How a Virtual Choir Enhances Social Capital

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This paper examines the link between social capital and a virtual choir. During the recent COVID-19 pandemic of 2020, with an intensified perception of alienation, community, church, and university choirs used the format of a virtual choir to continue the singing and performance practice of choral music. Created by a user-generated choir with uploaded videos and audio, a virtual choir is the final synchronized mix of these various files producing a unified performance. The challenge is to maintain and grow the virtual experience. A living sense of community and connection with others is a characteristic of the choral music process. Obstacles to overcome in the preparation and execution of a virtual choir participation include familiarity and facility with current technologies, the alienation of individually learning, preparing, and performing the singer's part and the lack of the traditional choral experience of interacting with individuals on a personal and sonic level. Using testimonials of singers involved in a virtual choir experience and current research regarding varied examples of developed choral practices, a clear demonstration of social capital is evident. Social capital is the value created by social relationships with likely returns in the form of good will, sympathy, and social networks.

Introduction

The virtual choir is a web of singers that sustain a distinct identity and shared purpose. It is not a network of singers in the traditional sense that interacts with each other in a common physical space but a shared virtual reality of digital choral art. It is a cooperative artistic creation that can involve thousands of singers from numerous points on earth. Twenty-first-century technology and skill have eradicated the boundaries of countries, regional communities, and traditions. The conventional approach to choral art of teaching, learning, rehearsing, and performing with a group of people in a common room has been transformed with the new choral art practice of the virtual choir—a piece of music is executed in the isolation of a singer's home. The traditional performance of choral music has morphed into a mixed multi-track online video sharing format such as a YouTube and Vimeo performance video that exists in the World Wide Web.

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The Virtual Choir

On March 21, 2010, Eric Whitacre, the originator of the virtual choir concept and realization, released *Lux Aurumque* the first virtual choir. It involved 185 singers from twelve countries. The inspiration came when in May 2009 Whitacre received a video from devotee Britlin Losee singing the soprano part from the composition, *Sleep*. Whitacre, impacted by the gesture and beauty of her singing initiated a social media experiment. Whitacre sent out a call online to his fan base, a young adult and teen group, encouraging them to learn the music, sing their part, and upload the outcome. Singers followed an online version of Whitacre conducting the piece to synchronize the singing. The uploaded files were first put together by Scott Haines who edited the audio and video and generated the first virtual choir.

The singers never met each other, never rehearsed together, and never knew each other. The entire traditional choral format of meeting in a common space, singing together, and creating a choral piece of music in the moment had been completely bypassed. All the personal interactions, communication in real time, and relationships built in the common construction of choral music were abandoned. The sonic interaction of singers learning a piece of music and blending a unified sound was also discarded. In the first two months after Virtual Choir 1, *Lux Aurumque* was launched, it received over one million hits on YouTube and since its release has been watched online by nearly five million people.

Released April 6, 2011, the second Whitacre virtual choir, *Sleep* included 1,999 singers from fifty-eight countries. This choir included children and senior citizens. Virtual choir three, *Water Night*, was released on April 2, 2012, with 2,945 singers from seventy-three countries. *Fly to Paradise* the fourth virtual choir released on July 11, 2013, involved and impressive 5,905 singers from 101 countries. The fifth virtual choir *Deep Field* was released on November 16, 2018, using 3,939 singers from 126 countries with the youngest singer of age four and the oldest singer of eighty-seven years. *Sing Gently*, released on July 19, 2020, the sixth virtual choir, includes 17,572 singers from 129 countries. Remarkable is the fact that the phenomenon of the virtual choir success has grown both in singers and countries involved. Also noteworthy is the inclusion of singers from a wide selection of generations that participated in this innovative artistic expression.¹

Developing technologies have given rise to a new art form in the virtual choir. The lack of the traditional choral format has evolved into a novel form of a twenty-first-century choral reality. The above examples are the work of Eric Whitacre. After his first release of *Lux Aurumque* there were other examples of virtual choirs. During the COVID-19 pandemic, there are many examples of virtual choirs, virtual orchestras, and virtual bands. Virtual dance performances, theater performances, and other artistic ventures also flooded the Internet during the COVID-19

^{1.} Whitacre, Eric. Eric Whitacre's Virtual Choir.

pandemic. Unable to meet in person led to the necessity to express and perform online. Evolving technologies gave growth to businesses that offered the assistance of mixing individual files and producing a unified virtual performance. Do-ityourself videos also had a presence in the virtual performance information stream. The virtual presentation venue kept people working while continuing numerous art forms. The corporate creation of art online is flourishing.

In the choral field groups like an Australian Pub Choir's Couch Choir, the Barcelona Soul Choir, two Italian singing groups Il Coro Che Non C'è and Coro Saint Cecilia, Boston Children's Chorus, the Camden Voices from the United Kingdom, the Stanford Talisman Alumni virtual choir, Vancouver's Universal Gospel Choir, Lucerne, Switzerland's Molto Cantabile, and Fox Point, Wisconsin's St. Eugene Liturgical Choir to name a few, all engaged in the virtual choir performance phenomena.² All of these efforts were accomplished with the aspirations to connect and build social capital through a project that could be realized during the COVID-19 pandemic lockdowns.

The social interaction included in the virtual performance space is also thriving with blogs, chat groups, and testimonials that support and grow the online virtual community of art performance. Whitacre, for example, offers and maintains a "location" for virtual choir participants to share their experiences online on his website. The page is called VC Family where those who have contributed to a past virtual choir are invited to share their stories. This social capital that is a part of this growing development of virtual performance is also expanding.

Social Capital

The phrase "social capital" carries varied connotations and implications dependent on who and how it is used. It can be an economic and cultural capital where networks of individuals are vital to social interchange, trust, and cooperation. Coleman presents a bidimensional aspect of social capital:

Social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure...Unlike other forms of capital, social capital inheres in the structure of relations between persons and among persons.³

^{2.} Tori Cook, *Chorus Connection* (2020); Tom Metzger, *Top 10 Virtual Choir Videos of 2020* (Choirgenius , 2020).

^{3.} James S. Coleman, *Foundations of Social Theory* (Cambridge, MA: Belknap Press of Harvard University Press, 1990), 302.

Collective social capital and individual social capital⁴ are two approaches that, in some way, appear in the presentations of Putnam and Coleman.⁵ This bifurcation of the term social capital has been a component since its initial stages. Putnam states, "Unlike conventional capital, social capital is a 'public good,' that is, it is not the private property of those who benefit from it."⁶ According to Putnam, social capital is both personally and publicly good—at the same time.

One of the measures of collective social capital is trust. "Trust is a psychological trait that helps initiate social contacts, exchanges, and durable relations with other human beings. And such contacts, exchanges, and durable associations comprise social networks and social capital."⁷ Bonding networks that are formed to increase social capital and influence trust are the framework for reciprocity. Miyata, Ikeda, and Kobayashi state, "bridging networks that connect diverse individuals sustain a sense of generalized reciprocity and general trust. Through social exchanges among diverse members, people tend to obtain a sense of generalized reciprocity."⁸ The Internet is a place where networks expand, and people potentially can meet other individuals. It also has the potential to diminish the significance of physical attributes, gender, race, and appearance. The Internet can also diminish and eliminate the importance of physical distance. Miyata et al. suggest, "participation in online communities encourages formation of diverse social networks."⁹ The measurement and management of this burgeoning beast is still in its infancy. Research, measurement, and supervision is also an explosive field of work.

Regarding managing social networks, those online, Koput states, "A long tradition of social research has demonstrated that we form ties with others with whom we share attributes or affiliations. That is, we interact socially with others with whom we have common interests, which may be based on our demographics, location, or participation."¹⁰ The social networks that are the foundation of social capital, if managed skillfully, can produce fulfillment. As in reality, individuals are drawn toward others of similar interest and behaviors — the norms for social capital significantly existed before the Internet was created.

^{4.} Joonmo Son, Social Capital (Cambridge, UK: Polity Press, 2020).

^{5.} Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000); Coleman, *Foundations of Social Theory*, 1990.

^{6.} Putnam, "Social Capital and Public Affairs," Bulletin of the American Academy of Arts and Sciences 47 (1994): 10.

^{7.} Son, Social Capital, 2020, 37.

^{8.} Kakuko Miyata, Ken'ichi Ikeda, and Tetsuro Kobayashi, "The Internet, Social Capital, Civic Engagement, and Gender in Japan," in *Social Capital: An International Research Program* (eds.) Nan Lin and Bonnie H. Erickson, 206-233 (Oxford, UK: Oxford University Press, 2008), 210.

^{9.} Ibid, 208.

^{10.} Kenneth W. Koput, *Social Capital: An Introduction to Managing Networks* (Northampton, MA: Edward Elgar Publishing, Inc., 2010), 22.

It is the intent of this paper to demonstrate social capital was present in the preparation and completion of a virtual choir. This work adds to the existing choral investigation and literature by offering research on the choral population and the relationship to the virtual choir experience. It has the potential of benefiting the study of social capital within and outside the choral world. An overriding significance of this study is to bring attention to the value of singing in a choir, traditional or virtual, and shed light on the effects of digital technologies on choral creativity and the collective creation of art. It is possible that singers and others will see the relationship between singing together and the act of creating choral music strengthening connections, relationships, and improving communities. This research displays the direct connection between a virtual choir and social capital.

Building Social Capital with the Virtual Choir

Building social capital with a virtual choir is inherent in its design. As Coleman states, "A major use of the concept of social capital depends on its being a byproduct of activities engaged in for other purposes."¹¹ A population in pandemic lockdown will experience long-term social stresses unless there is a novel design to support social interaction. "Another form of intentional organization is a voluntary association which produces a public good."¹² The administrative leader of any organization possesses a clear concept and objective of the outcome. In an example of a singing group, the organizer, not necessarily the conductor but many times it is the conductor who is the driving force behind a virtual choir, must have the vision and desire to realize a project." Social capital requires investment in the designing of the structure of obligations and expectations, responsibility and authority, and norms (or rules) and sanctions which will bring about an effectively functioning organization."¹³ Apply a functioning organizational model on a choral setting – with any organization, responsibilities and opportunities, accountability and control, and standards and restrictions actuate functionality. When these attributes are in place in a virtual choir, by this inherent design, social capital is a natural byproduct of the shared purpose.

The organizational complexities of a virtual choir primarily include a musicality factor. The music selection must be accessible, understandable, and within the technical range of the chosen demographic. Each singing group has various skills and ranges. Musical choice is of paramount importance. Superior communication skills to engage the necessary financial support, singers, and technicians for the project ensure a successful outcome. The positive relationship between the director and singers is key to building trust that the projected goal is realistic and attainable. Some singers may need assistance with the learning of the

^{11.} Coleman, Foundations of Social Theory, 1990, 312.

^{12.} Ibid, 313.

^{13.} Ibid.

music or the technical aspects of recording their files. A support system of either the director, in a smaller setting, or other structures of assistance are crucial. Not every person has a similar skill set. Technological issues are the greatest obstruction to the artistic process for many. Whatever guidance offered for those with roadblocks related to technology that can be available the better. It is curious that the very technologies that give us the possibility of virtual performance can also be the biggest obstruction.

"Good for me and good for you" is also an inherent factor with social capital. The public good aspect of social capital is not like physical capital where property rights or ownership are the goal sought after. For those who are embedded in a virtual performance, social capital is not the individual property of anyone who gain from it.¹⁴ It builds on itself by a public good contribution. Coleman writes,

The kinds of social structures which make possible social norms and the sanctions to enforce them do not benefit primarily the persons whose efforts are necessary to bring the norms and sanctions into existence, but all those who are part of the particular structure. . . . The public-good aspect of most social capital means that it is in a fundamentally different position with respect to purposive action than are most other forms of capital. Social capital is an important resource for individuals and can greatly affect their ability to act and their perceived quality of life. They have the capability of bring such capital into being.¹⁵

Coleman emphasizes the empowerment of those within the structure or organization are generating social capital for social good. Creating a thing of beauty with choral music or any art is a gift of service to the public thus bolstering the social capital outside the given structure. The power of the virtual choir to influence, in a positive way, public trust is evident.

Methods

The thirty-three-voice chorus sampled was from a private university in the Midwest of the United States. The chorus is a non-required elective for academic credit in an institution that does not have a music major—thus the students registered for the class were motivated to be in the class because they had a propensity and desire to sing. Involved students studied nursing, engineering, digital media, education, and business. Some were musicians who had sung in choirs before, some never sang in a choir, a few were instrumentalists and composers while others could not read a note of music. Students met twice a week for a seventy-five-minute rehearsal. Due to the COVID-19 pandemic the university initially had a mandatory online class format. The first quarter was an exclusively

^{14.} Coleman, Foundations of Social Theory, 1990.

^{15.} Ibid, 317.

online recorded synchronous class. Students could return to the recording of the class and review their voice part if needed. The literature prepared for the virtual choir was a twelve-minute, three movement American work of the twentieth century with a medium degree of difficulty. Students learned the music through online sectionals and group singing during class time and their personal review of recorded class. Because of latency with the programs used for synchronous online class meetings, students were unable to hear each other. Singers were isolated in their own personal space learning and singing their part while listening to the instructor demonstrate their individual voice part. At times the entire harmonic structure within which their part interacted was played allowing students to "hear" their part in the harmonic whole.

The second quarter was divided into online and face-to-face classes. Complying with the university and the American Choral Directors Association recommendations for singing, highly controlled smaller groups of six to eight singers met for fifty to twenty minutes singing with masks and physically distanced from each other by twelve to eighteen feet. For the first time students could hear their part as they were singing along with the other parts of the piece. These face-to-face meetings were paired with the online recorded synchronous class format.

Singers were given detailed instructions and information regarding participation in a virtual choir. Once the music was learned the next major hurdle for the students was to record their part while listening to a master track. The master track is used to synchronize the audio tracks with the video tracks. Individually, students would sing along with the master track numerous times with the goal of feeling comfortable, singing alone. Participants were then instructed to find a quiet space and set up their video recording, prepare lighting that would show their faces, and consider the background of the recording space. If they were singing in their bedroom suggestions were made to be attentive to any disarray in the room. Using headphones or ear buds, students would then record their performance to a smart phone or other device such as a computer. The final instructions given were to upload the audio/video file to a drop box that was accessible to technicians and the instructor. Once all files were uploaded the process of mixing and synchronizing the files into a whole would begin.

Data collection began in November 2020. Students were asked to write reflections on a series of questions. For this paper their name and gender have been withheld. There were three areas of inquiry, the first was the functionality of the class; for example, what worked, what didn't work? The second area contained more personal questions such as, did you feel connected to the group, did you make friends, did you feel alienated? The third area of interest was about the reason they sing, why participate in a virtual choir, and would you do this again. There was a 100 percent return of very thoughtful reflections on the questions posed.

The structure of the class at this university of the chorus is unusual in that it is a student run organization and an academic class. There is an executive board of students that organizes social gatherings such as dinners, parties, and gettogethers. Even during the pandemic, students would organize online parties, campfires, and meetups. This is noted here because it is a social component of the choral experience—singers not only gather to sing but also to connect socially with each other through gathering and various social activities. The interface of singers before, during, and after a rehearsal is crucial for singers to connect with each other on a non-musical level.

The role of participant observation was practiced throughout the class portion and the data collection. The focus of the written reflections was to uncover feelings and behaviors that were authentic within a choral class setting and sharing of the lived experience of the same preparation of a virtual choir. It is important to understand the shared experiences so that a deeper understanding concerning the features of the phenomenon can be discovered.¹⁶ The trend of interest here is the growing number of virtual choirs and the social capital that is part of the experience and reinforced in the process.

Results

The first question category of data collection concentrated on class functioning, management, and delivery methods used for learning material in class. For the limited scope of this paper it will not be included. The data collected from the second and third categories, the thoughtful reflection on self, community, belonging, and purpose for individual singing, are addressed. Students were given two weeks after their audio/video files were uploaded to complete their written reflections. After the completion of their thoughts, they would download them to a university system of data capture.

During the coding and analyzing of the reflections, there were eight key areas in the second category regarding personal experience that are prominent: making new friends, the feeling of being connected to the group, a sense of alienation because of the pandemic, wanting/missing physical proximity with other singers before, during, and after rehearsals, a sense of inclusive belonging, social exchanges, shared purpose, and personally good and group good. These eight areas were all addressed individually in the students' responses. The third category of interest focusing on the reason the singer sings, there were three areas of prominence: singing as a part of life, singing to relieve stress, anxiety, and emotional release, and the desire to repeat the virtual choir experience. These three areas were also addressed individually. Personally good and group good require concise clarification. Personally good includes a sense of well-being and purpose, accomplishment, and happiness. Group good consists of a perception of family

^{16.} John Ward Creswell, *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (Thousand Oaks, CA: Sage, 2007), 60.

belonging, meaningful connections with others, and teamwork with a common purpose.

These data demonstrate that 21 percent of students made a new friend through the semester. One student commented, "I'm very glad to have met the new friends I made through chorus." Another student wrote, "I felt sad that I did not get to connect with everyone I was hoping to." Under the area of students feeling linked to the group 52 percent stated that they felt connected to the class. One student commented, "despite the pandemic, I feel that I became more connected with the other members of the chorus." That student also wrote, "I have found my place within the community." The third area of interest was the sense of alienation felt either by the pandemic or the online rehearsal structure. Twenty-four percent of students felt a slight sensation of alienation. "At times I did feel alienated because the only time we communicated as a group was online. Not being able to see other people physically just lends itself for people to feel alienated." Seventy-six percent of students missed the physical proximity of rehearsing together in the same space, clearly a significant number. These students missed and longed for the traditional physical proximity format of a chorus. The fifth area centered around the feeling of being included in the chorus-was the chorus in this online teaching format inclusive. Fifty-five percent felt that they were included in the chorus and welcomed. Most of the students articulated that if there was an issue with the semester it was not because of the chorus participants but rather the lack of physically being in the same space with other singers singing. The next area was entitled social exchanges implying the many times when students socially exchanged dialogue, messages, or made contact. In this category 61 percent could identify if they were engaged in social exchanges. In the penultimate area, 91 percent of students said they had a shared purpose. Some of the insightful comments included, "Although I believe that nothing will ever come close to a live musical performance, I felt comforted knowing that everyone was going through the same challenges that I was going through. This semester, that was the "community" that the Chorus was." Another student wrote, "Choral music is such a magical inexplicable thing. The fact that it is impossible for a single person to perform a choral work on their own, requiring multiple people to join and participate." The eighth and final category in this section was the awareness that the experience was personally good and good for the group. Ninety-four percent stated that the experience of the virtual choir preparation and recording was a good one for the individual and good for the group.

The coding and analysis of the third area of interest included three topics, why do you sing, what is the purpose of singing, and future participation in another virtual choir. Seventy-three percent of students stated that they had always sung, whether in a family setting, church choir, or school choir, they always remember singing—it was a part of growing up. Seventy-nine percent articulated that singing was a stress and emotional reliever. One student said, "The simple answer for why I sing is because it makes me happy. Singing and music have always been a way to

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get in touch with and release emotion and stress which especially helps during stressful times like the pandemic we have been going through this year." Another, "I sing because I love the freedom of expression that it provides, it's therapeutic and allows for an outpour of emotions." Two students used the same words, "I sing because it is a release. "Yet another singer wrote," Singing brings me joy and makes me feel complete." The final topic point asked the question, would you participate in a future virtual choir. Eighty-two percent said they would participate in a future virtual choir. Eighty-two percent solution make virtual choir work because I was determined to not let COVID-19 stop me from engaging in activities that helped me find peace of mind." One senior member wrote, "I still think that even if we cannot be in person, we are still able to create such beautiful art together." One singer summed up her thoughts with, "In a way, the music brings us together even when we cannot be physically near to others."

Discussion

If indeed there is a rise of social capital in what Lin refers to as cybernetworks then the virtual choir is joining the list of networks that are prolifically constructed in cyberspace. Lin focuses on defining measurement of social capital on embedded resources within networks.¹⁷ The increase in participation in the virtual choir from 185 singers from 12 countries with *Lux Aurumque* to the participation in *Sing Gently* with 17,572 singers from 129 countries is evidence there is an ascent in social capital in cyberspace. Lin proposes two hypotheses: "(1.) Social capital in the form of cybernetworks is clearly on the rise in many parts of the world, and (2.) The rise of cybernetworks transcends national or local community boundaries: therefore, its consequences (both positive and negative) must be assessed in the global context."¹⁸ This uptick in networks in cyberspace has outcomes away from societal or national borders.

The data demonstrate that 91 percent of students involved in a virtual choir experienced shared purpose, a hallmark of social capital, and 94 percent of students articulated the bidimensional aspect of social capital regarding good for the individual and good for the public. The virtual choir experience provides social capital to a global "market" carrying the beauty of the choral art presented with enticing and engaging video technology. Lin asserts,

These "virtual" connections allow users to connect with others with few time or space constraints. Access to information in conjunction with interactive facilities makes

^{17.} Nan Lin, Social Capital: A Theory of Social Structure and Action (Cambridge, UK: Cambridge University Press, 2001), 211.

^{18.} Ibid, 212.

cybernetworks not only rich in social capital, but also an important investment for participants' purposive action in both the production and consumption markets.¹⁹

There is no longer a restriction of time or space with the creation and expansion of social capital. The virtual choir has opened a new potential, using the choral art, increased levels of social capital with the possibility of global reach.

Intriguing that not once did the data show the word trust. Not one student used the word trust, yet trust is the expectation that is a component of a community of truthful, routine, and mutual behavior. "Social capital is a capability that arises from the prevalence of trust in a society or in certain parts of it."20 The sheer splendor of the virtual choir is embedded in its structure, a common shared purpose within a framework of directions. Each singer releases themselves to the structure of the music and joins the others, virtually, creating a thing of beauty. "The most useful kind of social capital is often not the ability to work under the authority of a traditional community or group, but the capacity to form new associations and to cooperate within the terms of reference they establish."21 Perhaps the students put their unspoken trust in the chorus director or the process of choral music. Perhaps they put their unspoken trust in each other to work hard for each other to produce the virtual choir. Perhaps they put their unspoken trust in themselves to use singing as a tool to make something beautiful together. Indeed, they have put their trust in making an artistic statement – so succinctly stated by one of the students, "Choral music is such a magical inexplicable thing. The fact that it is impossible for a single person to perform a choral work on their own, requiring multiple people to join and participate."

Conclusion

The virtual choir is a network of singers that sustain a distinct identity and shared purpose online. No longer are there limitations of time or space with the creation and progress of social capital through the virtual choir experience. Intrinsic in social capital is the matrix of relationships between persons and individuals that occur online. The virtual choir experience includes a community aspect where social capital is inherent. Participants in a virtual choir are predicated by a general interest in singing, bringing musicians together to learn, rehearse, record and upload audio and video files. Coleman²² bases his theory of social capital on relationships with people. In the virtual choir experience, the relationship between singers, in this case, occurred during class and in break-out rooms online, after class

^{19.} Ibid, 215.

^{20.} Francis Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity* (New York: The Free Press, 1995), 26.

^{21.} Ibid, 27.

^{22.} Coleman, Foundations of Social Theory, 1990.

in chat rooms and on blogs. The bifurcated nature of social capital is central in the virtual choir experience—the virtual choir is good for self and good for the society. The ability of the virtual choir to inspire public trust is apparent. The virtual choir enhances social capital.

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