

Multisensory Choral Music – Past, Present, and Future Trends

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Abstract

American community choirs and audiences show signs of maturation. Recent studies reveal high participation in community-based choral ensembles, yet these papers fail to capture the health and long-range sustainability of these organizations. A report published in the *International Journal for Research in Choral Singing* indicates singers 40 years or older encompass 80% of American choirs (Bell, 2000). A separate 2003 Chorus America investigation confirmed these statistics adding that women comprise 62% of participants. With the problem exposed several questions emerge: why are young singers no longer drawn to traditional choral music, and how can choirs be relevant to traditional and non-traditional singers and audiences? Creating concerts and choirs for a modern culture is part of the solution. In a culture where emails prevail over letters, iPods outpace compact discs, and TeVo eliminates the VCR, it is only consistent that young potential singers seek multisensory musical experiences. A new holistic performance movement has gained strength fusing traditional and new choral music with extra musical stimuli: lighting, visual art, video, and theatre. Plagued by stigmas and fear of the unknown, these endeavours meet with great resistance. By reviewing recent successes and failures, this examination hopes to demystify the use of extramusical elements in choral concerts. Three contemporary performances will be explored: Jonathan Miller's staged production of J.S. Bach's *St. Matthew Passion*, Alan Harler and Leah Stein's improvisational dance collaboration of Orff's *Carmina Burana*, and Mark Doerries' fusion of choral music with dramatic lighting in *Luminescence: Experiments in Visual Acoustics*.

Introduction

The current state of choral music is under assault; the aging of choral singers, a lack of young adult recruits, and a waning patronage threaten the long-term health of the art. While a 2002 National Endowment for the Arts survey suggested that a record 23.5 million Americans participated in weekly choral ensembles, a follow up investigation by Bell (2004) indicates that upwards of 82% of these singers are over the age of 45 and 70% are women (p. 42). How then do we as conductors, singers, educators, and scholars reverse the tide of choral aging and a perceived dwindling cultural relevance? In short, we evolve with changing musical interests, we adapt to developing technologies and we explore holistic and interdisciplinary approaches to choral music that consider incorporating aural, visual, kinetic, and intellectual elements within the concert environment, all the while appealing to an energetic and shifting culture that thrives on multisensory stimulation. While many ways exist to create multisensory performances, I will attempt here to chart the historical precedent and future paths for one specific artistic cooperation, that of music and coloured light.

Reinventing classical music's relevancy for a younger generation seems to be a vision that should result in a sustainable and vibrant art form, yet it requires the creation of concerts and choirs that reflect the racial, economic, and more importantly age diversity within our communities. In a culture of *the new*, where emails prevail over letters, iPods outpace compact

discs, and TeVo makes network television increasingly obsolete, can we expect younger generations to identify with choirs that perform stoically frozen and garbed in black-identity effacing garments while performing works 500 years their senior? Forgetting how technology informed the works of Steve Reich, Edgard Varèse, Alan Hovhaness, and many others, a common response by critics to the addition of extramusical elements to classical performance is that it detracts from the musical experience. Rather than viewing interdisciplinary elements as a substitute for quality, colour, lighting, video, and motion combined with music can and must fashion an altogether new environment where music arouses not only our ears, but also our eyes.

First to suggest that musical frequencies or vibrations are analogous to the oscillating waves of the visible light spectrum, Aristotle hypothesized in the fourth century BC that

We may regard all these colours as analogous to the sounds that enter into music, and suppose that those involving simple numerical ratios, like the concords in music, may be those generally regarded as most agreeable; as, for example, purple, crimson, and some few such colours (p. 699).

Despite acoustician, Michelson Morley, having negated this theory in 1887, early musings by Plato, Pythagoras, Newton, and later Goethe inspired a continuous and entrenched current of musicians interested in bridging the music-light divide well into our current century. Early twentieth century light-artist, Thomas Wilfred (1947) remarked on this false premise, “even if we succeed in getting deep, basso profundo rumblings from a Rembrandt and high, plaintive howls from a Picasso, we shall have proved nothing, except that we might have used our time and energy to better advantage (p. 250).”

These interwoven connections between music, colour, and light sparked the development of the “ocular harpsichord,” first conceived by eighteenth century Jesuit philosopher and musician, Père Castel. Each struck pitch of the instrument’s keyboard unlocked a shutter that revealed a coloured lens illuminated by candlelight, thrusting diffuse colours upon a white screen. Bainbridge Bishop, nineteenth century American painter and inventor, advanced Castel’s silent instrument adding electric lights and a mechanism that afforded music and colour to be played simultaneously and individually. Compositions performed solely in coloured lights were presumed to be distinguishable from their unique pattern of colours; colours here were treated as musical tones.

The colour-organ reached its climax under Alexander Wallace Rimington who, in 1895, gave live performances in tandem with Wagner’s *Rienzi Overture*. The problem inherent to the instrument was that there was no definition to the emitted light, only an endless succession of vague colours in rapid procession; critics noted that this scattered spectacle was difficult for the eye (Wilfred, 1947, p. 249).

The earliest example of mainstream classical music deliberately composed for coloured light is Alexander Scriabin’s tone poem, *Prometheus: Poem of Fire*. Scriabin’s influences include a deep spiritual mysticism (a fascination with Lucifer—the Bringer of Light), the literature and paintings of the Russian Symbolists, and the teachings of Theosophy. Theosophy not only seeks the synthesis of the world’s religions and the reconciliation of science and spirituality, but also teaches that the body produces coloured auras that vary with one’s mental state (red—anger, green—envy and so forth) (Besant & Leadbetter, 1905, p. 75). Scriabin is often grouped with Messiaen and Rimsky-Korsakov as a synesthetic artist, though his colour hearing was built around a network of logical associations and not an actual visual stimulation (Baker, 1989, p.

102). Scriabin's colour hearing began with three associations: C-red, D-yellow and F#-blue. Using the cycle of fifths, the composer then divided the remaining portion of the visible spectrum (ROY-G-BIV) across the chromatic scale. It is significant to note that Scriabin did not hear colours for individual tones, but rather a colour was associated with a specific harmonic area.

Prometheus: Poem of Fire is orchestrated for expanded orchestra, solo piano, wordless choir dressed in all white, and light-organ (*luce*). Spanning a major ninth, the colour-organ uses traditional musical notation, yet Scriabin includes no indications of what colours result from the depression of individual keys or whether chords produce a single blended colour or a juxtaposition of several hues. Premiered in 1911, the original organ developed to perform the *luce* part malfunctioned just prior to the performance; it would not be until a 1915 performance at Carnegie Hall that the colour-organ part would be fully realized.

Two voices comprise the *luce* part. The upper voice follows the melodic strands of the orchestra and illustrates salient key-areas. The lower voice ascend chromatically through an octave beginning on F# using the resulting colours to signify specific narrative and structural underpinnings within the music. According to Mirka (1996), the work is musically and visually unified; musical motives of the sea begin and conclude the tone poem just as hues of "bright, glaring blue" open and close the composition (pp. 238-239). An additional potential visual-aural unification occurs when the chorus enters in the final section of the work singing only vowels, perhaps in homage to Symbolist poet Alexander Rimbaud's poem "Vowels" (1871), which attributes specific colours to each of the five vowels.

The New York City premier of the complete symphony in 1915 attempted to realize Scriabin's desire to "bathe the audience in rhythmical light (Baker, 1989, p. 104)." The "Chromola," the light-organ designed specifically for the Carnegie Hall premier, was positioned within the orchestra; it held only the fifteen keys Scriabin required and two pedals that controlled the intensity of the light. Colours were projected onto gauze stripes, 8 feet by 10 feet that hung above the orchestra. Creating motion, the lights travelled along a motorized track that allowed the colours to continually mix in an endless variety of combinations. One review noted that the audience was submerged in darkness for the performance, which was subsequently repeated so the audience "or spectators, could take in the revolutionary significance of it (*New York Times*, 1915, p. 12)."

Critics found the colours vibrant and imaginative yet entirely unrelated to the aural experience. A reviewer for the *New York Times* wrote "[the lights] were continually shifting and melting, but without visible relation to the sound (1915, p. 12)." It is likely that the motorized ellipsoidal path the lights traversed obfuscated the integrated nature of the colours and harmonic progressions. The lack of form or shape in the projected lights made the colours diffuse and difficult to observe. Additionally, Cytowic (1995) indicates that the lack of a rhythmic relationship between the music and lights disguised any intended visible connection to the music since only 1 in 25,000 individuals have any form of synesthesia.

The American premier of Scriabin's complete *Prometheus* concept was greeted with limited success, yet since the advent of laser technologies, revivals of the work now receive greater acclaim. Theories of colour-music like those of Scriabin lead to the revolutionary work of Thomas Wilfred's *Clavilux*, the work of film maker Oskar Fischinger, and Jackson Pollack—the artist, musician, and light-artist.

The most influential and widely successful light-artist of the last two centuries, Thomas Wilfred, began his pursuits endeavouring to remedy Alexander Rimington's shapeless light projections as well as those of the 1915 *Chromola* debut in Scriabin's *Prometheus*. Wilfred (1947)

abandoned earlier ideas of direct connections between colour and music and developed his own three-tiered approach to light projection, or as he called it *lumia*, which focused on colour, form, and motion (p. 253). Based in New York City, Wilfred's visual compositions garnered widespread acclaim among art critics and audiences and within a year of his 1922 debut he was touring the United States, Canada, and Western Europe. His notoriety earned him celebrity status. Corporations sought endorsements through his light-art, yet he refused all invitations for commercial work including offers from stocking, chewing gum, laxative, and cigarette companies. Wilfred (1947) feared the exploitation of what he believed to be the emergence of the eighth fine art (in addition to grammar, rhetoric, dialectic logic, arithmetic, geometry, astronomy, and music) (p. 254).

Committed to the development of a younger generation of *lumia* artists, Wilfred established the Art Institute of Light at the base of New York City's Grande Central Palace in 1930. Holding daily recitals and lectures, the institute attracted many casual artists desiring to further develop *lumia*. The Institute remained active until World War II when the Grand Central Palace was commandeered for use by the US military.

Wilfred initially envisioned his light-art as a complement to live or recorded music, but after several disappointing collaborations, he detached *lumia* from music altogether, creating a silent and kinetic art. Long-time supporter and owner of a Clavilux Jr., the home version of Wilfred's projection device, Leopold Stokowsky, conductor of the Philadelphia Orchestra, commissioned Wilfred to compose *lumia* to accompany a performance of Rimsky-Korsakov's *Scheherazade*. In February of 1926, the Philadelphia Orchestra at Carnegie Hall presented an evening of *lumia* with Stokowsky and Wilfred at the helm. A white scrim concealed the orchestra on to which colours and rhythmic *lumia* were projected. Critics found the experiment rich with possibility, though an art in its nascent years. Downes (1926), music critic for the *New York Times* wrote:

There were some extremely beautiful and suggestive moments, particularly in the first part of the suite where one might think of the sea...here Mr. Wilfred flung upon the screen color-color of an extraordinary gorgeousness and in wild movement...The color did not merely enhance the orchestral effect, but often distracted the attention from it, with results artistically unprofitable. But it is easy to believe that it indicates an important field for future development (p. 17).

While the Art Institute of Light pioneered over a decade of *lumia* performances, Wilfred pursued few projects involving music after 1926. Conversely, Stokowsky's fascination in combining music with images and light became heightened and led to the development of Walt Disney's feature film 1941 *Fantasia*.

Wilfred achieved stunningly vibrant colours and shapes that evolve, dissolve, and transform with effortless liquidity. His accomplishments in light-art positioned *lumia* on the artistic map and paved the way for a generation of artists, led by Jackson Pollack, Man Ray, Oskar Fischinger, and Mary Ellen Bute, who continue to pursue his ideals of a balance between colour, form, and motion. The idea of connecting music and light did not die out completely, however.

Composed prior to the light-art of Wilfred and Scriabin's *Prometheus*, *Die glückliche Hand* [the fortunate hand], Arnold Schoenberg's one-act opera, attempts to fully integrate music, libretto, scenery, lighting, costumes, blocking, and even posture to advance a uniform narrative scheme. Schoenberg composed the music and libretto and left explicit directions for lighting, scenery, stage blocking, and costumes. The opera chronicles the plight of a *brilliant* male artist incapable

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of communicating with the world around him. The work begins with the protagonist lying on his back with a griffin-like creature crouching on his back, teeth sunk into his neck. The artist longs for happiness and companionship, yet a chorus of faces whispers "You, who have the divine in you, and covet the world! You cannot win." A beautiful young woman offers the artist a drink; as he quenches his thirst the monster disappears and the woman turns away and leaves him for an elegantly dressed man. Staring fixedly at his hands the artist does not notice her return delusionally believing that he holds the young woman forever. The woman leaves him yet again for the same affair. In desperation the artist climbs a rock to the window of the couple; the woman pushes the rock and as it tumbles it morphs into the monster from the opening scene and the artist is once again besieged with misery. Schoenberg (1988) suggests that the title of the work, occasionally translated as "the fateful hand," refers to one who "tries to grasp that which can only slip away from you, if you hold it (pp. 32-35)."

Schoenberg describes his use of lights, gesture, scenery, costumes, and music as "making music with the media of the stage (Schoenberg, 1988, pp. 32-35)." Perhaps the most significant and readily noticeable implementation of this notion is the *colour crescendo*, an upwelling of light intensity and colour that begins with total darkness in the opening scene and escalates through shadowy light to bright light and finally a glaring yellow light at the end of the third scene. In addition to the crescendi of light and colour, a traditional swell by the full orchestra is deployed: creating an increase in musical texture, dynamics, tempo, and the tessitura of the protagonist expands upward. A wind machine engages and the artist is found climbing the rock reaching for the woman, adding the element of ascending height (Latham, 2000, pp. 188-196). Schoenberg (1988) writes of this moment "the crescendo is clothed externally in the form of an *increasing pain* (pp. 32-35)."

Second only to the music, colour is integral to the symbolism of the opera. The young woman is garbed in violet and wears red and yellow roses in her hair. Latham (2000) notes that purple is a mixture of red, the colour of blood, fire, anger, and desire, and blue, the colour of water, coolness, and peace. The woman eases the artists' misery all the while continuing to inflame his passion and desires (p. 188). The colour yellow symbolizes artistic excellence when the protagonist creates the diadem. The monstrous creature glows green, the colour of envy. The protagonist is dressed in black symbolizing despair, ignorance, and darkness of the soul. These colours are integrated into the scenery, props, lighting, and costumes of the characters. Relationships between characters are often implied by the use and transformation of these colours (Schoenberg, 1988, pp. 32-35).

Schoenberg, who labelled himself both a Brahmsian and Wagnerian, sought to create a *Gesamtkunstwerk* (total art work), not only a synesthetic experience, but one that truly combined stimulations of all the senses; such an artwork could be considered a combination of the work of the Symbolists, Realists, and Romantics. Recollecting on the opera, Schoenberg suggested that he aimed to initiate an artistic revolution not by radically altering any one element, but by recombining the existing arts, "the effect of such changes within the work of art is equivalent to the change of the course of a planet."

The work of Schoenberg, Scriabin, Wilfred, and Kandinsky spurred a generation of multisensory artists that continue to explore the realms of music, colour, and light. During the 1960s, an explosion of film artists began to experiment with abstract shapes and colours in motion often under a backdrop of popular music. Artists such as Jordan Belson, USCO, Stan VanDerBeek, James Whitney, and La Monte Young and Marian Zazeela pioneered psychedelic installations that managed to generate excitement amongst mainstream audiences. Recently *Sonic Visions*, a planetarium film that combines computer graphics and the music of U2, Moby,

and the Flaming Lips, engages young audiences in ways classical music has yet to achieve. With the exception of the New York State National Chorale, which performed in casual clothing and with coloured mood lighting in the 1970s, and more recently the Honda Sound Effects Choir, the choir responsible for producing the sound effects for a Honda car commercial and for the 2007 Academy Awards, the current of multisensory and extramusical explorations in classical music has diminished in modern performances. The reasons for this could fill another essay, yet suffice it to say that the resultant standard concert experience conveys stoicism, severity, conformity, professionalism, and pretentious intellectualism. While these are not all negative associations, many of them do prevent new audiences from seeking out classical music experiences. Perhaps a needed change awaits us.

In September of 2006, “Luminescence: Experiments in Visual Acoustics” was a choral event that crafted landscapes of light, colour, and sound—a synesthetic experience—by fusing aural and visual stimulations. The performance explored intense moments of passionate love and contemplations of mortality. Paired compositions alternated images of life and death: Morley’s “Fire Fire!” and Whitacre’s “A Boy and a Girl,” Zhou Long’s “Words of the Sun” and Rautavaara’s “Suite de Lorca,” with Schoenberg’s “Friede auf Erden” (Peace on Earth) reconciling these two images. This programmatic, yet non-narrative, structure for the performance set the framework for a holistic and interdisciplinary concert experience.

In consultation with a lighting designer, acting as an integral creative partner, colours, standing arrangements, light intensity, and attire were chosen. Watercolour designs for each musico-emotional scene were fashioned and lighting plots were developed that transformed imaginary ideas into reality. The texts of the chosen pieces not only maintained a strong connection to the music, but also suggested visual possibilities. Intense reds, oranges, and yellows dominate “Fire Fire!,” while deep purples and blues cast long shadows in “A Boy and a Girl.” The dramatic nature of each work dictated the standing arrangements. The blocking for “A Boy and a Girl” divided the men and women, heightening the yearning passion of the couple, yet also suggesting their peaceful death; each singer’s eyes gaze just past another’s yet their gazes never meet. Suggesting a chaotic death, “The Scream’s” formation evokes a sense of restlessness by spacing singers haphazardly throughout the performance space. In “The Moon Rises” a spiral emanates from the soloist, standing front and centre, and allows each choral section to be unveiled with light sequentially mirroring a rising moon.

Schoenberg’s *Friede auf Erden* required a traditional semicircle formation due to the complexity of the music. An interactive video projection evoked sensations of motion. The video portrayed clouds passing against a clear blue sky; cloud direction and velocity responded to the pitch range of the choir. The intense second stanza, which tells of the travesties committed by humankind, mandates a significant increase in collective vocal range, manifesting fast and erratic cloud movement. The harmonically stable refrain—peace on earth—produced a serene and tranquil sky of billowing clouds.

Choral attire complimented the colours for each scene. With a variety of earth-tone colours and styles from American Apparel each singer found clothing that complimented their individuality, making them comfortable on stage. First impressions are important. What audiences see prior to a performance affects their perception of the performance. As a result, the colour and ambient light in the theatre and the shape, colour, and layout of the programs were considered. Desiring a close connection between audience and choir, the space between the two was constructed to achieve *comfortable* eye contact amongst singers and listeners.

New performance styles demand new audiences, thus *Luminescence* took part in the 2006 Philadelphia Live Arts and Fringe Festival. Appealing to this new audience as well as to

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students at Temple University, the University of Pennsylvania, and Philadelphia's downtown visual art scene resulted in overflowing performances. Some came for the music, particularly the underperformed *Friede auf Erden*; others came to experience synesthetic sensations; many had never witnessed a choral concert prior. The integration of the aural and visual paired with excellence in performance can appeal to an uninitiated, vibrant, and receptive new audience who seek multisensory emotional experiences.

Imagination, creativity, and action are attractive resources for the modern choral conductor. No longer can musicians rely on insular and blinkered thinking to relate to our audiences. Is it a folly to cater to the desires and interests of our listeners, no more so than Verdi's incorporation of nationalistic themes, symbols, and melodies into his operas? Have the interests of musicians and audiences diverged so far as to be irreconcilable? Granting ourselves permission to explore and develop multidisciplinary, multisensory, technological, scientific, and historical interests will allow music as a performance art to mature and reemerge as an art that speaks to the issues of a twenty-first century culture.

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