Scriabin’s color music in America

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On March 20, 1915, New Yorkers witnessed a lighted performance of Scriabin’s *Prometheus, Poem of Fire* op. 60 at Carnegie Hall. It was the most technologically-advanced production of *Prometheus* to date, featuring a color organ designed by Edison’s Electrical Testing Laboratories with special equipment made by General Electric Company. This event was promoted as both the ‘world premiere’ of *Prometheus* with lights and the first attempt to perform color music in America.¹ Neither of these statements were exactly true,² but the excitement and controversy surrounding the performance made Scriabin famous in the United States.

The conductor, Modest Altschuler, had experience introducing American audiences to avant-garde Russian music in his role as director of the Russian Symphony Orchestra. Aware of the difficulty audiences might have in understanding *Prometheus* and its show of colored lights, he performed the work twice. According to reports, one-third of the audience walked out during the short pause between performances.³ The immediate critical reaction confirmed Altschuler’s worst fears. One reviewer called

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Prometheus “strange unmusic,”⁴ another stated that the music was “practically unintelligible throughout.”⁵ Some had difficulty understanding how the music related to the theosophical program.⁶ Critics were harshest in their evaluation of the light show, which they claimed had no discernible relationship to the music. For H. E. Krehbiel of the New York Tribune, “watch[ing] the changing play of colors on the screens with sufficient intentness… caused a distraction of the mind which made judgment of the artistic value of the music well nigh impossible.”⁷

Despite this censure from elite critics in New York, Altschuler’s production of Prometheus was sensationalized in the popular press. Articles in the New York Times, Scientific American and Illustrated World published details of its sophisticated lighting apparatus (Figure 1).⁸ At the time, Thomas Edison was the most famous inventor in America. His company’s involvement in the performance reinforced Scriabin’s reputation as a visionary and promoted the idea that color music was the “artwork of the future.”

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⁴ Henderson, ibid.
⁶ Krehbiel, 11.
⁷ Ibid. Krehbiel’s feeling that the lights actually diminished an experience of the music was echoed by other musical critics at the time.
Figure 1: Illustration of the lighting apparatus for the 1915 Carnegie Hall performance of Scriabin’s *Prometheus, Poem of Fire*, published in *Scientific American* (April 10, 1915), page 343.

As Figure 1 shows, a console equipped with a piano keyboard and foot pedals controlled color and intensity. Custom-designed tungsten lamps ranging from 100-400 watts were mounted on a belt capable of rotating 180 degrees, which was powered by a small motor. Filters made of colored glass compensated for the predominantly yellow light of the tungsten bulbs. The lights were projected upward onto a series of gauze curtains of varying thickness, arranged so that a viewer could perceive a color projected
on the back curtains through the more diaphanous gauzes in the front. This allowed a clean juxtaposition of colors and prevented the colors from overlapping and cancelling each other out. Technical writers praised the significant achievement of coordinating color and sound, and described the aesthetic effect of the performance much more favorably than their musical colleagues. “‘Prometheus’ may probably be regarded as the first successful experiment of its kind that has ever been made,” concluded Harry Plummer, writing for *Scientific American*. ⁹ Charles W. Person, a reporter for *Illustrated World*, published this rapturous description:

> A magnificent crescendo in the horns—the dull red glow on the screen strengthens and bursts forth from among the blues and violets—a lurid glare that expresses the same agony of soul that brought for the agonized prayer in the music. The music sweeps on, then dies away into an ominous muttering in the strings. The screen shows blues and grays, with little flashes of green. A lightning streak of yellow flashes across the curtain—then another, and another. A woman leans back in her seat, and murmurs “Trumpets!—Trumpets!”

In the late 1910s and 20s, instruments for producing color music proliferated in America, likely stimulated by the debut of *Prometheus* at Carnegie Hall. ¹¹ Many color-music inventors were motivated by the same theosophical theories of sound-light correspondence that had inspired Scriabin, believing that mass exposure to multisensory stimulation could elevate spiritual perception. Beginning in the fall of 1915, the theosophist and architect Claude Bragdon co-organized several “Festivals of Song and Light” in public parks situated in Buffalo, Rochester, and New York City. Drawing as many as 60,000 participants, these immersive nighttime events involved elaborate preparations.

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⁹ Plummer, 351.
¹⁰ Person, 44.
systems of electrical lighting and thousands of singers directed by Harry Barnhardt, a specialist in mass choruses. Bragdon later co-founded a group called “The Prometheans” dedicated to the investigation of the relationships between sound and color.

In 1919, the Promethean Thomas Wilfred designed the Clavilux, an instrument capable of projecting complex swirls of light onto a large area. Wilfred called the result “lumia,” the art of colored light in motion. Though he acknowledged Scriabin as a precedent, he was interested in freeing mobile color from its dependence on sounding music. Wilfred wrote dozens of lumia compositions for Clavilux alone, without any aural accompaniment.

Scriabin became a touchstone for Theosophically-oriented American artists, such as members of the Transcendental Painting Group, who drew upon Scriabin and Kandinsky’s attempts to musicalize color in the development of their esoteric abstract style. Dane Rudhyar, a painter, writer, composer, and pianist, took special inspiration from Scriabin’s efforts toward synthetic art. He wrote,

Scriabin then, stands as a prophet of the music of the future, a seer to whose inner gaze the plans of a great art-synthesis were revealed; a man who lived the true life of the artist with sincerely, probity and enthusiasm. He came to a decadent civilization as the promise of a culture more real, more intrinsically beautiful, ethical, and true, and more fundamentally human.

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14 The Transcendental Painting Group was formed in 1938 and included Dane Rudhyar, Emil Bisttram, Ed Garman, Lawren Harris, Raymond Jonson, Agnes Pelton, Florence Miller Pierce and Stuart Walker. See Deniz Ertan, Dane Rudhyar: His Music, Thought, and Art (University of Rochester Press, 2009) and Robert C. Hay, Dane Rudhyar and the Transcendental Painting Group of New Mexico, 1938-1941 (Lansing: Michigan State University Press, 1981.)
In the following decades, Scriabin became a spectral figure lurking behind many immersive multi-sensory experiences that came to dominate American forms of public cultural life. References to Prometheus appear in discussions of abstract film, Broadway musicals, and even the liquid light displays of the 1960s and 70s. For some, Scriabin was a futurist visionary who contributed to the advancement of synthetic art; for others, Scriabin was a crazy mystic who failed at his efforts to musicalize color. Throughout the twentieth century, the legends surrounding Scriabin’s grand experiment eclipsed the original work itself, so much so that Scriabin’s original conception of Prometheus was frequently ignored or forgotten in American performances. Due to a lack of published sources and a persistent mythology of failure, the relationship between music and lights became as enigmatic as the work’s Theosophical program.

**Figure 2:** Luce part from Prometheus, measures 1-26.

In Prometheus, the part for color organ is written as two melodic lines on a single staff (Figure 2). One line moves relatively quickly and the other sustains a single color

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17 For example, the critic Bernard Holland mused that “Scriabin had a projection machine in mind for ‘Prometheus.’ It never worked properly, and later attempts to modernize the concept have been interesting failures. Maybe it is best for us to imagine what the score means us to see.” “Music: Translating a Language of Ecstasy,” *New York Times* (August 8 1999). Holland’s negative impression of the visual dimension of Prometheus translated into a lack of curiosity regarding what was actually in the score.
throughout longer spans of time. From Leonid Sabaneyev’s early articles, we know that the faster line of color corresponds to the fundamental of the Prometheus chord harmonies.\textsuperscript{18} As \textbf{Figure 3} illustrates, Scriabin correlated spectral colors with Prometheus chords on the circle of fifths.

\textbf{Figure 3:} Scriabin’s system of music-color correspondence used in \textit{Prometheus}. Color descriptions are taken from the 1913 annotated score held in the Bibliothèque Nationale de Paris.

The color descriptions are taken from Scriabin’s handwritten table that appears on the instrumentation page in the first edition score of \textit{Prometheus} held at the Bibliothèque

Nationale de Paris.\textsuperscript{19} Scriabin’s color progression more-or-less follows the spectrum along the circle of fifths, beginning with F as scarlet red and moving clockwise until Ab, which is designated as лиловий, красноватый.\textsuperscript{20} Scriabin chose two metallic colors to fill in the gap left by Eb and Bb. These correlations are premised on matching a spectral progression of colors to the pattern of accidentals created by transposition of the Prometheus chord along the circle of fifths.\textsuperscript{21} For each Prometheus chord, the number and type of accidentals contained in the collection is often similar to that of a major scale built on the same keynote. For example, the Prometheus chord on G has one sharp, D has two sharps, and A has three sharps. The Prometheus chord on F has one flat and Bb has two flats. While Prometheus chords on E and B each have four sharps, they also share a color word, голубой. Similarly, Prometheus chords on B-flat and E-flat both have two flats, and they are both metallic colors. The close relationship between chromaticism and color is even clearer in the table Sabaneyev published in 1911 (transcribed in \textbf{Figure 4}).

A Prometheus chord on B is indicated simply as “Похоже на Е,” and used the phrase “стальные цвета, с металлическим блеском” to describe both Eb and Bb.\textsuperscript{22} Scriabin viewed collections that differed by one or two accidentals as closely related through adjacent colors on the spectrum, while collections with the same number and type of accidentals were colored nearly identically.

\begin{itemize}
\item \textsuperscript{19} Score of A. Scriabin, \textit{Prométhée, le Poème du Feu, pour grand orchestre et piano avec orgue, chœurs, et clavier à lumières, op. 60} (Berlin and Moscow: Edition Russe de Musique, 1911), archived under the Bibliothèque Nationale catalogue number Res. Vma 228. Scriabin recorded his annotations in 1913, and the score has been available for study only since 1978.
\item \textsuperscript{20} Sabaneyev, \textit{Воспоминания о Скрябине [Memories of Scriabin]} (Moscow: Klassika-XXI, 2000) 53.
\item \textsuperscript{21} I provide a more detailed account of the musical functions of the fast and slow \textit{luce} part in Justin Townsend and my article “Scriabin and the Possible,” \textit{Music Theory Online} 18/2 (June 2012): http://www.mtosmt.org/issues/mto.12.18.2/mto.12.18.2.gawboy_townsend.html
\item \textsuperscript{22} Sabaneyev, “О звуко-цветовом соответствии,” 199.
\end{itemize}
While the faster luce part displays the music’s harmonic rhythm through quickly moving changes of color, the slow luce moves more slowly through a progression of colors generated by a whole tone scale, beginning and ending on F# (Figure 5). These slow color changes divide the work into color episodes that help articulate the form and its dramatic narrative.23 Scriabin told Sabaneyev that he specifically chose the whole tone scale for the slow luce because its cyclic quality could portray the seven-stage cycle of human development described in The Secret Doctrine by Helena Blavatsky.24 In Figure 6, taken from The Secret Doctrine, each evolutionary stage is represented by a class of

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23 See ibid. for a more detailed account of how the slow luce part helps articulate the form of the work.
24 Sabaneyev, Воспоминания 262.
beings which Blavatsky called “Root Race.” They are arranged in a spiral, progressing through various grades of spirituality and materiality represented by horizontal lines.

**Figure 5:** Large-scale form of *Prometheus*, with formal boundaries defined by the slow *luce* part.

**Figure 6:** Blavatsky’s diagram of Root Races, reproduced from *The Secret Doctrine: The Synthesis of Science, Religion, and Philosophy* volume 2 (London: Theosophical Publishing Society 1888), 300.

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According to Blavatsky, humans emanated from divine Unity and began their evolutionary journey as “mindless spiritual shadows” in Root Race I. Over the course of the next few Root Races, the beings gradually acquired physicality, but not intellect. Blavatsky interpreted ancient Greek myth of Prometheus, the rebellious titan who stole fire from the gods to benefit humankind, as an allegory of human enlightenment. Prometheus’s gift of mental fire initially triggered a period of conflict that initiated a process of dematerialization that enabled human souls to reunite with the Divine Spirit in the seventh stage.

In Scriabin’s *Prometheus*, color stages I-III portray the material evolution of humanity from a purely spiritual being towards gradual physical embodiment, and serve an expository function. In the red stage four, Scriabin represents Blavatsky’s period of conflict with fragmented textures reminiscent of a development section. The yellow color stage V represents the present epoch in Blavatsky’s narrative, but is framed as a musical recapitulation, revisiting themes presented in color stages I-III. Stages VI and VII are Scriabin’s vision of the future, and work becomes more overtly ritualistic. The music evokes themes of Dionysian ecstasy and the theurgic function of the chorus in ancient ritual drama. The piano soloist becomes a celebrant, described by Scriabin as “in a vertigo, dance of flames or amid the flames,”26 and the chorus becomes a symbol of the coming reunification of individual souls.

Rather than distracting from an experience of the music, the lights perform an essential function. The two *luce* parts perform analysis in real time, one corresponding to harmonic rhythm and the other segmenting the music into dramatic episodes. But, as the Parisian score revealed, Scriabin imagined the *luce* part in *Prometheus* to be far more

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26 Annotation made by Scriabin in score *Prométhée, le Poème du Feu* held in the Bibliothèque Nationale.
than just color changes alone. The manuscript is a record of the *luce* part as it existed in Scriabin’s imagination, unconstrained by the technological limitations of his own time period. Scriabin’s notes call for not only blazes of color, but also dynamic changes in intensity and various special effects such as lighting, tongues of flame, and cascades of sparks. Only now can we begin to realize his lighting indications with the speed, precision, and dynamicism he called for, yet some of his effects still present a challenge to contemporary technology.

In America, the Parisian manuscript is virtually unknown. When *Prometheus* is performed with lights, designers base their work on the published score, which yields realizations that have little dynamic shaping or special effects. Too often, musicians and designers do not understand Scriabin’s lighting notation, so it is either interpreted freely or replaced entirely by an inauthentic light show. A successful realization of *Prometheus* requires knowledge of both lighting design and music, supported by research into Scriabin’s mysterious notation.

**Figure 7:** Performances of Alexander Scriabin’s *Prometheus: Poem of Fire*, op. 60, with lights designed by Anna Gawboy and Justin Townsend.

February 13, 2010  
Yale Symphony Orchestra, conducted by Toshiyuki Shimada  
YouTube: https://www.youtube.com/watch?v=V3B7uQ5K0IU

September 22-23, 2012  
Cape Cod Symphony Orchestra, conducted by Jung Ho Pak

November 23, 2013  
Utah State University Orchestra, conducted by Laura Jackson
I have collaborated with lighting designer Justin Townsend to produce three performances of *Prometheus* since 2010, listed in **Figure 7**. Each performance is designed specifically for the space it occupies, but all are based on a few foundational interpretive decisions. To create an atmosphere of multi-sensory immersion, we place lights throughout the hall to fill the hall with color as the orchestra fills it with sound. Since the fast and slow *luce* parts perform different musical roles, we separate them spatially and technically. The fast *luce* part is projected behind the orchestra and is controlled by performer playing piano keyboard, while the seven color changes of the slow *luce* appear on the walls and ceiling, controlled by musicians operating a light board. It is essential that musicians operate the lighting technology so that they may respond to the conductor like any other member of the ensemble.

Above all, we try to realize Scriabin’s lighting notation as faithfully as a musician would perform his musical notation—no more, and no less. The pitches and durations Scriabin wrote for *luce* are played precisely as written, resulting in a tight rhythmic coordination between music and lights. The annotations Scriabin included in his 1913 Parisian score provide a profound resource of information. We interpret the markings regarding dynamic brightening and dimming of lights, various light qualities, imagery, and projections within the capacity of our space and available technology. Just as two pianists can follow the same score but create two very different sound worlds through their interpretations, two realizations based on the Parisian annotations may look quite different and still remain faithful to a single source.

We place particular dramatic visual emphasis on the chorus, which enters late in the work. Like the chorus in ancient ritual drama, Scriabin imagined his singers as a
group of idealized spectators who mediated between the audience and the performers onstage. Their entrance in *Prometheus* is an enactment of their transition from audience-observers to performers-participants, and the mass of bodies symbolizes the joining of souls in preparation for their transcendent reunification with the Divine Spirit. In our 2010 performance with the Yale Symphony Orchestra, the chorus sat in first two rows of the house and stood for their entrance, flooded with blue light. For the Cape Cod Symphony, chorus members entered from back of the hall and walked slowly through the audience and assembled at the front before their musical entry. At Utah State University, we seated chorus members throughout the house. Upon their entrance, they stood up and turned on individual lights for dramatic effect.

Scriabin hoped that his multimedia performances could alter reality in a fundamental way. The world has profoundly changed in the 100 years since Scriabin’s death, but perhaps not in the manner he anticipated. Multimedia now saturates our world, and reality is constantly mediated by technology. Paradoxically, this both heightens the relevance of *Prometheus* and lessens its effects on the contemporary viewer. Only by returning to the original notation can we attempt to recapture the strange enchantment of Scriabin’s vision. Through careful attention to primary sources, my collaborators and I hope to change the way *Prometheus* is treated in contemporary performance practice, both in America and beyond.

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27 Scriabin’s interest in reviving the theurgic function of ancient drama in modern theatrical performances was stimulated by his reading of *Die geburt der tragödie* by Friedrich Nietzsche as well as contact with Viacheslav Ivanov and other Symbolists. See Ivanov’s “Presentiments and Portents: The New Organic Era and the Theater of the Future” and “Nietzsche and Dionysus” in *Selected Essays*, translated by Robert Bird, 95-110 and 177-188 (Evanston: Northwestern University Press, 2001); see also “Wagner and the Dionysian Rite,” in *По Зведамъ [By the Stars]* (St. Petersburg: Ory, 1909) 65-69. Regarding Scriabin’s imagined use of the chorus in the *Mysterium*, Ivanov wrote “it was not a chorus of performers but the sacramental chorus of those who perform liturgical service.” “Scriabin’s View of Art,” in *Essays*, 226.
Works Cited


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