

## **Transforming Space – Cultivating the Imagination and Promoting Pedagogic Change**

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**Abstract:** Transforming Space, a collaborative project to present Julia Wolfe’s *Anthracite Fields*, is a multimedia musical composition that describes the plight of 19th century coal miners in the Anthracite coal region of Pennsylvania. The music was performed at Roebling Wire Factory located in Trenton, a depressed urban center in central New Jersey. Modifying the space with theatrical lighting, acoustical panels, and microphones to enhance sound transformed the now empty warehouse into a community concert venue.

Children from underserved populations attended a matinee performance, and inspired by the performance, transformed a space in their own school buildings into one that would be aesthetically and artistically significant. Framed in a lens of critical pedagogy, assessment data from participants were coded. Themes of collaboration, communication, creativity, and critical thinking emerged. The authors concluded that the project fostered a critical consciousness that acknowledged the importance of community engagement and social justice.

**Keywords:** Transforming Space, Anthracite Fields, Julia Wolfe, community engagement, social justice

### **Introduction**

A meaningful music education engages the musical imagination, musical intellect, musical creativity, and musical performance in ways that change perceptions about music, the role of the arts in the community, and the nature of the community itself. We suggest tenets of critical pedagogy as an appropriate theoretical framework to view music education because they include conversation and dialogue about music and society and changing perceptions and misperceptions about musical genres. By committing to a social justice agenda, critical pedagogy offers empowerment and resists the hegemonic influences that confound the politics of musicking.

Our research focuses on Transforming Space, a collaborative project to study, teach, and perform Julia Wolfe’s Pulitzer Prize Winning *Anthracite Fields*. The musical composition describes the plight of 19th century coal miners in the anthracite coal region

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of Pennsylvania. While principally a work for choir, the piece integrates video, dance, and a contemporary chamber ensemble.

### **Roebing Wire Factory**

Central to the focus of the project was performing the music at the abandoned Roebing Wire Factory located in Trenton, a depressed urban center in central New Jersey near our college. During the industrial revolution of the late 19th and early 20th centuries, most of the wire rope that was needed for airplanes, cable cars, shipping, elevators, and sky scrapers was produced at the Roebing facility. In addition, wire rope for bridges, including the famous Brooklyn Bridge and George Washington Bridge in New York and the Golden Gate bridge in San Francisco was also produced here. Trenton was the hub of commerce during that time because of easy access by rail and proximity to the Delaware River and Raritan Canal. Not only did this location allow for the easy transport of anthracite coal from the nearby Pennsylvania mines, but it also facilitated the shipping of manufactured goods to the rest of the country. Productivity at the Roebing Wire Factory and other Trenton factories was so influential that “Trenton Makes, The World Takes” became the city motto. And despite the current lack of significant manufacturing in this struggling postindustrial city, the motto remains today. Modifying this massive abandoned space with theatrical lighting, acoustical panels, microphones to enhance sound, and a community art display transformed this cavernous cathedral of industry into a community concert venue.

The idea and interest in transforming the now vacant factory into an appropriate concert venue was the combined vision of three Westminster Choir College staff: Anne Sears, Director of External Affairs; Matthew Shaftel, Dean; and Joe Miller, Director of Choral Activities. Miller states, “We must find ways to resonate with our changing community that promote and celebrate our deep musical heritage, advancing new voices and connecting to the digital age. Many of the ways that we have been taught to program no longer resonate with audiences that live their lives looking at a screen. If the choral art is to continue being a vital part of our culture, we must focus on ways to respond to current society.” Miller believes that to reach modern audiences, we must break through the fourth wall. He cites Daniel Barenboim, who enlisted architect Frank Gehry to design the Pierre Boulez Saal in Berlin as a space the *Los Angeles Times* reported was “for music to visibly—and audibly!—make a powerfully public cultural statement” (Swed 2017). There, the audience is close to the performers so they can participate as more than passive listeners to concert programs.

“It is frustrating to be in a space where you can’t feel the sound,” Miller once said. Inspired by space and sound, he believes that “the sonic nature is electric and is

transformative in itself.” In her doctoral dissertation at University of South Carolina, Robinson (2013) studied alternative spaces for chamber music in the 21st century. Her findings confirmed these feelings.

When Miller, Shaftel, and Sears initially considered this project, they were inspired by the nationalistic history of linking music to place. As described in Denise Von Glahn’s (2003) study *The Sounds of Place*, works such as Charles Ives’s “The Housatonic at Stockbridge,” Duke Ellington’s “Harlem,” or Steve Reich’s “New York Counterpoint” are musical soundscapes to celebrate and explore particular locations that project an American identity. However, instead of drawing from a location to inspire a musical work in this project, they chose to connect Wolfe’s musical engagement with coal mining and the labor movement, to a space that would enhance its meaning. They also believed this would provide the audience with a new appreciation for the space itself. By further involving the community through educational programming, an art display focused on labor and manufacturing, and pre-/post-concert events, the project sought to create the perfect marriage of sound, space, and community.

### **Transforming Spaces in Historical Context**

Performing what we generally accept as classical music in spaces other than halls specifically built for that purpose is centuries old. Instrumental music in the church dates back to the Middle Ages (King 1948). The Collegium Musicum in Leipzig, founded by Georg Philipp Telemann in 1701, frequently performed in coffee shops during the 18th century (Erickson 2009). At that same time, most nobility employed a staff of musicians in their homes. Franz Joseph Haydn, for instance, wrote chamber music for the Esterházy family for their festive social occasions (King 1948). Handel wrote his *Water Music* to be performed on barges on the Thames River. In England, musicians performed in long rooms inside taverns and coffee houses, and by the 18th century, many of these became public music halls (Butler 2007; Dyson 1932). Hosting music in a salon setting became fashionable in the beginning of the 19th century. Those taking part would have had a range of interest from socializing to serious music-making. Schubertiades were probably the most famous salons in history (Hilmar and Pauly 1988).

The middle of the 20th century saw the emergence of experimental performing arts in unconventional spaces. One of the first examples of this is what came to be known as the first “happening,” an untitled event in 1952 at the dining hall in Black Mountain College near Asheville, North Carolina (Fetterman 1996). The event consisted of a series of unrelated performances of solo dance, film, slides, paintings, records, poetry reading, and piano (Fetterman 1996). A group of artists-in-residence at the college put together the

event, including the composers John Cage and David Tudor. They collaborated with choreographers Merce Cunningham and Charles Olsen, and visual artist Robert Rauschenberg (Kloetzel and Pavlik 2011). Nearly 50 people attended, including students, college faculty, and members of the local community. The audience was seated in chairs arranged into four triangles, forming a single square, but most of the performances occurred outside this arrangement (Fetterman 1996). For example, Cage and Olsen each gave lectures from the top of a ladder. A movie and slides were projected on opposite sides of the room. Tudor performed on piano and dancers moved around the room (Nyman 1999). The event was multimedia, and moving away from the formal stage changed the physical relationship of the audience and musicians. Performing in a dining hall also changed the context of the performance to a place of everyday living.

Today, Longwood Gardens, a botanical garden near Philadelphia and Trenton has a performing arts series that includes the Philadelphia Orchestra, YoYo Ma, The Kings Singers, and notable jazz and Broadway performers. They also include dance companies, musical programming for children, and organ recitals on the largest organ in a private home in the world.

### **Anthracite Fields**

Anthracite coal was discovered in 1762 in eastern Pennsylvania. Estimates are that there are 16 billion tons of coal in the region with about 8 billion tons capable of being mined. Records document that anthracite coal was first used in 1768 and mining in the coal regions of Pennsylvania began in 1775. Coal was used in heating and drawing iron for the manufacture of nails as early as 1788. In addition to heating homes and buildings, anthracite coal provided the power for the machinery at the Roebling Wire Factory until it closed. Use of anthracite coal has been on a steady decline since the 1960s. Safety in the mines has been a concern for nearly 75 years. It is estimated that over 30,000 deaths occurred as a result of accidents in the anthracite coal mines.

New York-based composer Julia Wolfe wrote *Anthracite Fields* to explore the subject of coal mining from a region of Pennsylvania where she was raised. For research and inspiration, she visited the region, interviewed third-generation coal miners and their families, read books, and collected artifacts. She adapted text from these sources and wrote additional text herself. The resulting composition is a multimedia choral piece that integrates singing, instruments, and video. It describes themes of the laborers and immigrants who transformed the coal mining region in Pennsylvania to contribute to an industry that provided energy to heat homes as well as power to schools and factories.

These factories included the Roebling Wire Factory, in a time of industrial growth in the United States.

### **Goals of the Project**

Six goals delineated the project:

1. Explore and bring the arts to a historic landmark (Roebling Wire Works) in New Jersey.
2. Connect the historic nature of the performance with the history of the venue.
3. Ensure students participate in innovative artistic experiences.
4. Provide students with the inspiration to use the arts to transform a space, as a place of artistic expression, within their own schools.
5. Provide opportunities for High School students to collaborate with arts students from Westminster Choir College.
6. Provide Westminster Choir College music education students with an opportunity to develop hands-on arts-integration experiences for inner city high-school students.

### **Engaging the Imagination and Promoting Pedagogic Change**

While there were two performances for the public, we invited children from nearby high schools to attend a special matinee performance and workshop. After we asked them to return to their schools to incorporate the political and social themes of the musical text by transforming a space in their own school buildings. Our goal was to transform the space into one that would be aesthetically and artistically significant. To prepare children for the performance, nine music education students at Westminster Choir College developed a website with materials for the children to see. In addition, they wrote a sequence of lessons for teachers to use that would prepare them for the musical world that Wolfe’s *Anthracite Fields* conjured. They began with Elton John’s *Billy Elliott*, a contemporary musical set in northeastern England during the 1894–1895 coal miners’ strike. Other lessons explored “What We Feel and What We Hear” and students discussed the essence of how composers portray various subject matter. There was a lesson on aural impressionism and musical soundscapes, and others on the Pulitzer prize then and now, sampling and text, transforming spaces, and listening to *Anthracite Fields*. There was a lesson focusing on Julia Wolfe and other female composers. Included in each lesson, as much as was appropriate, were cross curricular connections to social studies, science, architecture, and visual art. Teachers using the materials told us, “The lesson plan about popular music

mixing with classical was very helpful in preparing students for the event; and, of the training materials, the most helpful thing was the documentary about Julia Wolfe and her work in creating the piece.”

After attending the matinee performance, students at one school connected the experience to their STEM curriculum and integrated music into science, technology, engineering, and mathematics. Such integrations are encouraged by federal initiatives in US public education. They identified a space outside of one of their humanities classrooms that was in need of restoration. Working with their teachers, the students cleared the space and began growing a variety of plants to beautify the space and create a calm, restorative location. They designed a picnic table and two chairs so that the garden could be utilized as a performance space and an outdoor classroom to promote the themes of group unity and sharing one’s voice. For the opening of the new space, they performed music and poetry that depicted issues pertaining to social justice. In another school, the students were inspired to present a concert in a space under a staircase that was in need of paint and light.

### **Changing Perceptions**

Reflections from the stakeholders provided data from which four themes emerged. Consistent with key 21st century skills (P21 2015), and with ideals of critical pedagogy (Abrahams 2005a), the four themes were collaboration, communication, creativity, and critical thinking.

*The conductor.* Early in the rehearsal process, the conductor realized that his traditional rehearsal routines would not be effective. Thus, much of the musical preparation included nontraditional rehearsal techniques. In order to meet the challenges of the musical score, the conductor explained that preparing the music “was done by questioning, short discussion, resources for research, simple descriptive words or emotions that were identified and labeled in the performer’s scores, and movement that corresponded to the text.” The theme here was unity and community through individuality. Further, problem-posing by questioning, and problem solving by self-reflection are key strategies in critical pedagogy. Providing research for the singers to set the music into a context that was previously unfamiliar to them helped them to connect word to world, a Freirian concept integral to critical pedagogy. Answering questions by asking students how they felt engaged their imagination—a theme of this paper.

*The singers.* Joe Miller, the conductor, reported, “Singers constantly were asking [the stage director] to define what they should be feeling at certain points. He generally answered with a question asking what they personally felt. The intention was to form a

realistic viewpoint for each performer. Differing viewpoints allow the final product to seem more human and representative of a real community.”

*High school students.* After the performance, one student at the Cambridge School shared,

Thank you so much for inviting us to the performance of “Anthracite Fields”. You must have worked very hard to give us the best performance you could, and we really appreciate it. We liked how the music, photographs, singers, and dancers combined their efforts to create a musical feast. The story of the coal miners really spoke to us as students. We felt empathy for the children working in such difficult conditions. It reminded us how lucky we are to be in an environment where children do not have to put their lives at risk every day. The highlights included: the “breaker boy” dancer who expressed the emotions of a painful life. The creative use of instruments such as the bicycle wheel, saxophone, piano, guitar, oboe, drums, bass, and cello resonated with us as students.

Not all the reflections were positive. One student shared, “We found the monotonous tone of the musical understandable, but difficult to follow for so long a period of time. We would have liked to see more specific transitions between movements, to help us understand the message more clearly. Candles, a better screen to see the photographs, and seats that allowed the audience to see the entire stage would have helped as well.” The student then concluded with enthusiasm, “All in all, we look forward to restoring our own space at the Cambridge School, using the inspiration that your performance created.”

One week after the performance, we met with six students from Pennsbury High School and their teachers. Their comments were positive and insightful. One young man told us,

“The factory was absolutely transformed, and made the audience comfortable. It wasn’t until I thought, ‘whoa’ I’m in an abandoned factory space, that I realized how well the piece fit with the place in which it was performed.” Another said, “I really am a strong believer that it doesn’t matter *where* you perform, but *how* you perform. I appreciated how you made this run-down location into a performance space that didn’t distract me, but added meaning. The space set the mood from the moment we walked in and had an impact on the message from the first minutes in that location.” Regarding the music, another student confessed, “I was confused about the flower movement until the composer spoke and explained the work. It made the piece more meaningful to understand the connection to the people who lived through these experiences.” And still another told us, “It was really cool. The video in class sparked my interest, but the actual work was captivating because it repeated words over and over again with a story told through acting, and dancing. They

told a meaningful story.” Then, of course, most typical of high school students, one shared, “It was the first time I’ve been to a concert where nobody coughed!” And another added, “I felt engulfed by the piece. I was too focused on the piece to pull out my phone or to turn to someone near me to think about something else.”

*High school teachers.* High school teachers shared the vision of conductor Joe Miller. One told us, “Anything different will attract a new audience, and we live in a new world where we have to think about audiences and innovation. It’s not just about good singing, but a good production.”

### **Critical Pedagogy for Music Education**

Critical pedagogy is a lens to view teaching and learning. Five tenets delineate a critical pedagogy for music education (Abrahams 2005b):

**1. Music education is a conversation where students and their teachers pose and solve problems together.** When discussing critical pedagogy, Paulo Freire (1970) advocated dialogue as a powerful and effective teaching strategy. Dialogue fosters communication and understanding. The abilities of the conductor and performers to converse with each other and with the members of the audience provided opportunity for conversations that deepened the understandings of performer and listeners. Some high school students had never been to concert where the composer was present, or ever had the opportunity to pose a question to a composer. Several students noted that they had no idea the depth to which a composer researches text, and thinks about style, genre, instrumentation, sequence of movements, and performing forces.

**2. Music education broadens the students’ view of reality.** The goal of teaching and learning is to bring about a change in the way that both students and teachers perceive the world. High school students transforming a space in their own schools is an example of how the *Anthracite Fields* performance changed students’ view of reality. Looking at a space at school in a new way, through a new lens, was a goal of this project.

**3. Music education is empowering.** When students and teachers realize they know something with a depth that goes beyond the recall of information, this is “conscientization.” This knowledge includes an ability to act on this knowledge in such a way as to effect a change.

A quality music education program in schools fosters the nurturing of musical imagination, musical intellect, musical creativity, and musical performance. These are cognitive constructs that define what Howard Gardner (1983) calls “musical intelligence.” There is evidence of musical imagination in the ways that Julia Wolfe addresses the topic



of coal mining in the anthracite coal region, where she grew up as a child. Composing in a post minimalist style, she engages elements of musical intellect.

The Transforming Space project was an experience in creativity. Modifying a space in the machine shop of an abandoned wire factory in a depressed and dangerous urban neighborhood and exploring issues of social justice and moral conscience were the results of many creative and visionary minds.

Inspiring the teachers and students who attended the performance to look at spaces on their campus in new ways was a successful outcome of the project. All learned that reality is not limited to one particular perspective but that perspective defines reality. This is empowering.

**4. Music education is transformative.** A lesson has been learned when both the teachers and students can acknowledge a change in their own perceptions. It is this change or transformation that teachers can assess.

Particularly, students in advanced placement music theory classes, who attended the performance and the talked with the composer after, shared that they did not realize the deliberateness of the composition process. They realized that their vision of the composer sitting in a small room with a piano, doodling until something strikes their fancy, was an imaginary fantasy. This change in their perception was a powerful one because it enabled them to place the content they were mastering in their theory courses into a real-world context. Teachers, accompanying students to the performance, also asked questions of the composer and the conductor. One science teacher asked Julia Wolfe how she reconciled writing a movement called “Flowers” in a piece that focused on the devastation of coal miners, many of whom lost their lives in mining accidents. Wolfe described a meeting she had with a miner’s wife at a museum located near the anthracite fields. The flowers represented all of the beauty in the area and the beauty of the people who worked so hard to mine coal so that homes and buildings had heat and energy. This resonated well with the science teacher who asked the question. Later, he shared that this changed his ideas about how his students might transform a space outside the school building into one of beauty. They planted flowers, and made the a place that was energy efficient. There, students could come, read poetry, contemplate, and sing.

A musical performance, and the place where it occurs, is transformative. Seeing spaces in new ways, and hearing music differently is transformative. This performance of *Anthracite Fields* in the Roebing Wire Factory placed new filters on the realities of energy, the impact of industry, and matters of social justice for the conductor, singers, and audience members.

**5. Music education is political.** There are issues of power and control inside the classroom, the school building, and the community. Those in power make decisions about

what is taught, how often classes meet, how much money is allocated to each school subject or program, and so forth. Those who use the critical-pedagogy model are able to transcend these constraints by focusing on the valuable knowledge students bring to the classroom.

Often those in power do not understand the power of music and the other arts to add beauty to the world, and to the lives of those in the school and community. Instead, they often silence voices, marginalize underserved constituents, and enforce policies that are hegemonic and oppressive. Issues of social justice, an important concern of the critical pedagogue, are overshadowed by the immediate need for those in power to react to declining test scores, declining funding, lack of governmental financial support and more. Compositions such as *Anthracite Fields* and composers like Julia Wolfe, champion the cause of the subaltern and the music they create and perform peeks a consciousness of resistance and change.

## **Conclusions**

### *Role of the Arts in the Community*

Since its founding in 1926, Westminster Choir College has empowered and inspired young artists to transform their communities through the arts. Although the arts provide numerous benefits, it is our belief that the power of the arts is the essential glue in strong communities that are developed around tenets of mutual respect, understanding of difference, and the human connections of shared experience. The educational components of the Transforming Space project developed out of a grant from the John F. Kennedy Center, which identified Trenton as the first northeastern US city for their “Any Given Child” program, which brings together community partners in a collective-impact model designed to provide a quality arts education to every school child during the school day. Several meetings with key stakeholders in the community (enabled the Transforming Space project to move forward as a community event in a city that is often quite segmented. These stakeholders were also essential in the structuring of the educational opportunities that ensued. With a full contingent of school children in attendance at the workshop, two sold-out concerts with 200 free tickets offered to the community, we were able through music and art, to transform a building that had long been abandoned into a community center. It brought people from all backgrounds together to envision a new, postindustrial future for Trenton around creativity and the creative economy.

### *Efficacy of Critical Pedagogy*

The authors concluded that a curriculum for music education framed in tenets of critical pedagogy may foster a critical consciousness among those students who attended the matinee performance. It offered a lens to focus a view of the world that was transformed

by deliberate intention and furthered the importance of community engagement, social responsibility, and social justice. This work, in this place, in this time emphasized the extent to which, as performers and audience members, we are coauthors of our artistic experience.

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