you know, putting all my ducks in that basket—or whatever the expression is. I could be like, “I think this sounds good,” and I give it to someone else and they’re like:

“What are you doing? I don’t get it. You know, it’s not very clear.” And that’s something that Dr. [Alejandro] Rutty really pounded into my brain… If [the music] lacks clarity and focus, you need to work on that… Above all things, it needs to have clarity and focus.

And then, there’s downsides with that, too. But it’s helped me as a composer in trying to get my point across, and so—especially at the beginning… with the pacing of the [sings open fifth/ fourth 32nd-note figure at m. 36]—that was very much like, listen, playback in Finale (which there’s pitfalls to that, too). But listening to it back and being like:

“Oh, do I need to extend the material more, or do I need to chop stuff away?” There was no real process to it; it was just, like: does it sound good…

KD: It makes sense to me that [And everything in-between] was through-composed… You talk about the form, but it seems like it’s telling one story. You couldn’t take those sections and reorganize them and it be the same piece.

JT: Oh, no. Yeah, there really is definitely a narrative; and that’s something I’ve been interested in, too: is… how do composers tell a narrative, if a narrative at all… With Boulez, there’s gesturalism; and then he was trying to get away from creating any sort of narrative at all, approaching it like Webern, where’s it’s just abstract. It’s just: it is what it is. And then, I was listening to Judd Greenstein, who is with New Amsterdam Records. He’s a little bit older than us… And, when we were listening to him in my Musics in the 2000s class, a lot of people were like… “if there wasn’t a music video component to it, I think I would get bored real quickly.” But I was just like:

“I disagree. I think the music is so strong in and of itself that it… tells a narrative, in my mind, at least.” And so, I’m really fascinated with: how does music communicate a very abstract narrative, like a story? And we also have preconceived notions about what
makes a good story. You know, it has to have development, it has to have a character… We associate musical characters—is that right? I don’t think that’s necessarily right for my music, where it’s like—that you assign different things, different characters... But it’s still—I like to think that it has an arch, even though… I like to think that it defies what we conceive as [that]… We need to talk about the balance between the abstract and concrete elements in art, because you can’t escape them, as long there’s a medium—as long as there’s a physical thing communicating them...

_KD:_ I have your program notes, too, about the concept that went behind the piece. Was there anything else that inspired the piece, or any concepts? Maybe the narrative... [But] it sounded to me like you were trying to divorce yourself from a narrative.

_JT:_ Yeah, I’m always trying to divorce myself from a narrative, and lose that baggage; but I think I’m drawn to it... I guess I was listening to a lot of Nadia Sirota, the violist, her _Baroque_ album. And she has Nico Muhly on there. She has Shara Worden, the singer—she sings for a lot of David Lang’s music (and it’s very straight-tone), and she has a band called _My Brightest Diamond_. And also Judd Greenstein, as well as Missy Mazzoli. And those pieces… kind of provided a frame work… everything was just very clear in regards to the music: the rhythms, the harmonies, the sounds themselves (a lot of them had electronic playback). And, I’ve been trying to get away from this really, hyper-academic exploration of sound—I guess, just academic in general. I’ve been struggling with—and what I think what I want to focus on my thesis, is that—we’re trying to expand our bubble, our sphere of knowledge, and try to put a tiny blip in it with our dissertations… like, “I’m making these crazy sounds, and I’m making this experimental music…” But then, I feel like so many composers get so caught up in: “I need to, like, make a blip in my bubble by doing something just innovative and really crazy and new and stuff…” I would love to make my thesis commissioning composers and playing on saxophone and, you know, writing music myself based around sine tones as source material. Something just so incredibly simple and bursting our end of the bubble by just making music with sine tones and searching for clarity and focus rather than… overcomplication of materials.

And I’ve also been listening to a lot of indie pop music; and… I taught a course in Pro Tools this summer, and so I’ve been exposed to the more, I guess, pop elements of it all. And I’m really encouraged by that community, and what little I have been exposed to. So, with the inspiration for _[And everything in-between]_, that tail end… it was influenced by Desiigner (with an “i”); and he made a song called “Panda...” He’s from Georgia; he’s from I think Atlanta. And, in Logic, I so cliché-used the preset drum-kit “Atlanta.” And the 808 (the kick and the snare) sound very similar to that song. And so, I was like, “I’m going to do this…” The tempo is the same... 80 beats per minute... And his lyrics are based on this triplet sixteenth [idea]: [sings triplet sixteenths]... So, I emulated that song in the sense of the rhythmic aspect—and, so, with tempo and rhythm—and then also trying to capture the sound of the 808. And just letting loose and exploring the hip-hop element of taking that, I guess, rhythmic motif... and permutating and changing the phrasing of it. So, it starts in groups of three, and then it’s interrupted by groups of five:
that [sings groups of five]. And then doing it in six, and stuff like that. And a lot of rap music, I’ve found, is taking the same flow of the same beat, but then with the different sentences and sentence structures, they accent the different off-beats; and I love to explore rap music that does that…

So, that’s what the tail-end of the piece—that’s what that was inspired by: that Disigner, “Panda.” And then, the middle was more [trying] to be like—not New Complexity—but just trying to make different rhythmic possibilities and stuff. But, overall, the whole piece itself was definitely inspired by Baroque by Nadia Sirota…

KD: The next thing I wanted to ask you about was lighting art… So you [were] talking about using lighting boards at church and stuff like that. Had you had experience with light prior to this?
JT: Not a lot… [My] friend DePaul Vera… he uses a lot of these colors that I like that are really simple colors. And I was like, “I could just really map that onto… like, just the spectrum of color.” That was the main inspiration for that. And then also, just, the idea of And everything in-between; it applied to the… musical element of—you could think about it with silence (and total silence) and then where does sound begin—you know, what number and what value… And then also with color, where you get into these—you talk about hexadecimals, where you have these very accurate numbers… depicting these unique colors. You know… the infinite possibility of color and the infinite possibility of harmony and sound… Different pitches and different timbres, as well…

KD: Had you thought about integrating the two before, the sound and the color?
JT: Yeah, with color. And I showed you my—I think I sent you my comprehensive exam where I was mapping Nico Muhly’s music to color. Yeah. For my [comprehensive exam] essay, I mapped the spectrum of light to the spectrum of fifths—the Don Freudenstadt spectrum of fifths… I’ve always been interested in mapping… minimal colors and minimal art to music. And I went to the Menil collection in Houston, where there’s a lot of work by… Barnett Newman… He was very fascinated by color theory, and he was kind of along the lines of Mark Rothko’s work, where he had these very minimal, you know, large canvases of just… paint and coloring… He has this famous portrait called “Who’s Afraid of Red, [Yellow], and Blue?” I think. And it’s addressing color theory. And, so, I’ve been very fascinated by just simple colors and simple music and how they might affect the affects… the overall affect of a person.

KD: Which ties super into the “Baroque” [album] that you were talking about, too.
JT: Yeah. And I’ve been saying, “I need to disassociate with the narrative and whatever;” and I’m latching onto people’s feelings and overall perception…

KD: That all being said, if you had to… define your lighting palette, what would you say your lighting palette would be? It seems very color-driven for you… [So, let’s take one step back:] What does music with light mean to you?
JT: Okay. So, along with this project, and then also doing light—doing graphics and AV at The Village [Church] in Denton—I’ve found that, you know, the overall mantra is (we have a sign that says), “minimize distraction to enable worship.” And I think there’s something to that with lighting where it hones in on a certain thing—I don’t know what that thing is, it’s an abstract thing. But it can either be—it’s really… a delicate balance with lighting (and also with music, too… I can make a couple of allusions in my head)—but it’s… a delicate balance between distracting or allowing for better focus into what the art is trying to express… So, along those lines… to avoid distractions and… to really hone in and focus, you get great performers… If you’re making electronic music, you do really clear motives and really try to hone in on, I guess, the narrative or just what you’re trying to do—whatever you’re doing, whether it has something to do with doing something. (Wow, that got really meta.)

And so, with music, you hire a group of performers, you do your best to communicate what’s on the page. You know, we have all of these kinds of guidelines that are unspoken, but we also learn in music school, or we learn just [by] being a human being, in general… You communicate the most effectively to avoid the distraction of, you know, getting off what you’re trying to say. And then, with lighting, you need to have the right balance of certain—for me it’s… all color based—and have the right balance of colors. And colors that match may or may not match the music that you’re playing, in the case of your dissertation. And then, also, it’s a matter of brightness or darkness, hue and saturation. You know, it’s all about the saturation point of, you know, how much can the audience take, how much can the performer take, how much can the person take? So, all that to say, the mantra might be: “Avoid distractions, remain hyper-focused. Try to really hone in on the point.” And I think when you put more and more elements together, in the case of your dissertation, I think the lighting—I don’t want to say that it adds, because it’s not necessarily a slave to the music. It becomes one work of art. The performance, the lighting set-up, the electronics set-up—when all of those things are equally balanced and kind of in this order, you get this really, ideally, truly artistic expression of the composer and the performer, and something really enjoyable for whoever is sucking it in…

KD; Another question for you: what do you think the function of the light is in your piece, just based on what you just said in terms of the working together and the balance of the whole thing?
JT: The function of the light… Really, I wanted to achieve more of a… Crumb Vox Balaenae effect, where it’s kind of all-immersive. But it works also in that… it’s a video instillation. I have been asked: are you afraid of—just, it is really in and out, it’s really kind of harsh in some regards. It might trigger epilepsy. And so, I think that I need to work on—if it’s a video instillation, it needs to be… more smooth in transition. But, all in all, I wanted it to be—if I could get a huge projection that was casting down… from a mile above the audience and it just kind of immersed the whole radius of where the audience was—I’d love that. So, ideally, I wanted the projection to be the lighting; I didn’t want it to be a simple fix, though. I still take it very seriously—but… I like to think
that it’s really easy to just connect the VGA into the projection, connect the microphone to the interface, and then you have your lighting…

KD: In talking about this balance, do you think that—because you have the ROY G BIV happening backwards, and you were talking about how the colors relate to different affects—do you think that… certain colors relate to certain parts of the piece, more or less? Or was there any thought behind that—assigning different colors to different parts of the piece?

JT: I’m going to say no… When you ask that question, I think about synesthesia and Andy Akiho… He wrote a suite of steel pan works called… the Synesthesia Suite. And, in his program notes—I did my research paper on one of his pieces and kind of got this biographical info—and he was saying that, “I don’t have perfect pitch, but when I’m thinking of a color with music, I’m thinking of it as a tonic, as a ground bass for the framework.” Rather than haphazardly being like, G is green, C is yellow. But, rather, C is yellow, and… the key itself—the abstract key itself—works together to reinforce yellow…

KD: So, it’s more of a relative kind of thing.

JT: Yeah, like, “I’m a synesthete. I see all these—all these colors when you’re playing a Bach Sonata or a Bach Prelude…” Whereas Andy is, like:

“Oh, we’re in a Bach Prelude—Prelude [No.] 1, we’re in the key of C. That’s yellow. It all works together to make yellow…” Even then, he assigns color to specific pitches. I’d like to think that I was avoiding—you know… I unintentionally assigned… started with indigo. And someone could easily say:

“You did indigo at the beginning and the beginning of the piece is in… b minor. So, therefore you think that indigo is b minor.” That’s not the case at all. It’s just that it just so happened to be at the opposite end of the [light] spectrum and… I go in reverse. So, no. I think that might be something, though, I might want research later as I’m figuring out my relationship with narrative and stop trying to divorce myself from it…

KD: Now we get into questions about… improvements for me... So, were there any differences between what you heard in the premiere versus what you imagined?

JT: Okay, well… I did record the premiere, and so I would go back and listen to it. And I really, really love what you did with it… Listening to the recording—I think with the performance, I really liked in the middle section, especially with those overblown harmonics, how you really took your liberty with that. And some were really [quick]—you’re just kind of like flowing through it and it wasn’t as precise as the recording that you sent… That’s something I need to do in those scores… I say, you know, stay strictly in time [as] the computer moves in and out. But at the same time, I’d [like] the performer… in the piece itself to kind of ebb and flow… Just make this section, this portion faster and give it back [within] this time… I think I need to do better in the middle part (especially with the overblown harmonics) not be so strictly, like: [sings
metered, then sings with more direction]. Like, really, really fast, [especially] as you go higher...

**KD: Do you think that in this particular piece the lighting enhanced the music? Did you achieve the balance you wanted?**

**JT:** I think it could be better because what Jitter is—it’s a video playing back. And I think the video isn’t in the best dimensions, the best quality that it could be… And so, I’m going to say—sort of. You know, I’m almost there in the sense that I’m happy with how it enhanced it. But I know that I was trying to meet a deadline and—I think… I was fixing the lighting aspects when I was here in Denton [at University of North Texas], way past the deadline… And so, I was really just trying to figure out—you know, I haven’t explored the video or Jitter side or the lighting side of music and how it complements each other… And I think that… this could be a proponent for having schools do more intermedia study, making it a core curriculum in masters and doctoral programs—and even bachelors programs just ‘cause so much of the world has become digital. And because of that, so much art has become digital, whether it’s music, lighting, video, picture, and anything else that might be, you know, art and digital. Because of that, you know, more classes need to be talking about: you need to be a jack of all trades in some cases and not a master of one discipline—because you’re going to get more opportunity to collaborate…

**KD: The only other question I have left, at least on paper, is: how do you think this project will be received and… (you’ve kind of already answered this one, too) do you think you’ll continue to compose for the genre?**

**JT:** Yeah, I think so, especially as more composers are getting more intermedia accustomed. And, I’ve already thought of… ways to—I wrote a percussion and piano duo—and [thought of] ways of incorporating visual aspects to it… Also, so much of pop culture is leaning towards the combination of—or just video in general, where video incorporates audio and visual… I’d like to think that composers are being pushed—and just artists in general are being pushed—to make stuff for video because it’s so prevalent with YouTube… and with Instagram video… And that’s where arts are really thriving, I think. And, so I’ve been trying to, yeah, incorporate more of a visual aspect to the music, too…

Mark Applebaum is great in saying that all composers are narcissists; and for better or worse, I’d like to think that people either be hot or cold. And, I’d like to think a lot of them would be hot and be, like, “This is really awesome.” And, I’m really proud of [And everything in-between], and I think it’s one of the best pieces that I’ve written in my compositional career…

And it’s so funny because… I feel like people will listen to [my piece] and it has these pop elements and because… I did that—I don’t want them to assume I did it to be a crowd pleaser. But, I did it primarily for myself… It just kind of occurred to me, we’re talking about this, and—that could totally be the case, where someone assumes that, “Oh, Jake… you did it as a cop out…” You know, [in] listening. But really… in that sense, I’d
like to think that, you know, pop culture art—you know yes, we should question it. We should question where mass media is coming from. But on the other hand it’s still an expression of the human experience. Why should we undervalue it? And, I think that’s what I’ve been struggling with…

And then, I get wrapped up in: what is good art? Is it innovative? Good art doesn’t have to be innovative. Good art can be just simple and clear—and taking off from something else. And it doesn’t have to be new, it doesn’t have to burst the bubble. So, it’s a fine balance…
APPENDIX E

PERMISSIONS

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Informed Consent Form, DMA dissertation research

Please consider this information carefully before deciding whether to participate in this research.

I, Dr. Michael S. Rothkopf, volunteer to participate in a research project conducted by Krisztina Dér from the University of North Carolina Greensboro. I understand that the project is designed to gather information about musical compositions written for flute and light; and a transcript of my interview will be part of the published dissertation project.

- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
- If I decide to volunteer, I will be asked to participate in one interview that will take approximately one hour.
- In the interview, I will be asked several questions. Some of them will be about my contribution to the integration of music and lighting design: I Dream of Coloured Inks. Others will be more general, about the multimedia genre.
- With my permission, the interviews will be tape recorded, and notes will be taken during the interview.
- I agree to be contacted post-interview, should the researcher, Krisztina Dér, have follow-up questions.
- I understand that the information I have submitted will be published in a final dissertation document.
- I agree that my name, job title, and place of work may be identified in the final document, and waive the right to anonymity for the purposes of this research.
- I agree that my contribution to this research project may be used by others for future research.
- If you have any questions, please ask the researcher before you to decide whether to join. You will be given a copy of this Consent Form to keep and refer to at any time.

I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Composer’s Signature: [Signature] Date: 11/24/2016
Rothkopf Permissions (Cont.)

Score Permissions Form, DMA Dissertation Research

Dr. Michael S. Rothkopf permits Krisztina Dér to publish the score to his work *I Dream of Coloured Inks* in her University of North Carolina Greensboro dissertation document, for which Dr. Michael S. Rothkopf holds the rights.

- To make this score available to scholars, Krisztina Dér requests non-exclusive publishing rights for using the score *I Dream of Coloured Inks* in her dissertation document, regardless of the media, territories, and languages in which it is distributed and displayed.
- As this is a not-for-profit publisher, the dissertation document will be used only for educational and scholarly purposes.
- Krisztina Dér will acknowledge Dr. Michael S. Rothkopf as the owner/author of the material. If Dr. Michael S. Rothkopf has a preferred title and/or name, he will inform Krisztina Dér.
- As use of Dr. Michael S. Rothkopf’s score will be strictly non-commercial, Krisztina Dér requests a waiver for any permissions and licencing fees Dr. Michael S. Rothkopf may charge.

Signature: [Signature]
Date: 11/16/16

Composer’s Signature: [Signature]
Date: 11/24/16
Video Agreement Form, DMA dissertation research

Dr. Michael S. Rothkopf permits Krisztina Dér to video record a performance of his work *Dream of Coloured Inks*, for which Dr. Michael S. Rothkopf holds the rights.

- The video will be used to supplement Krisztina Dér's University of North Carolina Greensboro dissertation document and will be published with Vimeo or YouTube.
- The rights of the video will belong to videographer Wayne Reich of Sunset Photography, LLC.
- The videos may not and will not be used commercially; the dissertation document and video will be used only for educational and scholarly purposes.

Signature: ___________________________ Date: 11/16/16

Composer’s Signature: ___________________________ Date: 11/16/16

Rothkopf Permissions (Cont.)
Anna Meadors Permissions

Informed Consent Form, DMA dissertation research

Please consider this information carefully before deciding whether to participate in this research.

I, Anna Meadors, volunteer to participate in a research project conducted by Krisztina Dér from the University of North Carolina Greensboro. I understand that the project is designed to gather information about musical compositions written for flute and light; and a transcript of my interview will be part of the published dissertation project.

- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
- If I decide to volunteer, I will be asked to participate in one interview that will take approximately one hour.
- In the interview, I will be asked several questions. Some of them will be about my contribution to the integration of music and lighting design: At Daybreak. Others will be more general, about the multimedia genre.
- With my permission, the interviews will be tape recorded, and notes will be taken during the interview.
- I agree to be contacted post-interview, should the researcher, Krisztina Dér, have follow-up questions.
- I understand that the information I have submitted will be published in a final dissertation document.
- I agree that my name, job title, and place of work may be identified in the final document, and waive the right to anonymity for the purposes of this research.
- I agree that my contribution to this research project may be used by others for future research.
- If you have any questions, please ask the researcher before you to decide whether to join. You will be given a copy of this Consent Form to keep and refer to at any time.

I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Composer’s Signature: Anna Meadors           Date: 11/26/2016
Meadors Permissions (Cont.)

Score Permissions Form, DMA Dissertation Research

Anna Meadors permits Krisztina Dér to publish the score to her work *At Daybreak* in her University of North Carolina Greensboro dissertation document, for which Anna Meadors holds the rights.

- To make this score available to scholars, Krisztina Dér requests non-exclusive publishing rights for using the score *At Daybreak* in her dissertation document, regardless of the media, territories, and languages in which it is distributed and displayed.
- As this is a not-for-profit publisher, the dissertation document will be used only for educational and scholarly purposes.
- Krisztina Dér will acknowledge Anna Meadors as the owner/author of the material. If Anna Meadors has a preferred title and/or name, she will inform Krisztina Dér.
- As use of Anna Meadors’ score will be strictly non-commercial, Krisztina Dér requests a waiver for any permissions and licencing fees Anna Meadors may charge.

Signature: ____________________________ Date: 11/16/16

Composer’s Signature: ____________________________ Date: 11/26/2016
Video Agreement Form, DMA dissertation research

Anna Meadors permits Krisztina Dér to video record a performance of her work *At Daybreak*, for which Anna Meadors holds the rights.

- The video will be used to supplement Krisztina Dér’s University of North Carolina Greensboro dissertation document and will be published with Vimeo or YouTube.
- The rights of the video will belong to videographer Wayne Reich of Sunset Photography, LLC.
- The videos may not and will not be used commercially; the dissertation document and video will be used only for educational and scholarly purposes.

Signature: ___________________________  Date: __11/16/16__

Composer’s Signature: ___________________________  Date: __11/26/2016__
Informed Consent Form, DMA dissertation research

Please consider this information carefully before deciding whether to participate in this research.

I, Kyle Rowan, volunteer to participate in a research project conducted by Krisztina Dér from the University of North Carolina Greensboro. I understand that the project is designed to gather information about musical compositions written for flute and light; and a transcript of my interview will be part of the published dissertation project.

- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
- If I decide to volunteer, I will be asked to participate in one interview that will take approximately one hour.
- In the interview, I will be asked several questions. Some of them will be about my contribution to the integration of music and lighting design: Komorebi. Others will be more general, about the multimedia genre.
- With my permission, the interviews will be tape recorded, and notes will be taken during the interview.
- I agree to be contacted post-interview, should the researcher, Krisztina Dér, have follow-up questions.
- I understand that the information I have submitted will be published in a final dissertation document.
- I agree that my name, job title, and place of work may be identified in the final document, and waive the right to anonymity for the purposes of this research.
- I agree that my contribution to this research project may be used by others for future research.
- If you have any questions, please ask the researcher before you to decide whether to join. You will be given a copy of this Consent Form to keep and refer to at any time.

I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Composer’s Signature: ___________________________ Date: 11/26/16
Score Permissions Form, DMA Dissertation Research

Kyle Rowan permits Krisztina Dér to publish the score to his work Komorebi in her University of North Carolina Greensboro dissertation document, for which Kyle Rowan holds the rights.

- To make this score available to scholars, Krisztina Dér requests non-exclusive publishing rights for using the score Komorebi in her dissertation document, regardless of the media, territories, and languages in which it is distributed and displayed.
- As this is a not-for-profit publisher, the dissertation document will be used only for educational and scholarly purposes.
- Krisztina Dér will acknowledge Kyle Rowan as the owner/author of the material. If Kyle Rowan has a preferred title and/or name, he will inform Krisztina Dér.
- As use of Kyle Rowan's score will be strictly non-commercial, Krisztina Dér requests a waiver for any permissions and licencing fees Kyle Rowan may charge.

Signature: 
Date: 11/16/16

Composer's Signature: 
Date: 11/20/16
Video Agreement Form, DMA dissertation research

Kyle Rowan permits Krisztina Dér to video record a performance of his work Komorebi, for which Kyle Rowan holds the rights.

- The video will be used to supplement Krisztina Dér's University of North Carolina Greensboro dissertation document and will be published with Vimeo or YouTube.
- The rights of the video will belong to videographer Wayne Reich of Sunset Photography, LLC.
- The videos may not and will not be used commercially; the dissertation document and video will be used only for educational and scholarly purposes.

Signature: ________________________________ Date: 11/16/16

Composer’s Signature: ___________________________ Date: 11/26/16
Informed Consent Form, DMA dissertation research

Please consider this information carefully before deciding whether to participate in this research.

I, Dr. Stuart Saunders Smith, volunteer to participate in a research project conducted by Krisztina Dér from the University of North Carolina Greensboro. I understand that the project is designed to gather information about musical compositions written for flute and light; and a transcript of my interview will be part of the published dissertation project.

- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
- If I decide to volunteer, I will be asked to participate in one interview that will take approximately one hour.
- In the interview, I will be asked several questions. Some of them will be about my contribution to the integration of music and lighting design: The Circle of Light: A Ceremony for solo flute and eight lumenists. Others will be more general, about the multimedia genre.
- With my permission, the interviews will be tape recorded, and notes will be taken during the interview.
- I agree to be contacted post-interview, should the researcher, Krisztina Dér, have follow-up questions.
- I understand that the information I have submitted will be published in a final dissertation document.
- I agree that my name, job title, and place of work may be identified in the final document, and waive the right to anonymity for the purposes of this research.
- I agree that my contribution to this research project may be used by others for future research.
- If you have any questions, please ask the researcher before you to decide whether to join. You will be given a copy of this Consent Form to keep and refer to at any time.

I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Composer’s Signature: [Signature]  Date: Dec. 9, 2016
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Smith Publications hereby licenses Krisztina Der to print the score of Light: a ceremony for solo flute and eight luminists, by Stuart Saunders Smith, in her dissertation document for the University of North Carolina – Greensboro. Smith Publications warrants that it is the exclusive copyright holder for this work throughout the world and is authorized to grant this license to print. It is understood that the dissertation document will be used only for non-commercial educational and scholarly purposes.

There will be no fee for this use.

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The Circle of Light, by Stuart Saunders Smith. Copyright Sonic Art Editions. Used by permission of Smith Publications, 54 Lent Road, Sharon, VT 05065.

Sylvia Smith, owner/editor
Smith Publications
Smith Permissions (Cont.)

Video Agreement Form, DMA dissertation research

Dr. Stuart Saunders Smith grants Krisztina Dér the right to video record a performance of his work The Circle of Light: A Ceremony for solo flute and eight humans, for which Dr. Stuart Saunders Smith and Smith Publications holds the rights.

- The video will be used to supplement Krisztina Dér’s University of North Carolina Greensboro dissertation document and will be published with Vimeo or YouTube.
- The rights of the video will belong to videographer Wayne Reich of Sunset Photography, LLC.
- The videos may not and will not be used commercially; the dissertation document and video will be used only for educational and scholarly purposes.

Signature: 

Date: 11/16/16

Composer’s Signature: 

Date: 12/9/16

Publisher’s Signature: 

Published Smith 12/16/16
Informed Consent Form, DMA dissertation research

Please consider this information carefully before deciding whether to participate in this research.

I, Jacob Thiede, volunteer to participate in a research project conducted by Krisztina Dér from the University of North Carolina Greensboro. I understand that the project is designed to gather information about musical compositions written for flute and light, and a transcript of my interview will be part of the published dissertation project.

- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
- If I decide to volunteer, I will be asked to participate in one interview that will take approximately one hour.
- In the interview, I will be asked several questions. Some of them will be about my contribution to the integration of music and lighting design: *And everything in-between*. Others will be more general, about the multimedia genre.
- With my permission, the interviews will be tape recorded, and notes will be taken during the interview.
- I agree to be contacted post-interview, should the researcher, Krisztina Dér, have follow-up questions.
- I understand that the information I have submitted will be published in a final dissertation document.
- I agree that my name, job title, and place of work may be identified in the final document, and waive the right to anonymity for the purposes of this research.
- I agree that my contribution to this research project may be used by others for future research.
- If you have any questions, please ask the researcher before you decide whether to join. You will be given a copy of this Consent Form to keep and refer to at any time.

I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Composer’s Signature: [Signature] Date: 11/17
Thiede Permissions (Cont.)

Score Permissions Form, DMA Dissertation Research

Jacob Thiede permits Krisztina Dér to publish the score to his work *And everything in-between* in her University of North Carolina Greensboro dissertation document, for which Jacob Thiede holds the rights.

- To make this score available to scholars, Krisztina Dér requests non-exclusive publishing rights for using the score *And everything in-between* in her dissertation document, regardless of the media, territories, and languages in which it is distributed and displayed.

- As this is a not-for-profit publisher, the dissertation document will be used only for educational and scholarly purposes.

- Krisztina Dér will acknowledge Jacob Thiede as the owner/author of the material. If Jacob Thiede has a preferred title and/or name, he will inform Krisztina Dér.

- As use of Jacob Thiede’s score will be strictly non-commercial, Krisztina Dér requests a waiver for any permissions and licencing fees Jacob Thiede may charge.

Signature: ___________________________ Date: 11/16/16

Composer’s Signature: ___________________________ Date: 11/1/17
Video Agreement Form, DMA dissertation research

Jacob Thiede permits Krisztina Dér to video record a performance of his work *And everything in-between*, for which Jacob Thiede holds the rights.
- The video will be used to supplement Krisztina Dér’s University of North Carolina Greensboro dissertation document and will be published with Vimeo or YouTube.
- The rights of the video will belong to videographer Wayne Reich of Sunset Photography, LLC.
- The videos may not and will not be used commercially; the dissertation document and video will be used only for educational and scholarly purposes.

Signature: [Signature] Date: 11/16/16

Composer’s Signature: [Signature] Date: 11/17/16
Wayne Reich Permissions

**Video Agreement Form, DMA dissertation research**

Wayne Reich permits Krisztina Dér to include five videos (*I Dream of Coloured Inks*, *At Daybreak*, *Komorebi*, *The Circle of Light*, and *And everything in-between*) in her dissertation document, for which Wayne Reich holds the rights.

- These videos will be used to supplement Krisztina Dér’s University of North Carolina Greensboro dissertation document and will be published with Vimeo.
- The rights of the video will belong to videographer Wayne Reich of Sunset Hills Photography, LLC.
- The videos may not and will not be used commercially; the dissertation document and video will be used only for educational and scholarly purposes.

Signature: ___________________ Date: 4/5/17

Signature: ___________________ Date: 4/6/17