

Beverly Emmons: Composing Light for Merce

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ABSTRACT

There is an increasing interest in the performance and analysis of stage lighting design as a unique artistic discipline with a logic and language of its own that serves a creative purpose outside of simple performance illumination. This article suggests that the lighting design work of Beverly Emmons in collaboration with Merce Cunningham and John Cage – can be analyzed and perceived in similar ways to music composition. The improvisational processes and practice often associated with the Cunningham and Cage aesthetic, were present in all aspects of their staged works, including the lighting design. The key production discussed in this article is “Winterbranch” for which Emmons designed/composed the lighting in the 1960’s and again in 2012. At the core of this article is a 2015 conversation with Beverly Emmons on her experience in moving from a career path as a dancer to that as an emerging female lighting designer with the Merce Cunningham Dance Company in the 1960’s, balancing audience expectation with experimentation, re-imagining another artist’s work, composition “by chance” and being female in a predominantly male occupation. Emmons recollections of her work with Cunningham and Cage offer unique insight into her experience with the avant-garde artists and the effect on her own approach to the composition of stage lighting.

In March of 2015, Beverly Emmons kindly agreed to a telephone interview from her home in Brooklyn, New York to discuss her experience as the lighting designer for the Merce Cunningham Dance Company in the 1960's. Emmons' account revealed that the improvisation, experimentation and composing by chance that was created for the company by John Cage, David Tudor and their contemporaries was also being explored by the lighting designers. Her candid, detailed and often hilarious accounts are the base for this article. Citations listed as (Emmons) are direct quotations from that interview.

A lighting designer for the stage is like a symphony conductor giving the performance its tempo. A talented lighting designer can direct the pace and dynamics of a live stage production like a play, musical, opera or ballet through the speed at which light appears or disappears from the stage and the intensity with which it is presented. The lighting composition may consist of a solo in the form of a single spotlight, the pianissimo of a gently lit cyclorama glowing¹ and revealing the human form in silhouette, or the full sensory assault of the strobe light – like a bass response that is felt more than it is heard. I contend that in her role as the lighting designer of twelve productions² for the Merce Cunningham Dance Company, Beverly Emmons was

¹ The single largest piece of scenery in the theatre, the cyclorama or “cyc” encloses the scene to form the background and is most commonly placed as far upstage as possible. Most often used to create a sky effect behind a scene, it is traditionally illuminated in dance to match the mood of the piece and to create visual depth between the dancers and the stage. Depending on the material the cyc is made of it can be lit from the front or behind to create different effects. The cyc can be a large screen or curtain stretched between battens or the back wall of the stage painted white, and may be curved or flat.

² Beverly Emmons designed the lighting for twelve productions by the Merce Cunningham Dance Company: *Winterbranch*, *Cross Currents*, *Place* (also costumes and scenery), *Night Wandering*, *Scramble*, *Walkaround Time*, *Field Dances*, *Nocturnes*, *Story*, *Variations V*, *Rain Forest*, and *Crises*. *Winterbranch* is the focus of this article because, as I discuss below, it is the most recent remount of a Cunningham show that Emmons has been involved with.

as much a composer of these avant-garde pieces as John Cage or David Tudor. The uncommon aesthetic practice of the Merce Cunningham Dance Company, which I shall summarize, influenced Emmons' approach to colour, improvisation, creative agency and standard lighting conventions for the stage, as this article demonstrates. This article will draw on examples from various productions of *Winterbranch* as well as biographical information gathered from a conversation with Emmons. Throughout this essay I refer to norms and changes in the field of lighting design: I have gained these insights from my own work as a professional in the field since 1992.

Lighting design is a precise and mathematical art, not unlike many forms of music. Improvisation is not a common requirement for lighting designers, but the collaborative creation style of the Merce Cunningham Dance Company essentially aligned lighting design practice with improvisational traditions in music. In theatre, the lighting designer is often the last to come to the table in the production process. The director, set designer and costume designer take the lead on the thematic vision of the performance, and the lighting designer then adds depth, texture, atmosphere and mood. Emmons sees lighting designers as secondary artists, by which she does not mean that they are less a part of the creative process, but that without the others performing first, the lighting designer serves no purpose: "We are there to communicate the work of the primary artist – the choreographer, the playwright, the director. We bring a lot to the party but if somebody doesn't write a play, I can't light it. If some choreographer doesn't make a dance, I can't light it."³ In this sense, Emmons is like a musician improvising music in response to

³ Monica Snellings, "In Conversation with Beverly Emmons," *Culturebot Maximum Performance*, Dance Interviews, last modified September 26, 2013, accessed August, 27, 2016, <http://www.culturebot.org/2013/09/19149/in-conversation-with-beverly-emmons/>

themes and variations being offered to her, except that she is doing so with light.

Beverly Emmons began her performance career path as a dancer. She studied with Bessie Schönberg⁴ at Sarah Lawrence College, a liberal arts college in Yonkers, N.Y., and the *American Dance Festival* at Connecticut College. In order to be able to afford the tuition to attend the *American Dance Festival* as a student, Emmons needed a summer job. Having enjoyed backstage work at *Jacob's Pillow Dance Festival* in Becket, Massachusetts and working in summer stock theatre in high school, Emmons approached Schönberg, to help her secure a job backstage at the *American Dance Festival* for the summer. Initially, Schönberg told her that she did not have enough experience for the job. Emmons proved her wrong. At the time, Sarah Lawrence was predominantly a women's college, and Emmons was the only person in her all-female class willing to climb the ladder to work with the stage lights for the theatre and dance department performances. According to Emmons, "I put in a stellar performance and I asked Bessie again and she lifted the phone and got me a job on the crew that minute."⁵

In 1962, her senior year at Sarah Lawrence, Emmons was hired to create the lighting design for a performance by the Merce Cunningham Dance Company (Emmons). Her lighting professor, John Braswell, was too busy to take on the production and recommended her to Cunningham.⁶ It was this chance happening that led to

⁴ For more on Bessie Schönberg see "Bessie Schönberg papers 1932-1997 and undated," The New York Public Library Archives and Manuscripts, accessed August 27, 2016, <http://archives.nypl.org/dan/19838#overview>.

⁵ Beverly Emmons, personal interview, March 2015. Unless otherwise noted, all subsequent references to 'Emmons' refer to this interview and will be cited in text.

⁶ For more on John Braswell see the Sarah Lawrence College Archive, "Guide to the John Braswell Papers 1939-89," last modified August 15, 2016, accessed August 27, 2016, <https://www.sarahlawrence.edu/archives/collections/finding-aids/j/john-braswell-papers.html>.

Emmons' successful career as a lighting designer on the Broadway stage; a notable accomplishment in a male dominated discipline where, even today, only one in five shows are designed by women.⁷ In addition to the twelve productions designed for Cunningham, Emmons is credited with more than thirty productions on Broadway, (six earned her Tony Award nominations), and played a role in the development of Vectorworks™, the dominant software program used by lighting designers. She served as the Artistic Director of the Lincoln Centre Institute and is the director of both the *Theatrical Lighting Database*, housed in the New York Public Library, and the *Lighting Archive*. Emmons eventually returned to Sarah Lawrence College as a professor, teaching courses such as "Lighting Design and Stagecraft for Dance" in the MFA Dance Program.⁸

The connection between music and modern theatre lighting design, vital to Emmons' work for the Cunningham Company, has deep roots and can be directly traced to Adolphe Appia, arguably the most famous lighting designer in history. Appia is credited with developing one of the first consoles for manipulating multiple lighting instruments at the same time. His "light organ" could "express the emotional nuance of music with great subtlety and variation... a calibrated and extremely sensitive lighting console operated by a single person. Light could, in effect, represent the music visually in space and thus complement the physical embodiment of music..."⁹ Appia drew his creative inspiration from the operatic works of Richard

⁷ Adrienne Onofri, "Groundbreaking Women in Theatre: Lighting Designer Beverly Emmons," *Broadway.com, Wisdom Digital Media*, last modified March 12, 2005, accessed August 18, 2016, <http://www.broadwayworld.com/article/Groundbreaking-Women-in-Theater-Lighting-Designer-Beverly-Emmons-20050312>

⁸ For more information see <https://www.sarahlawrence.edu/faculty/emmons-beverly.html>, last modified 2016, accessed August 19, 2016.

⁹ Richard C. Beacham. *Adolphe Appia: Artist and Visionary of the Modern Theatre*. (New York: Routledge, 2013): 94.

Wagner and ultimately defined the Bayreuth visual aesthetic that is commonly associated with Wagnernian opera.¹⁰

Emmons, like Rauschenberg and Skelton, also wore multiple hats working for Cunningham, serving as the stage manager for many Cunningham performances in addition to creating the lighting design. Merce Cunningham and John Cage did not seek out lighting designers from the theatre; rather, the lighting designs were often generated by visual artists, including Robert Rauschenberg and Jasper Johns, or by other lighting designers who began as dancers, such as Tom Skelton and Emmons. Rauschenberg, for example, whose combines,¹¹ décor and light installations found their way onto the stage, had no intentions of being a lighting designer:

I remember having very strong feelings that theatre basically was at the mercy of the lighting, and I had no training in lighting. At some summer festival in New London, I said, 'Where's the lighting technician?' John Cage said, 'Oh, Merce and I thought you could do that.'¹²

¹⁰ A young Adolphe Appia became quite obsessed with Wagner's work after seeing Wagner's production of *Parsifal* in 1882 and Cosima Wagner's staging of *Tristan und Isolde* in 1886 and *Die Meistersinger* in 1888 followed by the *Ring cycle* in 1890. Wagner's innovations in staging that included moving the large orchestras into the pit inspired Appia to explore a minimalist approach to scenery which was a move from Realism and Naturalism which were popular at the time. Appia's lighting was a study of shadow and light used to sculpt the performer, rather than simply lighting them to be visible. Stark forms and strong vertical and horizontal planes are representative of the Bayreuth aesthetic that was created by Appia. For further information see Beacham, *Adolphe Appia*.

¹¹ As suggested by the term, 'combines' are hybrid works of painting, sculpture and collage. Robert Rauschenberg's work from 1953-1964 were his 'Combines Period.' A friend of John Cage, Rauschenberg's later combines demonstrated a growing interest in sound and analogies between music and visual art. This connection with Cage led to the combines being used as stage décor by the Merce Cunningham Dance Company. For more information see Centre Pompidou, accessed August 27, 2016, <http://mediation.centrepompidou.fr/education/ressources/ENSRauschenberg-EN/ENS-rauschenberg-EN.htm>

¹² Don Schewey. "We Collaborated by Postcards: An Interview with Robert Rauschenberg," *Theatre Crafts*, last modified April 1984, accessed August 27, 2016, http://www.donschewey.com/arts_articles/rauschenberg.html

Lighting designers are often born out of necessity and small budgets that force artists to wear multiple hats in order to get a performance to opening night.

Because I later focus on Emmons' use of improvisation, it is important to note the difference between improvisation and chance operation. Carolyn Brown, one of the most noted dancers in Cunningham's Company, has attempted to address the difference in a 2012 forum of *Arts Journal*. In regard to the improvised lighting by Emmons, Rauschenberg and Skelton she stated, "The lighting was different night after night, yes, but not by chance! BY CHOICE, artistic choice in the moment." In the same *Arts Journal* forum, in response to the 2012 remount of *Winterbranch* at Montclair University for which Emmons again re-conceptualized the lighting for the production, Emmons also responded, stating:

I had a lovely long chat with Carolyn Brown... she does distinguish, as does Cage, between Chance and Chance Procedures. And [sic] both are different from Improvisation. Cage would devise simple or 'elaborate' games to arrive 'at the next note'. The *I Ching* hexagrams used in purposeful ways are an example....This can be done with lighting decisions only really at the cueing stage. Because *Winterbranch* was often performed in one-night-stand situations (no time for cueing) we would select the odd and interesting lights we wanted to use and then improvise in performance.¹³

While Emmons does not claim to have used chance operation, she notes that some of her Cunningham lighting contemporaries did. Richard Nelson "spent a great deal of energy figuring out games... like the composer's idea that they would think of games to arrive at sound... Richard did a lot more of that than I did." (Emmons). Emmons' comments suggest that she views the *I Ching* and other systems for

¹³ Both Brown's and Emmons' comments are drawn from Deborah Jowitt, "Winterbranch: The Comment that Grew," last modified November 7, 2012, accessed August 27, 2016, artsjournal.com.

composing by chance, favoured by Cage and Tudor, to be game-like; for their own entertainment as much as a compositional method.

Although the work of the Merce Cunningham Dance Company was collaborative, Cunningham's aesthetic is arguably most prominent. Emmons asserts that he wanted the lighting designer to operate as independently as the other artists, but he had definite ideas about the final look. She states that Cunningham's direction to her as the lighting designer was very clear,

The lighting for my [Cunningham's] pieces should move, it should have a life, but it should be the way the tree looks different outside the window... because the sun has moved and not because anything emotional has happened in the room... if I have the dancers in a clump up left, I don't want you to take the rest of the lights out and leave them in the lights up there because that's telling the audience that I'm going to be there long enough to make it worth your while to do that. Plus if I go and leave that clump, you have to bring up the lights ahead of me signalling where I'm going. That's none of your business, that's my business (Emmons).

Beyond these instructions though, Emmons says she had very little communication with Cunningham regarding the lighting design. Unlike other directors and choreographers, he rarely rehearsed with light, only agreeing to it if was necessary for filming or photography for promotional purposes.

John Cage and his musical contemporaries David Tudor and Gordon Mumma experimented with how evolving technologies could be used to compose challenging and new kinds of music and soundscapes. Likewise, the lighting designs for the Merce Cunningham Dance Company challenged the audience's visual expectations. In contrast to standard practice, Emmons and her lighting contemporaries experimented with lighting sources other than the stage lights, incorporating work lights, flashlights and other non-traditional (for theatre) illumination. Like the composers, Emmons often created the

lighting design completely separate from the choreography, which sometimes resulted in a disconnect between the dance and visibility of the performance. This improvised method often upset the audience who were accustomed to bright, evenly lit stages with fully visible dancers. Emmons described that the occasional outcome was

...enraged audiences. In part because what happens is somebody comes out and takes shape and starts to do something interesting and 'boom', the light goes out on them, and then ooooooh we discover way up in back someone is crawling along on the floor with the light lighting his toes and so you pay attention to that and then 'bang' its gone and someone is running, leaping and running and you catch them in mid-air in the light and they land in the dark. But what it demands, what it reveals, is the audience's unconscious expectation that they are actually going to be able to see that ballet from beginning to end – they don't (Emmons).

In this way, the lighting designs were operating in the same way as the new music of Cage and his contemporaries; creating a disruption, not only in the traditional production/rehearsal process, but also in the way that an audience experiences performance.

Many of today's stage lighting conventions evolved in the late 1950's and 1960's. At the time when Emmons began working with Cunningham and Cage, stage lighting technology was advancing in terms of the increased brightness that was possible. Designers like Nicola Cernovic and Skelton were exploring with the saturated colours that have become synonymous with dance lighting; the lighting instruments were now powerful enough to project deeper hues. However, according to Emmons, "Merce hated strong colour which at that point was the main exploration. The equipment was finally bright enough so the strong colour could make an impression and Nic Cernovic and Alvin Ailey...that aesthetic is still there..." (Emmons).

The improvisational nature of the lighting for the Merce Cunningham Dance Company was a complication when it came time to

remount a show. Conventionally, a lighting design consists of technical drawings, lighting hookups, cue sheets and equipment lists that document how the show is to be performed.¹⁴ Much like a musical score, it allows a lighting design to be recreated with relative ease. However, these documents were not always generated for Cunningham's productions, so when it came time for Emmons to reproduce lighting designs that had been originally conceived by Rauschenberg or Nelson, she was often at the mercy of someone's memory of the event and their ability to communicate it to her. For example, when Emmons designed a version of *Winterbranch* after Robert Rauschenberg's version,

I never saw Rauschenberg's version, I never talked to him about it. I was told by people in the company what it should be...the question of how to adapt that... I mean the first time I did it I had some gobos¹⁵ in lights, in Lekos¹⁶ and he (Cunningham) said, 'Oh no. No, no, no, no...' I said, OK, fine. So what I would do is slowly during the evening, I would pull the colour out of any of the equipment that I could reach and I would just improvise with stuff coming off and on (Emmons).

Winterbranch is an interesting case study that illustrates Emmons' early lighting design work as a form of composition with the Merce Cunningham Dance Company, and, through the 2012 remount,

¹⁴ Examples of technical drawings, lighting hookups, cue sheets and equipment lists, created by Beverly Emmons for the Martha Graham Dance Company, can be viewed at <http://thelightingarchive.org/archive.php>, accessed August 27, 2016.

¹⁵ A gobo is a small patterned template or stencil of either very thin steel or glass that creates a projected image when inserted into a stage lighting instrument called an ellipsoidal reflector spotlight. Gobos are traditionally used to add texture (live leaves) to stage light.

¹⁶ Leko or Lekolite is a popular stage lighting instrument manufactured by Strand Century Lighting. The Lekolite features ellipsoidal beam reflector with adjustable focus and shutters and a gobo slot that make it a highly flexible instrument.

also demonstrates her current approach to achieving the unique Cunningham aesthetic. *Winterbranch*'s lighting design holds up well when compared to a jazz standard or bel canto aria interpreted by various soloists; Rauschenberg, Skelton, and Emmons have all performed interpretations. Emmons took over the lighting design/improvisation for this show after Rauschenberg in the 1960s and was later involved in a remount of the show at Montclair University in 2012. La Monte Young composed the music for *Winterbranch*, a piece that was disturbing to 1960s audiences who "variously interpreted it as images of race riots, concentration camps or the atom bomb."¹⁷ In an interesting reversal, the music for *Winterbranch* was recorded and therefore consistent for every performance, while the lighting was reinterpreted for each performance. According to Gordon Mumma, a composer who worked with Cunningham and Cage, *Winterbranch* used "'canned' music: a tape recording of two sustained sounds...at near deafening levels. The sensation of *Winterbranch* was in its theatrical impact, due largely to its lighting."¹⁸ The rawness of the lighting design was achieved in multiple ways, but largely by incorporating alternate sources of lighting at unpredictable intervals, inconsistent levels of brightness and angles that caused discomfort for the audience.

The timing of the piece is fairly formal. For the first twelve minutes there is silence that helps to focus audience attention, allowing them to be more involved with the fractured lighting, rather than split between lighting and music. The costumes are sweatpants and sweatshirts that are largely devoid of colour, and there is a point in

¹⁷ Joseph Carman. "The L.A. Experiment: Benjamin Millepied's New Company tests the City's Appetite for Concert Dance," *Dance Magazine* 86, no. 9 (2012): 35.

¹⁸ Gordon Mumma. *Cybernetic Arts: Adventures in American New Music*, ed. with commentary by Michelle Fillion (Urbana, Chicago, and Springfield: University of Illinois Press, 2015):114.

the piece where the light on the stage is absolutely black. During the blackness, a solo dancer (originally Merce Cunningham) engages with a mysterious monster that has been improvised from a collection of ‘stuff’: a motley collection of overturned chairs, rags and whatever junk could be found laying around backstage and loaded onto a wheeled dolly, and dragged across the stage.¹⁹ As with most Cunningham pieces, the meaning of the ‘monster’ is left to each individual member of the audience to decide for him or herself. The ‘monster’ has a front searchlight and a police light flashing on top of what is essentially a covered pile of chairs on a dolly. Anecdotally, Emmons states that “Bob Rauschenberg would make it each time and in each place and of course that made it a Rauschenberg sculpture, I’m sure it was fabulous and interesting. When I made a pile of chairs and would show it to Merce, he would sigh and throw a big rag over it” (Emmons).

Emmons is candid that creating the lighting design for the Merce Cunningham Dance Company allowed for somewhat more latitude in terms of what would be considered a safe environment for dancers to work in. In another example of how standard lighting conventions were ignored in order to achieve a specific aesthetic, about *Winterbranch* specifically, Emmons commented, “it was very dark. Its always been very dark, but with Cunningham dancers, they were dancing for Daddy and they never got hurt, they just soldiered on” but she asserts that any remount of the piece by another dance company, especially with current safety standards, cannot work with the same level of risk: “if you’re talking about a unionized professional ballet company...no no no no, you can’t do it as dangerously as that” (Emmons).

¹⁹ Film footage of Merce Cunningham interacting with ‘the monster’ in *Winterbranch* can be viewed in the “Merce Cunningham Dance Capsules”, last modified 2011, accessed August 17, 2016, [http:// dancecapsules.mercecunningham.org/overview.cfm?capid=46113](http://dancecapsules.mercecunningham.org/overview.cfm?capid=46113).

In the 2012 Montclair University incarnation of *Winterbranch*, Emmons' grounding in the Cunningham culture met with her fifty plus years of lighting design experience. Those experiences coupled with advances in technology made it possible for her to devise a lighting performance that was both improvisational and dark, but with greater safety for the dancers. Keeping with the norms of the Cunningham and Cage collaborative model, Emmons created much of the lighting design separate from the choreography and rehearsal of the show. Modern lighting technology allows a lighting designer to pre-program lighting cues that can be loaded into the computer control system. Knowing that *Winterbranch* is a timing based performance, Emmons was able to choose arbitrary lighting cues that would execute with no more than seven seconds of darkness between them, with the exception of the 'monster' scene. This portion of the lighting design, although improvised at its inception, would remain consistent every night, providing the dancers with some predictability and thus greater safety on what was still a very dark stage.

Emmons disagrees with the premise that chance-based composition embraced by Cage and Tudor must also be different from one performance to the next. "The whole idea that every time it's different...it isn't different for an audience that only sees it once. So it is only amusing for the artists...unless of course you have a fan base that comes back again and again..." (Emmons) To illustrate her point, Emmons shared the story of the John Cage piece *Atlas Eclipticalus*, which she lit only once. The performance featured a group of musicians from the New York Philharmonic Orchestra. Her observation was that Cage was "a little cute" (Emmons) to not include program notes about the piece that would help the audience past their discomfort with the new music. She argued that without the context to understand what the composer is aiming for, particularly with experimental music, the audience is excluded. Her sense is that if the

audience knew the concept of *Atlas Eclipticalis* being derived from star charts it would be more accessible: “when you get the idea of what the piece is about, that the sounds are like stars in the universe... oh my God, what a beautiful idea” (Emmons).

However, at its core, *Winterbranch* is a piece with a reputation built on improvised and at times irritating light. Current lighting control consoles have the ability to run two cues lists at the same time, which in basic terms means that two sets of lighting commands can be operated in tandem. This extra level of control allowed Emmons to reintroduce nightly improvisation to the show. In addition to the preprogrammed ‘random’ lighting, Emmons trained the lighting operator to essentially ‘play’ the lighting board as an instrument, bringing up lights in multiple locations, intensities, and originating from various sources responding in the moment. For today’s lighting technician, this is a level of creative agency that would rarely if ever be afforded (although for those whose careers predate computerized control systems, this was the norm). In addition to the board operator improvising overtop of the recorded lighting cues, Emmons gave the stage hands the brightest and strongest flashlights that she could find and directed them to shine the light at random on anything that caught their interest, thus adding additional players to what could be interpreted as the lighting ensemble (Emmons). The Montclair show is also an example of how evolving technologies continue to play a role in *Winterbranch*, as the most recent Emmons version would not have been possible in the 1960s, but new technology allowed a deeper level of improvisation in 2012.

This performative, improvisational approach to lighting design that defines Emmons’ work for the Merce Cunningham Dance Company is not the norm. This style of design demands a unique set of creative and intuitive skills from the designer; a set of skills that are arguably more difficult to develop given the current level of

technology.²⁰ Current lighting technologies are heavily digitized, and the transition from the analog sensibilities common at the height of the Cunningham and Cage collaborations has greatly altered how lighting designers work on current productions. From the late 1950s and into the early 1990s lighting operation was still similar to playing a musical instrument. True artistry in the art form required sensitivity, finesse and being perceptive to what your fellow collaborators were offering you. Designers like Emmons, whose careers have evolved in tandem with the technology, seem to have mastered the best of both eras. In regard to being open to experimentation, Emmons stated, “designers who take chances on new materials and techniques that are unproven are courageous. In fact, knowing the risks and still doing what is right for a show is courageous because critics and audiences are more comfortable with the ordinary.”²¹ That the lighting designers associated with the Merce Cunningham Company share a diversity of backgrounds and training speaks to the value of the interdisciplinary collaboration that is evident throughout the work.

Winterbranch in particular demonstrates how Emmons was as much a composer of the piece as the musicians and soundscape artists. Her compositional flexibility allowed her to repeatedly reimagine the piece. She re-interpreted the lighting of other lighting designers who designed the production before her, and then her own lighting choices

²⁰ I began my post-secondary training as a lighting designer in 1989. The late 1980’s marked the beginning of the transition from analogue to digital lighting control systems. Analogue systems were more akin to musical instruments, where the physical hand and touch of the operator on the control directed affected each performance. Having worked as a professional lighting designer since 1990, it is my opinion that today’s computerized systems have all but eliminated these kinds of nuances as each lighting cue is now digitally recorded in a cue setting session prior to the show opening. Today’s operators need only push a ‘go’ button to execute the lighting cue that will automatically rise to the predetermined level and colour in a set time.

²¹ Beeb Salzer, “The Subtext: A Risky Business,” *Theatre Design and Technology* 46, no. 3: 10-11.

fifty years later. The twelve minutes of silence at the beginning of the piece does not seem devoid of some element: in the place of music, the lighting – or lack thereof – forces the audience to become more attentive. The willingness and ability of Cunningham's lighting designers to put aside theatre lighting convention and cross over into attitudes of creativity more akin to musical improvisation than theatre speaks to their trust in Cunningham and Cage and the work they were doing. In an era where lighting designers were being presented with access to technology that could flood the stage in colour and offered designers unprecedented options for controlling multiple instruments more capable than ever of projecting complex textures, Cunningham's designers opted for the experimental route that their musical contemporaries were embracing. Beverly Emmons and her Cunningham contemporaries accepted the challenge to think of lighting design outside of the box, and achieved thrilling compositions of light that rival the musical accomplishments of the composers.

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