

VIRTUAL VOCAL ENSEMBLES AND THE MEDIATION OF PERFORMANCE ON YOUTUBE

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DISSERTATION

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ABSTRACT

Musicians produce virtual performance videos of themselves and others on websites like YouTube. In a society with ubiquitous Internet and prominent social media interactions, music education can benefit by exploring the practices of musicians who produce music online, such as the creators of virtual vocal ensembles. A virtual vocal ensemble is a video containing multiple audio-visual tracks layered together through a technique called multitracking. In this performance practice, a virtual vocal ensemble creator records and combines multiple tracks to make a choir of clones or works with others in collaborative or collective ways.

The purpose of this study was to explore the implications of virtual vocal ensembles and the medium that emerged from the development and distribution of those videos. This study situates the creators of virtual vocal ensembles within a sound recording medium, based on a theoretical framework developed by Sterne (2003) that defines a medium as a contingent network of relations made up of people, practices, institutions, and technologies. Guiding questions focus on the musical and social implications of creating virtual vocal ensembles, the entities listed above, and the relations between them.

Traditional research methods and Internet inquiry were combined to create a multiple case study that examined three YouTube channels, each produced by a video creator. Data included the observation of the videos on the YouTube channels, text comments, and website analytics as well as interviews with video creators and others pertinent to the cases. A cross-case analysis was conducted to produce assertions that attended to the guiding questions.

Creators of virtual vocal ensembles developed methods to construct and publish their videos, which were limited by their musical and technological abilities and the resources available. As musicians produced virtual vocal ensembles, online communities containing

elements of fandoms, learning communities of practice, and music making spaces developed.

Implications of the performance practice have effected the way the medium is situated within society as well as the way creators perform choral music and sing. For example, when performers create virtual vocal ensembles, they develop identities as virtual performers and express themselves musically and theatrically. Musical arrangement, voice range expansion, and autonomous exploration of musical concepts were also results of creators' performance practices.

Creating virtual vocal ensembles require not only musical skills, but also technological and production abilities that can be applied to music education practices and expand conceptions of ensemble, performance, and medium. As producers of virtual vocal ensembles, video creators use social media to expand their reach and develop a community that has aspects of a fandom as well as learning and music making communities. Music educators can incorporate the practices of virtual vocal ensemble creators into their instruction and help students learn skills that may allow them to make music outside of the choral ensemble classroom in virtual contexts.

To my mother, Pamela Hickey, who inspired my love for music

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CHAPTER 1

INTRODUCTION

Composer and virtual choir director Eric Whitacre (2011) provided an early definition of virtual choirs as he recollected his experiences as a virtual choir director:

A couple of years ago, a friend of mine emailed me a link, a YouTube link and said, "You have got to see this." And it was this young woman who had posted a fan video to me singing the soprano line of a piece of mine called *Sleep*.

[YouTube video plays]. "Hi Mr. Eric Whitacre, um, my name is Britlin Losee, and this is a video that I would like to make for you. Here is me singing *Sleep*. I'm a little nervous, just to let you know" [Britlin sings].

I was thunderstruck. Britlin was so innocent and so sweet and her voice was so pure. And I even loved seeing behind her, I could see the little teddy bear sitting on the piano behind her in her room. Such an intimate video, and I had this idea. If I could get 50 people to do this same thing—sing their own part: soprano, alto, tenor, and bass—wherever they were in the world, post their videos to YouTube, we could cut it all together and create a virtual choir. . . .

So I sent out this call to singers and I made free the download of the music to a piece I had written in 2000 called *Lux Aurumque*, which means light and gold. And lo and behold, people started uploading their videos. Now I should say, before that, what I did before that is I posted a conductor track of myself conducting, and it was in complete silence when I filmed it because I was hearing the music in my head imagining the choir that would one day come to be. Afterwards I played the piano track underneath so the singers would have

something to listen to, and . . . the videos started to come in . . . From the crowd emerged this young man, Scott Haines, and he said, "Listen, this is the project I've been looking for my whole life." . . . and Scott aggregated all the videos, he scrubbed the audio, he made sure everything lined up, and we posted this video to YouTube a year and a half ago.

Introduction

This quote presents virtual choirs as emblematic of how ensembles are virtually mediated, with YouTube being a prominent site for such activity. Online music videos have inspired a surge of amateur music making on the Internet. Virtual choir is an emergent genre of mediated performance that has become popular among classical and popular musicians. This type of ensemble allows for the enmeshment of modern technologies with aspects of face-to-face ensemble performance. The video sharing website YouTube was released on the Internet on February 14, 2005. Since then, amateurs, professionals, and corporations have been creating videos to post on the website. YouTube is presently it the third most viewed website on the Internet (Alexa, 2015). Each month over one billion users visit YouTube, and the website claims that 100 hours of content are uploaded every minute (YouTube, 2015).

As YouTube and digital media have evolved, new performance practices like such as virtual choir have emerged. One of the first and most prominent supporters of virtual collaborative singing within the classical music community is composer and conductor Eric Whitacre. His YouTube channel, Eric Whitacre's Virtual Choir (EWVC), is an exemplar of the reach, influence, and growth of virtual choirs bringing thousands of singers and audiovisual technicians together to create performances that have been viewed by millions of people via YouTube. The number of people involved with EWVC has been growing with each incarnation.

Whitacre's virtual group started with 185 singers, who produced 243 tracks from 14 countries in *Eric Whitacre's Virtual Choir – 'Lux Aurumque'* and has grown to 5,905 singers with 8,409 video submissions from 101 countries in *Eric Whitacre's Virtual Choir 4: Fly to Paradise* (see Table 1.1)¹.

Whitacre's videos are some of the most viewed virtual choirs to date on YouTube with over 7 million views as of January 14, 2014. The people involved in creating Whitacre's series videos include thousands of singers, a composition team, instrumentalists, producers, programming and mixing specialists, web and graphic designers, creative directors, animators, sound file managers, and sound engineers. Additionally, a community support team ensured that Whitacre's website, social media, forums, and video submissions ran smoothly. To better conceptualize the end-product of this type of *mediation*, or creation with the help of machines and technology, the following vignette describes the Eric Whitacre Virtual Choir 1:

The video was silent as the title screens appeared announcing the descriptive statistics of the participants who provided the audio and visual takes for the ensemble. A red curtain, like that of a stage proscenium, appeared and opened up to reveal a virtual stage. At center stage was a black box that quickly turned into a manifestation of the maestro, Eric Whitacre. Behind him were hundreds of colorful boxes lined up like a live choral ensemble on risers. Each two dimensional box, or panel, sported the face of a singer. Above them were animated stage lights shining yellow, purple, and blue. The scene cut to the director who indicated a breath and downbeat. The view panned to show the choral singers, each in his or her own position on the virtual choral risers. A

¹ To aid in the readability of the text, tables and figures can be found at the end of each chapter.

soloist appeared in front of the choir and sang an obbligato. Each singer was located in his or her own environment where they recorded their take: bedrooms, hallways, practice rooms, and recording studios. While recording, they all wore headphones and watched a guiding track of Whitacre conducting so they could anchor themselves to stay in time with the others. As the song progressed, it sounded comparable to a professional recording with masterful editing and sound recording effects like reverb, panning, and equalization. As the maestro gave the final cutoff, the scene faded and the credits were rolled with the anchor track's piano soundtrack playing in the background.

Defining Virtual Vocal Ensembles

For the purpose of this study, the term *virtual vocal ensemble* is defined as an ensemble whose performances are comprised of multitrack recordings. *Multitrack* is a vernacular term used to describe a recording that is created by layering audio-visual tracks. Often virtual vocal ensembles contain multiple audio-visual tracks layered together to create a performance. Grove Music Online (2015) defines choir as "a group of singers who perform together either in unison or, much more usually, in parts," and defines ensemble as "a musical number involving anything from two singers to the whole cast" (Cook, 2015). Therefore, the term virtual vocal ensemble can be used to describe all types of mediated vocal performances, including virtual choirs, virtual barbershop quartets, virtual a cappella groups, and other various sized ensembles that may have no equivalent in traditional musical performance.

Three types of virtual vocal ensembles are presented in this study: collective, collaborative, and one-person. Virtual vocal ensembles like EWVC require individual vocalists to produce audio-visual recordings that are compiled by an audio-video editor into a *collective*

stages of production—for example, repertoire selection, recording, and editing—are collaborative virtual vocal ensembles. The differences between collective and collaborative virtual vocal ensembles speak to the degree to which singers are involved in the production after the recording process. In collective virtual vocal ensembles, singers are usually recruited by the virtual vocal ensemble's creator and their involvement in the project concludes once they submit their video. Collaborative virtual vocal ensembles allow performers to have more ownership of the project than in collectives because of the distinct role interactions between video creators play throughout the process. The final type is one-person virtual vocal ensembles. In one-person virtual vocal ensembles, creators record themselves multiple times and layer the takes onto each other to create an ensemble sound; they are thus solely responsible for the recording, editing, and production of the video.

The Convergence of Media and Technology with Music Making

Many music education practitioners and researchers are interested in understanding the technological aspects of the musical environments contemporary students inhabit. By understanding the technological aspects of social media and the Internet, music educators can connect their practices to the vast potential learning opportunities in the digital world. Music education has a rich history of ensemble learning and performance. Digital media and Internet technologies provide music educators with opportunities to expand their conceptions of musical performance beyond the *synchronic*, or ensemble practices that exist at one point in time.

Thibeault (2012a) strives for a better understanding of media in relation to music of the 20th century by viewing music through a lens of media and through exploring the intrusive media of the 1930s, the growing celebration of mass media in the 1960s, and the transformative

possibilities of digital media beginning in the 1990s. Thibeault suggests the emergence of digital media has resulted in a condition he describes as postperformance:

To claim the postperformance world is to attend to three current realities: (1) that most of our experiences with music are through recordings rather than live performances; (2) that many pieces of music produced today that originate in a studio separate and estrange audience from performer, resulting in recordings that may be impossible to meaningfully perform live due to sampling or synthesis; and

(3) that the prevalence of recordings radically changes the way we hear. (p. 518)

Thibeault notes how musicians are becoming involved with ubiquitous lifelong learning in which they use resources to guide their own education. By learning from and creating digital media, the "notion of ensemble can be extended along the lines suggested by ubiquitous learning: ensembles can be anytime, anywhere, and synchronous or asynchronous, and they are not limited by geography or grade level" (Thibeault, 2012b, p. 205). In sum, music went from only being experienced live, to also being recorded, and now it can be experienced through digital means.

Broader changes to musical practices have emerged along with new technologies, media, and approaches used to engage music. A medium is often thought of as an object such as a compact disc (CD), television, or set of headphones. However, the definition of *medium* adopted in this study stems from a theoretical position in which media are networks, not objects which are often how they are conceived. Sterne (2003) suggests that a performer sings to a network of "recurring relations among people, practices, institutions, and machines (rather than simply machines in and of themselves)" (p. 223). A medium is a network of which a musician is a part. This network shapes how machines and technologies can be used, how the medium is perceived, and how it develops. For example, while one might say that a performer sings *through* YouTube,

it is more helpful for our understanding to state that they sing to YouTube and that their performance has many aspects that are present or absent because they are engaged with that medium instead of, for instance, singing in a concert hall. When a performer sings to a medium by creating videos, the machines, software, and other technologies they use as aids allow their art to be captured in a particular manner. The creator takes into account how technologies are used to interact with others throughout the video's conception, creation, and distribution as well as how institutions make resources available and supply virtual spaces for the sharing of the performance. Institutions like websites, music publishers, and learning institutions can all play a part in a video creator's process. Thoughtful and purposeful musicians should be aware of the affordances and constraints of the medium with which their music is shared, whether these are technologized media or in a synchronic setting. As people began to produce virtual vocal ensembles, practices began to develop that implicated institutions and machines or technologies. Practices range include but are not limited to the artistic process, interaction with audiences, and distribution of music.

Large performance ensemble experiences have been traditionally synchronic and rely on members working together at the same time. The director works with musicians, musicians interact within a section, and multiple sections blend to create a cohesive sound. These live practices haved similarities and differences from the practices of the virtual vocal ensemble creators in this study. The view of ensemble has traditionally been thought of as a group of people who meet face-to-face to create music. However, as digital technologies, the Internet, and video media evolve, the idea of ensemble is expanding to include forms that were inconceivable decades earlier. To better understand the practices of video creators and develop instructional strategies, researchers and educators can explore the media that support virtual vocal ensembles.

YouTube has provided people opportunities to experience virtual music making in ways that are meaningful as they create within the affordances and restrictions of the medium.

To better understand the affordances and restrictions of virtual music making on YouTube, it may be helpful to contextualize virtual music making amidst the emergence of the interactive web. Heralds of the interactive web, or Web 2.0, have discussed the implications of a changeable and alluring Internet that allows users to create their own content. Negroponte (1995) postulated that the Internet would go from a predominantly encyclopedic entity to one where users could dynamically alter content on a whim, a view that has been largely supported by more recent developments such as the ubiquity of social media and mobile Internet devices (DiNucci, 1999; Lassila & Hendler, 2007). Internet users began to gather together and write content that centered on topics of interest. Jenkins (1992) coined the term participatory culture to explain the phenomenon of how people are drawn to affinity spaces where they meet to discuss and learn about a topic. Affinity spaces have low barriers to participation, allowing easy entrance for most newcomers. Gee (2005) expanded Jenkins's view by emphasizing that affinity spaces attract people through a common endeavor in which novices and masters occupy a common space. These relationships helped to develop a strong sense of support within these communities, which encouraged the sharing of ideas and creations with others. Members of a participatory culture often feel socially connected to each other, and often more experienced members of the community become mentors to those who are newer to the group or subject matter.

Large Ensembles in Music Education

Bands, choirs, and orchestras are a staple within many school music programs, especially in the United States. Music educators have heralded large ensemble-based music making in schools as an exemplar of collaborative learning and performance. These types of programs often

promote the formation of social bonds within the confines of a school classroom. While a music ensemble is often viewed as a class like any other within a normal school day, students also often feel the music classroom is "a home away from home, a club, a family, or something unlike anything else they experienced at [their] particular school" (Adderley, Kennedy, & Berz, 2003, p. 203). Being involved in a performance-based ensemble can also allow musicians to feel a sense of safety and belonging. Brewer (2010) found that marginalized students felt band was a safe place where a diverse group of students can come together for the common cause of creating music. Similarly, Durrant (2005) discovered that singing in a community chorus can create a sense of belonging, national pride, and musical achievement.

Ensemble pedagogies within music classrooms attend to students with various interests and abilities. Authors such Kratus (2007), Miksza (2013), and Regelski (2013) suggest that large ensemble practices should be examined to ensure they are relevant to students in a modern society. While the large ensemble model is appropriate and successful in many situations, Williams (2011) suggests it can lead to the exclusion of other course offerings that are more relevant, particularly as technology and the Internet are so prominent in everyday life. Williams challenges music educators to reflect on their purposes and approaches within a changing society. Tobias (2013) uses participatory culture practices on the Internet to connect music education with contemporary culture. He suggests that by teaching the skills some adolescents use online, students may be better situated to continue to make music outside of the classroom or after they no longer participate in school music courses. Educators and musicians may ask themselves: how can synchronic large performance ensemble participants expand their approaches beyond live rehearsal rooms to mediated spaces? In what ways can the traditions of

performance-based large ensembles connect to participatory culture practices? How can the practices that are part of synchronic ensembles offer support to mediated creation?

Contemporary Approaches to Learning in Music Education

As Internet capabilities, social media, and computer technologies have advanced, society has become increasingly focused on online communications. Tapscott (2009) claims, "The new Web is a communications medium that enables people to create their own content, collaborate with others, and build communities" (p. 18). Web 2.0 allows space for user-generated content on websites like YouTube, Facebook, and Twitter. Jenkins's (1992) concept of participatory culture describes how fan communities produce cultural and social interactions that set them apart from spectators who only view content on the Internet. Jenkins (2006) discusses how online communities form around popular culture topics. In these communities, people share user-generated content in the form of videos, manuscripts, and blog posts. Content ranges from editorials to tabloids and realism to bizarre fiction. Users become mentors to some and learn from others. Jenkins documented an informal grassroots movement emerging at the turn of the 21st century. This movement melded with corporate ideas and evolved into a "convergence culture," which spurred a cultural shift where Internet users went from passive consumers to active content generators.

Digital society has allowed Internet users to contribute to content available online. For Jenkins, Ford, and Green (2013), participatory culture refers to "a range of different groups deploying media production and distribution to serve their collective interests" (p. 2). Meek (2012) suggests that YouTube has allowed for a "shift from media to *social* media [that] requires us to rethink the spatial relations between communication and politics in everyday life" (p. 1430, italics added).

Music educators can reconceptualize the way teachers and students interact with, learn from, and create music to respond to the changes that have affected the way people learn and interact with each other. Barrett (2005) called for the reconceptualization of music curriculum and the ways educators approach their music program. She argued that the locus of music education should be students' experiences, providing them with opportunities that relate their musical studies to their lives outside of school. A student's musical understanding through inschool and out-of-school experiences could be connected through music curriculum and instructional strategies. By taking the traditions of music education and coupling them with innovation, school music programs can begin to expand.

One way educators have responded to Barrett's (2005) call for reconceptualization was through informal music learning pedagogies. Green (2002), whose research is resonant with Barrett's call, explored the way popular musicians learn and began to develop an informal music learning pedagogy that connected outside-of-school musical practices to the classroom. She found popular musicians often utilized informal music learning strategies outside of the classroom. Green's research led her to develop informal music pedagogies that incorporated the practices of rock musicians into the classroom allowing students to experience a way of learning that differed from the large conductor-led ensemble (Green, 2008, 2013). Green's informal music learning pedagogies share similar elements with the ways people learn in participatory cultures that were discussed by Jenkins (1992, 2006; Jenkins et al., 2013).

Music Education and Virtual Spaces

By examining the ways people are learning through participatory culture practices and in the classroom through informal learning pedagogies, music educators can develop instructional approaches that prepare students to make mediated music, including approaches modeled on the virtual vocal ensembles presently found on YouTube. Musicians can turn to digital sources to learn music and to become part of an online musical community. Various virtual musical communities have emerged that allow people to interact with each other for the purposes of discussing, learning, and performing music. Research regarding musical communities ranges from studies about tutorial videos (Kruse & Veblen, 2012) and fandoms (Baym, 2007, 2012) to music sharing communities (Pinch & Athanasiades, 2012; Salavuo, 2006). Waldron (2013) explored how informal music learning practices on the Internet facilitate musical learning, the formation of community, and online music making. Her comparison of two contrasting online communities revealed a complex tapestry of user-generated content, YouTube, Web 2.0, and participatory culture that can foster music learning.

Using Wenger's (1998) community of practice theory, Waldron (2009) examined how cyberspaces formed around folk music genres. These communities exemplified Wenger's four components of learning as social practice as members of the community developed a stronger sense of meaning, practice, community, and identity. Waldron suggested that video sharing sites like YouTube are prime examples of cyberspaces that allow communities of individuals to experience, create, and learn music. Waldron (2013) also found participatory culture led to a pedagogical syncretism, or blending of two contradictory systems. Aural learning versus written notation was the biggest example of such syncretism.

Digital learning and online communities are now at the forefront of many adolescents' lives. Waldron (2009) claimed, "combining school music learning with the music learning culture of an online music [community of practice] should produce richer and more meaningful musical experiences as the local becomes situated in the global and vice versa" (p. 108). Waldron believed it could be beneficial for music educators to connect the outside musical

interests of students to learning within the classroom. Waldron's findings on informal music learning on the Internet echo what Green (2008) found in face-to-face informal pedagogies. Green discussed a pedagogical syncretism of the informal learning practices in which the practices of popular musicians are used in the formal music classroom. Green found most teachers were initially apprehensive about giving up complete control of their classroom in favor of allowing students to direct their own learning. However, she found informal learning practices in the music classroom helped music teachers feel that informal pedagogies improved their teaching approaches by allowing students to take ownership of their education.

A better understanding of virtual music making could inform music educators to equip their students with the skills and tools for lifelong learning by combining informal music learning with participatory culture. In a prior study, I found social media sites like YouTube provide spaces for musicians to create, consume, and share music in new ways, and informal music learning is often at the root of those practices (Cayari, 2011). YouTube has become a performance venue for music to come alive on the Internet; it also encourages participation within online communities which can lead to the construction of meaning that transcends both time and space (Waldron, 2009). By blending participatory media and social media musicianship with traditional music education values, "teachers are looking to make in-school musical experiences more like their students' musical experiences outside school by drawing on the music technologies that are an integral part of youth culture" (Ruthmann & Herbert, 2012, p. 577). The way young people are learning how to interact with digital media and the Internet is evoking a shift in locus in music making from face-to-face, formal, large group learning to virtual, informal, individual-directed, collective learning.

The Virtual Vocal Ensemble

A systematic inquiry examining the complexity of virtual vocal ensembles and the medium of which they are a part can provide insight on the ways people are mediating ensemble on the Internet. I do not suggest that virtual vocal ensembles can, could, or should replace synchronic choirs. However, virtual vocal ensembles may be one way to connect the longstanding values of large performance ensembles to popular new technologies. Music educators can begin to expand their concept of what it means to perform by including virtual ensembles. Jorgensen (2003) suggests that expansion can challenge the preconceived notions educators have to be more inclusive of a variety of ways to make music:

Music educators and those interested in their work need to break out of the little boxes of restrictive thought and reach across the real and imagined borders of narrow and rigid concepts, classifications, theories, and paradigms to embrace a broad and inclusive view of diverse music educational perspectives and practices. (p. 119)

Virtual ensemble performance is among those diverse music educational perspectives and practices called for by Jorgensen. The human connections, inner workings, benefits, and drawbacks of online musical mediation explored in this study may help educators think of virtual vocal ensembles in relation to the synchronic practices surrounding ensemble performance.

Armstrong (2012) explored the idea of community within cyberspace by studying the circumstances of participation in Eric Whitacre's Virtual Choir. Konewko (2013) discusses how Whitacre has infused the choral world with new energy through both live and virtual efforts.

While Whitacre became a champion in the classical music world as the conductor of some of the largest virtual choirs, virtual vocal ensembles go much further than the famous composer and

appear in a variety of contexts. Educators have put together virtual choirs of all-state repertoire and augmented their face-to-face performances with digital videos. Individuals have recorded one-person virtual vocal ensembles in various settings that range from bedrooms to recording studios. The musical genres of virtual vocal ensembles have spanned barbershop, Broadway, popular music, classical, and sacred music; these examples are a small sample of the variety that has inspired virtual vocal ensemble creation.

Virtual vocal ensembles draw upon both informal music learning practices and digital music activities. The characteristics of informal music learning set forth by Green (2008) including copying, learning by rote, listening to recordings, and mimicking are apparent in the processes enacted by virtual vocal ensemble singers. For example, when one creates a virtual vocal ensemble, singers can choose the music they perform, learn by listening and imitating recordings, chose the others, if any, with whom they perform, acquire their knowledge without structured guidance, and combine their ability to listen, perform, improvise, and arrange throughout the virtual vocal ensemble process. Virtual vocal ensemble participants, especially those who create videos themselves, also work through the musical activities typical in participatory culture. Such skills, according to Tobias (2013), include covering, arranging, multitracking, and remixing. By looking at informal music learning and musical participatory culture, one can see how virtual choirs might be a way for these two pedagogies to be merged. However, the medium surrounding virtual vocal ensembles is an intricate and complicated phenomenon. Therefore, media and sound studies research can be elicited to better understand the technological and social complexities of virtual vocal ensembles.

Statement of Problem

YouTube has emerged as a venue for musicians to express themselves through music videos. The virtual vocal ensemble is an emerging performance practice that incorporates multitrack recording to produce a collective vocal sound. People of all ages are participating in virtual vocal ensembles collectively, collaboratively, and individually, propelling the performance practice into high popularity on various venues; the most notable being YouTube. The number of people who participate in virtual choirs is growing as suggested by the growth of EWVC. Yet the virtual vocal ensemble is a phenomenon that has yet to be studied in the depth appropriate to its popularity and promise. Researchers should explore the experience of virtual vocal ensemble creators and participants. Music educators can use modern technologies to incorporate the learning and musical activities that guide teaching, curricula, and class offerings. However, until we know the more about the implications of virtual vocal ensembles and the experiences of those involved in creating them, we may miss the valuable opportunities to redefine what it means to perform in an age where virtual connections are seemingly limitless. By striving to understand virtual vocal ensembles, those in the music education profession can explore what it means to perform and the complex implications of what happens when singing with others becomes an asynchronous activity produced through digital files instead of face-toface.

Purpose and Significance of Study

I came to this study by way of my research on YouTube, online video creation, and video performance in the classroom. Virtual vocal ensembles are an emerging performance practice that I find inspiring, and I wanted to explore how these videos were constructed and what made virtual vocal ensembles choirs meaningful for those who engage in their creation. The purpose of

this multiple case study is to explore the implications virtual vocal ensembles have on their creators and the medium that emerged from the development and distribution of those videos. This study situates virtual vocal ensemble within a medium, or contingent network of recurring relations that has emerged as people created videos and posted them on YouTube. Data are used to guide a discussion of the implications that virtual vocal ensembles have for music education, researchers, and video creators. This study looks at an emerging musical performance and builds upon existing literature from the following areas: music ensembles, online identity and community, mediation and fidelity, and sound and media studies. Music, musician, and audience are considered in light of modern technologies as well as the ways technology can be integrated into music education and performance.

Guiding Questions

A multiple case study is complex because it includes a number of cases, each with a context and situation (Stake, 2006). Therefore, a researcher must keep not only each individual case in mind, but also the thread that connects them. The connecting thread, or *quintain*, for this case is virtual vocal ensembles. Stake defines a quintain as "an object or phenomenon or condition to be studied . . . representing the collective target, whether it is a program, a phenomenon, or a condition" (p. 6). Stake claims it is important to develop research questions that are germane to the quintain as well as issue questions that are specific to individual cases.

In this study, there are two guiding questions, each with multiple subquestions. The first attends to those who create virtual vocal ensembles and the second focuses on the medium to which they perform:

1) What are the musical and social implications of virtual vocal ensemble participation and creation?

- a. How do virtual vocal ensemble creators find the process fulfilling and meaningful?
- b. How does the production of videos on YouTube affect the identity of the virtual vocal ensemble creators?
- c. What type of community emerges through the creation and distribution of virtual vocal ensembles?
- d. How does creating virtual vocal ensembles influence the creator's skills and understanding?
- 2) How does a medium emerge as people create virtual vocal ensembles?
 - a. Who are the people creating virtual vocal ensembles?
 - b. What practices are involved in making virtual vocal ensembles?
 - c. How do institutions influence virtual vocal ensembles?
 - d. How is technology used to mediate ensembles and performance?
 - e. How do recurring relations create a network through which the medium emerges?

Stake (2006) suggested that while the inquiry of individual cases within a multiple case study is guided by questions that pertain to a quintain, questions that are relevant to specific cases will also emerge. These case-specific questions are referred to by Stake as issue questions, which are considered as individual cases are observed, questioned, and analyzed. Issue questions that emerged from the cases in this study include the following:

- What specific actions did the creator take to create virtual vocal ensembles?
- What were the skills the creator learned, developed, or exercised as he produced virtual vocal ensembles?

- How did the creator develop online identity as she performed on camera?
- What effect did vlogging (talking to the audience) have on the creator's ability to connect to his fans?
- What was the nature of the interactions between commenters on virtual vocal ensemble videos as well as their interactions with the creator?
- How did comments effect the creator's decisions for future virtual vocal ensembles?
- How did the online music making of a virtual vocal ensemble creator affect her offline experiences?
- How did the creator's education and previous experiences prepare him to produce virtual vocal ensembles?
- What practices were used to effectively brand the creator's YouTube channel, and how did branding aid in developing a fan base?
- How does the creator portray her emotions and effectively express herself through creating virtual vocal ensembles?
- How does the creator navigate the relationships he started online?

Research Design and Scope

By using multiple case study, trends emerge that are germane to understand the convergence of YouTube, virtual vocal ensembles, and musical performance. Stake (1995) suggested case study can be used to lay the ground-work that allows for the identification of trends in culture. For Stake, a case is a specific, complex, and functioning thing. It is a bounded system that has a situation and context (p. 2). Since a case is a bounded entity, YouTube channels were selected as individual cases. Each YouTube channel has an owner, often the

person who created an account. These people will be referred to in this study as *creators*. YouTube channels have key information that is viewable by the general public. When looking at a YouTube channel, one may find uploaded videos, audience interactions, biographical information about the creator, and video playlists. These playlists contain videos that have been grouped together by the creator and can consist of videos that were previously posted on YouTube. Another common practice on YouTube channels is to include links to important sites. For example, on the EWVC YouTube channel, a link to Whitacre's personal website is available. All of these forms of interaction and information are considered within the case.

Since virtual vocal ensembles are a virtual phenomenon, methodologies were developed for this study by combining Internet inquiry practices and more traditional research methods. Coleman (2010) suggests researchers take a prosaic view of digital qualitative research by attempting to (a) uncover the lived experiences of digital media; (b) discuss the conditions in which digital media are made, altered, and deployed; (c) attend to particular genres of communication; and (d) place attention on the production and sustainability of digital media. Since digital media have changed the way humans interact with each other and their own lives, it is important for those conducting research online to adjust synchronic, face-to-face methodologies to this context. J. L. Jackson (2012) recommends qualitative researchers should pay attention to these changes as they challenge the ways researchers gather data, observe people, and check for accuracy.

Observation and question-asking methodologies were used to better understand each case within the study. Three YouTube channels with at least one virtual vocal ensemble were selected with preference given to channels with higher numbers of virtual vocal ensemble videos.

Observations included repeated viewings of the videos on the YouTube channel and the

YouTube channel website including analytics, comments, playlists, and other information available to the public. Interviews were conducted via email and video conference. Participants included creators of the YouTube channel cases; singers, editors, and other key participants in virtual vocal ensembles; and people in the lives of YouTube channel owners such as family members, collaborators, and friends who provided insight about individual cases and the quintain.

Cases were constructed and analyzed individually. Trends, similarities, and differences were then assessed throughout the cases to better understand the quintain of virtual vocal ensembles. A case study is a qualitative approach which emphasizes specificity; in a multiple case study, a number of cases are examined, each with their own specific context and situation, which allows the researcher to see trends and differences among the cases. A purposive sampling strategy was followed to allow for maximal variation sampling. Maximal variation sampling allows the researcher to "sample cases . . . that differ on some characteristic or trait" (Creswell, 2011, pp. 207-208). The cases selected to include varying degrees of collaboration in which one-person, collective, and collaborative virtual vocal ensembles were present in this study; a plethora of musical genres; multiple gender representation; a span of ages; and variety of race.

Summary

While multitrack recording has been around since the early 20th century, virtual vocal ensembles are a recent phenomenon, appearing in their present form within the last few years. The concepts behind virtual vocal ensembles such as collaborative singing, asynchronous recording, and sound editing are not novel. However, this new performance practice allows for an innovative melding of synchronic large ensemble performance values and participatory musical technology. The ease of use, affordability of technologies, and the prevalence of digital

sharing on YouTube position virtual vocal ensembles to become a venue for the enmeshment of the educational and performance traditions of the past with modern technologies. Virtual vocal ensembles indicate a promising pathway forward for music educators. However, one may ask whether singing asynchronously with one's self or others could be constituted as an ensemble. By investigating virtual vocal ensembles, it is possible to better understand how people are using new media and technologies to create performances on the Internet. Collaboration with others, regardless of age, space, and time, becomes possible within the convergence of learning and education in the digital age. If educators choose to tap into that resource, the possibilities for musical ensemble and performance seem endless.

Overview of Dissertation

In chapter two, I review literature in four broad categories that inform this study. First, I discuss the historical and theoretical backgrounds of how media has influenced sound recordings. Second, I explore the musical ensemble and how people construct meaning, identity, and community within collaborative performance. This section also addresses what motivates people to participate in choral singing. Third, participatory culture and online learning are discussed. Finally, the literature on how YouTube has allowed for new forms of online performance, learning, and community is reviewed.

Chapter three of this study includes discussions of methodology, including Internet inquiry, qualitative and ethnographic methodologies, and multiple case study. The participants, data collection techniques, and analysis methods are presented. Intentions and biases are shared. The chapter then closes with a timeline of the study. A report for each of the three cases is presented in chapters four through six with the seventh chapter dedicated to the cross-case

analysis. In the final chapter, implications for media research, music education, and virtual vocal ensemble creators are provided concluding with suggestions for future research.

In sum, this study takes a close look at three YouTube channels, which are conceived as individual cases, each situated in its own context. These cases are analyzed to inform the quintain of virtual vocal ensembles. By researching mediated choral performance on YouTube, we can better understand how people are informally making music and publishing it on the Internet and the implications those performances have for their creators' lives. YouTube and the medium of which it is a part has provided a unique venue for individuals, collaborations, and collectives to perform in a vocal ensemble virtually, independent of time and space.

Table for Chapter One

Table 1.1

Participants and Analytics of Eric Whitacre's Virtual Choirs 1-4

Tarrierpanis and Thursties of Brief Himaere & Firmar Choris I				
	<u>Virtual Choir 1</u>	<u>Virtual Choir 2.0</u>	<u>Virtual Choir 3</u>	<u>Virtual Choir 4</u>
Song	Lux Aurumque	Sleep	Water Night	Fly to Paradise
Date Published	March 21, 2010	April 6, 2011	April 2, 2012	July 11, 2013
Views	4,179,402	1,514,037	920,367	586,145
Singers	185	1,752	2,945	5,905
Tracks	243	2,052	3746	8,409
Countries	14	58	73	101

Notes: View counts as of January 14, 2014. (Lincoln Center, 2012; Whitacre, 2010, 2011, 2012, 2013b)

CHAPTER 2

LITERATURE REVIEW

In a time of ubiquitous technology and constantly evolving approaches to creating, consuming, and producing music, music educators can benefit by taking a multi-disciplinary view of performance, including digital performances. In order to advance the understanding of digital performance and more specifically virtual choirs, this literature review explores four areas. It begins with a historical and theoretical investigation of media and the evolution of mediated performance. Next, the literature on ensemble and performance in a live, acoustic situation is explored. The third part of this review discusses the intersection between mediated learning on the Internet and in the classroom. Finally, literature about online musical performance and YouTube will be reviewed to show how musicians are using the Internet to learn, create their art, and join together in online communities. Empirical studies, philosophical writings, and theoretical literature from these areas inform this study of mediated musical performances and virtual choirs.

Media, Sound Recording, and Music

Media and sound recording technologies have entered into a complicated interplay with music as the evolution of recording devices has changed the way people experience and create music. The way people use technology influences art and those who create it; in response, as people create art the way people use technology is modified. This complicated dance has led to innovative and inspiring ways of performing music. In this section, an interdisciplinary exploration of recording technologies allows for the presentation of literature from media studies, sound studies, and music education to illustrate the relationship between recording technologies and music performance as well as how technology has influenced music making.

Interaction Between Society and Technology

There is a give-and-take relationship between society and technology. An understanding of the historical trends of recording technologies may and how they have influenced society may be helpful in understanding how virtual vocal ensembles effect those who participate in the creation and consumption of the mediated performance practice. While technologies often help shape the way people experience life, users adapt technologies to address their personal and collective needs. Researchers have explored this symbiotic relationship between users and technologies such as the pencil (Baron, 2009; Collins & Halverson, 2009), film (Benjamin, 1937/1968), the phonograph (Katz, 2004), the Internet (Jenkins, 2006; Kinder, 2008; Negroponte, 1995; Palfrey & Gasser, 2008), the MP3 (Sterne, 2012), and YouTube (Burgess & Green, 2009; Cayari, 2011).

Establishing a theoretical framework for understanding media. For this study, Sterne's (2003) definition of medium is used to better encompass the network of recurring relations among people, practices, institutions, and technologies that are involved when people create virtual vocal ensembles and publish them on YouTube.

Sterne (2003) uses an example of how radio as a medium can be conceived as an assemblage or a network. As a performer sings live on the radio, a medium emerges through the development of a network of recurring relations that encompass various people, practices, institutions, and technologies. The singer, audience, producers, salespeople, and sound technicians are only a few of the people who are implicated in the formation of the radio medium. The practices include the musician's practicing, performing, and interacting with fans long after the performance was heard; the sound producers' mixing techniques; the listeners' rituals as they tune their radio to their favorite station. The medium does not simply mediate a

relationship between performer and listener; Sterne would suggest the performer does not sing to the members of the audience at home but to the medium itself.

Various institutions contribute to the medium including the broadcasting company, the publishers and copyright holders of the music being performed, as well as the makers of both the equipment the performers use to record and the audiences use to listen. The broadcasting company, an institution, facilitates the performance by providing technologies, air time, advertising, and recruitment of an audience. A singer performs for a microphone in a studio, albeit she probably imagines those for whom she is singing. This performance is then transduced into electricity, broadcast to the listener's radio, transduced back into sound waves, and finally heard by the listener. People, practices, institutions, and technologies all interact with each other and develop a symbiotic relationship making the medium, a plastic network that is ever changing. These machines are a few of the technologies that are enveloped by the medium that emerges through radio performance.

Sterne (2003) suggests that media have their own social implications, and sound production "is not just eavesdropping on live performance; it is a studio art" (p. 237). Sound production can produce sound that is fundamentally different than the experience of live sound. "The 'live' and the 'reproduced' performance practices exist in relation to one another, but they are not the same thing" (p. 240). While live and mediated performances are fundamentally different, a common mischaracterization of sound recording has been that it aims to recreate sound that is identical to live sound; a perfect fidelity between a recording and its live referent.

Fidelity and the vanishing medium. A critical aspect of the relationship between live and recorded sound of value to this study can be found in Sterne's (2003) exploration of discourses of sound fidelity. Sterne (2003) suggests, "Conventional accounts of sound fidelity

often invite us to think of reproduced sound as a mediation of 'live' sounds, such as face-to-face speech or musical performance, either extending or debasing them in the process" (p. 218). While fidelity *can* denote a measurable correspondence between a live and reproduced sound, Sterne discusses how fidelity had more to do with "enacting, solidifying, and erasing the relations of sound reproduction than about reflecting on any particular characteristic of a reproduced sound" (p. 274). For Sterne, fidelity is about how people interact with sound rather than how sound is being replicated to achieve the same quality as live sound. some recordings attempt to create a sound reproduction that has high fidelity, and often the goal for the performers is to sound as if they were in the room with their audience. In this imagined ideal situation, the medium would vanish and the mediated performance would equated to a live performance.

While sound technicians and audiophiles continually seek a holy grail of the perfect sound in the form of a "vanishing mediator" (Sterne, 2003, p. 282), Sterne notes how the quest for fidelity changes how people interacted with sound, media, and technology. Fidelity became a shifting standard for judging reproductions based on how they measured up to the original. Sterne suggests the transformation of practices and technologies often led to an imagined trajectory "where sources and copies move ever closer together until they are identical" (p. 222). The invention of recording technologies led to the ever-increasing availability of song recordings (Katz, 2004). For Thibeault (2012a, 2012b), recordings have become the predominant locus for music listening. People are increasingly experiencing music through recordings instead of through live performance. Thibeault discusses the implications for educators and students who are living in what he called a postperformance world:

Media also offers [sic] expanded notions of learning, inviting educators to participate in the wider nets cast by those who are interested in music in everyday life, in traditionally excluded music, in the uses and purposes of music, and in understanding music as a cultural practice embedded in multiple discourses. (Thibeault, 2012a, p. 527)

Katz (2004) traced the various music recording technologies from the phonograph to the digital, and concluded that sound recording had influenced the way musicians create, record, interpret, and share music. The emergence of the phonograph, the first widespread recording and playback device, allowed listeners to "ultimately decide what they were to hear, and when, where, and with whom" (Katz, 2004, p. 9). Katz theorized that the prevalence of sound recordings had an effect on how people interpreted and performed music. He cited the changes in vibrato on violin recordings and how patterns in the way people played were influenced by the prevalence of recorded performances.

Recording technologies challenge the position of amateur musicians. With the invention of sound playback technology and the influx of high quality performances on recording, skeptics began to question what these new technologies would do to music making. In the early 20th century, the phonograph allowed music, through the aid of technology, to become portable, affordable, and repeatable (Katz, 2004). Phonograph owners could bring a marching band or a symphony with them wherever they wanted to go. For a nominal fee, listeners could obtain media that allowed for repeated listenings of a recording and get to know the sound and nuances of a particular performance and its artists. Furthermore, Americans were more likely to own a phonograph than a piano. Katz suggests that the effects technology had on music and society resulted in a shift of the relationship between music and the general public.

Predominantly, activities went from making music to simply listening to it; why play piano for your houseguests when you can have Rachmaninoff play for your friends?

Sound recording skeptics voiced their concerns about the phonograph and felt it could bring about the end of the amateur music maker. One of the most prominent examples of this skepticism was voiced by renowned bandleader and composer John Phillip Sousa (1906), who envisioned instances where sound reproducing apparatuses would replace live music: a baby being lulled to sleep with a machine instead of a parent's voice; a gramophone playing love songs on a romantic boat ride replacing a gondolier; and a serenading cavalier trading his guitar for a technologically based music producing device. Sousa predicted, "Without the slow process of acquiring a technic, it will be simply a question of time when the amateur [musician] disappears entirely, and with him a host of vocal and instrumental teachers, who will be without field or calling" (p. 280) Sousa's concern was not only that "canned music" (p. 281) would replace amateur music making, but also that mechanical music would deeply affect the musical art form, essentially reducing music making to an imitation of recordings which would further reduce musicians to "human phonographs—without soul or expression" (p. 281).

The concern that mechanical reproduction may debase works of art is discussed by Benjamin (1937/1968), who believed original art has an aura or uniqueness in a context which includes time, space, and aesthetic. He held that when an artwork—whether a painting, symphony, or film—is mechanically reproduced, it loses its aura. However, Benjamin was not as condemning as Sousa was decades before. Mechanical reproduction, while stripping art of its aura, allowed for mass reproduction.

Above all, [mechanical reproduction of art] enables the original to meet the beholder halfway, be it in the form of a photograph or phonograph record. The

cathedral leaves its locale to be received in the studio of a lover of art; the choral production, performed in an auditorium or in the open air, resounds in the drawing room. (pp. 220-221)

Thibeault (2012a) expanded on the idea of aura by discussing how going to a live concert is a "deliberate choice to experience a work with an aura, a specific concert that even a recording fails to capture in its unique relations of time and place" (p. 521).

For Benjamin (1937/1968) the rise of mechanical reproduction resulted in art becoming mobile, accessible, and prevalent. Katz (2004) discussed how the widespread availability of high quality recordings has become a determinant for some amateur music makers. Amateur musicians can be intimidated by making music, especially alone in public. However, the reasons for avoiding public or private performance are varied: an elitist view of professional musicians (Bailey & Davidson, 2005); previous experience of alienation from musical activities (Green, 2002); or fear of a solo voice being heard by others (Richards & Durrant, 2003). While individuals may have many reasons for not wanting to perform in public, technologies have been instrumental in the resurgence of amateur music making and participation. Media and technologies have provided amateur musicians novel opportunities to create and experience music in new ways.

Mediated musical performance and the amateur musician. The amateur Sousa knew was a musician who performed live, creating his or her own soundtrack for the sheer enjoyment, exhibition, or ritual of music making. However, the cases Katz (2012) discussed suggest "amateurism changed from a live-only practice to a mediated-and-live practice" (p. 476). During the 1930s in the era of phonograph, radio, and film, media intruded into the world of musical performance (Thibeault, 2012a). While recording and playback technologies changed the way

people interact with music, the media of these technologies brought with them new ways to make music. "The generation who grew up with these new technologies came to focus more on media's opportunities and possibilities, the celebration of the world through media" (p. 522). As people became familiar with these new media and technologies, new ways to engage with music began to emerge. Attali (1977/2011) noted how music was placed back into the hands of amateurs when *Minus One* recordings became popular in the 1950s.

A new usage of records is also developing: records are being made with only instrumentation, meant to be sung to, in other words, allowing one to insinuate oneself into production. . . . [This practice] heralds the negation of the tooloriented usage of things. By subverting objects, it heralds a new form of the collective imaginary, a reconciliation between work and play. . . . Music is no longer made to be represented or stockpiled, but for participation in collective play, in an ongoing quest for new, immediate communication, without ritual and always unstable. It becomes nonreproducible, irreversible. (p. 141)

Attali's (1977/2011) sentiment is further discussed by Katz (2012) who used four cases to illustrate how technology has enhanced the practice of amateur music making. Technologies such as the phonograph allowed people to engage with music in three new ways: using technologies as quasi-musical instruments, creating and recording amateur performances, and performing along with recordings. Katz cited how piano-rolls and instrumental recordings of popular songs allowed amateur music makers to play or sing along with technology in an interactive manner. The second of Katz's technological cases was the development of karaoke. He claimed, "Karaoke *demands* active music participation Any given group of people listening to karaoke is less an audience than a collection of performers-in-waiting" (p. 467, italics

in the original). Karaoke allows for amateur musicians to come together and create a participatory environment that fosters music making, community, and exhibition. Katz's third case dealt with the hip-hop community. Disc jockeys (DJs) mix music recordings together while masters of ceremony (MCs) rap for audiences. The hip-hop culture cultivated the use of the turntable; a technology that was meant for listening to media had been transformed to one that encourages amateur music making. DJs would take records and create new songs out of recordings while MCs would add their voices to create a musical hip-hop scene. The final case Katz explored was the effect video games and mobile phones had on amateur music making. He suggests that games like *Guitar Hero* that eallow amateurs to play rhythmic games can serve to usher players into more meaningful music making. Similarly, cell phone apps can serve as a composition and music making platform by allowing users to create and recreate music at their convenience.

The mediation of music in performance settings. New media have allowed musicians and music educators to explore how technologies can be used to mediate musical performance. Music is a sonic phenomenon that, with the aid of technology, transcends space and time. Before sound recording was possible, music was temporally limited. If one wanted to hear music, he or she would have to go to a concert or performance. Thibeault (2012a) discussed this idea using Lowell Mason and his attendance at a performance of Beethoven's *Ninth Symphony*. Mason waited nearly 30 years to hear the masterwork performed. Thibeault believed that performing the work was only a small part of a life filled with exposure to the *Ninth Symphony* via recordings, commercials, films, and television broadcasts. Concert pianist Glenn Gould is an example of the extreme disassociation between live performance and media possible through recordings: a musician who went from live performer to solely a recording artist. Gould found that there was

something special about recording; it allowed him to create music in a new way, enhancing his ability to manipulate sound to produce a more musical and emotional performance (Page, 1984). This new way of creating music through microphones and soundboards affected him so greatly that he walked away from the concert hall to focus on creating music in the recording studio, never to perform live again or even to attend concerts. His musical performance could only be experienced through the mediation of microphones, equalizers, and speakers.

Technology and multitrack recording allows for the expansion of music making that go beyond recordings of solo performances. Byrne (2012) found that the mobility of the recording studio and the ease of sound file sharing allowed him to make compositions in ever changing and innovative ways. For example, he would borrow sound from other recordings and use those sounds as backing tracks for his compositions. Similarly, there was a time in his music-making career where he would travel with a mobile studio to musicians' houses and record various artists to create compositions in a piecemeal fashion. These recordings were tied together to form cohesive songs. Stanyek and Piekut (2010) noted that Natalie Cole sang a duet with her deceased father, Nat King Cole, through the scrubbing, reworking, and mixing of recordings.

The process of making music is no longer bound by live performance. Recordings can now go beyond what Gould experienced to include multitracking, dubbing, and unconventional layering. YouTube musicians are using these techniques to create music videos. For example, one YouTube musician, Wade Johnston, created a number of collaborative musical performances with fellow YouTube musicians who lived across the country (Cayari, 2011). Johnston layered video and audio files of his collaborators and himself to create a series of Christmas songs. On a larger scale, *Eric Whitacre's Virtual Choir 4* included over 5,000 singers, none of whom recorded their voices simultaneously, and a number of them recorded themselves singing

multiple parts (Konewko, 2013). Modern technologies allow for musicians to create music in ways people ten years ago could not have fathomed. This mediation of music allows for the exploration of virtual performance, which presents implications for the ways people experience, execute, and share their virtual art.

Ensembles and Choral Singing within Music Education

Making music with others through playing instruments and singing are two objectives valued by music educators. A goal common to collaborative music making is for the members of the ensemble to work together to create music. Researchers have studied not only the musical benefits but also the social benefits of ensemble singing. Since ensembles are a social construct, musicians often experience connections with each other and develop their own sense of individuality or identity within the context as musicians. This section will synthesize studies that explore the benefits of musical performance ensembles and how musicians develop motivation and identity within the context of ensemble performance.

The benefits of the musical performance ensemble. Musicians often find enjoyment in being part of musical ensembles and spend many hours a week practicing, rehearsing, and performing with those groups. The ways musicians find meaning in ensembles are complex and affect various aspects of their lives. Hylton (1981) distributed the *Choral Meaning Survey* to 673 high school choral students spanning 14 ensembles in an attempt to better understand what ensemble members perceived as meaningful in their music-making experience. Hylton executed a three step process for gathering data including a pre-pilot study that utilized this open-ended question:

As a member of your high school choral group you are a person who sings because this experience means something to you. We are trying to find out what it

is about this experience that is meaningful for you. Would you list below what this singing experience means to you and the part singing plays in your life? (p. 289)

After compiling responses from the pre-pilot and pilot study, Hylton categorized statements into six distinct dimensions of meaning: psychological, communicative, integrative, musical-artistic, spiritualistic, and achievement. The dimensions identified by Hylton can be defined as followed: psychological relates to self-development; communicative includes the connections a singer has to the audience; integrative involves the social aspects a singer has with others in the group; musical-artistic has to do with musical growth and knowledge; spiritualistic encompasses the expression of spiritual thoughts and feelings; and achievement is related to a sense of accomplishment (p. 290).

Even though the six dimensions were differentiated, their interrelatedness suggested a strong connection between the variables. Hylton noted the low number of negative statements in the pre-pilot questionnaire and the highly positive responses on the Likert-type pilot and final survey. Hylton's study supported the view that there are multiple outcomes of choral music experiences; also, students may have felt achievement was connected to musical-artistic expressions in choral singing. The highest correlation Hylton found was between achievement and integrative factors. Hylton suggested individuals establish their own identity through musical experiences, and choral music can aid in the creation of a positive self-image through being able to experience achievement through choral singing. Hylton speculated that students may find contributing to a group effort meaningful because it gives them a sense of accomplishment.

Hylton's study provided an overview of how musicians may find meaning in a choral ensemble. Adderley et al. (2003) sought to expand the scope of Hylton's findings by

interviewing students from band, choir, and orchestra (n = 60; 20 from each type of ensemble). They found students joined music programs for a variety of reasons; among them were family influences, musical motivations, balance between the arts and other school subjects, and social benefits. The researchers found the majority of students seemed to take pride in their ensembles and the high quality of their performances. They noted that some students viewed themselves as a part of the larger school population while others saw their music ensemble as a separate society apart from the rest of the school. The students used derogatory terms to describe themselves such as "choir nerd," yet those same terms were also badges of pride. Some students perceived that their non-musician cohorts looked down upon them less as they grew older.

While there was social tension between those who were in ensembles and those who were not, there were also various perceived benefits for joining these classes. Adderley et al. found the musical benefits of being in an ensemble included making music and performing, interaction with the audience, working toward a goal, and sense of accomplishment; however, the last two are not exclusively linked to musical classrooms and could conceivably be found across the entire school. The nonmusical benefits were broken down further into three categories. The first nonmusical benefit encompassed academic achievements, which included high standards, honors credit, and career preparation. Sense of community from ensembles, diversity of members, participation in a group activity, improved social skills, and group outings were identified as social benefits. The final nonmusical benefit was psychological, divided into four areas: personal qualities, personal growth, emotional outlet, and atmosphere. Being in a music classroom led to student growth in self-esteem, self-confidence, and self-knowledge.

A significant finding of Adderley et al. (2003) was the degree of importance students placed on the social aspects of the music classroom. The researchers noted how formative the music program was in the social development of high school students.

The musical connection is not the only association many of these teenagers share. In addition to their music classes, many participate in traditional teenage activities, including 'hanging out' with their friends, eating lunch, sleeping, studying, or participating in other extra-curricular activities. (p. 201)

Students who enjoyed the social settings of the school tended to see the music classroom as a home away from home. References to the social aspect of the classroom were found throughout the responses and are apparent in all four of the areas examined in this study.

Other studies support the findings of Adderley et al. (2003) and Hylton (1981) by noting how the factors that motivate choral singers to join choir are diverse, many, and interconnected. Durrant (2005) observed and videotaped 14 different rehearsals or recording sessions in Finland and Sweden, varying from traditional choral rehearsals to recording sessions. The conductors of the videotaped rehearsals were interviewed, as were two additional conductors, eight individual singers, and two group interviews of minors. Durrant investigated how singing in a choir was promoted, directed, and maintained through the conductors' relationships with the singers and looked to see how valued national music was to the singers. The focus of the study was the social dimension of singing. For example, singing in a choir allowed members feel a sense of belonging to a group of peers. The singers appreciated how the conductor made them feel good about themselves and what they were doing. The singers felt important in the context of the sound and music. Durrant found that the social benefits were only a portion of the interrelated ways the participants found meaning and identity in choral singing. During one informal performance, he

noted, "the commitment of the singers was apparent in their involvement with the total performance" (p. 96), including not just singing, but also dancing and acting. Durrant asserted that national folk songs were perceived to be important to the singers for establishing and maintaining a sense of national identity and pride. He supported the social function as well as a musical function of choral participation.

Motivation to sing in an ensemble. The studies that follow lead to a better understanding of the motivation people have for joining choirs by looking at the experiences of students who are different ages but of similar circumstances. This allows a comparative understanding of different social situations thus providing insight on what could be considered important or trivial concerns (Erickson, 1986). Researchers have been looking at what motivates students to join choir and the implications choral singing has for their musical, individual, and social development.

Kennedy (2002) conducted both structured and semi-structured individual and group interviews of eight Grade 8 and three Grade 9 students. One group interview of three girls was carried out to triangulate the data collected with the boys in the study. These motivational factors point to the construction of social relationships, meaning, and identity which can developed through choral singing. Data were analyzed after coding field notes and interview texts. The purpose of the study was to better understand the factors that motivated middle school boys to join and stay in choir. Though Kennedy found four areas in which students perceived benefits of being in choir, she noted the social aspects were most common: friendships, cross-grade mentoring, fraternal mentoring, group experience, and field trips. Social connections, both inside and outside of the music classroom, seemed to influence why boys would join choir. Kennedy found that even though peer pressure from students outside the music program could deter a boy

from joining choir, choir members were also successful at using peer pressure to get others to join. "Friends proved to be also a significant force in allowing junior high males to overcome powerful hurdles such as the belief that 'singing is for females only" (p. 29). The students, regardless of gender, felt it was important to interact with older or younger students in choir. These relationships led to a social support system and a structure where more experienced singers mentored others.

Kennedy noted the obvious pride boys took in learning musical skills like using proper breath support, raising the soft palate to produce proper resonance, and displaying proper choral etiquette and professionalism. The girls gave similar responses to that of the boys; while musical learning was meaningful to the girls as well, they were able to articulate it better with musical terms. Kennedy also found the students valued the high standards set for them by their choral teacher. The boys felt the musical style of their repertoire was important to their choral experience. The boys varied on which pieces they enjoyed most; however, the rationale for their preferences ranged from vocally challenging songs to being able to move and dance while singing. All of these things point to musical preference which is important when developing identity through music, a topic to be addressed in the next section.

Sweet (2010) conducted a semi-structured group interview and classroom observations of her eighth grade male choral students to investigate what motivated middle school boys to participate in choral activities through listening to their individual stories and experiences. Of the themes that emerged, singing, other people, and extra-curricular choir were particularly motivating for Sweet's students. The boys put emphasis on the advanced repertoire in the extra-curricular choir and their ability to progress faster in this group than in the curricular mixed ensemble. They placed high value on their work ethic and ability to "fine-tune" their music.

Sweet's subjects experienced similar peer pressures as Kennedy's (2002) informants. Non-singing peers teased the boys with sarcastic comments. However, the choral singers found the strength to deal with the comments because of their friends in choir. The boys also reported that their involvement with a smaller, more advanced group was an extremely positive experience. "For any negative comment they had made about daily choir classmates' efforts, the five boys had twice as many positive comments about the work ethic and dedication to singing of Choralier Men members" (p. 9). The students reported experiencing a higher level of musical accomplishment and social benefits with other singers in the group.

While Kennedy (2002) and Sweet (2010) focused on junior high students, Paparo (2013) conducted a study in which he observed and interviewed members of an all-male collegiate a cappella ensemble. He used an ethnographic approach and collected data through observations of rehearsals and performances, informal conversations, and formal individual and group interviews. The observations spanned across three weeks and included four rehearsals and three performances. The researcher then used both emic and etic codes and triangulated data through member checks and peer reviews. Paparo found popular music was what drove this collegiate male a cappella group to create music. Five themes arose: music-making culture; fraternity; alumni involvement; the triad of autonomy, leadership and hierarchy; and value of participation. Benefits were found through the young men's membership in an a cappella ensemble including, but not limited to musical, social, and personal aspects: (a) music listening; (b) independent musicianship; (c) creation of recordings; (d) live performance; (e) personal connection with fellow members; (f) creation of role models from and association with former members; (g) decision-making and leadership roles; (h) self-esteem and pride; and (i) reputation and social recognition from other students.

Paparo (2013) noted that the appeal of popular music is paramount in the students' involvement in a cappella singing. Even though they were known to sing some songs that were more traditional in nature, the music director of the ensemble stated that popular music was what drove them. They had a desire to perform music with which they were familiar. Members felt that being part of the decision making process was also important to their experience. Each member helped choose what solo he would sing. Arranging and the music learning processes were fluid because vocal parts changed throughout the process to cater to the men's voices. Even though the music director was ultimately responsible for making musical decisions, he was open to suggestions from his peers, thus allowing all members to take ownership through group learning. As Paparo suggested, informal music practices within the a cappella group led the singers to become better musicians and helped them develop understanding about voice leading, harmonic function and formal structure as well as interpret popular songs and create a distinct interpretation. He noted how the students would listen to recordings, watch videos, and even utilize Skype to discuss issues with alumni who were no longer at the university. Paparo found arranging music for this group allowed members to feel a bond with the music and led to a feeling of pride because the arrangement was done by a member for their group.

The social constructs within a music ensemble allows members to connect with other musicians in a meaningful way. Hylton (1981) suggested, "High school choral singing is viewed as meaningful in terms of the social aspects of the experience" (p. 299). These social connections are apparent between singers in an ensemble (Adderley et al., 2002; Kennedy, 2002; Paparo, 2012; Sweet, 2010), the relationship of the director with the performers (Durrant, 2004; Kennedy, 2002), and the choir with the audience (Paparo, 2013). This complex, interconnected web of relationships is common to ensemble performance. However, within this community of

collaborative music making known as ensemble, individuals often construct a sense of self which is referred to as identity.

Musical identity formation. "The concept of identity serves as a pivot between the social and the individual, so that each can be talked about in terms of the other" (Wenger, 1998, p. 145). According to Wenger, "our identity includes our ability and our inability to shape the meanings that define our communities and our forms of belonging" (p. 145). Therefore, it is important to look at identity informed by both community and the meaning people find within those communities. For MacDonald, Hargreaves, and Miell (2002), there are two ways one can look at identity as it pertains to music: identities in music (IIM) and music in identities (MII). The former has to do with how an individual constructs his or her identity through musical activities while the latter deals with how the music in one's life shapes his or her identity. The interplay between the two forms of identity and music allow an individual to form a self-concept which influences how one is seen by self and others.

Musical identity can influence the way musicians interact with each other, how they create their own music, and choice of groups with which to associate. Instrument choice and musical preference are just the beginning of what contributes to the construction of one's identity in music according to Macdonald, Hargreaves, and Miell (2002). It includes self-definitions such as *musician* and *non-musician*, one's musical self-esteem, and a "self-concept of musical ability" (p. 14). Music in identities is influenced by one's personal identity and includes "gender identity; youth identity; national identity; and disability and identity" (pp. 14-15). While the phenomenon of musical identity is important to this study, a discussion of online identity and how virtual communities affect these identities will follow. Virtual communities and online learning have begun to come together to encourage the creation of content on the Internet.

The Emergence of Virtual Communities and Online Learning

The literature about the mediation of sound and the research about ensembles and their members can be combined to create lenses with which to examine mediated performance. The intersection of mediated virtual communities and online learning has been explored to better understand how people come together to learn, create, and share. This next section explores how virtual communities have emerged to allow people to find new ways to learn, interact, and mentor others online. This discussion will then inform the final section which will discuss the interplay of YouTube, online music communities, and informal music learning on the Internet.

In the late 20th century, Negroponte (1995) predicted that the Internet would go from an encyclopedic-like, information-centric entity, to a socially charged space where people could interact with each other, and DiNucci (1999) echoed these predictions by suggesting there would be a shift from a static to an interactive Internet, writing "The Web we know now, which loads into a browser window in essentially static screenfuls, is only an embryo of the Web to come. The first glimmerings of Web 2.0 are beginning to appear" (p. 32). She described an Internet where permutations and customizability were quintessential to the character of Web 2.0, and where various machines allow the Internet to have varied forms. For example, Internet on the television would look very different than it would on the computer or a cell phone.

As Web technologies have advanced, a Semantic Web or Web 3.0 has emerged. The Semantic Web capitalizes on the ubiquitous connectivity of people to the Internet because of the prominence of cell phones, Wi-Fi, public Internet access, and the interconnectedness of Internet platforms (Lassila & Hendler, 2007). For example, tagging something on one website allows users to connect information and other users to various links and related content, a phenomenon Jenkins et al. (2013) coined as *spreadable media*, which will be discussed below. Another trend

of Web 3.0 is how websites use algorithms that allow for what some might consider unobtrusive gathering of data which then leads to the customization of search results, advertisements, and suggested links. These advances in technology have constructed a culture where people are using technology in ways that are different than in the past.

Changes brought by technology. As was discussed above in terms of emergent sound production technologies, skeptics often claim that technologies elicit changes that are detrimental to the well-being of society. Tapscott (2009) and his team of researchers conducted interviews with over 9,000 individuals about their use of digital communications and virtual technologies. Tapscott suggested that the *Net Generation* is very different from their parents' generation, the baby boomers, because of how they interact with others, learn, and use technology. He identified eight norms that describe the tendency of adolescents who grew up digital on the Internet. The norms include freedom, customization, collaboration, sharing, scrutiny, entertainment, speed, and innovation. Adolescents seek out experiences and technologies that allow them to achieve these norms.

Palfrey and Gasser (2008) discuss how "Digital Natives—the savvy users" (p. 37) and online companies partner together to foster innovation and bring collaboration to a new level through virtual interactions.

Innovation can mean building on the shoulders of giants who came before, but it can also mean trusting the company's users to point the way to sustained innovation over time. Often, this refinement takes place asynchronously, in physical spaces all around the world, in a manner that is only loosely coordinated. These services—like Facebook, Napster, and YouTube—are highly independent

from the powers-that-be, yet connected in deeply social ways that are obvious to their Digital native participants and founders. (p. 228)

Burgess (2008) discussed the idea of vernacular creativity or "the everyday practices of material and symbolic creativity, such as storytelling and photography that both predate digital culture and are remediated by it in particular ways" (p. iii). For Burgess, social media sites have allowed users to interact in meaningful ways with each other and with the industries or institutions involved with those websites.

Participatory Culture on the Internet

Participatory culture on the Internet is abundant and takes many forms from discussion boards about reality television to fan fiction about prominent novels. Jenkins (2006) explored three concepts prevalent in digital society: "media convergence, participatory culture, and collective intelligence" (p. 2). These three phenomena result in what Jenkins would call a "convergence culture, where old and new media collide, where grassroots and corporate media intersect, where the power of the media producer and the power of the media consumer interact in unpredictable ways" (p. 2). Jenkins discussed six cases that showed how grassroots communities emerged to interact with established media institutions providing members of the grassroots communities with an opportunity to learn from each other, create art, and pool collective knowledge. Jenkins's discussion of convergence culture and the diversity of media, genre, and popular culture show how the connection between the grassroots movement of Internet users and professional media producers have led to innovative, user-generated content on the Web.

This coupling of media and participatory culture enhances the views Tapscott (2009) provided with the eight norms of the Net Generation as they were all apparent in Jenkins's

(2006) examples of convergence culture. As social media has become ubiquitous in the lives of people in society, a trend of sharing, tagging, and linking has emerged. Jenkins et al. (2013) discuss the phenomenon of spreadability described as:

The technical resources that make it easier to circulate some kinds of content than others, the economic structures that support or restrict circulation, the attributes of a media text that might appeal to a community's motivation for sharing material, and the social networks that link people through the exchange of meaningful bytes. (p. 4)

The ability to share content online allows users to create networks that encourage the collaborative learning of skills and knowledge, viewing of content, and even creation of new material. Jenkins et al. use Susan Boyle, a British reality television popular music artist, as an example of how musical media can be spread across multiple platforms via television and the Internet.

Boyle's videos went viral on YouTube after her audition for *Britain's Got Talent* was posted. For Jenkins et al. (2013), "YouTube is a space where success often encourages duplication" (p. 9). After examining more than 75 different copies of Boyle's one performance, all from different parts of the world with various special features or commentaries, Jenkins et al. found the most popular video had over 2.5 million views in the first three days of existence. This video was shared across 20 websites in the first nine days after it was created and drew over 103 million views in that time. This spreadability exemplifies how people can share media quickly and efficiently through social media and video sharing websites where ideas, content, and lives are experienced collectively.

A skeptical view of online social interactions The spreadability of content often helps people feel connected to others online and gives them a sense of belonging through interaction within a social network. However, in her book *Alone Together*, Turkle (2012) discussed the ramifications of mediated social connections on a digital society. Turkle suggested that an issues is that Internet users often turn to the *robotic* as a substitute for live interactions. However, she discussed the weak social bonds that connect online acquaintances who quite often never meet; these weak ties are a way for people to step back from their busy lives, connect with others, and anticipate "meaningful face-to-face conversations" (p. 285). Turkle challenged the idea of authentic communication and questioned whether the interactions people experience on social media sites like Twitter, Facebook, and YouTube are genuine. For Turkle, the hours spent typing and interacting in a mediated society can provide respite from real life, and while they allow for connection with others, a disconnect may occur between the human need for interaction and the robotic mediation necessary in a digital society.

Convergence culture on YouTube. The dark picture of digitized social mediation

Turkle (2012) presents cause for concern. However, it is not the only way to regard society's movement toward a convergence of commercial media, the Internet, and social interactions.

Burgess and Green (2009) call YouTube "a site of participatory culture" (p. vii). The authors support the idea that YouTube is not a site that fosters community, but relationships, collaborations, and innovation occur because of how users interact with the social media site. For example:

The architecture of YouTube does not overtly invite community-building, collaboration, or purposeful group work YouTube's architecture and design invite[s] individual participation, rather than collaborative activity; any

opportunities for collaboration have to be specially created by the YouTube community itself, or by special invitation from the company. (Burgess & Green, 2009, pp. 63-65)

The opportunity exists for educators to help pull these online engagements in the direction of healthy social versions of interaction. Burgess and Green suggest that YouTube skirts a fine line between user-generated content and commercial media. They believe the ramifications of this convergence culture on YouTube are "as disruptive and uncomfortable as they may be potentially liberating" (p. 10).

YouTube allows for the consumption, manipulation, and even creation of commercial content and media. But it also provides a site for creativity, innovation, and a seemingly laissez-faire stance with copyright. User-generated content began to proliferate on YouTube in the first two years of the website's existence. The populist community of grassroots media creators is contrasted by traditional source videos which are typically seen on network and cable television. After sampling and analyzing 4,320 videos from the most favorited, most discussed, and most responded categories from six days across two weeks in each of three months in 2007, Burgess and Green (2009) found that 42% of videos were from traditional sources, and 61% were from user-created sources. Of the 2,177 user-created videos, 42% were video logs (vlogs), 15% were music videos, 13% were live material, 10% were informational content, 8% were scripted material, and 10% were new or unclassified genres. These statistics show how YouTube has become a place where users are creating content that include music making and connecting with others through *vlogging*, or creating video logs in which they use the camera to record their thoughts, opinions, or actions.

YouTube and Online Performance

As the third most visited site in the world (Alexa, 2015), YouTube's popularity and influence has caught the attention of researchers, educators, and philosophers. This section begins with a review of the various approaches to researching YouTube. While the YouTube website is less than a decade old, subsequent publications are even younger. Researchers, philosophers, theorists, and educators have begun to explore the various uses of YouTube within the music education community. YouTube as it aids learning, YouTube as a performance venue, and the music communities surrounding the website will be discussed.

Various approaches to researching YouTube. Snelson, Rice, and Wyzard (2012) conducted a Delphi study of prominent researchers who have published or presented research about YouTube. In the study, 35 researchers were invited to participate in the study because they were identified as people who "had conducted empirical research studies and/or provided theoretical discussions" (p. 120) about YouTube. The study was divided into three rounds. Round one consisted of the open-ended question, "What should be research priorities in videosharing technologies (particularly YouTube) over the next 5 years?" (p. 120). In round two, the responses of the informants in round one (n = 17) were categorized and participants were then asked to rate the statements and categories for level of importance. Only 15 of the round one respondents completed round two. In the final round, the researchers provided the respondents with descriptive statistical information from the previous round and asked them to reconsider their decisions as they re-rated the categories of research in order of importance. They found the following seven categories in order of highest to lowest priority: (1) users, groups, and communities; (2) teaching/learning; (3) social/political impact; (4) video creation/production; (5) legal/ethical; (6) media management; and (7) commercial interests.

YouTube has become an interactive website where users share content and information as well as communicate through videos, rating, and text responses (Chang & Lewis, 2011). Meek (2012) claimed YouTube has also allowed for a "shift from media to *social* media [that] requires us to rethink the spatial relations between communication and politics in everyday life" (p. 1430, italics added). He also suggested YouTube could be seen as a cyberplace where people can gather in solidarity for the purposes of activism and community building.

Vernacular video, the amateur, and the professional. YouTube video creators use a distinct language and practices characteristic of the medium. Videos on YouTube tend to display similar characteristics such that a vernacular video style has emerged. Sherman (2008) discussed the various characteristics of vernacular video: short clips; prevalence of canned music as feature as well as background noise; sampling of popular music; collage and montage; voiceover narratives; personal reflection through on-site journalism and video diaries; dynamic on-screen text, often semantically crude; overuse of motion altering effects such as slow motion and acceleration; digital effects used as ways to connect video clips; and the proliferation of travelogues, road films, and video tourism. Manovich (2008) also discussed how norms of YouTube have influenced users' everyday media life. YouTube videos often blur the lines of communication "where content, opinion, and conversation often can't be clearly separated" (p. 40). Manovich claimed that social media has led to a democratization of communication, information, and art. He suggested that much user-generated content rivals commercial content. The creators of this content are "prototypical 'amateurs', 'prosumers' and 'pro-ams', most are done by young professionals, or professionals in training" (p. 43). These creators are creating vlogs, documentaries, anime, music videos and myriad other types of videos that use YouTube and video editing software in innovative ways.

Expression on YouTube. Murthy (2008) suggested everyday life is becoming "increasingly technologically mediated" (p. 849), and Burbules (2002) wrote, "The 'virtual' is not the opposite of the 'real'—it is a medial term, between the real and the artificial or imagined" (p. 391). In other words, online identity is not the opposite of live identity, but a mediated derivative. Similarly, Lee (2012) suggested the YouTube website has allowed users to find a place to express emotions about events that affect their lives. She claimed, "YouTube plays an important role in evoking emotions from individuals via the videos as well as their associated summaries, titles, and tags" (p. 470). YouTube has provided users a way to not only express emotions through text comments, but though the creation of videos which are subsequently shared and available for the masses.

YouTube as an aid to learning. Researchers are expanding their methodologies that address online inquiry while continuing to support traditional qualitative and quantitative methods (Markham & Baym, 2009). Educational researchers have also begun to start looking at the pedagogical implications of using YouTube and video creation in the classroom and specific examples are discussed in the following paragraphs.

YouTube as a classroom. Juhasz (2008) attempted to facilitate an entire class on YouTube. Her purpose was to have students "consider how Web 2.0 (in this case, YouTube) is radically altering the conditions of learning" (p. 133). The course and all of its related material such as lectures, class discussions, and homework assignments were either videos or comments on the website. By challenging the public versus private paradigm common in most academic classrooms, Juhasz found non-class members would respond with negative comments thus discouraging students. This interrupted the norm of having a safe classroom, which is often taken for granted by most students and teachers. She also found logistics and technical issues to be

troublesome as they took up large amount of her time. She concluded that while the idea had merit, she and her students were not equipped to deal with the problems of this pioneering effort. The traditional values that constitute a classroom include a teacher who is expert, students who are amateurs looking to learn, in an institution that infers authority. For Juhasz, "On YouTube, amateurs rule, experts are deflated, and authority is flattened" (p. 139).

Video creation in the classroom. Juhasz's (2008) conclusion that conducting a course on YouTube is problematic is not surprising. However, Juhasz suggested that there are elements of YouTube that can be used to assist learning. In their case study of two Grade 8 art classrooms, Lin and Polaniecki (2009) examined how students created a video documentary project on a personally meaningful topic to better understand how the students consumed media and engaged in creating videos. The researchers collected data via ethnographic field notes, classroom observations, interviews, photographs of activities, and assignments. Lin and Polnecki found that having students create activist documentaries inspired by similar YouTube videos helped students develop a critical eye for news reporting, creating social awareness, and creating online media. They also noted that students were not concerned about intellectual property and copyright while creating their own project. However, once the project was over, students were more aware of the importance of respecting intellectual property because of their new experiences as video creators. Lin and Polnecki found the students were able to make "inquiries into their own lived experiences" (p. 103) because they were critically looking at not only the media which they consume, but also issues that affect their lives. By discussing and critiquing content on YouTube, students were able to make decisions on how to create their own content to contribute to their classroom community. For Lin and Polnecki, an awareness of YouTube and its potential for activism "can be cultivated by means of an integrated learning experience in

which media consumption habits are transformed into media production skills and social action" (p. 104).

In a study of an undergraduate music education course with a similar project, I examined how participatory culture practices and informal music learning can be incorporated into the music classroom through music video creation (Cayari, 2015). The multi-modal study included students (n = 36) from two sections of an introduction to music education and technology course. The students from the class were allowed to choose their level of involvement with the study by deciding to participate in up to three data gathering activities. The data included the observation of 29 music videos, interviews with 10 participants, and the responses of 20 web-survey respondents. All but one of the participants in the study felt that they were just as confident or more confident after creating a single music video. Furthermore, students often felt a sense of accomplishment by creating a musical video performance. Findings suggest that "nearly all students described an initial apprehension, followed by a period of searching for guidance and structure, and culminating in a celebration of freedom" (p. 18). Freedom permitted the students to display creativity and contribute their own music to the collective classroom and a larger community on YouTube. The decisions musicians make through choosing their own music, performing it, and sharing it with others are part of the identity they construct.

Finding voice on YouTube. Another way people can develop their identity on YouTube is through vlogging. Researchers have been examining how vlogging allows people to express themselves, develop an identity, and participate in communal discussion. For Burgess and Green (2009), "Vlogging itself is not necessarily new or unique to YouTube, but it is an emblematic form of YouTube participation" (p. 53). Tolson (2010) critically examined the discourse of authenticity through vlogging within communities of practice on YouTube. He conducted a case

Study of Lauren Luke, a make-up artists who, at one time, became the second most popular YouTube user in Britain. Tolson explored Luke's videos and how she interacted with her audiences. He suggested that "technological transformations of the relation between recording and live performance have placed a premium on constructions of authenticity in the relation between performers and their fans" (p. 277). The researcher suggested that the authenticity of vlogging has an excessively direct, amateur-like style that encourages a conversational response from viewers. For Tolson, how vloggers relate to their audience coupled with their authenticity perpetuates a community discussion and a contingent, relative, and fluid community which allows vloggers and other YouTube users to interact within their own comfort zone.

The search for authenticity takes on various manifestations in the literature. For example, Kellner and Kim (2010) examined YouTube and media activism through a lens of critical pedagogy. The researchers suggest that the Internet allows for users to engage in civic activites as modern citizens. On websites like YouTube, users are at all times ready to become creators. Kellner and Kim supported the notion that YouTube allows users to learn by doing and encourages lifelong learning.

YouTube also fosters a new pedagogical setting on the Internet that encourages dialogue and media creation. YouTube users "are able to achieve agency in forming [YouTube] as their learning community by questioning and answering each other" (p. 22). B. Jackson and Wallin (2009) discussed how back-and-forth rhetoric also allows YouTube users to develop community, identity, and voice. Jackson and Wallin believed that an informal dialectic has appeared on Web 2.0 and sites like YouTube. This dialectic is a loop which includes receiving new information, critical listening or reading, and responding thoughtfully. When one listens to a YouTube video or reads a text comment, they are receiving new information. The user can then assess the

information critically and respond thoughtfully and reflectively while constructing new understanding.

For Kellner and Kim (2010) as well as B. Jackson and Wallin (2009), YouTube allows for virtual learning communities to develop where dialogue is at the center of interaction. Hung (2011) examined how a vlog project affected college students within the context of an English for Specific Purposes (ESP) course (N = 17). The vlog project was broken up into four three-week cycles in which students were required to upload a video of themselves speaking, view each other's videos, give feedback on other's videos, and then reflect on the process. Hung collected data by administering an attitude survey and open-ended questionnaire, interviewing students, as well as observing written peer feedback, student journal entries, and vlog clips. Hung made six conclusions: the visual representation of vlogs were beneficial to the students; flexible time lines to complete one's project allowed students to easily engage in learning; vlogging led to self-evaluation; students believed the project allowed them to develop professionally; the audience that comes with publically publishing a vlog allowed for more interaction, feedback, and perspectives; and the construction of vlogs facilitated peer learning.

These findings were similar to the conclusions of a case study of a collaborative vlog project described by Cayari and Fox (2013). The study looked at the process of creating a collaborative vlog as well as the educational and social implications of using a collaborative vlog as part of a course project that involved asynchronously dialogued. They found that collaborative vlogging allowed for the members to take ownership of their own learning by creating, asking, and answering questions. Posting videos on a public forum "provided the group with an 'authentic audience' beyond the artificial setting of the classroom" (p. 353). Collaborative vlogging in the classroom developed both autonomy and community. The vlogging allowed for

students to find "a voice and venue to share their thoughts" (p. 355). These findings about speech-centric video styles could be applied to music videos and how musicians find a space to expand their audiences and share their craft on YouTube.

YouTube as a performance venue. Burgess (2008) discussed the cases of videos that allowed musicians to find an extremely large audience through performing music on YouTube. The first example Burgess described was the song *Chocolate Rain*, written by Tay Zonday, an amateur music maker and graduate student who sang his own popular music on YouTube. Burgess wrote, "It is arguably the combination of oddness and earnest amateurism that made 'Chocolate Rain' such a massive YouTube hit' (p. 104). Burgess pointed out how Zonday's song was an exemplar of participatory culture because the viral video was used by other YouTube users to create parodies, mashups, and remixes. The other case Burgess examined was a video entitled 'guitar.' This video featured a young electric guitarist playing a neoclassical metal version of Pachelbel's Canon in D. The amateur music video, performed in the young man's bedroom, became "the video with the most views overall in the entire sample for the period, and it appeared in the Most Discussed and Most Responded lists, not only the 'most viewed' list" (p. 103). The video responses to 'guitar' were often what Burgess called bedroom guitarists covering the original or playing a song in a similar style. Guitar also inspired versions of the song on various instruments and montages that featured remixes and collaborations.

The participatory culture of the Web coupled with the ability to perform through video has allowed musicians to use YouTube as a space to consume, create, and share their music (Cayari, 2011). I conducted a case study on the YouTube channel of amateur musician Wade Johnston. The study used the following data gathering methods: observations of Johnston's YouTube channel; interviews with Johnston, key actors in his life, and other YouTube

musicians; and panel interviews with educators and future educators to triangulate and establish Johnston's credibility as a performer and educational resource. I discovered the ways in which one amateur musician shared his own music, constructed his own identity as a musician and fan, collaborated with others, and built his own following on YouTube. Johnston was able to network himself with other YouTube artists to gain followers, create collaborative performances, and develop an online fan base that trumped his local followers.

The virtual choirs of Eric Whitacre have drawn the attention of music researchers. In her ethnographic study of the relationships between and experiences of the participants of the Eric Whitacre Virtual Choir Experiment, Eric Whitacre's Virtual Choir, and Eric Whitacre's Virtual Choir 2.0, Armstrong (2012) claimed that while participating in these types of ensembles required creating micro-performances in solitude, the technologies surrounding these collective virtual choirs encouraged singers to develop their skills and interact with each other under a common goal. Armstrong challenged Turkle's (2012) critique that the Internet has driven people to be alone while interacting online together; in light of Whitacre's collective virtual choirs, Armstrong suggests musicians can be "alone," yet existentially together" (p. 125). While some participants found the concept of "singing together, alone" (p. 39) troublesome, they would also acknowledge how the Virtual Choir projects of Eric Whitacre came close in terms of energy, community, and recorded performance.

The participants in Armstrong's (2012) study joined the collective for a variety of reasons including collaboration with the composer, participating in a high caliber project, being part of an innovative endeavor, being part of a viral collaboration, finding an outlet for expression, reconnecting with musical performance, being able to sing in a choir (the first time for some), challenging musical skills, and trying a new experience. The experiences for the participants

were not all positive. Armstrong noted the challenge that the participants had no sonic feedback typical of live choirs. Setting the proper levels on microphones, finding the right backdrop for filming, learning the song and its nuances, and singing "the 'perfect' take (p. 71)" influenced the musicians' process while they prepared their micro-performances submission to Whitacre's technicians. The informants suggested the process was not only technologically challenging, but also musically challenging for most participants. One participant suggested that it was:

more like an exercise in discipline and accuracy than in musicmaking . . . I had already spent hours making numerous takes of my vocal track – all in the attempt to get my recording perfectly aligned to Whitacre's conducting, and to express the nuance conveyed through his gesture. (p. 71)

By participating in Whitacre's collective ensembles, participants found themselves learning about their voices. While some were learning how to sing in a choir for the first time, others explored how to record their voice so it would blend with others. Stage fright, both live and virtual, was tackled by some. Another challenge participants noted how hard singing with emotion and musicality was without other singers and a live conductor. Armstrong discussed the complexity of community experienced in Whitacre's collective virtual choirs. One critique participants had was that they were not represented in the final project, despite the promise of Whitacre and this team that every submission would be present both visually and aurally. This critique was not held by all participants as some were visible and expressed sympathy for those not visible and others were satisfied "just knowing that he [or she] had helped to make the larger project possible" (p. 78). However, individuality was not Whitacre's purpose. The purpose was a technological feat that encouraged people across the world to offer their voices to be part of the collective.

As Armstrong observed, participants from across the world came together to create this collective virtual choir. However, involvement with each other did not end after the submissions were due. Participants conversed on social media sites like Facebook and Twitter. Singers met up in person for reunions and sought each other out during conventions and concerts. Some participants even used their connections with Eric Whitacre's Virtual Choirs to recruit for their own projects and philanthropic organizations. Armstrong suggested:

On the surface, it might appear that Virtual Choir participants are simply recording themselves singing, in isolation, and then sending those recordings out into the immaterial ether of bits and bytes to be aggregated into a larger 'performance' by a team of digital technology experts. However, on a deeper level, what they are "doing" in this process is, in actuality, something far more complex and meaningful, despite the seemingly impersonal nature of this collaboration. It is through this unique act of 'doing' that we understand the particular value of this project. (pp. 88-89)

The research above looks at how individuals have used YouTube to share their music online and how a community can be formed around their music. For example, Zonday inspired others to reuse, remix, and rework his original song *Chocolate Rain. Guitar* inspired others to perform and cover a specialized genre of music. Johnston reached out and collaborated with other YouTube artists to share fan bases and was able to further perpetuate his online fandom. The Eric Whitacre collectives allowed thousands of people to send in micro-performances there were combined to create a massive virtual vocal ensemble.

Online music communities and YouTube. Online music communities have been a topic of interest as researchers attempt to understand how people come together on the Internet. There

are three types of communities that have emerged from the literature: fandoms, music sharing communities, and communities of practice.

Fandoms. A fandom often "involves a collective of people organized socially around their shared appreciation of a pop culture object or objects" (Baym, 2007, section 2, para. 1). Through her investigation of the Swedish independent music scene, Baym noted the Swedish indie music fandom would probably be nonexistent without Internet interactions. Baym suggested that fans often use various platforms such as Myspace, YouTube, last.fm, and other specialized websites to share music of their favorite artists and discuss their love for performers, a trend that exemplified the concept of spreadable media. Fans can create personae for themselves, which give them notoriety as writers or experts on the groups that they support. Baym described various ways in which these fans create content to promote their heroes: YouTube profiles which archive performances, playlists, journals, and blogs. These fans are able to create an identity for themselves by displaying the music to which they listen.

Baym discussed the sense of "community" that is formed across various platforms because fans often frequent the same places on the Internet. Fans congregate in chatrooms, message boards, and social media to discuss, debate, and share. Baym called this "networked collectivism' in which loose collectives of associated individuals bind networks together" (section 6, para. 4). While fans are a large part of the popular culture oriented community, on the other side of a fandom are the artists who have become the objects of affection.

To better understand the relationship musicians have with their fans, Baym (2012) interviewed 36 professional recording artists, three managers, and one producer. Each interview was transcribed, coded, and the data were organized into categories. She found that social media has affected the way musicians communicate with their fans. The ability to have instantaneous

and frequent connections between artist and audience allows for more personal connection than was ever possible before the Internet. This ability leads fans to expect artists to interact with them. Baym claimed, "Where once [musicians] were expected to be aloof and inaccessible, now they are expected to be present and to engage" (p. 293). Connection with fans can be beneficial for artists. For example, opportunities for feedback and support are possible. Personal relationships can also be fostered between fan and artist. One of the artists Baym interviewed spoke about how fans became part of his life and how his "music becomes the soundtrack to that relationship" (p. 294). For some musicians, audience members are transformed from fans to friends. However, for other popular artists, a close connection with fans can be very daunting and even hostile. Therefore, they will often adopt strategies which build connections among fans while seeming friendly, ultimately keeping their distance in a shroud of mystique.

As Baym suggested, popular artists must choose how to use social media to advance their own interests and careers. They must choose the appropriate media, decide how much to interact with fans, and define those relationships. They continually have to adjust the balance between celebrity and friend. It has become apparent in the digital era that the Internet allows musicians to share their own music with larger audiences than would be possible if music were still a strictly acoustic art form. This is not just the case with professional artists but also for amateurs who can gather in virtual communities and share their own musical works.

Sharing original music on the Internet. Websites dedicated to sharing one's music are an example of how communities form on the Internet for the purposes of exhibition, feedback, and support. In an ethnographic study of the music sharing site acidplanet.com, Pinch and Athanasiades (2012) explored how users shared music, created an identity, developed reputation, and used technology within an online sociotechnical community. The interviews of 35

ACIDplanet users were used to inform the study. Pinch and Athanasiades found online music allowed musicians to create identities that are detached from their bodies. Furthermore, musicians could create multiple online identities, even on a single site. On ACIDplanet, users constructed identity by creating profiles, sharing their original music, and commenting on others' music. Users sought collaborators on their profiles, and music making with other ACIDplanet residents lead to a developing community of musicians working together.

The users at ACIDplanet not only provide most of the content for the site but also form a devoted community who regularly return to the site to post songs, enter competitions, post reviews, and in many cases actually care about what is happening at the site. (p. 497)

The interactions that took place on ACIDplanet led to the creation of norms where sharing was expected, feedback was encouraged, and competition proliferated.

Salavuo (2006) also examined how online community is formed and developed. In his study of mikseri.net, a Finnish musical community where users share original audio content, Salavuo conducted a web-based survey of its users (n = 234). Users on mikseri.net predominantly identified themselves as amateur musicians, and only six percent of respondents considered themselves music professionals. The musicians in this community represented a diverse musical pallet including compositions from electronica, pop/rock, metal, hip-hop/rap, alternative, "something else", blues/jazz, funk, soul and R'n'B, classical music, and folk/ country (p. 261, listed in order of popularity among respondents). Salavuo found that there were both musical and social reasons users participated in the mikseri.net online community, "musical practices being the prime reason for taking part in the community, despite a very active discussion forum. These activities included listening to and reviewing music, and particularly

uploading one's own music" (p. 265). However, Salavuo suggested a musical and social online community also allows for a knowledge community. He discussed how formal music instruction was valued by the users of the mikseri.net community; for Salavuo, learning about music, getting information on technology, reading interesting messages, and giving advice to and helping others were ways users constructed a knowledge community on mikseri.net. There are many theories of how communities form, and music education researchers have begun to look at how music learning, practice, and social connections interact to form communities.

Communities of practice. Waldron (2009, 2011, 2013) situates her research of online music communities in Wenger's (1998) theory of communities of practice, which places a social theory of learning in the practices of a community. Wenger's social theory has four components: meaning, practice, community, and identity. Each of these components contribute to a community of practice whereby members learn through social interactions. In her cyber ethnographic exploratory study of Old Time music on the Internet, Waldron (2009) explored the virtual community of practice surrounding Sugar in the Gourd, a website where Old Time musicians congregated online. Through "lurking" online, she collected data which included observations of forums, videos, and static website information. She also rooted her study in the four characteristics of communities of practice to guide her search for evidence of the components Wenger identified. Waldron found each of the characteristics present in the Sugar in the Gourd website. Meaning was manifested in the educational and performative YouTube videos on the website. Waldron claimed these videos artifacts exemplified both reification and participation within the community. For example, YouTube allowed for Waldron's participants to teach lessons online through video. These videos gave the participants both a body and a voice. The videos, participatory in nature, brought both music and musician to life, thus allowing for the videos to be independent of time and space. Practices were identified through the collective knowledge that was constructed by the site's users. For example, a question would be posed and users would join together to share information and ideas as well as gather a body of resources, artifacts, and suggestions for future learning. Wenger's concept of community was manifested in the ease of entry and exit to the community as well as the experienced members of the community offering help to the newer, less experienced members. Finally, Waldron noted that identity was constructed through the experiences the members had within the community. The users' experiences of online Old Time music were enhanced because they were situated in offline musical norms; the musical contexts in which the Old Time musicians experienced in their everyday lives allowed them allowing them to bring an understanding about the genre, bonding them to the online community.

Waldron (2009) wrote, "Combining school music learning with the music learning culture of an online music [community of practice] should produce richer and more meaningful musical experiences as the local becomes situated in the global and vice versa" (p. 108).

Waldron (2011) further explored the way musicians are learning in online communities by conducting a cyber ethnographic field study of Banjo Hangout, a website that has developed an online community for Old Time and Bluegrass banjo players. Data collection included interviews and questionnaires, all collected through computer media communication such as email, online video conferencing, and lurking on the website. Waldron contacted the Banjo Hangout administrators and received permission to advertise the study on their website. A "semi" synchronous email questionnaire was sent to 67 participants and 26 of them were recruited for an interview. Waldron focused on three *old timer* members of the Banjo Hangout community and found that each of them had adjusted their learning and teaching styles to

accommodate online music making and instruction. Waldron also noted the importance of the informants' blogs:

Their blogs also act as agency to share narratives, views on learning, free online teaching lessons, and posts of upcoming appearances in the offline banjo community, all of which are facilitated through the use of hyperlinks, YouTube videos, and other technologies associated with the emergence of Web 2.0. (p. 45)

Waldron (2013) compared how two contrasting online communities, Online Academy of Irish Traditional Music and Banjo Hangout, created a complex tapestry of user-generated content, YouTube, Web 2.0, and participatory culture, which fostered music learning. The data from Banjo Hangout were collected as stated above (Waldron, 2011). The Online Academy is a "physically based virtual community" (p. 5); Waldron combined ethnographic and cyber ethnographic techniques which included face-to-face field interviews and observations of four teacher-participants with the digital data gathered over the course of five months. While the cases Waldron compared used the Internet as a supplement to face-to-face learning, she found online music communities fundamentally change the way teachers and learners interact. The Internet has challenged teachers to change their pedagogical practices on the web.

Waldron suggested four themes that influence online music learning and teaching. First, there are pedagogical "paradigm shifts" that occur as a result of this complex tapestry where online music teachers have fundamentally changed the way they teach to be appropriate for the online learner. Second, there is a pedagogical syncretism or combining of contrary belief systems such as notation and aural learning or live and mediated performance. Third, the prosumer proliferates in online learning and teaching, and informal music learning on the Internet has become a back and forth interaction. Finally, music learning and teaching through participatory

culture has both pros and cons. While having a venue to practice, learn, and perform online was appealing, Waldron found that her respondents still wanted to have face-to-face interactions both musically and educationally. The respondents' online community did not take the place of live music making but expanded music learning and performance beyond the boundaries of sonic and acoustic limitations. Waldron suggested that online music communities offer new possibilities to merge new technologies with traditional music making:

The epistemological *status quo* as we know it now will be insufficient for music teaching and learning as on and offline contexts continue to converge. As music educators, this requires exploring new models of music learning and reflecting upon the implications these new approaches might have for music teaching as the ways in which people use the Internet continues to evolve. (p. 16)

Summary

The literature reviewed about YouTube and online music learning, performance, and community can be considered as oriented heavily toward advocacy and the celebration of new possibilities. While the research reviewed is legitimate and valuable, it is also important to look at research on a new topic with a critical eye and a bit of skepticism. Researchers who inquire on topics of new media and online technologies are often early adapters and supporters of these new technologies. Therefore, most of the literature on YouTube celebrates the website's potentials. However, skeptic researchers and users of new technologies like Juhasz (2008) and Turkle (2012) serve as a reminder that not all technology should be used without hesitation. In the words of Thibeault (2012a):

We need not abandon what our profession has held dear for so long: the apprenticeship of individual studio instruction, exploring great works from around

the world and across history, and a deep appreciation of the pleasures of performance. . . . Educators have a critical role to play in helping to ensure that our engagement remains meaningful, that we do not lose track of the values of live performance, and that we allow ourselves as a profession to enlarge our conception of music, musician, and audience. (pp. 528-529)

The technologies available to musicians, educators, and video creators have allowed for a plethora of new ways to mediate ensemble. Mediated performances like virtual choirs are one way in which amateur musicians are creating music on YouTube. These ensembles have psychological and sociological potentials as well as drawbacks. The implications of participating in or creating these types of ensembles are unknown at this point. Informed by literature of the influences of media, online participatory culture, and musical ensemble participation, this study can help to better understand the network of recurring relations among the people, practices, institutions, and technologies of YouTube through examining virtual choirs. More importantly, the crossroads of media, virtual communities, and online music performance can be studied through a critical look at how virtual choirs are constructed and the experiences of those who create and participate in them.

CHAPTER 3

METHODOLOGY

Multiple Case Study

The performance practice of multitrack music video making is a phenomenon that deserving of study by researchers. Because this study was an initial foray into virtual vocal ensemble research, qualitative inquiry was chosen as the best-fit from a methodological standpoint. Creswell (2009) suggests qualitative research "honors an inductive style, a focus on individual meaning, and the importance of rendering the complexity of a situation" (p. 4). While there are various qualitative methodologies to choose from, this chapter describes a combination of case study and Internet inquiry methods used to explore virtual vocal ensembles.

Case and Multiple Study Design

"Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (Stake, 1995, p. xi). A case has a distinctiveness in time, space, circumstance, and individuality. It operates in context and real situations. Stake (1995) also suggests that a case study deals with specifics within a situation and that "case study seems a poor basis for generalization" (p. 7).

However, Stake (1995) supports the notion that single case studies can lead to the modification of generalizations about a phenomenon, theory, or practice. A researcher may be able to connect assertions and findings from multiple cases and gain a better understanding of what is being studied. The cases within a multiple case study are connected by a "collective target" Stake (2006, p. 6) calls a *quintain*. Stake suggests individual cases must be viewed within light of the quintain, further focusing the research on the overarching phenomenon. The study of a quintain can allow the researcher to attend to historical, cultural, social, ethical, and aesthetic

contexts. In this study, there are three cases, each focusing on a YouTube channel. Each channel has a creator who is the primary participant for the case. By looking at the three YouTube channels in tandem, the quintain of virtual vocal ensembles becomes the collective target for this inquiry.

Regarding case reports for a multiple case study and the ensuing cross-case report on the quintain, Stake (2006) suggests the reader expects the multicase report to serve as a guide to set policy for the cases' population and provide the readers a "vicarious experience useful for transferring assertions from those cases to others" (p. 88). Stake argues that, under these premises, a specific type of generalization is possible.

What multicase studies have most to offer is a collection of situated case activities in a binding of larger research questions. However, the generalizations are of a different sort. Such studies . . . show how a variety of components and constraints lead to a partly irreducible individualism among the cases. The common and the unusual are both portrayed, and both are situated in a complex of experience against a local and diverse background. (p. 90)

Stake suggests "both case studies and multicase studies are usually studies of particularization more than generalization" (p. 8). This study is no different; it examines the particularities of three YouTube channels and how their creators mediated virtual vocal ensembles. By looking at the network of recurring relations between people, practices, institutions, and technologies that emerged as these creators developed their YouTube channels, we can better understand how people are mediating vocal ensembles on the Internet.

Internet Inquiry

Internet inquiry compounds the contexts that a researcher must keep in mind because it includes both an online and offline component (Hine, 2000). Hine suggests there is a difference between a person's online and offline identity, and a boundary exists between one's online and offline life. If this boundary is ignored or disregarded by researchers, the potential to understand how the Internet influences human activity is limited. The relationship between a person's online and offline identity is complex, leading Orgad (2009) to propose that researchers should attempt to study both contexts of a person's life because online identity can be constructed completely separate from offline activities. Therefore, Internet inquiry must include online dimensions to which qualitative researchers usually attend in more traditional forms of research.

Yin (2014) mentions that "contemporary electronic media and archives open a whole vista of sources of evidence" (p. 129). Mobile and connectivity technologies have required researchers to adapt their methods of inquiry to incorporate the virtual aspects of human life. "The Internet and similar networks provide a naturally occurring field site for studying what people do while they are online unconstrained by experimental designs" (Hine, 2000, p. 18). According to Hine (2009), an adapted ethnographic approach to Internet inquiry can provide insight for understanding how people use the Internet, virtually interact with others, and create online identities. Furthermore, she suggests:

Internet research proves to be a rich arena for thinking about how contemporary culture is constituted, and a powerful way to do that thinking is to reflect on the boundaries of individual projects and, at the same time, to explore the boundaries of what it means to do ethnography. (p. 2)

Case study has the potential to inform the music education profession about the performance practice of virtual vocal ensembles. In her discussion of case studies in music education, Barrett (2014) proposes:

Case studies allow us to branch out in exploratory ways to map areas of inquiry that are underdeveloped or unexamined. They allow us to fill in more robust and integrated knowledge about areas of inquiry that need further explication and explanation, such as those aspects of music teaching and learning that are especially complex and intertwined. (p. 130)

By exploring virtual vocal ensembles through multiple case study, a better understanding of how people are mediating ensemble can be achieved, which can provide music educators with ways technology can be incorporated into music teaching and learning.

The YouTube Channel as a Case Boundary

Stake (1995) suggests "a case is a noun, a thing, an entity" (p. 1) that is bound, and boundaries should be defined before the study begins. Boundaries focus the study of a case to allow for "detailed, in-depth data collection involving multiple sources of information rich in context" (Creswell, 1998, p. 61), and they are necessary to help the researcher "ensure that his or her research questions are both coherently addressed and adapted to the cultural landscape that emerges" (Hine, 2009, p. 2). Kendall (2009) discusses three boundary types of Internet inquiry: spatial boundaries concerning the locations, people, and phenomena being studied; temporal boundaries regarding how time is spent in the study as well as specifying the study's beginning and end; and relational boundaries which influence how the researcher and participants interact. These boundaries often overlap and are complicated by the accessibility of data and the ubiquity

of the Internet. Therefore, for this study it is important to keep in mind how the Internet shapes the methods determined for qualitative research.

Research on the Internet can appear infinitely expandable without properly defined boundaries. While setting appropriate boundaries that considered spatial, temporal, and relational boundaries, I found the parameters of a YouTube channel particularly appropriate for Internet inquiry. boyd (2009) suggests, "Internet ethnography is not about the technology—it is about the people, their practices, and the cultures they form" (p. 31). An important feature of this study is that while the cases are YouTube channels, each was constructed by a creator and contains content such as videos, playlists, analytics, and links. Figure 3.1 visually represents a YouTube channel, which is enclosed by a dark line. A YouTube channel provides three main areas that were observed for this study: analytics, videos, and comments. Analytics included quantified data collected by YouTube such as view counts, subscribers, comments, and other pertinent information. The videos described in this study were limited to the virtual performances and other videos published by the YouTube channel creator. Comments were text statements and questions posted by the creator and visitors on the videos within the YouTube channel.

Data were also collected from three additional sources: websites, interviews, and documents. Behind the dark black line are factors that informed the case study, providing context for the following: technical and musical experience of creator, social and cultural contexts both online and offline, and relevant research. Data were salient to each case, the YouTube channel, and the quintain—virtual vocal ensemble video creation. In the following sections I discuss how each form of data collection focused on informing each case study.

One goal of this study was to identify the complex and intertwined qualities of the medium that emerged through the creation of virtual vocal ensemble videos. A network emerged

as virtual vocal ensembles were produced, and exploring the particulars of multiple cases and conducting a cross-case analysis can lead to a better understanding of the virtual vocal ensemble performance practice and the resulting medium.

The body of literature discussed in chapter two presented examples of various methods researchers used to study YouTube. Lange (2014) notes most qualitative research of YouTube videos and interactions have focused on only one video of creators' archives. She suggests that looking at a video maker's oeuvre on YouTube provides a more complete picture than studying single videos. I also found value in looking at the complete works of a single YouTube video creator by identifying my case as a YouTube channel (Cayari, 2011). By looking at all of a creator's YouTube videos, I was able to see how the owner cross-referenced his videos, progressed as a musician, and cultivated relationships evident through interactions that crossed beyond the boundaries of a single video.

Research Design

Case Selection

While it is sometimes important to select ordinary or average participants for research, the YouTube channels and their creators for this study were purposefully selected because of their extraordinary qualities. Studying ordinary video creators on websites like YouTube could conceptually be uneventful (Lange, 2008). YouTube and the entertainment-driven culture on social media has a tendency toward the non-ordinary. For example, an ordinary video creator does not have many subscribers and probably has only a few videos; selecting this person as a participant in research may not provide compelling data. However, a popular video creators with over 100 videos, 20,000 subscribers, and 2 million views should have sufficient knowledge and

experience to talk about executing online musical performances, developing a fandom, and distributing their videos on the Internet.

For this study, three cases were selected, each with a channel *creator*, who can be considered the architect of the channel. Each channel, with its own content, context, and owner, allowed for multiple distinctive views of virtual vocal ensemble video creation. Maximal variation sampling (Creswell, 2011) was used to allow for multiple perspectives to be examined. I sought cases that were diverse in the following areas: number of tracks in each virtual vocal ensemble, genre of music performed, style of virtual vocal ensemble, diversity of non-virtual vocal ensemble videos published on the channel, age of creator, collaborative videos on the channel, and gender of creator. These criteria were important to gain a better understanding of how video creators were mediating ensemble and performance. After gaining Institutional Review Board (IRB) approval to conduct this study, the recruitment process began.

Recruitment and first contacts. A list of YouTube channels to consider was compiled to guide the recruitment process. Seven video creators were sent an introductory e-mail that explained the study, risks, benefits, and procedures (see Appendix A for samples of communications). The creators were invited to participate in the study. Two days after the first e-mail was sent, I followed up with a personal message to the creators' Facebook, Google+, or e-mail accounts. A final request was sent a week later. If no response was given, I assumed the creator was not interested.

Participants. The primary participant in each case was the YouTube channel's owner whom I refer to as video *creators*. Three creators agreed to allow me to include their YouTube channel in this study. The name of the three YouTube channels studied as cases were *DanWright32*, *David Wesley*, and *Melody Myers*.

Introducing Dan Wright and the DanWright32 YouTube channel. When I contacted Dan Wright about participating in this study, he was a 21-year-old white male getting ready for his senior year of college in New York. The analytics of his YouTube channel, DanWright32, suggested an established fandom with just under 20,000 subscribers. He had over 3 million views from 96 videos featuring one-person virtual choirs, one-person virtual barbershop quartets, mediated collaborations, and recorded live performances; all of his videos were a cappella except for some live recordings of choirs in which he sang. He performed classical, barbershop, jazz, Broadway, and popular music. Wright's four years of publishing on YouTube allowed for the study of his ongoing progress as a creator.

Introducing David François and the David Wesley YouTube channel. David François, a 32-year-old male emergency medical technician (EMT) from Cobourg, Ontario, was the owner of the David Wesley YouTube channel. François started his YouTube channel by performing one-take solo performances in which he played piano and sang. However, his virtual performance style evolved to creating multitrack videos featuring one-man bands and a cappella ensembles; he performed popular, contemporary Christian, and worship music. He is half Caucasian and half black, and he was already established in his career and as a family man when this study began. François's YouTube channel was over four years old with over 2.5 million views and 20,000 subscriptions earned by his 62 videos. In addition to his musical videos, François also kept his viewers up to date on personal and musical matters by creating vlogs in which he spoke openly with his audience about significant events and past experiences.

Introducing Melody Myers and the Melody Myers YouTube channel. I sought out a female participant to counterbalance the two male participants. While observing a video by one of Wright's collaborators, I came across a white 22-year-old female named Melody Myers and

her YouTube channel of the same name. Myers had graduated from college a semester before I contacted her and was seeking work as a professional singer or admittance to graduate school for pursuit of a master's degree. Myers, like the other two creators, started her YouTube channel about four years before the study began. Myers had an extraordinary credit to her virtual music making. As a high school student, she was featured as a soloist in Eric Whitacre's first virtual choir, *Lux Aurumque*. When I contacted Myers, her fan base had over 5,000 subscribers and 1 million views on her channel.

Differences and similarities among cases. The three channels aligned in that they featured virtual vocal ensemble videos and had been established for four to five years at the time the study began. Wright's and Myers's cases were similar in that they started making videos in their last two years of high school; produced the same musical genres including barbershop, Broadway, popular, and classical music; and formed an archive of their musical growth throughout the four years they created videos; both also had multiple collaborative videos. However, Wright did not want to discuss his collaborations in detail while Myers was enthusiastic about sharing her experiences of working with others. François differed the most from the others in that he was older, performed piano driven adult contemporary music and worship music, conceived music as a leisure activity instead of a professional endeavor, and had extensive technological experience when he started his YouTube channel. Myers differed from the other two not only in gender, but also in her desire to collaborate with others and in her pursuit of professional performance as a musician.

Informed consent. Each of the participants in this study was provided with informed consent, which was approved by the IRB at the University of Illinois at Urbana-Champaign; however, the process differed for the involvement of each type of participant. The five types of

participants were creator, supporting participant, supporting musician, collaborator, and commenter. Informed consent forms were distributed, each describing the study and the informant's role (see Appendix A for informed consent forms).

Ethics of working with high profile YouTube artists. Research on YouTube brings with it risks to participants unique to online inquiry. Because of the visibility of participants on YouTube, one could consider the virtual vocal ensemble creators in this study famous, or at least YouTube famous, a vernacular term used by many video makers, viewers, and performers. Therefore, the rights and safety of participants were carefully considered. By agreeing to participate in a qualitative study, participants exposed themselves to risk that comes from being observed, analyzed, and discussed.

Anything a creator said, did, or published had the potential to be reported in this study. There was a risk that something the participants said or did may have been perceived negatively by others. Attempts were taken to minimize that risk, including providing interview questions prior to interviews and member checking. Transcripts were submitted to informants for their perusal; by checking for accuracy, participants were able to make sure misunderstandings were minimized. François and Myers both adjusted transcripts, and Wright did not.

Due to the nature of virtual vocal ensembles, the creators' notoriety on YouTube, and the descriptive nature of case study, complete anonymity was impossible even with a pseudonym. The choice of using a pseudonym has been given to professional musicians (Baym, 2012) and YouTube musicians (Cayari, 2011; Lange, 2014) involved in past research. However, as a public performer, participants of a research study may wish to have their musical works linked to any publication, giving the owner of a YouTube channel proper credit. In this study, each creator was

allowed to choose whether they used their own name or a pseudonym, but they all requested to use their real name, and links to their works are provided.

Consent for secondary participants. Stake suggests that there are often key actors who are particularly influential to the case and the main participant. Becker (1984/2008) suggests that participants could include "the network of people whose collective activity, organized via their joint knowledge of conventional means of doing things, produces the kind of art works that art world is noted for" (p. x). By examining those who influence the main participant in each case, a clearer picture of the YouTube channel owner's art world can be described. The secondary participants fell into one of four categories: collaborators, supporting participants, supporting musicians, and commenters.

Collaborators took an active role in performing on at least one video on the creator's YouTube channel. Supporting participants were characterized as people who were influential in the creator's life but were not found in the creator's video performances, such as family members, teachers, or friends. Supporting musicians were those who appeared in the creators' videos, but were not integral to the case or quintain. For example, in the case of DanWright32, Wright was part of a collaborative virtual barbershop quartet; however, because Wright did not feel that they played a significant part in his YouTube channel, they were considered supporting musicians and not collaborators. Commenters were those who provided text comments on the creator's YouTube channel. The choice to keep one's own name or choose a pseudonym was also given to the collaborators and supporting participants. Supporting participants were allowed to keep their relation to the creator anonymous as well. Therefore, some of the supporting participants in subsequent chapters are referred to as informants instead of by their relation to the creator.

Supporting musicians and commenters were not required to give permission for their inclusion in the study; however, they were given the opportunity to opt out of the study. This was an appropriate course of action because (a) their involvement on the creator's YouTube channel was publicly available, (b) the risk of being included in this study was minimal, and (c) it was impractical to have a large number of supporting musicians and commenters sign forms requesting their approval. A *Waiver of Informed Consent* was approved by the IRB, and a message was sent to the participants informing them that their likeness or text was to be included in this study. Commenters were given the option to choose a pseudonym. However, none responded so aliases were created for them.

Data Collection and Analysis

In the next section I describe the data collection process, which included observing online, interviewing participants, and collecting artifacts. Then the within-case and cross-case analysis methods are described. Finally, the case specific methods are explained. (A version of Figure 3.1 is available for each of the cases in Appendix B, Worksheet B.1.1, B.1.2, and B.1.3)

Online Observations. Observations that are conducted online entail complexities different than those in face-to-face observations. While it is possible to be a participant observer in an online community, a common way to observe online activities is lurking. According to Hine (2000), "Ethnography relies on observable features of interaction and the reading-based activity of the lurker is simply invisible to the observer of a newsgroup . . . Lurkers by definition lurk, and do not respond to the postings of participants even when the participant is an ethnographer They leave no observable traces" (pp. 24-25). Lurking researchers can enter and leave the online field invisible and unnoticed, and for Hine, this masking of the researcher's

presence can allow for a neutral voice that "enhance[s] the ethnographer's authority" (p. 48). The mantle of lurker was taken up by Waldron (2009) who described her process:

I used the cyber ethnographic technique of hidden participant-observer—or 'lurker'.... Conducting fieldwork meant 'spending many late nights in front of my computer, "traveling" the far corners of cyberspace', as I immersed myself in the ... forums collecting cyber ethnographic data. (p. 101)

Immersion into a digital world allows for a deep understanding of the field as it is presented online. So the first step in this study was to immerse myself in the virtual field of a YouTube channel by lurking and writing fieldnotes.

I began by lurking on the YouTube channel to observe musical, technological, and performance aspects of the case. In addition, I collected the analytics for each channel and its videos. I watched videos in two manners: continuously viewing and a *stop-and-go* viewing. Continuous viewing included watching and listening to a video from start to finish while jotting observations. Stop-and-go viewing involved using the pause function to allow for more detailed note taking.

Observations were recorded in a *fieldnote template* which guided the virtual observations. The fieldnote template was divided into three sections. The first section recorded analytics including date observed, video name, URL, date published, video length, and time watched, as well as the number of views, likes, dislikes, subscriptions driven, shares, and comments. YouTube analytics are usually available for each video published unless the creator changed the default settings. The other two sections provided a space for fieldnote jottings in a double-entry note approach developed by Sunstein and Chiseri-Strater (2007). In this approach, fieldnotes were divided into two sections where facts were recorded on the left side, and opinions,

inclinations, and notes on the right side. The fieldnote template included a priori themes which guided my attention to musical aspects, voices, performance, audio aspects, visual aspects, video style, and comments. Most YouTube videos' websites include a comment field in which people can leave text comments visible to the public. Observations of comments focused on the types of interactions the creator had with his or her viewers. Comments made by the creator were identified, and notes were taken on the content, nature, and mood of the conversations in which the creators participated. Not every theme was pertinent to each case or video, but jottings were recorded in any areas that yielded novel data.

I continued to observe and record jottings until a point of saturation, which "means that no additional data are being found whereby the [researcher] can develop properties of the category" (Glaser & Strauss, 2009, p. 61). For example, if the creator used the same visual layout in his first 20 videos, I would not describe that layout in detail for every video observation, but I would note when the layout changed. These narrative techniques painted a picture not only of the audio-visual aspect of the video, but also the description box, annotations, and text comments. There were also other websites the creators linked on their YouTube channel. These sites of interest were observed when necessary to broaden the context of the case, such as Facebook, personal websites, advertisements, YouTube recommended and related videos, collaboration videos, and digital media webstores.

When shorter notes did not capture the complexity of an aspect of the case, vignettes were written to accentuate the particulars of the cases. Stake (1995) believes that it is "useful to tell a few stories or vignettes to illustrate what is going on" (p. 127). These vignettes provide "extreme representation" and are "quite atypical" (p. 128) outside the context of the case, and they illustrate to an issue or assertion well.

Interviews. Identity on the Internet is often calculated and virtually contrived; therefore, observation alone is not enough to fully understand an online-oriented case study. When an online identity develops, a person can choose the information shared, and in some cases, visual and aural descriptors can be altered. For example, avatars can substitute for a live embodiment, text-to-speech technology can replace spoken voice, and software can alter musical performance. Orgad (2009) suggests observing strictly online interactions gives only a partial picture of the fully-lived experiences of the observed, but "the decision to obtain online and offline data is situated in the context of the specific research goals" (p. 39). Interviews can serve to supplement online observations within a case study. Data from offline sources can validate and triangulate data gathered online (Orgad, 2009). Orgad suggests face-to-face interviews can often help respondents shy away from utopian or dystopian discourses and clichés common on the Internet. Because the context of virtual vocal ensembles is online, and the creators have developed an online persona, Skype interviews are defensible, because conversations conducted on video reflected the format in which the creators published their music. While face-to-face interviews could give an added dimension to the case, I decided video interviews provided an authentic mode of communication between participants and me.

Interviews were conducted with all three YouTube channel creators. These interviews were conducted via Skype, recorded, and transcribed. I conducted three semi-structured interviews each lasting between 60 and 90 minutes with Wright and François and four interviews lasting between 45 and 60 minutes with Myers. Transcripts were sent to the creators to allow them to adjust their statements if they desired. In the case reports found in chapters four, five, and six, excerpts were edited to aid in the readability of the study, and the reader should assume that any quotes found in those chapters were spoken by the creator unless otherwise noted.

During the observations and creator interviews, supporting participants and collaborators were identified. Supporting participants were invited to answer interview questions via e-mail to elaborate on a creator's personal life and musical experiences. E-mail was preferable to Skype because it saved time on transcription as well as allowed respondents to participate with loose deadlines so they could formulate answers at their own pace. Collaborators were interviewed via Skype in a 15-30 minute interview. Both supporting participants and collaborators had the opportunity to choose a pseudonym or use their real name and relation to the creator.

Artifacts. The final method of data collection was the perusal of musical scores used by the creators. These digital files shed light onto the creative process, practices, and performance of virtual vocal ensembles. For example, original arrangements and rehearsal notes were examined to better understand the planning and creation processes. These artifacts were akin to an artist's sketch book or the draft blueprints for a construction site. The scores were examined and were discussed during creator interviews.

Case analysis. Data for this study were coded in a three-step process. The first two steps included an open coding phase and a focused coding phase suggested by Emerson, Fretz, and Shaw (2011). Open coding allowed for the identification and formulation of any and all ideas, themes, and issues through a preliminary marking. Focused coding included a fine-grained analysis based on the salient codes identified in the previous step. Both processes include a line-by-line analysis which, as Emerson at al. suggest, gives the researcher new ideas, insight, and connections integrating previously separate pieces of data, which can lead to a theoretical proposition that is supported by data. In the final step of the coding process, focus codes allowed for data to be grouped by themes which guided the analysis. Similarly to the way Waldron (2011) explored online communities, I analyzed online visual data with what Saldaña (2013)

might consider "a holistic, interpretive lens guided by intuitive inquiry and strategic questions" (p. 52). The mediation of virtual vocal ensembles as well as the meaning, identity, and community constructed by creating these ensembles was what guided my observations, coding, and analysis of this study.

Case specific methods. While the general structure presented above was nearly identical for all three YouTube channels, each case had unique characteristics that provided information about the quintain. First, in the case of DanWright32, a particularly popular video provided over 4,000 comments, which were examined. Second, during the data collection of this study, the David Wesley channel grew exponentially. To better understand that growth, a social network analysis of François's most popular video was conducted. Third, because the first two cases did not provide adequate data about collaboration, I focused on Melody Myer's experiences making videos with others. One of the guiding questions of this study had to do with the types of communities that emerged through the creation of virtual vocal ensembles. All three of these case specific methods focused on that aspect.

Case one: Comment analysis. As discussed in chapter two, according to Thelwall, Sud, and Vis (2012), music videos on YouTube are not likely to produce a dense discussion among commenters; the comments left on music videos with 999+ comments were likely to be individual comments as opposed to dialogues. However, I noticed a large amount of dialogue when I reading through the comments on DanWright32, a trend I saw in the comment sections throughout Wright's various video pages. To better understand how people used comments, an analysis was conducted on the comments of Wright's most discussed and most viewed video. Comments were saved as a portable document format (PDF) file which served as a backup and reference file. All the comments (N = 4,461) were copied to an Excel spreadsheet, and the data

was scrubbed so it contained only comments. Usernames, pictures, and any other identifying information that accompanied the comments were deleted. Repeated comments and spam were deleted, leaving a total of N = 4,107 comments.

The comments were alphabetized and purposely taken out of context, which allowed for faster manual coding as comments that started with similar words tended to have similar codes attached. The first 2000 comments were preliminarily coded with attention to two aspects: depiction and content. Depiction regarded how the commenters portrayed Wright and his video, similar to the process Kopacz and Lawton (2013) used for comment depictions of Native Americans. Four different codes were created:

- (+) for comments that portrayed Wright positively,
- (-) for comments that portrayed Wright negatively,
- (B) for comments that contained both positive and negative statements, and
- (O) for neutral comments that did not fit into any of the aforementioned categories.

In the preliminary coding process, comments by Wright were coded as neutral. This distorted the preliminary analysis, so a fifth depiction category, (W) for comments that were made by Wright, was included in the final coding process and provided a clearer picture of how comments depicted Wright and his involvement with others through text.

The second set of codes attended to the comments' content and used the same open coding process described for the fieldnote analysis above (Emerson et al., 2011). Each comment had at least one statement or question and was coded with as many descriptors as needed depending on the content of the comment. There were 45 codes that emerged during preliminary coding. Larger themes were identified, and smaller themes were either combined or incorporated

into larger themes. The preliminary codes contained two types of data: interactions and content. Therefore, an action classification scheme was created similar to that of Madden, Ruthven, and McMenemy (2013) which described the type of interaction that took place. Eight interaction types were identified: evaluation, extension (of topic), flames, gratitude, inquiry, recommendations and requests, supportive, and topical (discussion). These interaction types are described in detail with examples in chapter four.

The remainder of the preliminary codes pertained to the content and included 18 codes with two subcodes. All the comments were then recoded using only the new codes (for a description of each code, see Appendix C). After the comments were coded for depiction, interaction, and content, the data were analyzed for frequency, percentage, and trends.

Case two: Expanding a social network. While comments on Wright's videos provided information on the social exchanges between channel owner and viewers, the analytics of François's videos offered insight on how online content was migrating across the Internet. As Jenkins et al. (2013) suggest, media can spread across platforms because Internet users share links with others. In addition, recommendations of related content and search algorithms on social media sites can also contribute to the accessibility of a video (Thibeault, 2014). The David Wesley YouTube channel provided insight on how social media networks were built and expanded. To better understand how virtual vocal ensemble videos spread through the Internet, referrer analytics were gathered from François's most popular video.

François downloaded analytic reports from YouTube which presented data regarding country of views, ratings, referrers, and demographics of viewers. Data for François' most popular video were scrubbed to include country of referrer, referrer source, and sum of referred views. The country of referrer identified the country from which the view came. Referrer sources

included advertising, annotation, external application, external website, Google search, unidentified embedded link, unidentified non-embedded link, YouTube playlist, YouTube promoted video, related video, subscriber, YouTube channel, YouTube search, and other YouTube links. The sum of the referred views represented the strength of connection between country and source. The analysis of this data showed how users in various countries shared and discovered François's videos.

Case three: Exploring collaboration. While both of cases above explored online community interactions through conversation and sharing content, the Melody Myers YouTube channel provided insight on the making of collaborative virtual vocal ensemble videos. Myers had two videos posted in which she worked closely with other prominent YouTube multitrack video makers. One interview was conducted with two collaborators to provide a clearer picture of how collaboration took place. These interviews were subsequently transcribed, member checked, coded, and analyzed.

Cross-case analysis. To analyze the quintain of virtual vocal ensembles, cross-case analysis methods were developed. As Stake suggested, "Each Case [sic] is studied to gain understanding of that particular entity as it is situated" (p. 40). However, he also cautioned that a researcher can be easily bogged down by the particularity of each case when trying to explore the quintain. An iterative examination of the data collected was constructed by first examining the data of the three individual cases, then the data from the cases as they related to the quintain, and finally, the data as it pertained directly to the quintain. Chapters four, five, and six in this study described the particularity of each case and were used as the data for the cross-case analysis. By adapting the "Track II" worksheets Stake developed (2006, pp. 5, 43, 45, 49, 59, 73), data were generated. The adapted worksheets (see Appendix B) guided the iterative process of identifying

the most salient information within each case, how that information related to each of the guiding questions, and how that information fit together to develop a better understanding of the quintain.

The cross-case analysis process started as a case report was created, which included important information based on nine themes. These nine themes were developed from the guiding questions in chapter one. By analyzing the data pertinent to each theme, case specific findings were noted. The findings from all three cases were then grouped according to their content. Findings were clustered and analyzed to create *merged findings* that were then analyzed according to their importance to each theme, and a list of potential assertions about the quintain were developed. Finally, the potential assertions were examined and refined into a list of final assertions and analyzed according to their relation to the themes.

Establishing Credibility

Researcher Background

As a YouTube musician, music educator, and researcher, I found myself drawn to virtual vocal ensembles as a mediated performance practice. I have been a member of YouTube since August 12, 2006 and have three active channels for which I produced content ranging from music tutorials, vlogs, live performances, and virtual ensembles. My modest YouTube presence totaled over 200 videos, 250 subscribers, and half a million views. This experience gave me an insider's view of creating YouTube videos and virtual vocal ensembles which allowed me to interpret the creators' comments and videos with more understanding than someone who never created a multitrack video. Furthermore, I have taught K-12 students and college students various ways to create these types of virtual ensembles and published both practitioner literature (Cayari, 2014) and research (Cayari, 2015) on the topic.

A virtual insider perspective provided a participatory component to my study, as discussed by Lange (2014):

Maintaining my own [YouTube] account revealed insights that are not always possible to glean from observation alone. . . . Moments of personal insight might not have surfaced had I not maintained my own account over time. Such observations also provided a wealth of productive interview topics. (p. 235)

As I conducted this study, I experienced what Lange wrote about. However, as an avid YouTube multitrack fan, the reader should know that while my experience as a YouTube video creator positions me from an insider's view, it also creates a bias, as I had been a fan of many virtual vocal ensemble creators for years.

Verification and Accuracy

Creswell (1998) suggests there are eight verification procedures that can be used to enhance the accuracy and credibility of a study. In this study, I used triangulation, member checks, and peer debriefing. Triangulation, according to Creswell (2011), "is the process of corroborating evidence from different individuals . . . or methods of data collection in descriptions and themes in qualitative research" (p. 259). In this case, data from various sources were compared and checked including observation of videos and comments. In addition, interviews were triangulated. For example, I would watch a video and make an observation about an aspect of the performance. Commenters asked questions about how the same aspect was achieved, and the creator would answer their question via text. Also, I asked the creator to describe their own experiences, which further triangulated my observation and the comments. This technique included two types of triangulation: multiple sources such as the video, creators, and commenters, and multiple methods including observations and interviews.

Member checking was also used to improve accuracy and allow the participants to ensure that their voices were accurately depicted. Each informant interviewed via Skype was given a copy of the transcript and asked to make any changes if they felt the need. Before the interview process, they were reminded that a transcript would be provided, and that they could add, delete, or change anything they felt necessary. Wright did not make any changes, but François and Myers did adjust at least one of their transcripts. These changes were exclusively small adjustments, such as cleaning up vernacular or spoken idioms and adding details that were not decipherable from the recordings. After each case report was completed, it was also sent to each creator for his or her perusal. Only François had minor comments, which were addressed before the final draft of this study.

The final verification measure was peer debriefing, a form of auditing. According to Spall (1998),

In debriefing, a researcher and an impartial peer preplan and conduct extensive discussions about the findings and progress of an investigation. . . . Peer debriefing contributes to confirming that the findings and the interpretations are worthy, honest, and believable. (p. 280)

For Spall, it is important that the researcher finds a debriefer with whom he has a high level of trust, and who is knowledgeable about the phenomenon. Therefore, I invited Janice Waldron, a researcher of YouTube, social media, and music education to be my peer debriefer. Waldron and I had previous conversations about our work and had discussed theories, methodologies, and research prior to the beginning of this study. After Waldron agreed to participate, I planned two Skype meetings in which we discussed the methodologies, preliminary results, and observation process of the DanWright32 case study. I described the fieldnote

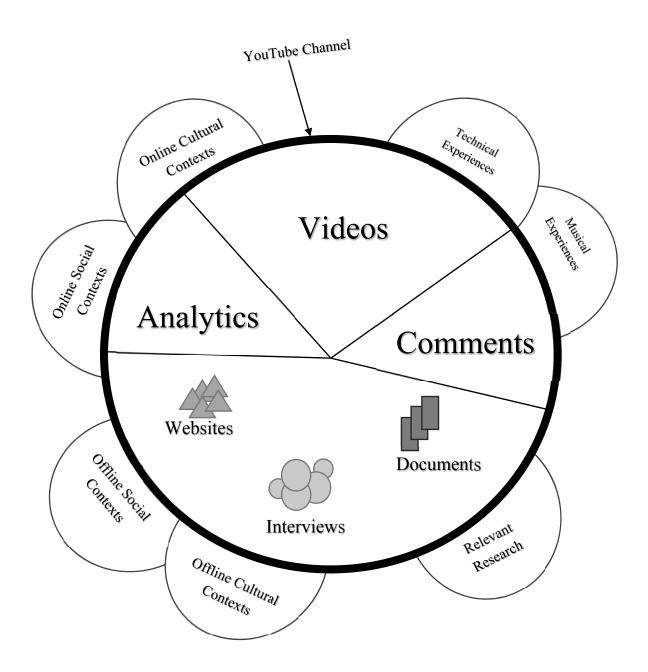
template in detail and gave examples of observations that would go into each section. Then we watched a video created by Wright, and as we watched I explained what I would write as I observed. Waldron was encouraged to stop me and ask questions about why I made the choices I did, point out methods she felt were particularly useful, and play devil's advocate. I then showed her the final fieldnote template for the video, and we discussed the findings. In our second peer debriefing, I explained to her the process of the comment analysis from the DanWright32 case study and showed her the coding measure, the process, and a portion of the finished data.

By having Waldron question my methods, data, and preliminary conclusions, I was put in an environment where I had to justify and clarify my study. As a result of peer debriefing, Waldron affirmed that the fieldnote template, observation procedures, and YouTube comment analysis were well thought out and provided valuable data.

In this chapter, I described methods that combined Internet inquiry with multiple case study methodology. In addition, I briefly introduced the three cases that are presented in chapters four, five, and six. In these chapters, I describe the creator, the videos, the community of each case, and a within-case reflection. In chapter seven, a cross-case analysis using the methods described in this chapter is presented, accentuating the similarities and differences which inform the quintain.

Figure for Chapter Three

Figure 3.1. Graphic Design of a YouTube Channel Case Study



Note. Adapted from Stake (2006, p. 5) WORKSHEET 1. Graphic Design of a Case Study. Original copyright 2006 by The Guilford Press.

CHAPTER 4

"IF NOBODY WILL SING WITH ME, I'LL DO IT MYSELF"

THE CASE OF DAN WRIGHT AND THE DANWRIGHT32 YOUTUBE CHANNEL

I wanted to try to start my own barbershop quartet in my high school. So I tried to do that, but unfortunately, nobody was interested. I found one person who was kind of interested but nobody who was really gung-ho about it. So I kind of dropped it for a bit and eventually, I came back to a YouTube multitrack video again, and I was like, well, if nobody is going to sing with me, I'll do it myself.

And that's kind of when I started. (Dan Wright, personal communication, October 14, 2014)

Introduction

The concept of amateur music making online has gained popularity because of the wide distribution of cheap home audio and video recording equipment (Burgess & Green, 2009; Cayari, 2011; Katz, 2012; Lange, 2014), and multitracking has become a popular way for musicians to create videos on YouTube. One multitrack musician, Dan Wright, was an early adopter of the virtual ensemble performance style and created multitrack one-person virtual choirs and one-person virtual barbershop quartets. At the time of this study, his YouTube channel encompassed nearly four years of work and contained 96 videos totalling 3,449,815 views, 52,235 likes, 1,015 dislikes, 12,594 comments, and 18,796 subscribers.² Wright was selected to be part of this study because his channel had fifteen virtual choir videos featuring over 8 voices, and he performed a variety of genres including classical and folk octavos,

² See Appendix D for a list of the videos and their analytics published by the creators of this study. All analytics for DanWright32 in Appendix D and in this chapter were gathered on August 26, 2014.

barbershop, and popular music. His channel consisted of 15 one-person virtual choirs, 56 one-person virtual barbershop quartets, five mediated collaborations, and 19 recorded live performances (see figure 4.1).

The data and interpretations regarding the case of Dan Wright and his YouTube channel, DanWright32, are presented in this chapter. A story of a young man who sought opportunities to make live music with his peers emerged. When he was unable to find a group with whom to perform, he pursued a fulfilling alternative through multitrack recording. Virtual vocal ensemble video creation proved to be a solitary endeavour in his makeshift recording studio, located in the bedroom of his parents' home. Yet, as he practiced creating videos and received formal training at college, Wright refined both his musical and technical skills. The hours spent alone in his bedroom led to the growth of a fandom of millions of people, and the medium was influenced by the videos he published on his YouTube channel. By exploring this case, we can also better understand the musical and social ramifications of creating virtual vocal ensemble videos.

This chapter begins with a description of Wright's musical life from his first stage performances to the time he created his YouTube channel as a junior in high school, providing a context which describes his musical upbringing, experiences, and aspirations. After that, two portraits of Wright chronicle his journey from a 17-year-old novice into a 20-year-old seasoned veteran. These portrayals are used to explore Wright's evolution in three areas: his rationale for creating videos, the identity he constructed, and the skills he developed as he created virtual vocal ensemble videos. Next, the community that grew around Wright's YouTube channel is analyzed. The chapter concludes with a discussion of the case report on Dan Wright and his YouTube channel.

An Extraordinary Childhood

Wright grew up in a home that valued artistic expression with parents who supported him in his artistic endeavors.

My parents are not musical, but they're pretty much the only people in my family that are not musical. Everybody else in my family are musicians. My grandmother was an opera singer. My grandfather has no formal training, but music is a huge part of my family. My parents have always been encouraging of me with whatever I wanted to do.³

Wright performed professionally as a young child. His interest in doing so started when his parents brought him to see live theater when he was 4 years-old. At the age of 8, he began his first national Broadway tour as Chip in *Beauty and the Beast*. After he completed his freshman tour, he was cast as Gayroche from *Les Miserables*, and he set out to travel the nation again. His acting credits extended to the live stage and also included television and commercials.

Wright's skills and professional opportunities allowed him to be involved in performances that established a wealth of learning and stage experiences. However, in junior high school, Wright decided he wanted to leave professional musical theater to pursue singing in choirs as his primary performance outlet. Wright's choral director in Grades 7 and 8 helped him cultivate a love for choral music. While in high school, Wright regularly sang with three groups: two curricular classically-oriented choruses and an extra-curricular jazz choir. His talent landed him a spot in an all-county chorus, an audition-based choir in his community. However, his experiences as a young singer living in Long Island, New York often left him feeling lonely as a musician.

³ Unless otherwise noted, all quote excerpts are from personal interviews conducted with Dan Wright on September 14, 2014; November 2, 2014; and November 15, 2014.

Wright did not have a good relationship with his high school choral director.

We didn't really get along. He was one of those teachers who had favorites, and I was not one of them. He always liked the more outgoing kids, and I was never that person. I've always been more reserved and kind of did my own thing.

Being part of a school with a small choir program, Wright sought an opportunity to sing with his fellow classmates as he attempted to find three other young men to sing barbershop music with him. However, he was not able to find peers to join him. His failed attempt at finding a live ensemble with which to perform led him to turn to multitrack video creation as a creative outlet.

Getting Started on YouTube

After discovering a multitrack virtual barbershop quartet video by <u>Danny Fong</u> on YouTube, Wright decided to create his own virtual performances and uploaded multitrack recordings on an undisclosed YouTube channel. These videos served as practice until he felt ready to start DanWright32. On December 26, 2010, he uploaded four multitrack videos, each presenting four panels that divided the screen into quadrants. Wright obtained the music for these mediated performances from his high school, where he sang the songs in choir.

Forming a Virtual Barbershop Quartet

Wright quickly produced 10 virtual quartet videos in his first two months on YouTube as DanWright32. He moved from choral octavos to barbershop music, which he found online at various websites. *I Wanna Be Like You one-man a cappella (V07)*, ⁴ published on February 5, 2011, achieved acclaim among the YouTube community. This video had over 50,000 views with

⁴ Regarding the style of video reference, the first time a video is presented, the full title will be provided with the video's number in parenthesis. For the remainder of this study, videos will be abbreviated to the video's song title after they are presented the first time.

144 comments, 377 likes, and 20 dislikes. The following vignette represents what Wright's early virtual barbershop quartet videos looked like:

The video began with four panels dividing the screen in quadrants filmed in Dan's bedroom (see Figure 4.2). The background was characteristic of a high school student's room, sporting white walls, musical decals, bookshelves, and a guitar hook mounted on the wall. Wright's clones stood with neutral looks on their faces, framed by red hair styled in a bowlcut, each wearing a black T-shirt and gray hooded sweatshirt. The jazzy barbershop arrangement began in a strict tempo that did not waver throughout the song and featured tricky syncopated rhythms and syncopated staccato notes. The sonic layout centered the lead and bass with the tenor to the far left and the baritone to the far right in the stereo panorama, each touched up with a slight reverb. Each vocal track was sung at the same dynamic, and each note was performed at the same intensity. While all four voice parts were within Dan's range, the tenor sounded a bit thin and pinched. The bass dominated the video's soundtrack because of the amplification and equalization decisions made by Wright. The complex jazz voicings resulted in pitch discrepancies, and a lack of phrasing made the arrangement sound mechanical, a critique prominent in comments on the video.

This piece stretched beyond Wright's normal vocal range, requiring him to adjust the amplitude of his vocal tracks. Because of the uneven live input, modifications to the amplitude resulted in voices spiking or being lost in the mix. The arrangement called for the clones to squawk like monkeys, creating an abrasively

loud addition to the song. The monkey squawks were one of several ways Wright attempted to add theatrics into his video performance.

Wright performed the song in a barbershop style with simple choreography featuring body movement and hand gestures; his facial expression was static, a plastered smile on his face. As is characteristic with barbershop music, the song ended with a tag. The recapitulation of the theme lasted 14 seconds, yet the tempo did not slow as it typically does with an experienced live quartet.

Both established and novice virtual barbershop quartet creators began to give Wright advice and interact with him via comments. He responded to their advice with gratitude and applied suggestions to the best of his ability. After making his seventh video, Wright began feeling more accomplished as a virtual barbershop quartet creator. He commented for this video, "It's not terribly difficult. The learning curve is pretty big though. I put out my first video almost a year ago, and it was pretty bad." *I Wanna Be Like You (V07)* was a turning point in Wright's YouTube video making.

The first time I started to feel successful was in *I Wanna Be Like You*. It was actually shown on a local news station in Texas. I'm from New York, and that's very far away. Overnight, most of my videos up to that point had a couple hundred views, less than 1000, and overnight my video got 30,000 views. So that kind of blew me away. I was really excited about that.

Wright recorded his 10th video, *Go the Distance one-man a cappella (V10)*, in front of a green screen. Using video editing software, Wright spliced four video recordings of himself into

⁵ Wright's writing style in the comment section often had punctuation, capitalization, grammatical, and spelling mistakes. I have edited comments throughout this dissertation to aid in readability.

a single frame giving the illusion that a quartet of identical quintuplets was simultaneously performing (see figure 4.3). Wright liked the side-by-side embodiment of his clones more than the quadrant layout because it resembled a live quartet.

Nobody is ever going to think it's realistic, but I think it makes it appear more realistic than it really is. It allows some interplay between the parts if you want to do anything visual, like acknowledge another part visually.

Creating a Virtual Choir

Six months after producing his 10th multitrack video, Wright decided to create something more complex: a one-person virtual choir. As Wright ventured into the multitrack YouTube community, he saw the videos of <u>Jayson Wilson</u>, a YouTube artist who placed 32 panels in four rows by eight columns. After taking a six-month hiatus from publishing any new videos, Wright was inspired to emulate Wilson's layout. The following vignette illustrates <u>Sleep – One Man</u> *Virtual Choir (V11)*, Wright's first foray as a virtual choir creator:

The video featured 32 boxes, each with a clone of Wright singing in his bedroom. To distinguish the voice parts, the clones wore eight different costumes from his first videos—scarves, t-shirts, sweatshirts, and even a tuxedo with bowtie (see Figure 4.4). At the beginning of the video, clickable annotations appeared over each section to direct viewers to previous video in which he first wore each costume.

The 32 vocal tracks, sung with relatively no vibrato, sounded like individual voices compiled into a mix. Voices were distinguishable, yet a reverberation effect was used to smooth out the balance. The synchronization of the soundtrack and visuals became increasingly disparate as the song progressed. A ghost-like, eerie

performance was created as the clones moved back and forth freely, giving the illusion of wild grass swaying in a field. The song required Wright to sing from Eb2 to Ab5, the tenor and higher parts sung in falsetto. Wright recorded the vocal tracks in a strict tempo devoid of dynamic phrasing until 3:08 when the composition requires melismatic passages expanding the choir's range. At that point, the extremes of Wright's range required him to sing louder, resulting in a more intense and emotional sound—a choral convention crafted into the music. The clones' vowel shapes were dissimilar, both within each section and across the sections (see Figure 4.4). The higher the voice part, the more horizontal Wright oriented his mouth. The song climaxed after a dynamic crescendo on the lyrics, "I surrender unto sleep." The pensive looks on the clones' faces accentuated the mood of the song while repeating the word sleep, ending the song with a whisper.

Receiving Feedback from Audiences

Wright's first virtual choir attracted interest online with 84,886 views, 890 likes, 20 dislikes, and 512 comments. These statistics represent the activity of the community of viewers who have differing levels of involvement with Wright and his video. View statistics count viewers who clicked on a link that directed them to the video. The like and dislike functions present a nominal statistic of whether the viewer approved or disapproved of the video content. Comments allowed for the most involved interaction in which viewers typed a message to be posted below the video.

The large number of comments on <u>Sleep (V11)</u> prompted me to compile two lists using the language of the commenters to display both the criticisms and accolades Wright's viewers gave him for the video, and comments often contained both positive and negative statements.

Criticisms for this video were as follows: wrong notes, lack of phrasing, sloppy entrances, no emotion, lack of reverb, lack of rubato, vowel shape, intonation, consonants (enunciation), forcing of his voice, nasality of his voice, pronunciation of the word *the*, dynamic contrast, rushed, bumpy sound, and bass-heavy balance. Wright received praise for the following: nice falsetto, good blend, range, editing, creativity, dynamics, dissonance, intonation, (audio) line up, bright sound, and beautiful voice. These comments were representative of all of Wright's videos and will be discussed in detail later in this chapter.

While most commenters were impressed by the novelty of 32 clones singing in a virtual ensemble, Wright's musicality was a highly discussed topic. Wright previously performed the song in his all-county chorus and was upset he could not submit a video to the Eric Whitacre Virtual Choir 2.0 due to sickness. He decided to make his own virtual version using what he learned from his honors chorus. Wright discussed the struggles he experienced musically with the piece:

My group all-county had a conductor, so they were able to change tempo. I was not as adept with my computer as I am now. Like now if you watch my new videos, you'll see that I'm much freer with the tempos and stuff. Back then it had to be basically a strict tempo. So it wasn't as free as a song should have been I think.

Recording 32 voices also presented a problem. Once he made a musical decision, Wright had difficulty changing his mind. For example, Wright responded to one critical comment:

As for the tempo, I agree that it could have been a bit slower, but by the time I thought of that, I was too far into my production process to start over and keep my sanity (this being my first choral video, I had no idea what I was getting into).

Creators of virtual choir videos are free to choose musical dimensions such as dynamics, tempi, and expression; yet these decisions can lock a creator into decisions that were made at the beginning of the creation process. As a novice, Wright may have been overwhelmed by the enormity of the task. Score interpretation, technological savvy, and vocal performance techniques are all required to create a virtual choir—all skills that are very different from the ones required of a senior in high school chorus. The feedback and guidance Wright received from his fellow virtual vocal ensemble creators made him aware of the various skills which he could improve. The mentality of taking feedback from his viewers and working on becoming better inspired Wright to continue to create virtual vocal ensemble videos; yet he took all advice with caution, as he did not know who was offering sound advice and who was simply stating opinions.

As a high school musician, Wright had just begun to develop score preparation skills. Since he had trouble singing with emotion when he performed live, the same struggle carried over to his mediated performances. He freely admitted to his audiences that he was working on becoming a better musician, and he had difficulty figuring out how to portray emotion on video. He commented:

Yes, I probably could have put more feeling into it. That's something I'm starting to realize about my singing and in real life as well. I'm going to work on it for my next video, although who knows if I'll be successful. I'm planning on keeping up with choral (mainly Eric Whitacre) pieces, while still putting out some barbershop here and there.

Armed with their advice and his own experiences, Wright continued to progress as a virtual vocal ensemble creator and developed a creative process that allowed him to form an identity as a virtual barbershop quartet and virtual choir creator on YouTube.

Refining the Creative Process

Creating a virtual choir is a complex process requiring a variety of components. The creator needs a musical and visual concept, musical, performance, and technological abilities, equipment to capture audio and video, a guide for recording in the same key and tempo, software to synchronize tracks, and a venue in which to publish. When Wright began making videos, he did not have a set process and created videos with minimal technological manipulation.

However, as he gained experience creating videos, his creative process evolved beyond synchronizing multiple audio-visual tracks. Each of the steps Wright developed to create virtual vocal ensemble videos are discussed below. This eight-step process evolved over four years of practice and included the following: selecting a song, creating a MIDI file, preparing the score, recording the audio, mastering the sound, recording the visual, editing the video, and publishing the product.

Selecting a Song. Wright's first task was choosing a song. Three themes characterize Wright's song selection practices: enjoyment, range, and audience. First and foremost, Wright selected songs he enjoyed singing. "That's why I choose all my songs. Back when I first started I chose my songs solely based on whether I liked them or not." Range was a primary factor in song selection.

99% of the songs I choose because they sit well in my voice, and I enjoyed them. Every once in a while there will be a song that I'm ready to sing that I think will sit well in my voice, and it doesn't work.

Wright's high school choir teachers identified him as a baritone. Therefore, he chose songs that featured the middle portion of his voice range. In these songs, he sang the tenor and treble voice parts in falsetto. As his voice developed and he moved on to college, he pursued music written for tenor and countertenor, leading him to music with a more expansive range. However, his lower notes limited his repertoire.

Every once in a while I would have to get rid of a song I really want to do because it's too low for me. That happens because of the lead voice, not the bass voice. The bass I record in morning voice, so I can get pretty low. But the lead voice I record when I'm actually warmed up and sing in my normal range. So if it goes too low for my warmed up voice, that's an issue. You'll notice most of my latest tracks really don't go below the 8va treble staff.

Finally, Wright selected songs he felt would draw an audience, gain subscribers, and inspire viewers to share his videos. Often his personal preferences were in line with what he felt his audience wanted to hear.

If it was a song I want to spend several days working on, or several weeks working on, or however long, and it was one of my favorite songs at that point in time, I just did it. Now I choose my songs based on myself—whether I like them—but I also choose them on whether I think they will get views as well.

This criterion perhaps accounts for his popularity with his audiences.

Creating a MIDI file. After Wright selected the songs he wanted to perform, he obtained the sheet music from his offline choirs or friends, or purchased them from the Internet. He entered that music into *Guitar Pro*, a music notation software, and created a MIDI file.

I use a program called *Guitar Pro*. I put all the score in the program, and I export the MIDIs. You have a staff, and you just click. It doesn't matter what note you hit, but as long as you hit a number, you import a note where your cursor is on the staff, and I do that for each of the parts.

Note entry became a mindless practice Wright did while watching *Netflix*. He also used the metronome in *Guitar Pro* so that the MIDI file had a click track in addition to the vocal lines. Early on in Wright's video making, this step limited his expressiveness by locking him into a set tempo. However, as he became more knowledgeable with *Guitar Pro*, he began to change tempi, use rubato, and add dynamics.

Preparing the score. As Wright became more adept at making virtual vocal ensemble, he prepared his score so that he could be more musically expressive. Not only did he adjust the playback of his MIDI files, but he also marked his score, which he read from his iPad. These markings were the same types of markings Wright used in his live ensembles and resembled what a choral conductor might write in an octavo when working with a live ensemble. In Figure 4.5, the markings Wright planned for a future video regarding tempi, dynamic, technique, and pronunciation are shown. The song began at 90 bpm and the chorus section accelerated to 160 bpm. The tempi markings reminded Wright that the song should go faster or slower at specific points:

I get pretty specific with tempi because when I make the MIDI track to sing along to, it's specific. So I see where the tempo is at, and then I write it down. If there's no tempo change, I don't write that in, but when it goes to 3/4 and then jumps to 160, it gets in my mind that I'm going substantially faster.

Crescendo markings can be found in mm. 1-2 and mm. 5-7 with decrescendo markings in mm. 3-4 and mm. 8-10. Performance markings include reminders like taking a big breath, "In m. 4, I have BB. That's my shorthand for big breath for when I have a very long phrase that I need to take an extra big breath to get through." Finally, pronunciation reminders, such as the ε in m. 10 were also present.

IPA for the ε vowel reminds me to not switch the diphthong too soon before the baritone and bass get there. I like to remember to write it all the way through, and I have that marked all the way through on different times I hold out *amore*.

Wright also made markings to remind him of phrasing. The two excerpts in Figure 4.6 prompted him to sing with musical phrasing. In mm. 21-23, Wright drew parentheses around a section of music because he "wanted to do those a bit softer than the rest of the phrase, like it's a side thought." The highlighted notes in mm. 24-26 reminded him that he "wanted it to be the strong syllable of the word."

Recording the audio. An exported MIDI file and marked score guided Wright as he recorded a rough draft of each vocal part into *Logic Pro*, a digital audio workstation (DAW). Regarding his virtual barbershop quartet process:

I sight read through each voice part two or three times while recording my voice. I'll start wherever my voice feels like that day. I don't really have a preference for where I start. Usually, it's the lead or the bass. I'll do one take on each of the voice parts. I'll go through two or three times to get an idea or an extremely rough outline of how the song is going to sound, and I don't pay attention to if all the notes are right. And usually I stop at that point for that day.

With the MIDI track anchoring his virtual choir in a tempo, Wright recorded multiple versions of himself singing the inner voices of his choral octavo. After synchronizing the inner voice parts, Wright recorded the outer harmonies. This process worked especially well for the choral music of Eric Whitacre, which featured complex chord clusters with ambiguous melodic lines.

This process became time consuming as Wright's perfectionism required him to go back and rerecord parts that contained mistakes. In a comment for <u>Sleep (V11)</u> he typed, "I listened to each track before I mixed it in and if anything was even a hair off by my ears I redid the track." <u>Sleep (V11)</u>, a video that lasted less than five minutes, required Wright to sing for a minimum of 2.48 hours, assuming he recorded each take perfectly the first time. The amount of time Wright spent recording his virtual choirs varied, but his 32 voice ensembles usually took between two and five months to complete from start to finish.

In virtual barbershop quartets, Wright sang as if he were recording a solo, performing each track in full voice. However, when recording virtual choir voices, he used a lighter vocal tone so his tracks blended better. Because of this element, Wright found recording the vocal parts for virtual choirs less rigorous for his voice than recording for virtual barbershop quartets.

It was easier on my voice to do virtual choirs because there were so many voices. I didn't have to be as perfect on every voice like in the quartets, and if there was one voice where I sang a wrong note in a choir, I could just cut that voice out and the video wouldn't sound any different.

Mastering the sound. Wright used a minimal approach to sound editing for his videos. "I exclusively used presets, because I don't really know anything about that stuff." His sound mastering consisted of adding preset equalization, reverb, and compression in *Logic Pro*. These

presets became a standard in his videos, and he suggested, "I've not found a song that my standard audio settings didn't work for, and I don't know enough about it to make non-standard settings." He frequently panned his audio tracks to match the visual layout on the screen, leaving the lead and bass in the middle with the tenor on the left and baritone on the right. Wright interchanged the audio editing and visual recording phases depending on his mood.

Recording the visual. If he had not yet mastered the audio track, Wright began video recording himself lip-synching to his rough mix of the recorded audio, MIDI, and click track. For a typical 32-voice choir, he video recorded himself lip-synching each of the eight voice parts (SSAATTBB) four times. Wright found this process tedious and annoying.

Recording video is mostly frustrating, because it never goes right the first time, and I'm usually stuck recording a two-minute barbershop quartet song for about an hour and a half. I usually will end up with 10 to 20 takes on each part because I mess up, and it's not like the audio, which I can cut in the middle. I have to make it through the whole thing without a mistake. That's why in a large majority of my videos there is some mistake. Probably a small mistake that's barely noticeable to anybody but me. There's some lip-synching mistake, or I forgot to turn my head, or I completely don't say a word, but you hear it, and I didn't even notice it until I set it up, but it happens. I like lip-syncing at the beginning. The first few takes I'm having fun, and then I'm like, "I need to get it right, now!"

Similar to the audio recording process, a virtual choir song would be lip-synced 32 times.

Adding to the time required to lip-sync 32 times to the time spent on audio recording and mastering, it is no surprise it took him at least two months to complete one virtual choir video.

When recording the footage for his videos, Wright sang along with his soundtrack.

I'm not too worried about the notes, especially in the bass. I'm usually singing everything up the octave. I'm almost never singing the right notes when I do lipsynching because I'm too focused on singing the right words and doing the right motions.

The spontaneous motions in his virtual barbershop quartet videos resembled the choreography seen from a live barbershop quartet. His choral videos did not include choreography.

Editing the video. Wright imported and synchronized the tracks in *Final Cut Pro*. Synchronization is another part that's really easy and doesn't take too long. Because I use the MIDI track, I have the metronome going on in the background so I can tell right away as soon as it's lined up. I don't know any other multitracker that does it that way, so they probably have more time with that. But for me it takes a minute or two to line up, and I let the program render it and put in the background. It can be fun because sometimes I get to be little creative with backgrounds. But usually it's just sticking them together in a standard format.

Wright added a virtual background to his videos, including special effects like fading in or out, darkening panels when the clone did not sing, key transitions, and voice part labels. After synchronizing the videos, mastering the audio track, and adding special effects, he rendered and exported the video from *FinalCut Pro*.

Publishing and promoting the product. After the video was finished, Wright uploaded it to YouTube. During Wright's earlier years, he wrote in the description box to tell his viewers a little bit about the song, including its arranger and a story about why he chose to perform it. However, Wright found the process to be time consuming and tedious.

And then I have to write the description, which I don't enjoy because I hate writing. . . . I don't have the time or the want to go through and write a whole long description.

Ultimately, he felt writing in the description box was often in vain.

I found that through the years, nobody reads the description, because everybody asks me questions that I've listed the answers in the video description. To me, that means that nobody actually reads it.

After he published the video, Wright responded to comments, answered questions, and interacted with audiences via the YouTube comment feature as time allowed. Wright's interactions with his audience are discussed in greater detail later in this chapter.

Creating one-person virtual vocal ensembles required Wright to be director, performer, editor, and producer. Wright had to make musical decisions a choral director would have to make when working with an ensemble: selecting repertoire, choosing tempi, and interpreting phrases. As a performer, he had to sing across his voice range from bass to soprano. He had to apply all the skills one exhibits while in choir: breath control, vocal resonance, and emotional portrayal. Editing skills included sound mixing, audio and visual effects, panel layout, and synchronizing takes. Production required Wright to be distributer, advertiser, and publicist. The skills Wright developed through experimenting with mediation were both wide and deep. As Wright informally learned about how to improve his musical, technical, and production skills, he began to move from novice to pro-am, exhibiting qualities of both amateur video creator and professional online musician.

Evolving as a Virtual Ensemble Creator

Even though Wright's routine for creating virtual vocal ensemble videos solidified, the finished product of his virtual barbershop quartet and virtual choir videos looked different in his later performances than in his initial songs. In this section, a brief description of Wright's life beyond YouTube is provided to establish a context for understanding Wright as a college musician and experienced video creator. Then, two vignettes of videos published a year and a half after <u>Sleep (V11)</u> demonstrate how Wright evolved after three years of practice.

Becoming a College Musician

In the fall of 2011, Wright began to attend Hofstra University in Hempstead, New York. He left a small high school on Long Island, New York to attend college with over 10,000 students. When Wright began college, he majored in applied voice and joined two college choruses:

One is the Hofstra University chorale, an audition ensemble. It's the largest auditioned ensemble we have on campus. It's roughly about 80-90 people. There's a larger choir we have that's not auditioned and open to anybody, but to be in chorale you have to be either a music major or a music minor. And then I'm part of the Hofstra chamber choir, which is a smaller, select group. There's 37 or 38 of us, roughly four to five people per section: four Tenor I, four Tenor II, that type of thing. We're the top choir in the school.

Wright began studying with a voice teacher who helped him realize his voice was not the baritone his high school teachers claimed. During his first few years in college, he developed his higher range as a tenor and sang professionally at a local church as a countertenor. Later, Wright

changed his major to music education and planned to student teach the semester after our last interview.

After beginning college, Wright's aspirations to sing in a barbershop quartet came to fruition. As the founding member of two live barbershop quartets, Wright always sang tenor. His YouTube channel featured seven videos of live barbershop music. The videos of Wright's live quartet include many intonation problems. As commenters pointed out these discrepancies, Wright responded in one of two ways: he made excuses because the quartet singers were exhausted while recording, and he dismissed the rawness of the videos because they were recorded and posted on a whim. In spite of the pitch problems in these live videos, Wright's quartet did well as they were judged against other groups. Wright told me, "My quartet qualified for the international competition in May in Virginia. I think we competed on July 1, 2014 in Las Vegas." This quartet provided Wright an opportunity to pursue his dream of performing in a barbershop quartet and because of this time commitment, his output during this period declined on YouTube.

While at college, Wright found it difficult to record virtual choirs and virtual barbershop quartets as often as he did in high school. While he was extremely productive on his YouTube channel as a freshman, his productivity dipped at the beginning of his sophomore year. In November 2013, Wright was living in the dorm but told his audience that he was looking forward to moving back home so that he could have a quiet place to record. He began to record barbershop tags, which were usually under a minute in length, instead of full-length songs.

In college, Wright's hobbies and interests changed as he began a photography studio. Even though he decided to finish his degree in music education, he was pulled in a different direction.

It is more and more likely that I'm not going to use my degree, and that I won't end up in music education, because I'm trying to make a lot of money off of my photography.

Even as a side interest during Wright's college years, he continued to produce virtual barbershop videos for his audiences of over 20,000 subscribers.

Expanding Theatrics through Virtual Barbershop Quartets

The videos Wright made as a college student looked quite different than the videos he made while in high school. He had matured, refined his practices, and became a better musician. The following vignette of *Why Don't We Just Dance – One Man Quartet (V82)* gives a glimpse of a typical DanWright32 virtual barbershop quartet from Wright's college years:

A barbershop version of the country song Why Don't We Just Dance, originally recorded by Josh Turner, was the inspiration for Dan Wright's 82nd video. The performance started with four vertical panels, all featuring clones in a blue buttoned-up shirt with a white collar and black tie (see Figure 4.7). Each clone's face was illuminated with a slight shadow on the left side. While the footage for this performance was recorded in front of a white wall, a virtual background resembling an old black-and-white television framed the singers with the title of the song displayed above their heads. As the clones began singing, it became obvious that the interpretation of the song was different than the original as Wright sang the song 25 beats per minute faster than the original recording. The arrangement began with nonsense syllables like "ba-pa-ba-pa," and the vocal tracks were panned to reflect the location of the clones. The top three voices continued with their swung eighth-note background as the lead smilingly loosened

his black tie and sang, "Baby, when we just turned the TV off," a melody that spanned over an octave. A slight vibrato occurred on the long, held notes at the end of each phrase. The backup voices accentuated lyrics such as "nothing good on" and "more than enough." Each clone smirked and acted out lyrics throughout the song, emulating the choreography typical of live barbershop quartet performances. Wright moved his hands freely and naturally.

The timbre of his voice throughout the various parts was similar. In each of the voice parts, Wright had a rounded pop sound, making the voice sound bright but also full and strong. The tempo was consistent throughout the song, appropriate for this arrangement.

The performance paid tribute to the style of the original with a cappella interjections: At 1:40, the baritone and lead sang a country guitar lick in thirds, accentuating the blues note; the three lower parts expanded this idea at 1:48 in a descending guitar-emulating riff. Dan effortlessly navigated complex rhythms, harmonies, and melodies throughout the song, synchronizing the four vocal tracks to create this virtual barbershop quartet. The clones smiled, showing how Wright enjoyed the performance. His attention to lyrics revealed both physical and aural accents and inner-phrase dynamics making the song ebb and flow. The tag slowed the tempo down drastically and featured the lead singing, "Why don't we just dance?" starting on F4 descending to F2, allowing the other parts to slide to a major chord resolving the dissonance created at the beginning of the tag.

Wright published <u>Why Don't We Just Dance (V82)</u> on March 15, 2013, two years and three months after producing his first DanWright32 virtual barbershop quartet. The video had

17,863 views, 428 likes, 7 dislikes, and 150 comments. The song diverged from Wright's normal repertoire because it featured a lower tessitura melody.

It was one of those songs that I really liked. I guess my voice was feeling particularly low that day, or I was sick. I decide to record a bass melody, and that's the one I liked.

Throughout his entire YouTube channel, Wright frequently claimed he was not a bass; however, this video depicted him effortlessly singing below C3. In the comments of *Why Don't We Just*Dance (V82), he made the following remarks:

I'm actually studying to be a choir teacher now! I'm definitely a tenor who happens to have some low notes as well.

Barbershop is certainly my passion, but I also sing in choirs and I'm trained in musical theatre and in classical as a tenor and countertenor.

Wright's expansive range showed versatility; as a live singer, he enjoyed performing at the highest range male vocalists sing, yet in his virtual venue, he impressed audiences with a wide range including bass tones.

Developing Musicianship through Virtual Choirs

Wright's improvement as a virtual vocal ensemble creator was also seen in his virtual choir videos. Eric Whitacre's music persistently inspired Wright to perform online. In *A Boy and A Girl (Eric Whitacre) – One Man Choir (V83)*, produced on May 14, 2013, Wright's range extended from F2 to G5. According to the video description on YouTube, the video took about three months to complete and featured 32 voices, but this time, his virtual choir only had eight panels. The following vignette provides a glimpse of the video:

The video began with a black screen that faded to a white screen with four

columns of two clones taking up the top two-thirds of the screen. The clones in the top of each column wore a white dress shirt and black tie, and the characters on the bottom donned a black dress shirt and white tie. The lyrics appeared slowly as they sang and set the mood as they flowed like waves or expanded like ripples in a pond. Whitacre's word painting was accentuated through musical performance and visual cues as the song reminisced about a young boy and girl who were separated forever in eternal rest. One example was seen when the clones sang "a boy" followed by silence and then "and a girl." The lyrics mirrored that separation with the mediated text (see Figure 4.8).

The haunting melody of A Boy and a Girl featured important silences and cluster chords. This video contained vibrant dynamic contrast throughout the performance. Wright sang with a calm voice and relaxed demeanor, producing a mezzo piano voice, and his treble voices soared effortlessly while they accentuated dissonances at 1:15.

The song featured staggered entrances at 0:40 and 1:40 as the voices layered to create tension. The chords became more dissonant as he created a darker tone with harsher attacks and a more pointed timbre placed forward in his nasal resonators. The somber look on the clones' faces matched the mood of the song as they shook their heads from side to side and sang, "A boy and a girl saying nothing, never kissing."

Wright's vowels matched between and within voice parts. His vowel shape was vertical and his mouth relaxed as he produced a homogenous choral sound. His tone was straight, devoid of vibrato, yet each phrase had a shape. At 3:19, Dan's

breath was audible as the quartets moved to two rows, at either the top or bottom of the screen with "DanWright32" in the middle and a clickable annotation box that encouraged the viewer to subscribe to his YouTube channel. The clones hummed, and his vocal track sounded like a pipe organ as the piece concluded and the panels faded to white, leaving just his YouTube channel name on screen.

Unlike Wright's previous virtual choir videos, <u>A Boy and A Girl (V83)</u> visually presented only eight clones. Each of the visualizations represented four vocal tracks. From the description box:

What you're hearing is not quite what you're seeing. There are actually 4 voices on each split (soprano 1, soprano 2, etc.), for a total of 32 voices. I thought it was more visually appealing with only 8 of me on the screen, and that way it gave me room for the words. I think I'll be doing all of my choral multitracks like this from now on.

The visual layout of the video emulated *Eric Whitacre - A Boy and a Girl - Peter Hollens feat. Evynne Hollens*, a two-person collaborative virtual choir video with lyrics which appeared and disappeared on a white background performed by eight clones. Wright asked permission from Hollens to emulate his layout. There were notable distinctions between the two versions. Wright's one-voice layered timbre differed from the timbre of four tracks from one male voice and four tracks from a female voice. Viewers called Wright's choral timbre ghostlike or mechanical and some accused him of using pitch correction software. Others pointed out that the Hollens and Hollens' video involved more theatrical expression. However, Wright suggested that he expressed emotion with a sombre expression he deemed appropriate for classical music.

Singing to a Medium

Wright spent four years growing as a musician, technician, and performer on YouTube, and during that he performed to the medium. When Wright published his first four videos on December 26, 2010, he did not know his videos would reach millions of viewers amassing over 20,000 subscribers. As I collected data for this study, I watched an archive of videos chronicling Wright's passage from high school student to college senior. Throughout my video observations, Skype interviews, and lurking around the comments of his videos, Wright's growth became dramatically obvious to me. He improved his musical skills and developed technological skills. Initially in the interview process when I started this study, I thought I would find that Wright's YouTube channel sparked his musical growth. However, Wright suggested the contrary:

I don't think my YouTube channel really has affected my musical life. I think it's the opposite way around. I think my musical life has influenced my YouTube channel. I'm sure you've heard how my talent level as a singer has progressed as time went on. I think that's affected the quality of my videos. Whatever I feel like listening to in real life affects the songs I choose for my channel, but I don't think my channel really affects my outside life very much.

Yet, as we discussed YouTube as well as his virtual and live experiences, a symbiosis became apparent between live performance practices and mediated video creation. In the following sections, I discuss how Wright's YouTube channel evolved as a result of this interplay between his online and offline music making by attending to three areas: a) Wright's shift in rationale for creating virtual multitrack videos; b) the various identities Wright constructed; and c) the musical and technical growth he exhibited on DanWright32.

Shifting Rationale from Self to Others

The primary rationale for Wright to create virtual vocal ensemble videos was for his own enjoyment; he found the process fun. Wright saw his YouTube channel as a hobby and consequently a small part of his life. He reflected:

Since I've gotten to college, I've matured more, picked up other hobbies, and become involved in other things, YouTube is mostly something that is separate from my everyday life. It's basically become something I do when I get the time to do it. Right now, it's not a large part of my life.

When Wright had time to create videos, he hoped his audiences would notice the enjoyment he exhibited. When recording, "I tried to enjoy myself and make it sound fun. I don't know really how to do that. If I'm having fun, I hope that comes across."

The role Wright's YouTube channel played in his life changed as he got older. He described himself as a 17-year-old:

I was much more desperate for views. [long pause] I hesitate to say, I can't really think of a good term for what I want to say. My self-worth, as much as it was affected by YouTube, was heavily affected by how my videos were seen by others. That wasn't all my self-worth was affected by, but I spent a lot of time thinking about my YouTube channel and trying to get my videos out there and trying to get people to like them and share them. Whereas now, if people watch them, they watch them. That's awesome. I hope they watch them. I hope they want to enjoy them, but it's not that big a deal anymore.

Initially, Wright wanted to create virtual choir videos because he did not have a group with which he could perform his preferred music. However, as he gained popularity on YouTube,

Wright's rationale for creating virtual choir videos shifted to performing songs he believed would expand his audience.

I think more about what the younger viewers would like because from what I've noticed, the older viewers watch pretty much anything as long as it's good. The younger viewers, typically because they are a cappella fans, will watch anything a cappella. I'm really thinking less about what the audience might like and more about what the people who aren't already part of my audience might like to bring them into my current audience, because the people who are my subscribers will watch whatever I put out. As long it sounds good, they'll be fine with it for the most part.

One aspect remained true throughout all of Wright's videos: even as Wright's focus shifted from purely his own desires to his audiences', he continued to use personal enjoyment as a determining factor for creating virtual choir videos.

Establishing an Identity

Like most musical artists, Wright developed an identity which made him distinctive from his peers. As Hargreaves, Miell, and MacDonald (2002) suggest:

The idea of the self as a kind of focus, or relatively unchanging core aspect of individuals' personalities, has given way to a much less static and more dynamic view of the self as something which is constantly being reconstructed and renegotiated according to the experiences, situations and other people with whom we interact in everyday life. (p. 2)

Wright's identity developed as he created virtual vocal ensembles online and progressed as a live performer. He constructed an identity which was dynamically reconstructed throughout his years

on YouTube. In this section, I present three themes that serve as elements for reconstructing and renegotiating the music in his identity through performance, his identity in music through barbershop, and his online identity as seen on his YouTube channel.

Performance and identity. Performance was interwoven in Wright's life since childhood and was an integral part of his identity. His family encouraged him to pursue staged and recorded performances through musical theater tours, television sitcoms, commercials, and radio.

My first foray into a group of musicians was not a choir or anything like that. It was with musical theater. I did some shows growing up. I was part of two Broadway national tours in third and fifth grade. I was a principal member of the cast in both of those.

Wright achieved success as a performer much younger than most children, and these experiences provided him a wealth of musical and performance knowledge at a young age. As he grew up, he decided to focus his energies in choral singing rather than theater. "I wanted to focus on the singing aspect rather than the acting part, and so choir was the logical niche for me." Wright had a deep reverence for the human voice, and while adept at various instruments, he always came back to his love for singing.

I don't enjoy performing with instruments very much. I mean, I'll do it, but a cappella is my favorite. It's more in tune than any other type of music because Western instruments have equal temperament tuning. So it's not going to be as in tune as a cappella music. Skilled musicians can get around that and make it sound good and very in tune, but I think a cappella music is the best sounding music.

Furthermore, Wright felt he had more control over his voice than any instrument. "I mean I can play. I'm competent on some instruments. I can teach most instruments. But to actually play at a high level or perform at a high level, singing is really my only option."

As a singer, range influenced the construction of Wright's identity. As a high school student, Wright's teachers told him he should sing as a mid-range baritone, yet he consistently strove to sing higher. In *Tonight, Tonight one-man a cappella (V09)*, Wright wrote in the description box, "I tried doing the tenor part in chest voice (I usually do it in falsetto when I can) and I have to say, I'm not a huge fan, so I don't think I'll be doing that again."

Wright's exploration of his range defined part of his musical identity. Wright worked to expand his range once he got to college and began to develop his tenor and countertenor registers. "I trained as a baritone in high school, and I got to college, and my instructors were like, 'Now you are a tenor. You need to train as a tenor.' So I started training as a tenor." In a comment from *Go the Distance (V10)*, he wrote to a commenter:

I've touched at a Soprano high F5 once, but the highest I can get while staying in a comfortable range on an everyday basis would be a Tenor high A4. But anything above an A isn't in a comfortable spot for me, and I stay away if I have the option usually. In falsetto on my best day, I've got maybe a quarter-tone or a half-step above what I hit in Good Vibrations, which is a Soprano high D6.

In this comment from a video published on February 19, 2011, he suggested he tried to avoid singing A5; however, in *Good Vibrations – One Man A Cappella (V16)* produced on April 23, 2011, Wright sang A4 in the lead part and reached C6 in an obbligato.

In the two months between <u>Go the Distance (V10)</u> and <u>Good Vibrations (V16)</u>, Wright changed his view about his high register. By exploring his range on YouTube, he began to

consistently sing higher and lower. In the comments, Wright regularly fielded questions about his large vocal range, explaining how it expanded from four and a half octaves in video 10 to five octaves in video 16. However, he admitted in the comments that his five-octave range was restricted to "a good day though. On average days I max out around a high A5 in the Soprano range." Wright took a lot of pride in singing in his high register.

I think my favorite, the one I keep coming back to, is *Lucky Old Sun*. I don't really have a reason other than I always really liked the song, and it's a really great arrangement. Also, that was the first time that I ever sang a high B in chest voice. Oh no, the first one was *The Muppet Show*, but I always thought *The Muppet Show* was a fluke because I was told in high school that I wasn't a tenor by my voice teacher. I was fooling around, and I accidently sang in chest voice and found that I could keep doing it, and that put me on the road to training as a tenor.

By accidently singing a high note in chest voice in <u>Let's Get Started (MUPPET'S THEME)</u> – <u>One-Man A Cappella (V07)</u>, Wright discovered the versatility of his voice. He and another virtual multitrack video creator conversed online about the difference in sound of his tenor and bass voices:

Neel: Great work, Dan. The video editing really adds a layer of fun to your super vocals, well done. You just took your game a step up! PS: I'm still intrigued by the power of your bass, in comparison with your high tenor. Almost sounds like a different person. OK, we've been there already. ;-)

Wright: haha thanks. I try and make my bass voice have a deeper sound than my tenor voice.

Even though Wright purposely varied the timbre of his voice, his identity as a tenor overshadowed his powerful bass voice as he avidly reminded people of his tenor identity whenever they complimented his bass singing. At times, he preemptively noted in the description box like in *Lucky Old Sun – One Man Barbershop Quartet (V60)*, "Also, let's face it: I'm not a bass." Alas, Wright's identity allowed him to find pride in his ability to sing high notes.

Barbershop identity. Wright's passion for singing a cappella music played a large role in his identity as a barbershop singer. While in high school, Wright longed to be part of a barbershop quartet, and began his YouTube channel to create virtual barbershop quartet videos as a way to express that desire. Videos 39-43 featured Wright singing in the No Borders Youth Chorus, an international honors chorus featuring young male singers who gather annually to perform at Carnegie Hall in New York, NY. He encouraged other young male singers to join him the next year at "No Borders." At the chorus's gathering the subsequent year, there were fellow singers who recognized him from YouTube, but Wright recollected that they did not make a big deal about his notoriety on YouTube.

Wright discussed the hesitation members of the barbershop community had about virtual ensemble singing. "A lot of barbershoppers don't really like multitracks. They think I should go out and sing with the chorus, but I couldn't back in high school. I didn't know where to go." One viewer harassed Wright through comments on the subject.

One guy who is kind of deranged and obsessed with me; he is hell-bent on ruining my name, I guess. He's commented on every one of my videos, ripping them apart. So I deleted those comments. That guy I blocked.

The sentiment that live music is more authentic than mediated music challenges the validity of virtual music making. However, Wright did not see virtual vocal ensembles as a replacement for

live singing. Within the two weeks before and after the No Borders Youth Chorus, Wright published six virtual vocal ensemble videos.

Once at college, Wright founded two live barbershop quartets; these quartets were featured in eight of the DanWright32 videos, which were recorded in hallways, rehearsal rooms, and outdoor parks the groups frequented. On March 9, 2012, a series of three videos was posted featuring the four college barbershop singers performing tags. One viewer asked Wright if the quartet competed. Wright explained the quartet rehearsed for the first time only 45 minutes before the videos were uploaded. Wright's excitement about the formation of this live quartet prompted him to post raw video footage of mediocre audio quality with intonation discrepancies from the singers.

In June 2012, Wright's new quartet drove three hours to see Vocal Spectrum, a famous barbershop quartet, perform. Wright published two tags of his quartet singing after they spent over six hours in the car, because they were inspired by their heroes; yet the intonation of the quartet was inconsistent, and Wright commented, "I have no good excuse as to why I went flat other than it was really late and I was exhausted and being lazy about tuning." The mediated videos Wright published around that time were free of intonation discrepancies because he was able to digitally splice multiple mistakes so that no mistakes were audible. However, these videos showed how Wright wanted to feature his live quartet on his YouTube channel.

Wright also used his YouTube channel to promote and fundraise for his barbershop quartet. He uploaded a video that encouraged fans to sponsor his quartet who needed to pay for their travel expenses to compete at the National Barbershop Harmony Society Competition in Las Vegas, NV. The group created a fundraiser on *Go Fund Me*.

I had a video where I was not singing. It was me saying my quartet and I were trying to raise money to be able to afford to go to the international contest. So I put a video up saying, this is my quartet, here is a clip of us singing, and we would really appreciate your support. We have a *Go Fund Me*. So we put up crazy goals so that we could get however much money we could get from our supporters. We didn't meet that goal, but because we were on *Go Fund Me* we were able to get all that money.

Online identity. While Wright's quartet qualified for an international competition giving him notoriety, his virtual barbershop quartet videos reached a larger audience. However, Wright separated his offline life from his online endeavors.

My YouTube channel isn't a huge part of my everyday life. So like, most of my friends wouldn't really think about it that much. If you were to ask my friends about me, YouTube video person would probably not be one of the first things they'd tell you.

However, after further discussion Wright admitted, "When I was in high school, when I first started, in the first year or two when I first started gaining that popularity, YouTube was definitely a much larger part of who I was." Wright established an online persona of a well-mannered young man who loved singing a cappella music. This caricature displayed a more refined version of his offline self:

The only difference between real-life me that my friends know and online me is that I probably censor myself a bit more online because like I don't know who will see it. It's not like I'm saying terrible things in real life. I try not to curse. Like most young YouTube video makers, Wright hoped to gain notoriety by creating successful multitrack videos.

I mean fame, I think most people want to be famous, or at least well-known in their fields, and that's kind of what I was going for because there was never really any chance of me getting famous off of this. It's not a very popular form of music making, but I did always hope that I would be one of the most well-known multitrackers out there. Which I think I have succeeded in. I also want a lot of people to like my videos, which again I think I succeeded in.

Wright's millions of views show how he amassed an audience, and the tens of thousands of subscribers demonstrate Wright's success at assembling a fandom. Each of his videos on YouTube contributed to his online identity. Wright exhibited perfectionism with his virtual videos but not with his live quartet videos; the newer virtual vocal ensemble videos had impeccable timing and nearly flawless intonation while the live videos of his quartets were riddled with pitch discrepancies. This could be due to his excitement to share his live quartet with those who have been following him for years.

Regarding intonation, his older virtual ensemble videos were rough around the edges;

Let's Get Started (V07) did not contain Wright's original audio recording. Instead, canned music played over an annotation stating, "Don't bother watching this. I've re-recorded this song and there's a newer version in my videos." The imperfections contained within Wright's videos contributed to his online identity. I asked him why he decided to leave the less perfected videos online while polished videos were available.

In the past I've gotten a lot of comments with people saying, "You've inspired me to sing more," or something like that. I feel like if I just had my last five videos

up, people would think, oh I could never do that. It sounds amazing, not that I want to sound conceited, but people would think, "I could never do that." So if they see how I progressed, how I didn't sound good when I first started, that might encourage others.

Wright's identity was not consumed by either music or YouTube; his interests also included photography. As a result of Wright focusing on his side business, his online and offline interests became increasingly separated. Furthermore, music became less of a lifestyle for Wright and more of a hobby. Nevertheless, creative arts interested Wright, his preferred art had changed. As a child, he was an actor. As an adolescent, he was a singer and YouTube video creator. As an adult, he wanted to pursue his own business as a photographer. A pattern developed in Wright's artistic undertakings: a) he became interested an art form; b) he developed his skills as an artist; c) he achieved success and acclaim in that venue; and d) he moved on to another medium.

Refining Musical Skills as a Creator

Wright claimed that if he had the time, he would go back to rerecord his older songs because his capabilities as a musician and technician had advanced. In the next section, I discuss Wright's skill development as a musician. I then supplement that with his development as a technician during the time he created virtual vocal ensemble videos. The vignettes from earlier in this chapter serve as a starting point to show the distinctions between Wright's earlier and later videos. I suggest that the work he did in his life outside of the virtual world interplayed with the skills he used for his YouTube videos. Like any vocal performer, Wright displayed musicality though his YouTube video performances. Three distinct musical areas of interest emerged in the analysis of videos between December 26, 2011 and September 21, 2014: vocal technique, score interpretation, and theatrics.

Vocal technique. Wright's skills as a singer were displayed for the world to see on YouTube. His vocal technique can be broken down into three sub-categories of vocal development: vocal production, register, and intonation. Wright's vocal production developed remarkably from his first video on his YouTube channel to more recent examples. When Wright began recording videos, he had a bright timbre, a slightly nasal tone, and his vowel shapes were horizontally oriented. There were inconsistencies in the uniformity of vowel shape both between parts and the voices within each section. For example, Wright's soprano singing was more horizontally spread than his bass singing, and the four clones in the alto section varied from each other. However, in his newer videos his lips were rounded, his voice resonated, and his vowel shape was more similar both across and within sections. Wright's vocal production changed over time, moving from inconsistency between clones to uniformity. Wright worked to fix this problem. "My voice teacher and I have been speaking a lot about having to modify vowels as I go up higher in my range." As Wright's vowel shape began to become congruent within and across sections, the ensemble began to sound more cohesive.

It's really easy to blend with yourself. It doesn't require much thought. It's easier than any other ensemble to blend with because it's all you. Every voice is the same timbre. It's the exact same vowels. It's the same placement. It's all uniform across the entire ensemble, which is what you kind of want in a real ensemble, but you don't have to think about it by yourself. It's actually easier that I'm not thinking about it, but if I try thinking about it, it might be different.

Field note observations corroborate Dan's description of his vocal production, as in this observation from *And So It Goes – One Man A Cappella Billy Joel cover (V91)*:

The vowel shapes across the voice parts are together and consistent. Dan's counter-tenor range comes through this arrangement in clear, open vowels. The balance of the song is masterfully done as each voice part is sung with phrasing and emotion. In the verses, a bass soloist sings stylistically with a slight vibrato on a few notes. A soprano joins the soloist, and their duet is well balanced with an identical enunciation. When the chorus sings together in homorhythmic movement, the voices sound like a diapason chorus on the pipe organ with each voice singing with the same tone and expression.

Wright's consistent vowel shape influenced his timbre, which became more constant in his newer songs. By having a unified timbre, the vocal tracks in his virtual vocal ensembles blended better. Register affected Wright's ability to merge his vocal tracks together. As Wright learned to better control his vocal registers, his blending technique benefited. Wright's upper register became more natural as he progressed as a singer. In *I Wanna Be Like You (V07)*, Wright sang falsetto in the tenor and, to a lesser extent, the lead. This difference affected the blend of the vocal tracks, resulting in the bass overpowering the higher parts. In his more recent videos, Wright produced a more consistent sound with rounded lips, relaxed jaw, and opened mouth. Being a virtual choir singer allowed Wright to continue to use the full extent of his range. When I asked him if singing for his videos inspired him to explore his range, he responded, "Yeah probably—especially the lower end. I would never sing bass at all if it wasn't for this."

Wright's earlier videos display inconsistent intonation. As time progressed, Wright's intonation became more accurate. A trend in field note observations showed how inconsistencies of intonation became less frequent as Wright produced more videos. Viewers commented on the

impeccable intonation in his later videos and as a result, discussed how his voice sounded manipulated by pitch correction software. Wright responded in a comment for *Sleep (V11)*:

I believe that no singer should ever use autotune. It not only takes away from the impressiveness of the singing, it is an insult to all of the people who can sing without the help of computers.

This sentiment was reiterated by Wright throughout his videos. In *Let's Live It Up one-man a cappella (V13)* Wright typed in the comment section, "I've been getting a lot of accusations about autotune. I NEVER HAVE AND NEVER WILL USE AUTOTUNE. (Did the voice in your head scream while you were reading that? Because mine did.)" Wright suggested his videos sounded that way because of the distinct timbre when the same voice is layered so many times. He explained in a comment from *Heart of my Heart – One Man Barbershop Quartet (V79)*, "And I don't autotune. It sounds the way it does because all of my voices are singing pretty well in tune, using the exact same vowels, and generally thinking the same way." The accusations frustrated Wright; in *The Stars and Stripes Forever – One Man Barbershop Quartet (V85)* he vented, "Well you can't please everyone. If I sing too much in tune people say I use autotune, if I hit a wrong note here and there people say I shouldn't have sung it in the first place."

Unlike live performance, recording allows for a musician to redo any part of a song that might contain flaws. In a comment from <u>Hide and Seek – One Man A Cappella Imogen Heap</u>

<u>Cover (V34)</u>, Wright wrote, "I can stop recording whenever I mess up and redo it, which is why it's as good as it is. I just have more patience than some people when it comes to that." In instances like these, impeccable intonation reflected his technological skill, as sound editing allowed for splicing takes and scrubbing audio. However, this should not negate how Wright had to sing in tune to produce the raw sound material to splice together. Regardless, he developed the

aural skills necessary to identify intonation problems and the technological skills to adjust discrepancies.

Score interpretation. Wright's ability to produce a sound with a pleasing timbre across a variety of registers in tune led to his development as a singer. Yet skills related to choral singing were not the only type of expertise required; Wright also had to perform tasks typically assigned to the director of the choral ensemble. In the videos at the beginning of Wright's YouTube channel, he did not prepare his scores at all. He sang through songs with little thought about structure, phrasing, and interpretation. As Wright studied music education and conversed with other virtual vocal ensemble creators online, he learned techniques that helped him musically interpret his scores. This interpretation led to musical decisions that created stylistic performances as opposed to the more mechanical performances from his earlier videos. Three notable musical differences pertained to tempi, dynamics, and phrasing.

Wright's first videos were bound to a strict tempo because of the MIDI files he created. Wright did not know how to adjust tempi within a song in *Guitar Pro*. The lack of rubato, especially in his virtual barbershop quartet videos, sparked conversation and critique among Wright's audiences. Viewers suggested he should be less strict with his tempi to allow the song to be freer. In *Be Our Guest (V05)*, another prominent multitrack video creator commented:

DF: The notes sound great, the tuning is fantastic, but it lacks continuity in its overall feel. There's a few pauses here and there that throw me off from what I expect. The tag also, you probably know what I'm going to say, but for future reference, just because you can't do it the way [the famous barbershop quartet] Platinum does it, doesn't mean you change it so it sounds double time. Try

rearranging the tag! Maybe a post throw so that a different part can take a breath and slide to the post later on?

Wright sang the tags in his earlier videos at the same tempo as the body of the song. A few videos later, another multitrack video creator joined the comment conversation on *Tonight*, *Tonight* (V09):

DF: Sweet. The biggest criticism I can give to you is try to take it off the page. I know the arrangement is preset with the given rhythms, but you want it to sound like a real performance rather than all the notes being sung in succession and in tune. I can only assume you're singing this with a metronome, which is good. Staying in time is good; however, the tag needs some freedom! Even if the metronome is going, try to ignore it and hold notes longer, let them ring, and make it sound animated!

Wright: [@DF] Yeah, I was singing this with a metronome (as I do in all my videos). I'll try playing with the rhythms a bit and making it sound more free next time. Thanks!

ST: [@DF] This is a rhythmic song. It should be on a metronome. Smooth it out and maybe make it a little more artistic, but it should be in rhythm. Only thing you should play with is the last phrase before the post.

Early on, Wright took suggestions from his fellow virtual barbershop quartet creators who helped to guide him in his skill acquisition and knowledge of mediation. Wright described how the advice of his colleagues and the techniques he explored on his own led to more proficient use of his software:

I've created MIDIs for all of them since I've started. But I didn't always know how to make a non-strict tempo, how to add ritardandos or whatever. I've learned how to do it more recently so that's why in my newer videos I'm not as strict with the tempos.

As time went on, Wright began to explore rubato in his videos, especially in the tags of his virtual barbershop videos. From the observation field notes of *Chordbuster's March – One Man Quartet (V59)*:

At 1:09, Dan attempts to give the audience what they have been asking about in terms of tempo. The song is sung in a strict march tempo. Yet when he gets to the tag, he slows down drastically. The driving rhythm throughout the body of the song changes as he holds the notes of the tag as if he is deciding their values in real time. Each of the chords move together cleanly, sung in rubato. The first phrase of the tag is sung about three times as slow as the body of the song, allowing Dan to show off his lung capacity and control by holding a pedal tone for almost 30 counts.

Wright's knowledge of barbershop singing grew, and he performed tags in a style more characteristic of barbershop singing. *I Wanna Be Like You (V07)* had a consistent tempo, and the tag did not waver. Yet in *Why Don't We Just Dance (V82)*, the tag slowed down. This is similar to the two Whitacre choral pieces described earlier: *Sleep (V11)* was sung through in a strict tempo, and *A Boy and A Girl (V83)* incorporated pregnant pauses that expressively wavered from a consistent tempo.

Wright's viewers still described his singing as too robotic. Below are comments from <u>A</u>

Boy and A Girl (V83):

DG: The only thing I see wrong in your videos is the mechanic sound. In my opinion all voices are completely great, but the song itself doesn't create me a feeling inside. Do you know what I mean? I think there is a lot of brain, but not so much heart! Anyways, this is so good! Congratulations! You did a great job.

DS: I have noticed this too, with many multitrack recordings. I believe it is very hard to have any rubato or stretched phrases when multitracking because of sync problems, thus creating a robotic or mechanical rhythm.

Wright's phrasing and dynamic contrast also improved remarkably. Dynamics in the earlier songs were dynamically uniform, while the newer songs featured a wider range of dynamics. In <u>A Boy and A Girl (V83)</u>, each voice spanned from pianissimo to fortissimo, while in <u>Sleep (V11)</u> dynamics were dictated by the register in which Wright sang. Wright explained his feelings about showing emotion through dynamics and phrasing to me:

A good multitrack sounds in tune. Hopefully, doesn't sound robotic like you're singing note-note-note. I try to sing phrases, and it's tough. Multitrack singing is much tougher than singing in a real choir, because you have to anticipate the other voices in a way that is different than if you were anticipating them in a real choir situation.

On his older videos, Wright was guilty of performing the "note-note" singing he mentioned above. In <u>Sleep (V11)</u>, each chord changed precisely in time with no dynamic movement or attention to word stress. However, in <u>A Boy and A Girl (V83)</u>, Wright sang each phrase with direction, stressed key words, and made phrases ebb and flow dynamically. A similar disparity was seen in the two barbershop videos mentioned earlier. <u>I Wanna Be Like You (V07)</u> was sung consistently in terms of dynamics, tempo, and enunciation; in contrast, <u>Why</u>

Don't We Just Dance (V82) had phrases that moved, varied stresses on key words, and vocal lines that created momentum. Virtual ensemble multitrack videos helped him understand a musical score better and explore choral conventions of how to portray emotion. Additionally, by preparing the score and singing through all the parts multiple times, Wright developed an understanding of how vocal parts fit together within an ensemble. "That's probably the one thing that multitracking has really helped with. I have a better understanding of how the parts interact with each other as well as the typical voice leading for each part now."

Theatrics. As Wright became more adept at creating online virtual performances, he began to express emotions not only musically but visually. "More recently, I tried to add more emotion into my voice, because it's something I have been criticized for both on and off YouTube." In addition to adding emotion to his performances through artistic singing, Wright also attended to theatrics through visually expressing emotion:

I started to try to show more emotion physically and try to sing with more emotion as opposed to just singing the right notes at the right time. I had a lot of people telling me, "It sounds good, but there is no emotion in it." That's completely right. I never took any offense to that because it's been something I've dealt with my entire life, even outside of YouTube. I don't show emotion in performances very well, so I try to do a bit more with that.

Wright made a conscious effort to put expression into his more recent virtual barbershop quartet videos; in contrast, his virtual choir videos were still straight-faced. This distinction was purposeful as he believed choral music was more reserved than barbershop music in visual expression. "There are exceptions, but typically barbershop music lends itself more to being outgoing with movement and stuff like that." Yet, Wright also suggested that choir classes

helped him understand how to develop a style of performance. He gave credit to his choir teacher:

I think I've learned how to sing with more expression. Outside an actual choir class, I've gotten to put that into practice in my videos. I think that's something that my choir teacher should have a lot of credit for.

In early videos, Wright's facial expressions were forced and manifested in a fixed smile. The expression was not necessarily appropriate for the style of the song; Wright bared his teeth and exhibited facial stress whenever he sang in his higher register. This habit disappeared in his newer videos, and his facial expressions were natural, conveying a more appropriate appearance for the mood of his songs.

Compared to *I Wanna Be Like You (V07)*, Wright's newer comfort level was obvious. However, Wright said he struggled with emotional portrayal when he created *Why Don't We Just Dance (V82)*. In Wright's more recent virtual barbershop quartet videos, he displayed natural arm gestures and freedom of movement as he progressed through a performance. This suggested that he still struggled with the theatrical aspects of performance. In *Why Don't We Just Dance (V82)*, Wright's clones interacted, making it appear that the quartet sang synchronously with each other by playing off of each other. In contrast, Wright's virtual choir videos still did not portray much expression. Wright admitted in an interview, "A Boy and a Girl, I don't think has any emotion either." Wright's facial expressions were a bit bland in the video, yet the somber mood of the Whitacre composition did not necessarily require a lot of facial expression. His carefully inserted pauses utilized silence to evoke emotion in his viewers.

Wright modeled his video after Peter Hollens, a prominent virtual choir video creator.

Hollens and his wife use a lot of facial expression in their version, including smiles, furrowed

brows, and remorseful looks, with a lot of movement from their heads and entire body. Wright's video contrasts their style, as his characters' bodies did not move below the neck. While Wright's expression differed from Hollens and Hollens's, viewers still responded with reverence for Wright's video through comments and likes.

Experimenting with Technological Mediation

The musical elements Wright developed to create expressive performances were one side of his virtual vocal ensemble process. Expression was also accentuated through the mediated aspects of Wright's videos. While it was not clear whether Wright's involvement on YouTube actually caused him to become a better musician, the technological skills he developed can be attributed to the hours he spent experimenting on his computer and with his software. In the following section, I discuss the visual perception and sound fidelity of Wright's videos. By looking at the technological practices Wright performed, the differences between mediated and live singing can be better understood. This does not mean Wright attempted to make his videos look like live performances, as layering one's voice and cloning one's appearance are obviously not possible in a live setting. Yet he did explore the medium, genre, performance practices, and capabilities through his use of recording equipment, hardware, and software.

Visual fidelity in virtual vocal ensemble videos. The evolving sophistication of virtual choir and virtual barbershop videos from the YouTube community was emulated by Wright in his videos. He used layouts he had seen on YouTube for the placement of his clones and their panels. "Basically, I'm not one of the innovators with video layouts for multitracks. I follow what the trends are in the small group of us that do it." The layout of clones changed as time went on and reflected the common practices of other prominent virtual vocal ensemble video

creators. Wright's various layouts showed experimentation that values both realistic and mediated perceptions of a barbershop quartet (see Figure 4.9).

Wright started creating videos with four quadrants, an easy layout that left no blank space on the screen. In *Be Our Guest*, Wright recorded himself four times in front of the same live background. He then used *Final Cut Pro* to line up the background, giving the impression that the four clones were singing in the same room. If Wright moved his hands beyond the edges of the panel, his hand disappeared, leaving the background undisturbed. In *Go the Distance (V10)*, Wright began to record his videos in front of a green screen, and his use of this capability became more sophisticated with time.

Wright added a virtual background to his green screen editing in <u>Sold (The Grundy</u> <u>County Auction Incident) - One Man Barbershop Quartet (V14)</u>. Wright did not have as much time or space to create videos once he started college, and he discontinued using the green screen and returned to various arrangements for his panels. <u>Love Me and the World Is Mine – One Man Barbershop Quartet (V52)</u> featured a soloist in the center of the screen with a trio of backup singers in a column on the right side of the screen; a virtual design of flowers drawn in chalk filled the rest of the screen. In <u>On The Street Where You Live – One Man Quartet (V63)</u>, Wright sang a tribute where four clones were positioned at the corners of the screen framing a picture of his grandparents and their dog (see Figure 4.10). The style of these outliers resembled <u>MLK – One Man Quartet (V71)</u> where the quadrants took up two-thirds of the screen with the final third sporting a virtual background evoking the song's mood.

Wright's favorite layout featured four vertical panels, first seen in <u>Aladdin Medley – One</u>

<u>Man A Cappella Quartet (V72)</u>. "Somebody, I don't remember who it was, came up with the four squares side by side which is the way I do it now, usually, and I thought that was much

cooler, so I switched over to that." Like the split screen and green screen layouts, this style created an illusion that the clones were interacting with each other side by side, giving the video a real-life feel, according to Wright.

Nobody's ever going to think it's a real barbershop, but I think it makes it seem a little more realistic than it really is. It allows some interplay between the parts if you want to do anything visual, like acknowledge another part visually.

In <u>The Stars and Stripes Forever (V85)</u>, Wright began to identify the characters by including voice parts below each panel. Wright decided to do this because a fan asked him to include the information.

Somebody commented on one of my videos, "I can't always keep track of which voice is which. Would you mind putting the labels on each of the voice parts?" So I said, "Sure, I'll incorporate that into all of my future videos." And I have.

Wright's virtual choir videos sported a more homogeneous layout aesthetic than his virtual barbershop quartet videos. The virtual choir videos displayed two noteworthy developments: elements of fidelity characteristic of a choral performance and mediated features. When going to watch a live choral ensemble perform, one expects to see and hear certain features such as choral risers, a conductor facing the chorus, and stage lighting. The 32 panel layout was common in Wright's early virtual choir videos (see figure 4.11). Wright felt there was something odd about watching 32 clones all facing forward; in *Voice Dance – One Man Choir* (*V45*), Wright angled the clones as if they were facing a conductor standing in front of the group, a convention Wright pioneered.

I think angling the singers was one of the few things that I came up with on my own. I thought a real choir wouldn't all stand straight at you, so why am I doing it? I don't really know what made me think to do it.

By angling clones, Wright emulated a live ensemble giving the audience visual representations that resembled live performances. Wright's mediated performances also broke away from the live choral aesthetic. In *Country Dances – One Man A Cappella Octet (V25)*, Wright featured two quartets, each in a row with the key of each song in the medley displayed in the middle.

In Somebody That I Used To Know – One Man A Cappella – Gotye Cover (V69), Wright used video editing to create a visual aesthetic incorporating panel movement, fades, and dimming. In this performance, the arrangement was divided up for two different types of clones: featured and support. The featured singers sang the melody and accentuated lyrics with harmonic support while the support singers provide rhythmic and harmonic backing using vocalises. The featured singers resided in the top half of the screen, and the support singers took up the bottom half with an angled chorus of 16 clones. Wright's use of visual effects created an aesthetic different than any of his other videos, providing a richness of visual spectacle that drew the audience's attention (see Figure 4.12). As was characteristic of Wright's videos at the time, he dimmed the panels of stagnant clones who were simply watching the camera, waiting for their turn to sing. This dimming attempted to focus viewers' attention to the active clones. To further enhance the prominence of the soloist, the featured panels moved so that the clone singing melody occupied position 1. The featured singers slid in and out of the area, creating movement and directing attention to the prominent part.

Figure 4.12 provides a simplified view of the complexity of video editing used by Wright. The video editing served to not only draw attention to the active singers but also accentuated the musical conventions of the song. At 2:25, the music was quieter, and half the screen was dimmed because the SAT clones were silent. As the featured singers started to crescendo at 2:30, the SAT clones joined the bass clones in a subito forte entrance with a shine-in effect that resembled a fade in but also included a bright flash of light. At 3:19, the other featured panels grew to match the size of the panel at Location 1 as the song reached its climax with a full sound of 19 vocal tracks singing forte.

This complexity of video editing reflects Wright's creative involvement in the musical and technological preparation for this piece. The arrangement, which would typically be sung by a popular a cappella group performance, contained seven vocal parts: four accompaniment lines featuring nonsense syllables and three main lines highlighting lyrics. Each of the three featured vocal tracks wove back and forth between melody, harmony, and musical accents, which allowed Wright to let panels dance with each other as they shifted, dimmed, and grew. The accompaniment tracks provided a richness and depth of timbre and texture that was accentuated with visual cues such as dimming and shining. The slight movement of each singer enhanced the depth of musical texture, providing visual stimulation for the audience.

While most of Wright's videos featured stationary panels, the highly mediated <u>Somebody</u>

That I Used To Know (V69) was his first of two videos which featured moving panels. <u>A Boy and</u>

A Girl (V83) had eight forward-facing clones in two rows with lyrics appearing below. The

clones on screen embodied the voice of their respective sections. A final layout in <u>And So It Goes</u>

(V91) embodied two quartets angled toward center with voice parts labels as in his virtual barbershop quartet videos.

Wright's ability to construct virtual vocal ensembles cleanly improved as he practiced creating videos and acquired better equipment. In the comment section of *Bohemian Rhapsody* – *One Man A Capella* – *QUEEN (V89)*, Wright responded to a fan who noticed a difference in the look of his videos, "Yes! Thank you for noticing! As of 'God Only Knows' I started using professional lighting equipment that I got as a gift from my parents." The lighting quality in *God Only Knows (Beach Boys)* – *One Man Quartet (V84)* affected the visual fidelity of Wright's videos (see Figure 4.13). In the earliest videos, a large shadow covered the left half of his face due to a light shining from below his neck line to his left. Wright began to pay attention to lighting, and the shadow became less prominent as he moved the lighting to come from above. However, this cast a moderate shadow below Wright's chin and behind him on the wall. After Wright received his new lighting equipment, the shadows diminished on the wall and were minimized below his chin. The superior lighting also led to a clearer picture capture on his *iPhone6*.

The visual fidelity also increased in the area of synchronization of audio and video. Because Wright recorded his audio and video tracks separately, he lip-synced to his own recordings to capture video footage. Some of Wright's earlier videos had synchronization problems. In *I Wanna Be Like You (V07)*, Wright's mouth did not always match up to the sounds of the video, most apparent when Wright squawked like a monkey. *Sleep (V11)* had rendering complications, and as the video progressed, a delay became more pronounced. These issues disappeared in his later videos, but the challenge of adequately synchronizing video feeds was always on Wright's mind.

Video recording frustrated Wright because a two-minute barbershop song could take over an hour to capture. Each visual track needed to be performed in one take, resulting in repeated run-throughs until an adequate performance was achieved. Wright's video sometimes contained a wrong or missed word due to lip-synching problems. The approach Wright took with his one-take video tracks contrasted the process of his audio tracks, which were pieced together from various takes and constructed as one would in a recording studio.

Sound fidelity in virtual vocal ensemble videos. Wright strove for high sound fidelity, trying to make his videos sound as close to a live ensemble as possible. He wanted his videos to have "the same sound as if you're listening to real choir. You want it to be in tune. You want to be expressive, and ideally you want it to make somebody feel something." There are two areas in which Wright evolved regarding sound fidelity: panning and balance. Discussed below are the similarities and differences in the two virtual choir videos discussed earlier in this chapter; after that, a more in-depth examination of the audio track from two virtual barbershop quartet videos is provided.

The soundtrack for Wright's videos sonically featured voices from different directions in a panorama. However, <u>Sleep (V11)</u> featured the voices grouped as a section coming from various spots in the speakers, while <u>A Boy and A Girl (V83)</u> distributed vocal tracks evenly in both speakers. When listening to one speaker in the stereo panorama of <u>Sleep (V11)</u>, certain voice parts are barely audible; yet when listening in the same manner to the newer video, one can hear each of the eight voice parts with certain sections more prominent. For example, the soprano I voices were slightly louder to the left while the soprano II singers were slightly louder to the right. Furthermore, each voice in <u>Sleep (V11)</u> sounded like an individual voice that stuck out of the chorus because of the way Wright panned and balanced the vocal tracks. The mixing process was not as sophisticated as it was in the later virtual choir video. <u>A Boy and A Girl (V83)</u> featured a balance in which voices were equalized. At times when the sopranos sang at the top of their

range, they were stronger in the mix, but they did not overpower the rest of the ensemble as a section.

The incongruence of audio editing effects between older and newer videos was more evident in Wright's virtual barbershop quartet videos. By examining waveforms while listening to the audio tracks of Wright's virtual barbershop quartet videos, differences became apparent. As he became more adept at creating virtual barbershop quartet videos, Wright strove for a sonic fidelity that resembled a live barbershop performance. Wright's more recent virtual videos featured a panorama that corresponded to the clones' positions on the screen. Each voice sounded acoustically near the others in the mix. If someone were to listen through only one stereo speaker, each voice would be heard, yet some would sound more distant. This was not the case in *I Wanna Be Like You (VO7)*. If the same mono speaker were listened to, some parts would be nearly absent. The extreme panning in Wright's earlier videos made the clones sound far apart in the sonic panorama. The four vertical panel layout allowed the video to correspond to a visual fidelity characteristic of a live barbershop quartet while the stereo panorama allowed for a higher sound fidelity.

Wright's ability to balance the vocal tracks improved drastically as he practiced making videos. In the two virtual barbershop quartet videos, the balance of vocal tracks differed radically. In *I Wanna Be Like You (V07)*, vocal tracks amplified at random times stuck out of the audio mix. The disparity between each voice jarred me at times and interrupted the flow of the performance. In *Why Don't We Just Dance (V82)*, the lead voice received support from the other three vocal tracks at a well-balanced, appropriate amplitude. Wright's progression as a video and sound technician evolved as he practiced making virtual vocal ensemble videos. His older videos had an amateur sound and video quality limited by equipment, skill level, and experience.

However, as he progressed, his videos looked and sounded increasingly more mastered. This professional-amateur (pro-am) quality common among YouTube video creators is discussed in chapter two.

Developing a Virtual Community

As a virtual vocal ensemble creator, Wright amassed a following of viewers and commenters. This virtual community formed as Wright posted video performances on YouTube, establishing an online performance venue. By using YouTube as a venue to perform virtual vocal ensembles, Wright amassed an online audience community that interacted with him via private messages and text comments, yielding feedback, debate, and conversation among a global Internet community. In the following section, I present the ways Wright gathered a following and sought financial support from his audiences. After that, I discuss how comments allowed Wright to interact with his viewers. I conclude the section by discussing his views on collaborating with other musicians online.

Gathering a Following

As Wright and his virtual ensemble videos gained popularity, his audience began to interact with each other, and a fandom formed. As Baym (2007, 2012) suggested, a fandom is "a collective of people organized socially around their shared appreciation of a pop culture object" (section 2, para. 1). Wright's fandom developed on YouTube and through spreadable media, a phenomenon where media is not restricted to one platform, expanding across various sites through user sharing on the Internet (Jenkins et al., 2013).

A variety of virtual entry points to Wright's videos appeared. The YouTube website had conventions that pointed viewers to Wright's videos; these included related and recommended videos, video searches, playlists, and subscriptions. The related and recommended videos on

YouTube were determined by how potentially engaging the content would be for viewers. The Official YouTube Partners and Creators Blog discussed how these recommendations were determined by an algorithm that takes the viewer's engagement with other YouTube videos into consideration. As discussed by Thibeault (2014), algorithms on YouTube have changed how content creators orient themselves on social media sites. The titles, tags, and description Wright used to identify his videos affected how people came across his creations.

The video search function brought viewers to Wright's YouTube videos, and they found his videos by searching performance practices, titles of songs, and even recording equipment. Searches on YouTube yield video suggestions and playlists which appear in the results. A playlist is a group of videos put together by a YouTube user or as a result of a YouTube algorithm of thematic content. Viewers created playlists that included Wright's videos, and YouTube users found his videos by watching those playlists. If viewers decided they wanted notifications whenever Wright created a video, they could subscribe to his YouTube channel.

Besides gateways on YouTube, other avenues were prominent in comments. Wright's fandom expanded beyond YouTube, and conversations moved across social media platforms into Facebook, Twitter, and Tumblr. Wright discussed with me how the interface on YouTube was not conducive to private messages. Since the platform merged with Google+, Wright had not been keeping up with his private messages. On the other hand, Wright actively interacted with his fans on Facebook.

YouTube is a bit harder to keep track of messages because I get a lot more comments. But if you private message me on Facebook, or comment on my Facebook fan page, I'll respond. It might not be right away, but I'll respond to everything.

Wright offered me a digital folder containing screen captures of comments from fans that were particularly touching to him.

I got one comment that said, "The world is a better place with Dan Wright singing and harmonizing." That's awesome! There's one, "Hey Dan, thanks for all the hard work you've put into your awesome videos. I listen to them over and over again. I went to music school too, but I dropped out. But now I'm inspired to do something with music again because of your videos." Like, that's awesome.

The messages in the folder were from YouTube, Facebook, and Twitter. The authors of these messages were viewers, fellow YouTube singers, professional performers, and originators of the songs he had covered. The folder contained stories of how his music comforted, inspired, and encouraged his viewers.

Wright's YouTube videos were not just relegated to social media. Wright's videos were even featured on television. Wright shared with me the story of his first big break:

The first time I started to feel successful was in the video *I Wanna Be Like You*. It was actually shown on a local news station in Texas which is not, I mean I'm from New York, and that's very far away, and overnight most of my videos up to that point had a couple hundred views, like less than 1000, and overnight the video got 30,000 views. So that kind of blew me away. I was really excited about that.

Wright's audience expanded overnight; not only did he receive thousands of views, but he also had people begin to share his videos outside social media networks. Educators and students shared his videos with each other. The following comments show how his videos were used as examples in classrooms:

V10: I also first heard this in my choir class and I was amazed when my teacher said that it wasn't Auto-Tuned. You're awesome and I look forward to all your future videos.

V11: How ironic that my chorus teacher came across this video looking for good recordings so we could sing this song for one of our school concerts. He had some good points to make.

Wright's videos spanned live, online, and commercial platforms which provided YouTube viewers many gateways or entry points from which to discover his videos.

Building a Financial Support System

Wright's videos were shared in educational settings, as evidenced in the number of comments by educators and student viewers describing how they found or shared Wright's videos at school. Wright connected his affinity to teach and his entrepreneurial instincts by creating learning tracks and selling them on his website *Wrighttracks.com*. These purchasable mp3s from his website made the songs he performed more accessible to others. Each set contained three mixes with various vocal tracks absent or altered to facilitate learning. In addition to the songs he already performed, Wright also created custom learning tracks for people who wanted help with learning or teaching songs that were not performed on his YouTube channel. The creation of learning tracks affected his ability to create videos as Wrighttracks required him to spend time on other projects.

The December holiday is the most popular season every year, because everybody is about to have their holiday shows. So everybody's ordering the spring music now. Right now, I'm working on 5 tracks, and that's part of the reason why I

haven't really released much lately. Because I'm doing learning tracks and stuff like that.

In addition to Wrighttracks, Wright gathered income through the YouTube partner program. By signing up for the partner program, a video creator could give permission for YouTube to place advertisements before or during video play. If a viewer clicked on one of the ads, Wright received a small amount of money he could collect from the YouTube partner program. Wright also included links in his videos and YouTube channel that directed his audiences to *PayPal*. Viewers could donate to Wright for his hard work on YouTube. Wright described how he used the website:

I had a link that said "support me," and it was a link to PayPal. That wasn't something I really advertised, but it was there for anybody who wanted to use it. At one point I had a video up that was just a link to *PayPal* telling people I was planning on making a CD. This would bring me the money to pay for all the various costs of making a CD. I tried to crowd-fund it, and it worked. They got me enough money, but I didn't have enough time to make the CD. So I emailed everybody back saying, "Sorry, it's not gonna happen. Here's your money back." Similar to PayPal, Wright also created a *Patreon* account:

Patreon is a site that people can pledge money to you. So, say someone pledged \$5. Every time I release a new video, that person will give me \$5. When you put your credit card information in, nothing is charged until I release a new video. You can put a cap on it in case you don't want to spend more than \$10 a month. If I release three videos in one month, you only spend \$10. So it's a good way for

people to show their support and a great way for me to make some money which, as a college student, I really need.

The Patreon website allowed Wright's viewers to become patrons who funded his musical endeavors on YouTube. On Wright's Patreon website, he wrote:

I create a cappella multitrack videos. I will be using any funding I receive to pay for copyright fees, sheet music, and to upgrade my recording equipment. Any and all support you can give is greatly appreciated!

I am going to do my best to release one video a month, although I may be able to do two. A typical video takes about 20 - 25 hours to make, and, as you can imagine, there are various fees involved making these videos I produce (arranger fees, copyright fees, distribution fees, etc.)

Wright offered his patrons rewards on Patreon. These included interactions with Wright such as thank you notes, follows on Twitter, conversations on Facebook, custom happy birthday videos, sets of learning tracks, or opportunities to choose his next multitrack video.

By commoditizing interactions, Wright hoped to entice viewers to support him financially. He also monetized the audio tracks of his videos on *BandCamp.com*, allowing audiences to download the finished audio tracks of his videos.

You can download it, and it's either name your own price, where you can download for free if you want, or with the exception of some videos where I put in minimum price, pay a dollar. And that's usually on the more popular videos.

Like *Hide and Seek*, you have to pay a dollar.

The dollar minimum helped Wright pay for copyright costs in addition to giving him spending money. When people asked Wright where they could download his videos, he referred them to

his BandCamp account so that he could have a record of how many people downloaded his tracks.

Interacting through Comments

There are three features built into the YouTube interface that allow for the interaction of creators and viewers. Viewers can leave non-descriptive feedback by liking or disliking a video or comment by clicking a thumbs-up or thumbs-down icon. More descriptive responses are also possible through text comments and video responses. As I observed Wright's YouTube channel, I found no video responses; however, text comments on Wright's videos prompted a diversity of interactions discussed below.

A broad view of the interactive data is presented in Table 4.1. DanWright32 featured 57 one-person quartets, 15 one-person virtual choirs, five mediated collaborations, and 19 live recordings. In Table 4.1, the interactive viewer statistics and central tendencies are shown of all of Wright's videos, his one-person vocal ensemble videos, and the rest of the videos on his channel. These distinctions show how Wright's one-person videos received more attention than the other videos on his channel.

An average DanWright32 video might have the following interactive statistics: 11 dislikes, 544 likes, 131 comments, and 35,936 views. The average one-person video might have 13 dislikes, 713 likes, 170 comments, and 46,872 views, while the average non-one-person video might have 2 dislikes, 36 likes, 16 comments, and 3,128 views. These numbers should be interpreted with caution because the statistics for all of Wright's videos and his one-person videos have high standard deviations and large positive skewnesses. The presence of outliers affected the central tendencies because a few of Wright's videos received an extremely high amount of attention while others got nearly none. The likability for all of Wright's videos

showed approximately a 1:51 ratio of dislikes to likes, while Wright's one-person videos had a likability ratio of around 1:53, and the other videos had a likability ration of 1:17. The findings of these statistics point to a positive environment that was created on DanWright32, which was confirmed as I observed and analyzed the comment section.

The comment section on YouTube allowed for a text-based conversation to develop below each of Wright's videos. The videos in the DanWright32 channel had a total of 12,594 comments with a mean of 131 with a standard deviation of 463, a median of 47 comments per video, and a mode of eight comments per video.

To better understand the types of interactions taking place in the comments of Wright's videos, I downloaded the 4,161 comments on Wright's most commented video, *V34. Hide and Seek*, and conducted three-part analyses of the data: a depiction analysis, which looked at how the comment portrayed the video creator and performer; an interaction analysis, which examined the type of communication that took place; and a content analysis, which inspected the topic of each comment. These descriptive statistics provide a snapshot for the type of community developed on Wright's channel. Below I discuss the three-pronged coding schema by describing the prominent codes that emerged, analyzing the frequencies of the codes, and providing examples of statements, questions, and interactions germane to the DanWright32 YouTube community.

Depictions of Dan Wright. Comments were posted by both Wright and viewers.

Comments by Wright were marked as such, and the viewer comments were coded to determine whether they portrayed Wright in a positive, negative, or neutral way. Since each comment could have multiple segments, a single comment might depict Wright in both a positive and negative light. I concluded that a positive virtual atmosphere surrounded the DanWright32 YouTube

channel as seen in the depicted statistics for *Hide and Seek* (see Table 4.2). The data included 2,828 (68.86%) positive only, 76 (1.85%) negative only, and 88 (2.14%) positive and negative comments from viewers. Wright posted 371 (9.03%) comments. The remaining 744 (18.12%) comments did not fall into any of the above categories and were marked as neutral.

Approximately one out of every 10 comments was made by Wright, giving him prominence on his video's page. The positive depictions of Wright often included praise, congratulations, and amazement. The following examples were coded as positive depictions of Wright:

I am speechless. This is amazing! I've always loved this song (:

I'm addicted to this video. I watch it at least twice a day. I feel like if I stopped, I would go through withdrawal and die. Is that a bad thing?

On the contrary, other comments portrayed Wright negatively. Musical and technological criticism, accusations of using pitch correction, and general distaste for Wright or his song choice were often the subject of such comments:

Is it just me or does he slow down too much at the "whatcha say" part?

This version would be bad ass if he had put in dynamics and not used Auto-Tune.

I have no respect for Auto-Tuned A cappella.

Noise. Hate this song.

Nearly as many comments contained both negative and positive depictions as did only negative depictions. The commenters' tones, whether supportive or adversarial, had no bearing on the coding of the comment. For example:

The only reason I can understand the lyrics at all is because I have listened to the song so much. I know how difficult it is. The only minor flaw I noticed was some

lines like, "The dust began to fall," tended to bleed together. And lines such as, "Spin me round again," are hard to make out. The *d* in round. Ok, enough with the negative. I really like the way you use your voice in doing the chord changes. I have an eargasm every time. I subscribed to see more. Hope my musical banter helps.

This commenter gave a positive depiction of Wright through supporting comments and offered feedback on how to make his next performance better. The viewer also let Wright know he enjoyed the performance and subscribed to DanWright32. The negative depiction comes from pointing out Wright's flaws. In contrast, other viewers who were not as supportive admitted they were impressed by Wright's performance:

He's hitting all the notes, but he showed almost no emotion in his voice. This is a very emotional song. He sounds bored. Very impressive vocal range though!

While this is a very good cover, it is NOT better than the original. Well, I suppose everyone has their own opinion, but...he has a robotic type quality to his voice, while Imogen Heap does not. It is things like that you need to pick up.

These comments illustrate how some of Wright's viewers were apprehensive about his performance, yet they decided to commend his hard work and skills.

Wright's performance was not the only thing under critique. The following comment challenges Wright's and other artists' willingness to take criticism:

He did a great job, but I'm going to go ahead and say I've noticed musicians seem to be extremely sensitive to anything negative said about what they do. It goes as far as I've seen people in lessons who get told how to improve, and they then mope and shit-talk the teacher the first chance they get.

This comment contained statements that depicted Wright in both a positive and negative light by saying he did a great job but criticizing his unwillingness to graciously accept critique.

Interactions through comments. Depictions of the video creator provided only the first lens of examination as I explored the community that developed on the *Hide and Seek* video page. In Table 4.3, I identified eight ways commenters interacted with others: evaluation, topic, extension, inquiry, support, gratitude, recommendation and requests, and flame. Each of these codes will be defined in turn below.

Evaluation emerged as the most prominent code and included statements or opinions that evaluated or assessed Wright or his performance. Over half of the data contained evaluation including 2,062 (50.21%) comments comprised of constructive criticism of both the positive and negative aspects of the video. Topic appeared 1,746 (42.51%) times and included statements, questions, or opinions pertaining to the song, the artist, the performance, or the video. While topical comments were restricted to the video at hand, extension comments were statements, questions, or opinions that initiated or maintained dialogue not directly related to the artist, video, or performance. Extension appeared in 777 (18.92%) of the comments and also included any statements about the song's original artist, Imogen Heap. Questions and answers were coded as Inquiry and were found in 635 (15.46%) denoting a give-and-take relationship between Wright and his viewers. Inquiries were double-coded with either topic or extension.

The final four interaction codes each consisted of fewer than 10% of the total comments. Support were statements that either affirmed or confirmed a previous statement, opinion, or person. Gratitude featured a statement that expressed appreciation, gratitude, or thanks. As discussed in Thelwall et al. (2012), the comment section of a music video on YouTube is often positive and supportive. The support and gratitude categories suggest that commenters interacted with each other in a positive manner. *Requests and recommendations* included suggestions that forwarded Dan's progress as a virtual choir creator as well as suggestions or advice to do something. Furthermore, the presence of recommendations and requests showed that viewers hope to gain knowledge and resources from the YouTube community present on Wright's page. *Flames* were overly negative and focused on attacking a person, idea, or performance. While flames were posted, the overly negative comments consisted of only 3.26% of the total data.

Exploring the content of comments. While the depiction analysis allowed for a general overview of how Wright was being perceived, and the interactive comment analysis began to portray the type of exchanges being performed, an even clearer picture of the community emerged through analyzing the content of the texts published. I coded the comments using 20 categories consisting of 18 codes and two nested sub-codes. These codes were then grouped into five larger categories: *musical*, *mediation*, *media*, *social*, and *opinion* (see Table 4.4). Each of the categories, codes, and sub-codes are described below to illuminate the content and the language used by the commenters.

Musical codes. Wright and his audience discussed the musical content of <u>Hide and Seek</u> and the musical ability of its creator. Musical content was present in 895 (21.79%) of the comments. The musical codes and their frequencies (percentage in parenthesis) were as follows: musicianship, 410 (9.98%); comparison, 258 (6.28%); arrangement, 214 (5.21%); collaboration, 46 (1.12%); and lyrics, 46 (1.12%). Musicianship comments had to do with musical abilities, interpretation, and decisions made by Wright in his video. This included comments specifically about musical elements such as dynamics, intonation, tempi, diction, and range. General praise and flames concerning the performance such as "good singing" or "your voice is horrible" were

not included. The following comments exemplify both the positive and negative feedback about musicianship given to Wright by his viewers:

I like everything about this video, the pitch, the dynamics, and the amount of skill it probably took to make this video. Congratulations man, keep up the good work. This is really impressive, but at the same time I would like to offer the polite criticism that your over-pronunciation of consonants is distracting and too apparent—it takes away from your skill.

Perfect chords, but if you were to work on anything, try to make a darker sound (with more "proper" vowel shapes), but other than that this made me cry.

The comments made by these viewers offered both general and specific feedback pertaining to the musicianship of Wright's performance. Because one-person virtual choir singing requires an expansive range, Wright's audiences often commented on how high or low he could sing.

Viewers asked questions, shared their amazement, or even expressed their disbelief:

I watch this once a week. Beautiful voice man. How did you achieve the wide range? Hard work or was it a gift?

THIS SO AMAZING. OH MY GOD, WHAT A RANGE! AND BEAUTIFUL CHORDS TOO. YOU SIR DESERVE ALL THE AWARDS.

There is no way your singing those lows a cappella... Prove it!

The sub-code of *range* showed up in 291 (7.09%) comments and was more apparent in musicianship than in any other aspect.

Viewers discussed Wright's content by comparing it to other arrangements, performances, or videos. Viewers deliberated about how Wright's rendition of *Hide and Seek* stacked up against the original by Imogen Heap. The comment, "I've now been through about 50

covers of this song on YouTube, and nothing compares to your version!" suggested that there are a plethora of covers by various YouTube artists. Any comments comparing Wright's video to these other versions were thusly coded as *comparison*. Comparisons also took the form of simile and hyperbole as viewers often likened Wright's multitracking to a choir, angels, or ghosts.

The three less common musical codes were *arrangement*, *collaboration*, and *lyrics*.

Comments about the *arrangement* had to do with sheet music, the number of vocal parts, and the arranger. *Collaboration* encompassed all statements in which viewers wanted to make music with Wright live or through mediation such as mixing, re-mixing, or editing his videos. Finally, *lyrics* pertained to the words of the song, discussion about their meaning, and the way Wright sang them.

Mediation Codes. While the musical codes addressed Wright's performance, the mediation codes attended to the technological characteristics and performance practices used in one-person virtual choir singing. The 719 (17.51%) comments in the *mediation* category included the following: *multiplicity*, 309 (7.52%); *sound editing*, 268 (6.53%); *time and effort*, 125 (3.04%); *visual editing*, 99 (2.41%); and *recording*, 65 (1.58%).

The most common mediation code was *multiplicity* which addressed comments about the clones of Wright on the screen and the vocal tracks in the audio. Many of Wright's viewers found it fascinating to watch 32 versions of one man sing in a choral ensemble. Comments joking about twins and clones were prevalent, as in the following: a) "Are these all the same faces?" b) "Are you brothers?" and c) "I just hope you know you have 31 identical bros." Questions about the inner workings of a one-person virtual choir were also asked. Synchronization piqued the curiosity for Wright's viewers. One viewer asked, "How in the blazes did you manage to keep in sync with yourself...32 TIMES OVER...WITHOUT

HEADPHONES?!" As discussed earlier in this chapter, Wright lip-synched to himself while recording the visual footage for his videos, and he used to lie about his process to his fans. To one viewer of *Hide and Seek*, he responded:

Yes, I recorded audio and video and the same time. The only video I've lip synced in was my cover of Ben Folds' *You Don't Know Me*. No, there were no cuts, every track was a single take (except for 1. I got frustrated near the end of one of them and cut it together).

Recording video and audio at the same time requires a virtual choir singer to perform at a high caliber in one take. However, Wright did not create his videos in that manner. He would first record the audio and then the video. Commenters offered their opinion on the difficulty of synchronization on both audio and visual recording:

Trust me, getting everything in sync on something like this is impossible on the recording aspect. Perfect starting and ending consonants are the worst with this stuff. I've done a lot of four part stuff on my own, and that is irritating enough.

This would be very difficult, and I've got it hand it to you, man.

I don't think people understand how much work this took. I do editing, and to do something on point like this is difficult, not to mention to SING it all himself..... I tip my hat to you bro.

As shown by the above comments, both musicians and sound technicians registered their opinions to help others realize the complexity of the performance practices in virtual choirs.

Multiplicity also included comments about a visual anomaly that occurred due to the 32-box layout. Commenters likened the visual layout of Wright's video to a magic eye artwork.

Viewers described how they crossed their eyes and watched the video to achieve the effect.

Below are some comments that described processes at length:

About halfway through, the heads started going all 3D, like they seemed to be heads floating on the bodies, because the heads were the only things moving and the bodies all stayed in the same positions. It was trippy.

I crossed my eyes to get the 3D effect; then forgot I'd done so and crossed them further so it looked like fifty or sixty 3D heads. Then I partially uncrossed my eyes and thought I was watching the video normally. But when it ended up that my eyes were still crossed so I looked away and was confused until I refocused. Also when you do the 3D trick my vision acted like a camera with autofocus that had trouble finding the focal point. The eye and brain are weird man.

The 3D trick became a game among Wright's viewers, amassing him repeated views as visitors repeatedly watched the video and encouraged others to join them in their 3D exploration.

Sound editing referred to statements and questions about the creation of Wright's audio soundtrack for his video. Commonly, these comments focused on audio adjustment including equalization, panning, amplification, and compression. *Pitch* correction was sub-coded in sound editing and included comments about vocoders and pitch correction software. Imogen Heap recorded the original song using a vocoder to mediate harmonies. One viewer extended the conversation to give the readers a lesson about the technology:

The vocoder dramatically reduces the amount of information needed to store speech, from a complete recording to a series of numbers. To recreate speech, the vocoder simply reverses the process, creating the fundamental frequency in an oscillator, then passing it through a stage that filters the frequency content based

on the originally recorded series of numbers. So if you record something out of tune, a vocoder will sound like shit. Therefore you still need to know how to sing.

I own one trust me.

A prominent debate compared the vocoder used by Imogen Heap to autotune pitch. This debate addressed the validity of technology in singing, whether Wright used pitch correction software, and the sound differences of a natural voice versus a mediated voice.

Initially, I had not included *time and effort* as a code because it was not prevalent in the initial coding process. However, after further consideration, I noted it appeared often enough to include. Comments in this code included questions about how much time it took Wright to create the video or acknowledgments of the amount of effort Wright put into making the video. *Visual editing* comments had to do with visual effects, the layout, and the visual editing style of the video. It is probable that there were so few comments about visual editing because Wright's one-person virtual choir layout for *Hide and Seek* was static. The only exception was one illuminated box toward the end of the song that featured a soloist. *Recording* included content about recording equipment and the recording process. Most of these comments were questions from curious viewers who hope to emulate Wright's style.

Media codes. The *media* category contained comments that were about YouTube and other social media websites and consisted of 374 (9.11%) comments. This category's most common code was *stats*, which pertained to 299 (7.28%) comments. Comments about YouTube statistics included video sharing, recommended videos, subscriptions, likes, dislikes, annotations, repeated views, and view count. Viewers commented about how they subscribed to his YouTube channel after watching the video. A common compliment was joking about the repeated views an audience member accumulated. Viewers would say that the number of views was depicting

only their view because they watched the video so many times. Additionally, viewers commented on the number of likes and dislikes, often suggesting that the dislike function malfunctioned or that those who disliked the video made a mistake. Also included were comments about sharing Wright's YouTube videos, either through coming across the video through a shared link or sharing the link with others. The final code in the media category was *business*, which represented 80 (1.95%) of the comments, encompassing comments about the monetary concerns of Wright's YouTube channel and his other websites, including but not limited to sponsorship, patronage, downloading and purchasing recordings, competition, and contests.

Social codes. The social category, including cultural references and personal information, consisted of 746 (18.16%) comments. These social-oriented comments extended the conversation to discuss popular icons on one hand and the artist and his viewers on the other. The *culture* statements and questions were found in 453 (11.03%) of the comments, and had to do with both popular and historical cultural icons. In addition, comments about Wright's clothing were included. In the description box, Wright wrote, "The solo at the end is the top left box, the one wearing a bowtie. My soloists wear bowties now, bowties are cool." This sparked much conversation as Wright's bowtie led viewers to ask him about its significance. The following comment is representative of the excitement the bowtie created:

I'm pleasantly surprised by your comment about the soloist in the description and to learn that you're a Whovian as well! Keep up the great work, Dan, I love all of your videos! You have serious talent!

Wright's tribute to the bowtie connected him to the cultural icon from *Doctor Who*, a popular British television series known for the bowtie-wearing lead character of the same name. Other

cultural discussion centered on Imogen Heap and to a lesser extent Jason Derulo, who sampled the ending of Heap's original. The conversation often centered around one of two ideas: comparisons between Wright and the professional musicians or the copyright issues between *Hide and Seek* by Heap, *Watcha Say* by Derulo, and Wright's cover.

Personal information appeared in 377 (9.18%) comments. These comments included stories, information, emotions, or opinions about the personal lives of the posters. Commenters shared their experiences or aspirations on the website in hopes that Wright would read and respond. In addition, commenters described what Wright's performance meant to them.

Audience members sought out information about Wright including information about where he lived, where he went to school, his age, and other aspects of his personal life. Of Wright's 371 comments, 36 (9.70%) contained personal information, more than any other category (see Figure 4.14). This suggests the conversations that evolved on this video's page allowed viewers to learn about the artist.

Opinion codes. Opinion populated most of the comments consisting of 2639 (64.26%) comments from the following codes: praise, 2462 (59.95%); flames, 123 (3.04%); and adoration, 92 (2.24%). Praise included congratulations one might hear said to a performer at a live venue. These comments pertained directly to the video or performance of the song, also including emoticons. In the extreme, fans told Wright that they were in love with him or wanted to marry him; I assigned these comments the adoration code. In one response, Wright jested, "Haha this is like the fifth marriage proposal I've gotten in the past week." Adoration comments differed from praise comments because they focused on emotional feelings about Wright himself and not his performance or videos. Statements that contained inflammatory statements were coded as flame,

which often had a blatant disregard for another's opinion and included vulgarity and emoticons of a negative nature; however, profanities were not always meant to be negative.

There were 307 (7.48%) comments that were uncategorizable. These included ambiguous comments that could have been taken positively or negatively, short responses to questions that were not able to be traced, and gratitude.

Dealing with adversarial comments. As the data suggests, a general feel of positivity and support appeared in the comments on Wright's YouTube channel. However, that does not mean controversy or adversarial exchanges did not appear, as seen in the 164 (3.99%) comments depicting Wright negatively and the flames consisting of approximately 3% of comments. In this section, I attend to the comments that depicted Wright in a negative manner, discuss Wright's own adversarial comments, and present a complex exchange that resolved itself through discussion.

Negative depictions of the channel owner. The ordinal position of interaction codes for both positive and negative comments was similar. The majority of both positive and negative depiction comments were evaluative. The second most common code for both depictions was topical. This suggests that regardless of depiction, evaluation and discussion about the performance were more common than other interaction types (see Figure 4.15). Topical comments were also close to evenly distributed across all four depiction categories.

While the relationship of interaction informed by depiction codes provides insight on the type of interactions taking place, it was more telling to look at the difference in depiction type according to the content of the comment. Figure 4.16 illustrates the relationship of content informed by depiction. Praise, apparent in 84.29% of the positive comments, was also found in 45.12% of the negative comments. More than half of the comments with a negative depiction

code included both positive and negative feedback. The negative depictions were nearly five times more prominent than positive in sound editing, four times as prominent in musicianship and recording, three times more prominent in multiplicity, and twice as prominent in visual editing. Specific critique was given in these areas, and because critique was the result of commenters pointing out the flaws of Wright's performance, these comments depicted Wright negatively. While the typical commenter may type general praise, that viewer was also less likely to offer specific feedback. On the other hand, the typical critique likely included specific feedback on the flaws they saw in Wright's performance.

Wright's adversarial retorts. Wright's response to critique was often adversarial. Even though one of favorite parts of creating YouTube videos was receiving positive feedback from his viewers, Wright's response to criticism was much more complex. He expressed to me his apprehensions about taking suggestions from critics online:

If it's a good idea, I'm going to take it to heart. When established virtual ensemble creators comment, I pay more attention, because they know what they're doing, and they've been doing it longer, and they have a bigger fan base than I do. If they think I'm doing something wrong, I should probably listen. However, if a popular virtual barbershop quartet creator were to comment on my video and say, "Hey, you're straining your voice," I wouldn't take that to heart, because I know I'm not. But if he said, "Hey, what if you tried your layout this way," I might try it for a video and see what the response was. Any normal person, it's basically the same thing. If somebody says a suggestion that I don't think is a good suggestion, I am not going to pay attention to it. But if I think it's

a good suggestion, I'll think about it, maybe incorporate it into a future video, and see what the response is.

Wright vetted his critics by looking at their YouTube pages. Wright retorted to a commenter, "You know what, I'll take your criticism to heart as soon as you post something actually worth watching." Other viewers supported Wright and responded with their own pointed retorts to the critic:

You're completely incorrect. This was done incredibly well, especially with a piece as difficult as this one. The harmonies are tight, his diction is crisp, his vowels are open and clean, his use of varied dynamics is effective, and his range is admirable. That bass line is so concise. Also, keep in mind, the task of recording a choral piece by yourself is quite the challenge, a feat I'm sure that you're less than capable of. In short... "up yours."

Kill yourself. Really you have no ear for brilliant construction of music.

Umm that was rude! He does not suck! This is a really good cover! Stop being a hater! Thanks.

Dude, don't feed the trolls. You're awesome. You are now awesome enough to receive unqualified criticism.

Don't feed the trolls dude... Sounded great! Well done!

The last comment sparked Wright to respond with humor in the following comment:

Sometimes I get so stressed in real life I just need to take it out on someone, so instead of being rude to someone I care about I take it out on annoying people on the Internet. Thank you by the way!

The support Wright received from his viewers was obvious. The extremity of the statements above show how defensive Wright's dedicated fans got when agitated by a *troll*. I asked Wright about how he felt when his fans would stick up for him after a particularly inflammatory comment. He responded:

I think that's cool. I like that. Especially because it allows me to not get involved with an argument that I don't necessarily want to be part of. But at the same time, it shows that person that not everybody necessarily agrees with them, which I think is an important thing for everybody to realize about everything.

This suggested Wright appreciates multiple opinions and approaches to critique. However, he read between the lines of the comments to decide what to apply and what to ignore:

It depends how it's phrased. If it's negative and they're attacking me, even if it has merit, I respond and say, "You had a good idea, but I'm not inclined to listen to you because of the way you phrased it." If they phrase it nicely, "I like your videos. I wish you would've done this or could you do this next time," and it's a good idea, I'll say, "Oh yeah. Perfect. I'll do it next time."

Wright often asked his critics for clarification if their comment was confusing. Especially during his earlier years on YouTube, Wright sought feedback and information to get ideas on how he could improve as a virtual vocal ensemble creator. By engaging his viewers in conversation, Wright was often able to explain his rationale for musical and technological choices as well as quell conflict.

Conflict resolution through dialogue. Debate and conflict came up in the comments of Wright's videos. The following provides an example of the complexity of content these

conversations contained, the number of people involved, and both the resolution and irresolution of conflict:

DS: Hi, I kind of hope you read this comment! I love this song. I am an entirely heterosexual male, and I enjoy rap music and hip hop. Typical guy stuff. But this song by Imogen Heap really makes me happy. I feel as if I can calm down in any situation when I hear this track. Your video's representation is amazing! I'd go so far to say even better than the original! Anyways if people reading this could give me a thumbs up so he can see how much I enjoy his talent!

Wright: Thank you! I don't understand what your sexuality has to do with anything, but I appreciate the fact that you like my music:)

DS: Well, commonly I am referred to as gay for listening to this genre or style of music. But thank you for replying to my comment!! I really appreciate it. Keep doing what you are doing.

Wright: Well that's stupid. The genre of music you listen to doesn't have anything to do with the people you're attracted to. Listening to a cappella music just shows that you have good taste.

FtG: You are a cancer on humanity, just though you should know.

DS: ????? HOW.

FtG: Not really, I just hated your comment.

DS: oh. I'm sorry. I just really enjoy this guy's rendition of a song I already liked. Everyone is entitled to their own opinion. So yeah I'm not going to be like "Hey fuck you man blah blah" I apologize if I make you upset.

Ftg: No, I like it a lot too. Just thought it was really weird that you felt you had to announce your sexuality as if that has anything to do with whether or not you like the song. Best way to fight negative gender stereotypes is to ignore them and do your own thing like it's the most normal thing in the world.

DS: I know I agree. I put that in there because I have often heard this type of music to be referred to as gay. So I didn't want to be associated as such. That's all.

BA: Accusing other people of being gay because of their musical tastes seems like a strong indicator of confusion about one's own sexual identity. Nothing to do with you, and there's no shame in liking good music, which this absolutely is. DS: Thank you! I agree one hundred percent. It doesn't faze me when people call me gay for this, but it is a common misconception. If only people would stop hitting up the mainstream music for a while and listen to music and/or covers like this one.

JS: Hip hop and rap isn't typical guy stuff. It's typical teenager shit. Unless you're black. Either way it's trash. This song is good.

Wright: First, I want to thank you for watching. I'm glad you like my video. Now, that comment was pretty racist. I know plenty of people who like rap and aren't teenagers or black. I personally do not, but to each their own.

JS: I'm not racist. It's just that modern rap/hip hop disgraces music as an art form. I find it offensive that people think they know music when all they listen to is modern rap (not even old school stuff when it was actually real). Nothing against any one race or person, I just hate rap.

Wright: I realize that you are not a racist person. Just letting you know that rap isn't limited to the African American community and teenagers. I also agree that it isn't actually music. But good rap does take a little skill with rhythm and a lot of skill with writing. Even if you don't like something, you should try and see the good in it.

DS: That's A) Racist; B) Stereotypical; and C) Incorrect. Rap is a genre of music generally listened to by 8 to 38 year olds. I enjoy it for the beats and lyrics. Others have different ideals for it. So your statement I find to be inept of gratitude.

JS: I don't give a shit what you think. Modern Rap is garbage, delete my comments if you want.

DS: Yeah lol. Dude I hate this modern rap shit. I mean OLD rap like 80's shit. I never said I like modern rap. Your right it's just swag money weed bullshit.

32456: "Isn't actually music?" Dan really?

JS: Well, my target the whole time was "Modern Rap." Old rap was real, now it's sell-out trash. Sorry for not making my point more apparent.

Wright: Yes. I'm not saying that performing rap doesn't take talent, but that talent has nothing to do with musical talent. There are no instrument (except fake, synthesized ones). There's no melody. You can't analyze rap using music theory. Even pop music, simple as it is, has at least a I-V-I progression in the chorus and usually more in the bridge. I could go on, but I think you get my point.

32456: Lmfao ok lmao

The conversation ended as abruptly as started. In this interaction, DS made a comment that struck Wright as prejudiced. Wright addressed the issue, and DS opened up by talking about

how his peers discriminated against him because of the type of music to which he listened. Wright further encouraged and supported DS. It was probable that FtG saw DS's first comment and responded with a flame. These two similarly resolved their conflict by trying to better understand each other. JS would be considered a troll by Internet standards, because his remarks were adversarial, and he displayed a blatant disregard for others' opinions. Wright attempted to difuse the situation by thanking him for watching the video, but Wright also called him out on the comment he perceived as racist. The two continued their debate as DS returned for one more comment, and 32456 entered the conversation. JS dismissed the situation as he challenged Wright to delete his comments. The conversation ended as Wright further explained his views, appeasing 32456.

Conversations of this nature happened across Wright's channel, which is why some of his videos had such high numbers of comments. The content of these dialogues are complex and challenge the thoughts and opinions of those involved. This exchange captured the nature of how Wright conversed with his viewers. He shared his strong beliefs in a diplomatic manner, explaining to others so they could better understand him. Wright often censored himself online, performing a persona for his audiences as a refined, respectable young singer. While Wright occasionally gave an adversarial comment to a critic or troll, he more often responded like he did in the above conversation with inquiry, discussion, and elaboration.

Working with Collaborators

When I first conceived this study, I expected to find a large number of collaborative virtual choirs I could observe; however, finding collaborative virtual choirs proved challenging. While Wright was one of my first choices to study because he had produced 32 voiced virtual choirs, it was not until after I watched all of his videos when I realized that he had very little

collaboration on his YouTube channel. Viewers asked Wright to sing with their choir; however, the requests were from choristers, not directors.

I feel most of those comments are not people with the power to actually make that happen. I feel like it's mostly people in those specific groups that are like, "Hey, it would be cool if you were to come sing with us." And it would be cool. But the fact of the matter is that I can't fly to California on a whim to sing with your group. If somebody were to ever come to me and said, "Here's a plane ticket.

While the idea held merit for Wright, it was not a feasible option. Mediated collaboration was a more attainable endeavor. However, as I discussed collaborative virtual choirs and virtual

barbershop quartets with Wright, he discussed his distaste for those types of endeavors.

Come sing with my group," I'd do it. I don't have the money to do that.

Virtual vocal ensemble creation was an individualized activity that allowed Wright to express his creativity on his own terms. By adding others to the mix, the process got more complicated:

Collaborations are more work for me, because my process is different than most other people's. I don't really like to collaborate. The only times I said yes was when somebody with a substantially bigger audience asked me to do it. So I did it to get my name out there, but really unless there's some kind of benefit like that, I don't collaborate because it substantially more work. I don't work well on a schedule with these types of things. There's a lot of stopping and starting when I do my own multitrack videos. There's a lot of me singing for a day and not liking how my voice sounds, so I come back to it in a month. So when I have somebody waiting for me on this track, that doesn't work well for me.

The collaboration <u>With A Little Help From My Friends — International Collab with</u>

<u>Trudbol! (V51)</u> took Wright and his partner five months to complete, compared to the few days it usually took him to create a one-person virtual barbershop quartet. I asked Wright why the process took so long:

It was probably scheduling issues in terms of, he would send me a part and it would be a bad time for me to record and I would have to wait. I didn't have enough time. But then I'd send it, and he didn't have enough time. Then making sure that our parts fit together and stuff like that.

There were five mediated collaborations Wright produced on his YouTube channel, each time adapting his process to fit his collaborator's process of creating virtual barbershop quartet videos. By participating in these collaborations, regardless of how much work they were, Wright entrenched himself into a community of virtual singers who shared audiences, created music together, and interacted socially on YouTube.

Reflection and Discussion

This report completes the case study of the DanWright32 YouTube channel from the date of its first video upload, December 26, 2010, until August 26, 2014. More data were generated than I originally anticipated. The 96 videos Wright created displayed a timeline of his growth. Since he started creating videos as an adolescent, his skills were less refined than they were at the time I began my study. This growth allowed me to frame the third portion of this chapter in which I discussed Wright's evolution as a virtual ensemble creator.

Refining and Exercising Skills

Wright's process for creating virtual choirs and virtual barbershop quartets was, in his mind, distinct from his peers. Wright perceived his use of MIDI tracks as novel. However, the

MIDI tracks he created served as an anchor which allowed him to synchronize his audio and visual feeds easily. Anchors manifest in different forms, such as singing along to previous recordings, watching a conducting video, or creating an accompaniment track with which to sing along. Wright's videos serve as a timeline that reflects the trends of the virtual choir and virtual barbershop quartet creators' layouts.

It was no surprise that Wright found himself drawn to virtual vocal ensemble singing because of his reverence for the human voice and a cappella music which motivated him to pay close attention to synchronization, intonation, and blend. This love probably drew Wright to virtual vocal ensemble creation in the first place. His tendency toward perfectionism became more apparent as he developed the skills and knowledge necessary to carry out the tasks.

An Unintentional Online Identity

Although during our first interview Wright claimed that YouTube was a very small part of his identity, as we dug deeper, he began to reveal how his videos had shaped for him an online identity. It is possible that there were intervening factors that led to his own adversity to his online identity. While in high school, Wright's music director did not support him as a singer in school the way Wright wanted to be supported. Wright felt he was not one of his director's favorites, thus making him feel like an outsider in his own choir. When Wright experienced success on YouTube, measured in views and subscriptions, his director acknowledged that he saw Wright's videos. However, this acknowledgment did not seem sincere as Wright recollected it. Similarly, Wright discussed the conflict between the barbershop community and multitrack videos. There are people in the barbershop community that disapprove of virtual barbershop quartet videos, and Wright felt conflicted between two areas that inform what Hargreaves et al. (2002) would call Wright's identity in music. He loved being a live performer. He enjoyed

creating virtual music. However, the two identities or activities rarely intersected, and at times were even contrary.

The way Wright's fans knew him online was informed by his videos and his text comments. All of his videos were musical videos with no speaking. Wright's lack of speaking could have contributed to his perception that he had no online identity. He described to me how he asked his fans for money when his barbershop quartet qualified for an international competition. However, he has since deleted the video, meaning that no video on his YouTube channel included his speaking voice.

A Spreadable Media Venue

Wright's YouTube channel created for him an online venue and gathered an audience in which spreadable media abounded. For Wright, YouTube became a performance venue which allowed him a space to publish multitrack virtual vocal ensemble videos. The website also directed viewers to his performances where they could comment, subscribe, (dis)like, and share his video. Wright did have an online identity informed by the videos he published, the personae he performed online, and the interactions he had with viewers. By performing on YouTube, Wright forged a different relationship with his audience than popular touring artists have with their fans. Wright's virtual vocal ensemble career existed exclusively on the YouTube venue. If a viewer were to watch Wright perform live, Wright would either be singing with three other barbershop singers or a chorus. These live performances would be temporal, bound by time and space. Because he created videos on YouTube, his performances exist on the Internet; these digital artifacts allow his audience to view his performances at their leisure, when they want, where they want, and as many times as they want. Wright's videos, regardless of how old they were, continued to allow his fandom to grow through viewers accessing his videos through a

variety of gateways including related and recommended videos, YouTube searches, and social media websites. Wright also interacted with these viewers through comments.

Comments on YouTube allowed for a complex and varied community to emerge. Fans were compelled to write short congratulatory remarks. However, longer comments were almost always multifaceted and contained statements that spanned a number of content areas, allowing for conversations, debates, and statements of opinion. Wright actively participated in the community set up in the comments, especially in the earlier years. However, like everything regarding his YouTube channel, the time he devoted to the venue became increasingly limited as he got older and pursued other hobbies. He became less active not only in comments, but also in producing videos because his interests and career had been taking up more of his time.

While Wright amassed an online audience with over 3 million views and 20,000 subscribers, the process of creating virtual vocal ensemble videos proved to be a solitary endeavor. After developing a ritualistic process for creating virtual ensemble videos, Wright found it difficult to change his process when collaborators wanted to work with him. While the one-person virtual vocal ensemble process consumed large amounts of time, Wright found that collaborative virtual ensembles were even more complicated.

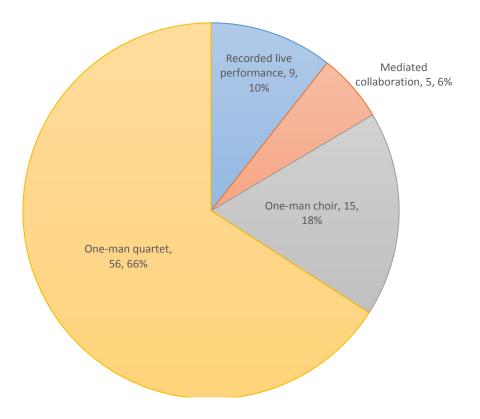
Marking the Trends

Wright produced a large number of videos that followed the trends of contemporaries. By studying DanWright32 as a case, I was given insight on the trends of a specific group of virtual multitrack singers. Wright's group of fellow creators consisted of virtual barbershop quartet singers. Therefore, it is important to look at other virtual choir creators who are performing other genres of music. Regardless, Wright's YouTube channel provided examples of various layouts and practices of virtual choir videos. The number of virtual choir videos Wright produced made

him stand out compared to his fellow virtual barbershop quartet creators. Wright provided insight into the diversity of performance styles of virtual singing ensembles that few others have exhibited.

Figures and Tables for Chapter Four

Figure 4.1. Frequencies and percentages of performance styles on DanWright32



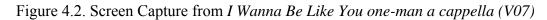




Figure 4.3. Screen Capture from Go the Distance one-man a cappella (V10)

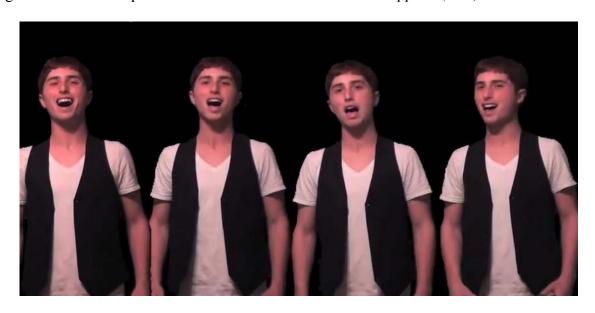


Figure 4.4. Screen capture of Sleep -- One Man Virtual Choir (V11)



Figure 4.5. Score Markings for a Virtual Barbershop Quartet Video



Figure 4.6. Phrase Markings for a Virtual Barbershop Quartet Video

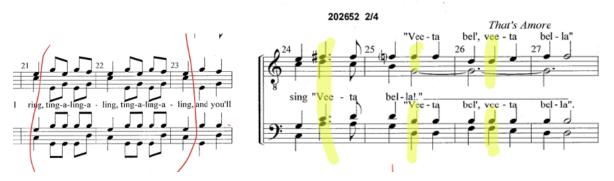


Figure 4.7. Screenshot of V82. Why Don't We Just Dance -- One Man Quartet



Figure 4.8. Screenshot from A Boy and A Girl (Eric Whitacre) -- One Man Choir (V83)

a boy and a girl

2

Figure 4.9. Layout of Virtual Barbershop Quartet Videos

V01 – Four quadrants with added soloist



The Christmas Song multitrack

V10 – Green Screen



Go the Distance one-man a cappella

V52 - Outlier



Love Me and the World Is Mine -- One Man

V72 – Vertical panels



Aladdin Medley -- One Man A Cappella Quartet

V05 – Split screen in live space



Be Our Guest multitrack

V14 – Virtual background with green screen



Sold (The Grundy County Auction Incident) - One Ma...

V71 – Quadrants with virtual accent



MLK -- One Man Quartet

V85 – Vertical panels with voice parts



The Stars and Stripes Forever -- One Man

Figure 4.10. Thumbnail of Tribute Video



On The Street Where You Live -- One Man Quartet

Figure 4.11. Layout of virtual choir videos on DanWright32

V24 - 32-panel layout



Swingle Song One-Man Jazz Choir

V45 – Angled singers



Voice Dance -- One Man Choir

V83 – Representative Chorus



A Boy and A Girl (Eric Whitacre) -- One Man Choi.

V25 – Informative texts



Country Dances -- One Man A Cappella Octet

V69 – Chorus outlier



Somebody That I Used To Know -- One Man A

V91 – Angled double quartet



And So It Goes -- One Man A Cappella Billy Joel covel.

Figure 4.12. Visual Layout and Special Effects for V69. Somebody That I Used To Know

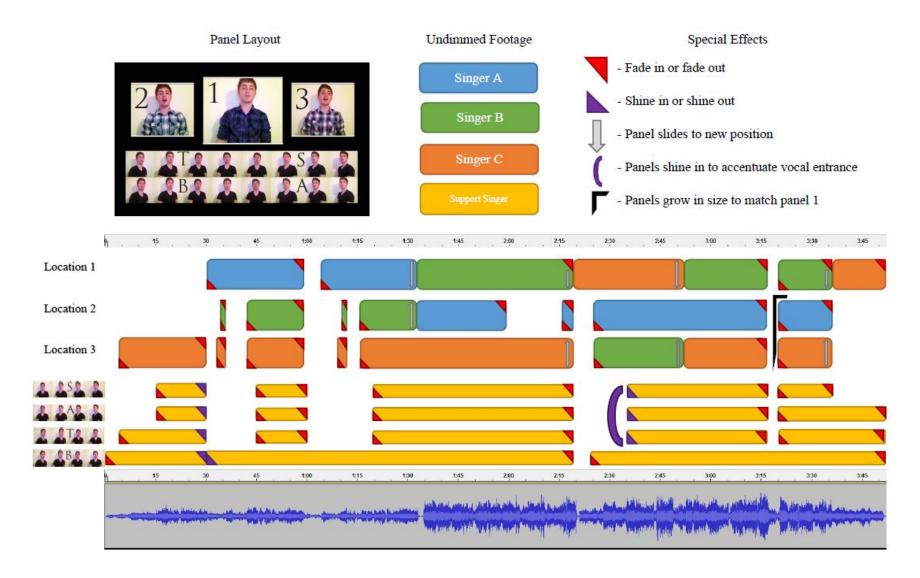


Figure 4.13. Shadows Cast by Lighting Equipment

I Wanna Be Like You (V07)



God Only Knows (V84)



Table 4.1

Interactive Viewer Statistics for DanWright32 Videos

	All DanWright32 Videos (N=96)				One-Person Vocal Ensemble Videos (N=72)				All Other DanWright32 Videos (N=24)			
	Dis- likes	Likes	Com- ments	Views	Dis- likes	Likes	Com- ments	Views	Dis- likes	Likes	Com- ments	Views
Frequency	1,015	52,235	12,594	3,449,815	963	51,361	12,208	3,374,750	52	874	386	75,065
Mean	11	544	131	35,936	13	713	170	46,872	2	36	16	3,128
Median	4	111	47	6,897	5	172	63	10,492	1.5	30	10.5	2,502
Mode	1	111	19	No mode	2	111	27	No mode	1	15	8	No mode
Min	0	4	0	691	0	14	2	2,460	0	4	0	691
Max	292	24,445	4,461	1,342,531	292	24,445	4,461	1,342,531	7	135	65	7,043
SD	32	2521	463	140,772	36	2,796	530	161,336	2	32	16	1,799
Skew	7.79	9.20	8.81	8.66	6.81	8.00	7.70	7.55	1.40	1.42	1.82	0.60

Table 4.2

Depiction Codes for Comments on Hide and Seek (34)

Code	Frequency	Percent of all comments	Percent of viewers only comments
Positive	2,828	68.86%	75.70%
Neutral	744	18.12%	19.91%
Comments generated by			
Dan	371	9.03%	_
Positive and Negative	88	2.14%	2.36%
Negative	76	1.85%	2.03%

Note: The code Dan refers to comments generated by Dan; the total number of usable comments was N = 4,107. The total number of usable comments from viewers was N = 3,736;

Table 4.3

Interaction Codes for comments on Hide and Seek (34)

Code	Frequency	Percent of total	
Evaluation	2062	50.21%	
Topic	1746	42.51%	
Extension	777	18.92%	
Inquiry	635	15.46%	
Support	303	7.38%	
Gratitude	260	6.33%	
Recommend & Request	165	4.02%	
Flame	134	3.26%	

Note. The total number of usable comments was N = 4,107; percentages do not add up to 100% because a comment could contain multiple codes.

Table 4.4

Interaction Categories and Codes for Comments on V34. Hide and Seek

Category or Code	Frequency	Percent of Total	
Category			
Opinion	2639	64.26%	
Musical	895	21.79%	
Social	746	18.16%	
Mediation	719	17.51%	
Media	374	9.11%	
Uncategorizable	307	7.48%	
Code			
Praise°	2462	59.95%	
Culture [◊]	453	11.03%	
Musicianship*	410	9.98%	
Personal	377	9.18%	
Multiplicity*	309	7.52%	
Uncategorizable	307	7.48%	
Stats•	299	7.28%	
Sound Editing*	268	6.53%	
Comparison*	258	6.28%	
Arrangement*	214	5.21%	
Time*	125	3.04%	
Flame°	123	2.99%	
Visual editing*	99	2.41%	
Adoration°	92	2.24%	
Business•	80	1.95%	
Recording*	65	1.58%	
Collaboration*	46	1.12%	
Lyrics*	46	1.12%	

Note. The total number of usable comments was N = 4,107; percentages do not add up to 100% because a comment could contain multiple categories or codes. *Musical codes; *Mediation codes; *Media codes; *Social codes; *Opinion codes

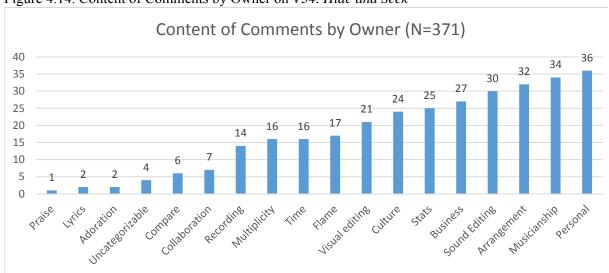
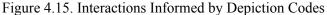
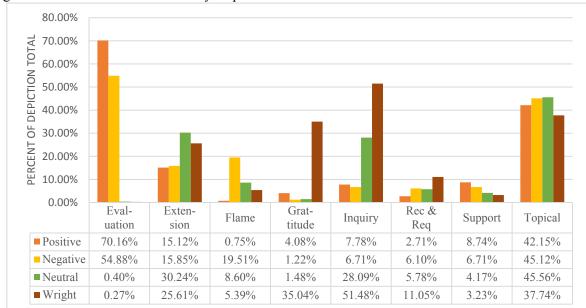


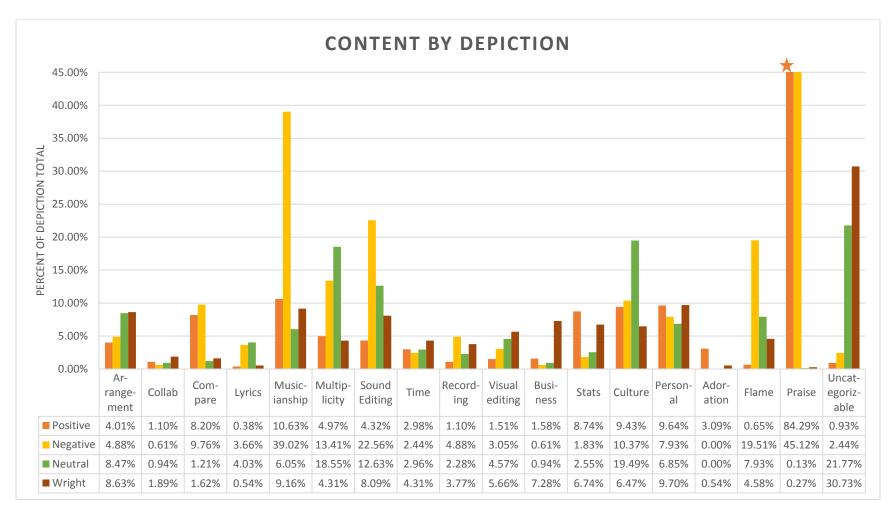
Figure 4.14. Content of Comments by Owner on V34. Hide and Seek





Note. Rec & Req stands for recommendations and requests.

Figure 4.16. Content Informed by Depiction Codes



Note: The praise-positive bar is nearly twice as tall, but is dwarfed to show detail.

CHAPTER 5

"I'M JUST A GUY MAKING MUSIC IN MY BASEMENT"

THE CASE OF DAVID FRANCOIS AND THE DAVID WESLEY YOUTUBE CHANNEL

I try to be as real as possible, and I am just a guy making music in my basement. I know that there are people that do what I do better than I do, but I like to keep it real, and it keeps me grounded. (David François, personal communication, December 9, 2014)

Introduction

Many YouTube musicians consider creating videos as a recreational activity that provides an outlet for making music. David François considered himself an untrained amateur singer who produced music videos on YouTube. This modesty, however, was accompanied by a rich musical and technological background from his school, recreational, and church activities. These experiences contributed to his ability to create high-quality multitrack music videos on YouTube. He suggested:

I'm a jack-of-all trades. What I do is only possible because of the culmination of all the musical experiences I've had throughout my whole life. Everything from the video editing to the audio editing, knowing about music, copyright law, and even computer programming. All those are things I've done in real life that have come together magically so that I can do videos all by myself without having to have someone else do things for me. I think, because I spent my whole life spreading myself very thin, never really getting good at one particular thing before I get bored and move onto the next thing. I don't know what you call it—wanderlust, I guess; not so much a physical traveling wanderlust, but more of an

intellectual wanderlust that obviously includes music. That's reflected in my YouTube channel—it's taken a lifetime of experiences to do what I do.

François's YouTube channel, *David Wesley*, featured various multitrack video performances including 14 one-take solos, 13 virtual bands, 13 a cappella multitracks, and 21 blog or archive videos (see Figure 5.1 for the percentages of the total number of videos on David Wesley). These 61 videos earned him a total of 2,568,322 views, 32,657 likes, 368 dislikes, 4,346 comments, and over 20,000 subscribers in the four years prior to this study⁶.

This chapter presents the data and interpretations relevant to the case of David François and his YouTube channel, David Wesley. The chapter begins with a description of how François acquired the skills to which he referred in the previous quote to become an experienced multitrack video creator. His various styles of music and mediated performance practices on YouTube are then discussed with particular attention to what François called *The David Wesley Treatment*. Next, data about how François's fandom grew are presented, including a social network analysis of two of his videos, how they were shared across the world, the ways he interacted with commenters, and the performances that were inspired beyond YouTube. The chapter ends with conclusions that were drawn from the case.

An Insatiable Intellectual Curiosity

In the following section, François's life predating the creation of his first YouTube video is divided into three periods: his early childhood, which tells a brief story of how François became interested in music and technology; his adolescence and young adulthood, a period when he began connecting his musical and technological interests to show off his skills to others; and

⁶ All analytics for David Wesley in Appendix D and in this chapter were gathered on November 11, 2014.

his college and young adulthood, when he shared his skills with the communities in which he lived. The technological and musical skills François developed to create multitrack videos were learned through guided tuition, informal exploration, formal training, and community practice. François's insatiable intellectual curiosity led him down these learning pathways, which often occurred simultaneously throughout his life. François spent his free time as a child and adolescent playing with music and technology. While François was guided by tutors and educators to develop musical skills, he supplemented his creative endeavors by tinkering with music and technologies on his own. A combination of both formal music classes and informal music making led François to explore music and video creation in meaningful ways both in and out of the classroom. These activities continued throughout François's adulthood, especially through his church work and YouTube channel.

Exploring Music and Technology as a Child

As early as the age of three, François would hum and whistle melodies. As a child, classical music was the music of choice for him because he heard a lot of it when he spent time with his grandfather. "We would have to take turns choosing what music to listen to while washing the dishes between myself, my brother, and sister. They would be annoyed because I would listen to classical music and they would listen to more popular genres."⁷

François started his music making exploration at a very young age.

My parents put me in piano lessons when I was four years old because I started playing a couple things by ear on their crappy little organ at home. Taking lessons was convenient because my next door neighbor was a piano teacher. I hated it. I didn't practice, and although I had the ability, I wasn't as disciplined as my sister,

⁷ Unless otherwise noted, all quotes are taken from personal interviews conducted with David François on November 19, 2014, December 3, 2014, and January 7, 2015.

who started a year and a half after me but then blew right past me in terms of levels.

François's teacher was certified by The Royal Conservatory® as a piano instructor. The Royal Conservatory is a Canadian based organization that publishes a structured piano pedagogy program for teachers to use with their students. Strict regimentation was not particularly inspiring to young François, and that led him to perceive practicing piano as a chore. François continued to take piano lessons until he was 10 years old, at which time his teacher moved away. Even though he ceased taking private lessons, François continued to play his favorite songs by ear, in addition to the music he learned during guided tuition.

While François's guided tuition on piano ceased, his curiosity drove him to play any instrument he could get his hands on. François had an active spiritual life, and the relationships he made through his church activities inspired musical exploration. For instance, at the age of 10, François fell in love with the 12-string guitar of a music leader at his family church outside his hometown of Ingersoll, ON. He explored the instrument when visiting his friend who was the son of the director. The musical and spiritual relationships Francois cultivated provided social connections, which in turn opened opportunities to perform later in life.

In addition to musical activities, he explored technology on his own. As a 10-year-old, François's curiosity was drawn to his family's computer, a Tandy 1000, which had three-voice sound capabilities. François explored this technology to listen to, arrange, and create classical music.

In the early 90s, we had a Tandy 1000 computer, and it came with a music editing program, which was completely unheard of at the time. That blew my mind. It came with some pre-loaded arrangements. The capabilities of the program were

limited due to the capabilities of the soundcard of the computer, which had only three voices. I was exposed to some techniques to arrange songs with only three voices available. Some of the examples that came with the computers were *Sonatina in D* by Muzio Clementi (François sings). That's a good song. Also there was an invention by Bach that was a really good example of counterpoint.

François analyzed the music making software and began to apply the knowledge he learned from his music lessons. "I could listen to these songs and watch the notes as they played. That really helped to cement the music theory knowledge I already had." Eventually, François started to input notes into the software program and arrange music.

After I learned a little bit from the examples that came with the computer, I went to the hymnbook that my parents had, and they usually were written in four part harmony. I wanted to program some of the songs that I liked in there. So I had to go through and turn four voices into three because that was the limitation of the software. I quickly learned which notes were expendable for a given chord at any point in the chord sequence. That forced me to think of music like an arranger.

As a young adolescent, François liked to play classical music by ear on the piano. In addition to his continued informal musical exploration at home, he learned how to play violin at the age of 12 at school.

I had actually gotten into classical music in terms of listening because of my grandfather, so I really took to the violin. I had good pitch, which was really quite a good thing to have when you're trying to play a violin with 25 other preteens in music class. The teacher would have to come around and tune everybody's

instrument, but I could tune my own by ear. Again, there was some formal training in my life, so I had a way to learn some music theory.

François's class violin provided him an opportunity to learn a new instrument, practice reading music, and play with others. The musical and technological experiences François had as a child solidified in him a passion for music and technology with arrangement as a bridge between the two, a theme that continued to appear throughout his life. However, these activities went from hobbies to something more serious in high school as he found opportunities to develop his skills.

Expanding Musical and Technological Skills as an Adolescent

When François entered ninth grade, his family moved to a new home, and his classroom musical instruction changed drastically. His new school had no string program, and music was only offered as part of a rotation that also included art and drama. Because there was no orchestra, François joined the school band, where he played auxiliary percussion for his first year in high school. In Grade 10, he began to play euphonium and also joined a Sea Cadets marching band.

Between school band and the Sea Cadets marching band, the responsibility rested on me to learn a new instrument, but I got to go to music camp on the Pacific Coast. One year I was there taking a course, and then I was back as an instructor for three years. That was a lot of fun. That was probably my most formative musical experience in terms of knowing how to play with a group of people and being disciplined in terms of practicing.

He created arrangements that were performed by his high school marching band and were rehearsed by his music class. François noted that these arrangements were simple and allowed him to experiment with instrumentation and harmony. While these arrangements were written on

paper, technological developments allowed François to begin arranging digitally. His family purchased an AST Advantage 486SX, and he installed a software program he had received from one of his mentors in the Sea Cadets. This program inspired him to create marching band arrangements, which were performed by both his high school and Sea Cadet marching bands.

François's attention to detail and sophistication of arrangement is described in the following story:

Over the course of a couple years from, the ages of 15 to 17, I started writing arrangements for the marching band that I was in. At the summer camp I had gone to in 1996, we had done a suite of songs from *Star Trek*. When we were looking for music for competition, there were compulsory styles that you had to perform: quick march, a slow march, and ten minutes of freestyle. Usually it's unified around some kind of theme, so we chose to do *Star Trek*. In our freestyle, there were some bits from the commercial arrangements we were able to get a hold of, but we needed a couple more things to fill out that ten minutes. We had [commercial] arrangements of *Star Trek the Next Generation*, the *Deep Space 9 Theme*, *Voyager*, and the original *Star Trek*. To fill in the gaps, I made a full marching band arrangement for the theme for *Star Trek IV* and *The Klingon Battle Theme* (François sings). That was the biggest arrangement that I had done to date.

François's ability to take multiple songs and arrange them into a cohesive medley demonstrated the synthesis of his explorations with instrument playing, music theory, and arrangement software. However, François's use of notation software for arranging music was not the only instance of technological exploration that laid the groundwork for future multitrack video creation.

Creating videos in high school. Adolescence was also a time when François explored video and sound editing on his own for projects in science and English. His high school projects, which he eventually archived on his YouTube channel, feature short films that he and his classmates created containing special audio and visual effects and extensive video editing. With the money François made teaching at his summer camp, he bought a video camera and an analog video capture card for his computer. These technologies allowed him to digitize video so he could edit and then export it to a VHS tape. With these technological tools, François created video projects for his high school classes. François became known in his high school for making videos for class projects. To understand how complex François's editing techniques were, the following excerpt from *Introduction to the High School Video Archive (1998-1999) (V34)* is provided to give a detailed account of François's context and experiences. Regarding the videos he created in the late 1990s:

The Internet was brand new. There was no such thing as digital video cameras. Everything was a little bit low tech. Back then it took a whole lot of work [to create a video].

I made a video for physics, and I caught the attention of some of my classmates. Students at my school had to do an English project every year on the Shakespeare play *Hamlet*. So these guys had the idea of making a fictional biography of a fake actor who was obsessed with Hamlet. They had already written scripts and had taped some fake interviews. They brought me aboard to shoot more stuff, edit, stitch everything together, and bring in music. The video was about 20 minutes long, and it took all of the power of my computer to do it. When it was all done, it

took all night to render the video so it could be exported back to VHS. We had a system crash. I had to send my computer to a different town to get fixed!

After that I made a few videos myself for school projects. I did a couple videos in English. I also made another video for physics and it was experimental. It was the first video I made by myself. My physics teacher showed it to his children, who were elementary school students, and they understood it. So it proved to be a useful instructional video.

When it was time to do my own English class video, I had to outdo the one that I already helped with. So we took the whole play of *Hamlet* and we adapted it to *Star Wars*. We called it *Hamlet Strikes Back*. It had light saber fights. It had space battles. It had the rolling credits going across the front. It had music. The paint in the light sabers fight were was created frame by frame. We couldn't actually show the whole video in class. It's about 49 minutes long. I had to use our reel-to- reel for a lot of it and then splice in the special effects shots afterwards.⁸

This lengthy excerpt speaks to the intricacy of François's high school videos. Being self-taught, François learned how to splice videos, add digital special effects, create background soundtracks, and direct films before he reached adulthood. This extraordinary desire situated him to be able to successfully create multitrack videos on YouTube years later. However, his experiences as an amateur musician, video creator, and sound engineer were only beginning.

Finding a Community for Making Music and Videos

During college, François began to explore the piano again. However, this time he did not pursue classical instruction but taught himself the music he wanted to play, which consisted of

⁸ This lengthy transcript is edited to aid in readability. Extraneous words were deleted, connection and descriptive words were adjusted, and tenses were modified to make sense in context.

adult contemporary popular music. The musical skills and theory he learned in his orchestra and bands and the technological skills he applied in his academic courses in high school were also exercised as he entered adulthood. He volunteered his time to work with a local Sea Cadet group and began to teach local children how to play brass instruments. His musical skills were kept sharp by doing transcriptions and vocal arrangements for his church worship team.

This was before the advent of the song selection system that was put out by CCLI (Christian Copyright Licensing International) called *SongSelect* that actually gives churches access to electronic lead sheets that they can transpose and print out on their own. Before CCLI—if you wanted to have a lead sheet with or without harmonizing, or try to make it so that you could put repeats in the right places and squeeze it onto two pages—copying had to be done manually. So I spent a lot of time doing that.

While in college and the time shortly after graduation, his musical explorations continued, he began teaching, and he sustained his arranging activities.

François also used his technological abilities to serve his church and its members.

François created *compact VHS* videos, which were then burned to DVD or played through

Powerpoint, that were shown during worship services to recruit, share information, and challenge the congregation's thinking. In an archive video, *Intro to Baby Theon and the Church Video Archive (V43)*, François recalls his video making at church during and shortly after college:

Video was not really something that was done in church a whole lot, but we were forward-thinking people. We put our heads together, and the first project we came up with was a compilation of short interviews with people. Some of the footage was handed to me, and some of the interviews I did myself. I put a video together

with some images, some scripture, and some music, and it was pretty well received.

François created a number of videos that included not only interviews, but also special effects and scripted interactions similar to the videos he created in high school. These videos were then shown at his church for various services and events.

Once François graduated from Wilfrid Laurier University with a degree in English

Language and Literature, he auditioned for a church worship team as a keyboardist and vocalist.

However, he was not accepted because his voice was unrefined and untrained.

I failed both the vocal and keyboard auditions. So, I was like, "Ahhhh!" I was on the audio team, so I would run soundboard for services, and this was a church that now runs four morning services while they're building a new auditorium. It had a couple thousand people. I was kind of hurt. I was only 22 years old. If I were to listen to myself back then, I'd probably say, "No."

They didn't really have a developmental approach to bring people onto the team.

They were the band, and that was it. So there was no way to grow to the level that they needed me to be. Basically they said go take lessons for a couple of years and then come back.

Instead of taking lessons, François decided to join another church and became a member of their choir and orchestra. At that church, no auditions were required, and François began to learn how to sing better. He was also given the opportunity to play synthesizer and piano in the worship band. Eventually, after his skills had developed, he was asked to direct the congregation as a worship leader, singing and playing piano backed by an orchestra. "It was nice to see that sort of developmental approach, where someone saw where I was and where I could be. There

were already the tools in place to get me there." François's church community fostered his interests and skills, allowing him to learn new musical skills and leadership techniques.

François's church experiences were a catalyst for his YouTube channel. Not only did the church provide opportunities for him to practice musical skills including singing, arranging, and playing piano, but it also provided opportunities for him to revisit his technological skills. In 2011, when François was 30 years old, he created a CD with musicians from his church. François was charged with obtaining the recording equipment, recording, and mastering the album. To help his fellow church members learn their parts, François created a practice CD.

It was difficult to get everybody together to practice, because volunteers' schedules can be difficult to coordinate. I made a *ghost* version of the CD. For each of the songs, I set up the drum beats and [other background instruments] so people could [practice on their own and then] come in, one at a time, and record. That was not a very traditional way to do it, but given how busy people were, it worked pretty well.

François enjoyed mixing and creating multitrack recordings for an audio CD. The church CD served as a catalyst that inspired him to apply what he did with multitrack recording to create videos for YouTube.

Online Performance on YouTube

When François created his church CD in 2011, his YouTube channel had already included 15 one-take unedited solo videos. The church CD served as a catalyst that launched him into the ongoing endeavor of creating multitrack virtual ensemble videos online. Approximately a year before he published the church CD, François created his YouTube channel with the name *David Wesley*. He decided to use his first and middle name because he hoped to maintain privacy

between his online world and his home life. David Wesley became an eclectic repository for François's virtual and analog video creations. In this section, the various styles of performance François published on his YouTube channel are presented. They included one-take solo performances featuring François playing piano and singing, one-man band videos, virtual a cappella ensemble videos, vlogs, and archived video projects. As François began creating videos, his style was overly simplistic, opting for one-take recordings. However, as time progressed, he used his abilities to arrange music, sing and play various instruments, master sound, and edit video to create more sophisticated videos.

Performing for the Camera

François created a YouTube account on March 14, 2007. However, he did not publish his first video until July 22, 2010. That date signified a shift of when François went from a viewer of YouTube to a video creator. His first 14 videos featured one-track live unedited recordings in which he played piano and sang. These videos had the aesthetic of a coffeehouse performance as they were recorded in a darker room and featured François sitting at his keyboard with a microphone and a music stand in front of him. The following vignettes provide a snapshot of the first two videos, *Keane - Hamburg Song (V01)* and *Coldplay - Shiver (Piano Cover) (V02)*.

François's first video begans with a simple organ sound from his Yamaha keyboard. His hair was fashioned in tight braids, and he was wearing a red hooded sweatshirt and cargo shorts. The sheet music on his stand waved as he played his song. There was a potted tree behind him which provided color against the completely dark background (see Figure 5.2).

His voice and facial expressions reflected the somber mood of the song as he sang into a Shure SM58 microphone. He performed as if he were singing to someone special. He showed subtle emotions on his face while singing, "I don't wanna be adored... I'd like to bring a little light... to make you feel loved." The organ faded as the song was driven by the piano. The melodic line required François to leap from his tenor voice to falsetto, which he did effortlessly. His singing was in tune and his phrases, for both his piano playing and singing, had a natural ebb and flow accentuated by changes in dynamics and timbre. At the bridge, he played a piano solo he arranged. The final verse closed the song as he delicately sang accompanied by confident piano playing.

François's second video, recorded the same day as his first video, looked similar to its predecessor. However, the microphone was removed from the scene. The Coldplay song, arranged by François as a piano solo, was a pop song with driving eighth notes. As François played, the sheet music on his music stand bounced from the force of his fingers on the keys. His left hand jumped from octave to octave as it supported the melody in his right hand. The dynamics swelled and diminished as François moved his whole upper body during his video performance. While there were occasional wrong notes, François's facial expression never changed from a concentrated yet relaxed demeanor. The song faded away as François used a calmer, gentler motif to end the cover performance.

François portrayed emotions as he performed on video. His freedom of movement when he played piano showed that he felt the music in his whole body. His facial expressions when he sang were somber, reverent, and sincere. While he vocal tension was visible as he grimaced and raised his chin when he performed, he was able to sing on either side of his passaggio with ease.

He often sang phrases that jumped from his tenor range to falsetto and back again. The text from the description boxes of his first videos reiterated his love for piano-driven popular music.

V01: I fell in love with this song when I first heard it a few days ago. I hope you enjoy.

V02: Probably my favourite song. Trying to cover parts for acoustic, electric and bass guitars.

As he alluded to in the description box for V02, playing piano and singing by himself limited the type of music he could perform. He played music by Kean, Coldplay, and Augustana, all pop-rock groups that were piano and voice-centric. After creating 13 one-track videos, François wanted to expand his musical repertoire to include songs with percussion. He attempted to find a drummer with whom to collaborate, but his plans fell through. So he turned to the Internet and created a *Trans-Atlantic* collaborative video with a drum set player from the United Kingdom. This was the only example of mediated collaboration on his YouTube channel and featured three panels: one with François singing, one with him playing piano, and one with a virtual friend playing drum set. Each panel was shaped by faded edges that were added in the editing process, and the video showed the straightforward recording technique of each individual video feed. While this video may seem overly simple in editing style, it whetted François's appetite for what his YouTube channel would soon become known—multitrack virtual ensembles including one-man bands and virtual a cappella ensembles.

Forming a One-Man Band

During 2011, François put most of his creative energy into producing the church CD discussed earlier. However, as he was recording and mastering the CD, he experimented with his own multitrack recordings to make sure he had a solid process balancing multitrack audio. He

turned to YouTube to publish his first one-man band, <u>Coldplay - Trouble (One-Man-Band</u> Version) (V16).

By the time I was doing *Trouble*, I was gearing up for this CD, so I was practicing with the recording process and the mixing to seeing what the results would be. I figured that I might as well share the mixes I created. It sounded half decent. So after that, the CD was done, but I had all this equipment, and I thought I should probably use it.

Most of his early one-man bands featured songs from the same artists as his one-take videos listed above; however, the arrangements were more complex than one piano and one voice. These videos included guitar, bass, percussion, and several keyboards. The keyboards filled three different roles: piano, synthesizer with pad, string, or organ sounds, and solo instruments which emulated a cello, pad, or other melodic instrument (see Table 5.1).

François's arrangements became more complex as time went on. He added more tracks and instruments with each progressive video. In *Coldplay - Trouble (One-Man-Band Version) (V16)*, François accompanied his voice with piano, guitar, and bass tracks he had recorded himself. As he made more one-man bands, he constantly tried to outdo his previous videos by adding more instruments and multiple voice tracks. The following vignette provides a snapshot of what François's first one-man band video looked and sounded like:

The video started with a piano solo, and the video footage of a piano being played by François's hands became the backdrop for the remainder of the video. When François's voice came in at 0:16, he started to play block chords on the piano. His voice was very resonant as he emphasized every word meticulously. His voice

had a nasal quality, which led his audience and even himself to liken his timbre to Kermit the Frog. At 0:40, a bass and acoustic guitar panel appeared as the instruments joined the piano in the audio mix.

The musicality of François's vocal phrases showed knowledge of popular music singing and voice control including slight intonation scoops. He had a gentle vibrato and round sound that floated across registers. While François's intonation was spot on, commenters suggested he used pitch correction software. However, the stylistic scoops and slight intonation discrepancies made it evident that there was no alteration of pitches. The acoustic guitar was not in tune with the piano, which was most apparent in the held notes at the end of phrases. The vocal panel faded at 3:20 when the singer panel disappeared as the instruments played the outro.

François's video featured a clear visual with crisp transitions, which included a half-second fade in and out as tracks and panels entered and exited the arrangement. His one-man band videos featured a dominant panel with other panels superimposed (see Figure 5.3). François's one-man band phase on YouTube served as a time for him to explore with multitracking and the software used to create visually dynamic videos.

Multitracking definitely got easier. When I first started, I was using *Roxio Videowave*, which was a \$99 program. I did *Trouble* by Coldplay and *Bad Shape* by Keen. Then I realized it was taking lot of time. It wasn't really designed to do multitrack videos. I had to do a video within a video with a little bit of embedding or layering.

I was like, "Okay. Well, it's time to move on to something else." I did a trial of the *Adobe Premier Pro*. The first video I did with that was *The Starting Line* by Keen. So that's probably the first video that I did with *Adobe Premier*. And that one was also different, because I had white borders around each of the video panes as well, which is something that I didn't do subsequently. It was actually kind of hard to do. There's probably an easier way to do it like matting some squares behind it, but the way I did it was really indirect, and it didn't really look all that great.

<u>Keane - The Starting Line (V20)</u> looked drastically different from François's first oneman band video. Each video faded in and out as was apparent in the audio mix. The arrangements François had been creating were made on a whim. He added voices and instruments he thought would enhance the overall feel of the song. In <u>The Starting Line</u>, at **2:49**, there were 9 active panels: a lead vocalist, two backup singers, a bass, an electric drum set, and four keyboards, each with a different sound.

After he bought this new software, his video editing became more sophisticated. This included various techniques like key-frame animation, which featured a moving panel. The feathered edges gave way to a crisper panel edge. His layouts for panels on the screen were also more sophisticated. These one-man bands inspired François to purchase better equipment including a new video camera. The equipment he acquired for his projects at church were good, but he wanted better.

Besides the drastic difference in video editing techniques and recording equipment, <u>The</u>

<u>Starting Line (V20)</u> was notable because it was the first video François recorded in a basement.

The background in each of François's panels featured the dark walls in the townhouse François

was renting. Basement music making became a theme in every subsequent multitrack video François produced, and that became part of his identity as a virtual ensemble creator. During one of our interviews in January 2015, he gave me a tour of his current basement studio and described how the basement had become a tradition for David Wesley:

This is my studio. I bought this house in August and before that it was a basement in a townhouse I was renting. And before that it was another basement in a townhouse I was renting. And then *Trouble* and in a couple of the earliest oneman band stuff was in an apartment that I had. So, generally it's been a basement thing.

As he took his new equipment and software to the recording studio in his basement, he created his first a cappella multitrack video.

François's later one-man band videos included three-part vocal harmony within his arrangements. He added one vocal harmony above and one below the melody line to fill out the sound of his performances. After publishing seven one-man band videos, François decided he wanted to try creating an a cappella version of *One Thing Remains (Your Love Never Fails)* (V23).

I had no plan going into it. I basically was going to record it with a microphone, the stand, and the pop filter, but my microphone clip actually broke. So, that's why I hold it in that video. It's the only one that I do it for.

The visual layout for the video had seven panels, each featuring a clone singing or beat boxing. Like his previous one-man band videos, the video had a melody singer and two harmony singers, one higher and two lower. Another clone entered half way through the song and sang an echo, creating a call-and-response, typical of a lot of gospel music. François also included two

other panels that added a beat boxing track. One beatboxer performed as the bass drum, and the other was a snare drum.

Developing The David Wesley Treatment

After <u>One Thing Remains (V23)</u>, François created another one-man band and then a set of three virtual a cappella ensemble videos. While creating these videos, François solidified a style of creating virtual a cappella ensembles he called the *David Wesley Treatment*. The David Wesley Treatment describes a template, process, or series of practices François used for creating videos which included selecting, arranging, recording, sound editing, visual editing, and producing the song. This process evolved from experimentation as François taught himself more sophisticated ways to record and edit video. In the following paragraphs, a description of this process provides insight on how François made his virtual a cappella ensemble videos.

Selecting a song. François's virtual a cappella ensemble videos started the same way. François heard songs he was not able to get out of his head.

When I am deciding what song to do next, I think of songs that are really speaking to me right now; what songs are stuck in my head? When I get a song that has been stuck in my head for months, I think, "Gotta do something with this!"

François had an affinity for songs with meaningful lyrics as well as songs he thought would be fun to arrange. The following quote describes how François decided to produce one of his first virtual a cappella ensembles:

It was totally a whim that I created that video. Absolutely a whim. I had heard this song in church the week before. I had never heard the song before that. It got stuck in my head, and I was like, "I gotta get this out! I gotta do something with

it!" I didn't particularly enjoy the way that it had been done at church. I was at a church where the music wasn't done very well, but I happened to like that song. I looked it up to get the original recording, and I tried something completely new that I thought would work.

Arranging the song. After choosing his song, François created an arrangement. In his earlier videos, arrangements were not preplanned but created spontaneously as he recorded. "The first song that I actually scored out was the <u>Amazing Grace Medley (V50)</u>, so before that it was various levels of winging it." He realized arranging songs with music notation software allowed him to create more complex performances.

Regardless of whether he had a written score or created the harmonies by ear, the resulting videos were similar, and the diverse arranging techniques François used are discussed throughout this chapter. François's typical seven-voice arrangement evolved from the processes he used to create his first four virtual vocal ensemble videos. François explained his arrangement processes leading up to *In Christ Alone (V26)*:

I realized that I needed to have that sort of background padding in addition to a melody line that would have been played by the violin. That's what makes up that background. It's basically the singing through, with smooth voice leading, the chords of the original arrangement. Plus the sort of soaring falsetto imitating the violin, and then you get the melody, of course, and the higher and lower harmonies that come in and out.

This background padding supported the trio singing lyrics and also filled out his virtual a cappella ensemble sound. These singers provided melodic and rhythmic support. Their lyrics were typically nonsense syllables, and they functioned like a guitar or piano would in a worship

band. These singers will be referred to in this case report as *support singers*. A soloist sang the melody accompanied by two backup singers. These backup singers sang the lyrics with the soloist: one sang higher, and one sang lower.

A final consideration for François when arranging music was his vocal range. François had a limited vocal range that restricted him to a few keys. Most of the songs François performed were modern congregational hymns and contemporary worship songs. The original songs were usually written with a soprano melody line. François paid attention to voice leading and kept the bass and melody from crossing.

I had to jump the song from D to Gb, which tends to be my go-to key, because I can hit a low G flat for the bass parts as a foundation. That way, my lowest melody note doesn't cross over the bass line. That's the key I go for, because I do have a limited range to work in, so I try not to go below the bass part with the melody. That does limit the songs that I can do.

Preparing for recording. Regardless of whether he created his arrangements by ear or whether he made a score, François created MIDI files to guide his recording process. In the earlier videos, this MIDI file contained the chords and a click track that kept him on pitch and in tempo. In his later videos, he used Sibelius to create a score for his melody and support singers. He continued to sing the backup parts by ear. After creating the score, he created MIDI files for each part, which were then imported into Pro Tools, a digital audio workstation.

After the MIDI files were created, François would enter the pre-recording planning phase. François sang along with the MIDI tracks to make sure the arrangement was in the right tempo and all the notes were within his range. He also created markers in his DAW so he could easily identify the verses, choruses, bridges, and interludes of his arrangement. After the DAW

was prepared with markers and correct tempi, François set up his basement studio for recording. Included in his basement studio were a backdrop hung on two backdrop stands, a tripod with a Nikon D600 video camera, and a boomstand with a Samson CL-7 condenser microphone and pop filter. François recorded both the audio and the video at the same time.

I set up my microphone that I use for the majority of the singing parts. It's called a side-address condenser microphone. So you would talk into it off to the side. I have a pop filter to prevent the p's from popping too much. I try to frame it properly in the camera so it shows just the right amount of me in each video. I hook the microphone into my audio interface, which can actually take my microphone's cable or cables from other instruments, and that's plugged into my laptop by USB.

Recording the song. Once everything was set up, François began recording. While recording, François focused on one vocal part at a time to capture an adequate take. All of his final tracks were recorded in one take. According to François, this way of creating a multitrack recording gave the song a sense of immediacy that resembled a live performance. François debated with himself on whether single-take tracks were the best way to create multitrack recordings.

I put it out as a question to my YouTube and Facebook fans and asked, "So this is how I do things. I record all my tracks in one take. Would it be worth taking away that immediacy in order to increase the technical quality of what I do?" The answer was a resounding, "No, don't change a thing." So that was kind of an encouragement.

François captured each vocal line in Pro Tools. He then added voice parts, one by one.

When I'm confident that I captured all the singing parts well, I'll take that mic off and reposition for either beatboxing which I record with an SM-58 microphone, or rearrange the camera completely to get a waist-down shot of my hand drums. I try to get consistency in the framing, so I make sure I have all my vocal stuff done first. If I don't, when I go back, I might see, "Oh, that microphone is placed differently."

The recording process was always completed on the same day because François wanted to make sure he looked the same in each video, except with a different hooded sweatshirt to distinguish each voice part. He shaved his face and head before he started recording. If he were to go a day in between takes, hair would start to grow, and he would look different from panel to panel.

Sound Editing. François captured and edited his audio on his laptop, opting for its quiet portability over his desktop's louder, more powerful processor. François called his DAW, Pro Tools, the "industry standard" for audio editing. François was able to elegantly explain the list of effects he added to his sound mix:

In terms of the mixing process, I attend to the fine tuning, the housekeeping things like fading out audio clips and making sure that there's no unnecessary noise. I can go through and reduce breath sounds if they are obtrusive, because if you're singing falsetto and are near a microphone, breath sounds are a lot more obvious. I'll do processing of each individual channel. I'll use a gate to try to minimize any background noise and excessive breathing. Compression control to deal with excess volume and keep things a little more level. Sometimes I can go in and manually edit the volume of a set of notes if compression isn't quite doing the

trick, like with something really high, because I'm a very undisciplined singer. Then there will be equalizing, because a recording is difficult to EQ when it's all one voice. It can become like a wall of sound if I don't change the EQ on different voices, because you have to have the right frequency ranges emphasized in the right vocal parts, otherwise it is like mush. There's a bit of reverb to provide a bit of space for the recording and how things stick together and sound a little bit more than the seven versions of me that there are. Then there's the overall mastering of the whole recording.

In addition to these basic editing techniques, François also used more complicated plugins with Pro Tools, which allowed him to achieve a more professionally mastered sound.

François's use of reverb included buses, which are audio sends that allowed him to add effects without changing the raw audio data.

I add reverb from a bus. I have a send from each of the audio channels to reverb buses. If there are drums, I usually have three reverb buses so that I have reverb settings for the melodic lines (melody and backup singers), the other vocal parts (support singers), and the drums. The top people in the video have one bus, and then another one for the background (support) singers, which might have a different reverb with, not necessarily a longer decay, but wider room characteristics to make it a background sound. Doing this also makes it sound bigger, more choir-like, and slightly muddier, because they are background singers. Then the drums usually have a different reverb setting just for tweaking.

Melodyne, a pitch and time shifting plugin, allowed François to adjust pitches and rhythms that may have been recorded slightly out of tune or out of tempo. This software could take sounds and change their position in time or their pitch.

I use Melodyne because of the nature of what I do. If I make a small mistake, I'd have to redo the whole take. I'd have to pray that I can get through five minutes without crazy mix-ups. Or I can mix things around a little bit and use Melodyne.

This program also allowed François to hit certain notes outside of his range in some arrangements. However, he noted that shifting notes was done in only three songs and were limited to two or three half-steps because anything else "would start to sound unrealistic."

Ozone, a plugin that was used for multiband compression, equalization, saturation, stereo width and limiting, allowed François to create a richer sound by widening his stereo panorama.

I pan different parts to the left or the right to create some spatial separation. I try to do that consistently so that the melody is always in the middle, which is a standard thing in the recording industry. The higher harmony is generally to the right; the lower is to the left like they are on the screen. The bass is centered.

Generally, the three (support) singers will be like left, right, left (from lowest to highest). So, the highest (support) singer is to the left. The highest (backup) singer is to the right so there's a little bit of a balance of pitch.

For François, the width of his panorama was less important for his YouTube videos than it was for the audio-only files from the soundtracks of his videos, which he sold on iTunes.

Reviewing the Audio. After François mastered his audio, he entered a review phase in which he listened to his recording in multiple settings.

In Pro Tools, I bounced the mix out to a WAV file and an mp3 file. I listened to it in my car, in earbuds, in headphones, and speakers to try and see if the mix sounds right in different places. Ideally, I would like a regulation set up where I'd have the right speakers and the right kind of room that is usually used as a reference for professional mastering, but I really can't do that right now. So, I try to make sure that it sounds reasonably good.

This process allowed him to hear any oddities in his mastered audio so he could go back and change things if he wanted. After the audio file was mastered, François created the visual portion of the video.

Layout and visual editing. François had one simple goal for the visual layout of his videos: to fill up as much of the screen with video as possible. Visually, his videos were typically divided into halves on the horizontal plane. As of *Speak, O Lord (V27)*, François wore hoodies when he recorded.

When there are only four people singing, I'll make them fill the screen. I try to keep the bass singer in the orange hoodie in the bottom left. I try to keep the melody singer in the middle and bigger when there's fewer singers. Also I try to keep the upper and lower harmonies on either the left or right, because that's where they are in the stereo field in the audio. That's pretty much it. The rest of it is trying to make things look vaguely symmetrical and consistent from video to video. It's actually gotten easier over time because I can memorize the basic coordinates for those general video frames and how much is cropped from each panel.

François's visual layout matched his stereo panorama. For example, when panning the singers, the lower backup singer wearing blue was panned to the left and the higher backup singer wearing red was panned to the right. To balance this, the highest and lowest support singers were on the left with the middle support singer on the right. The soloist and bassist were in the center.

Besides cropping the panels so they would fit on screen, François also used transitions including fades and key animations. Key animation refers to panels that slide from one destination to another, and François used transitions when clones were added or removed from the arrangement. The videos ended with all of François's clones walking away from their microphones to turn off the camera.

After the video was completed, François added a coda to the end of each video. This coda included a soundtrack of one of his performances, usually of the song that was just featured. On the screen was his logo, which had a clickable annotation that directed viewers to his Facebook or to subscribe. The logo was framed by videos of François's past performances with clickable annotations, which linked the viewer to the appropriate video. He then exported the finished project and uploaded it to YouTube.

Production. François used the description box on YouTube for businesslike purposes and included links and other important information as well as copyright, arranger, composer, and announcements. He also made announcements on Google+ and Facebook so his fans could see the video was available to be viewed. François strongly believed in giving credit where credit was due, and he gave information that complied with copyright when covering another person's song. This included posting songwriter credits and paying royalties when necessary.

As a Christian I do respect the law. I try to anyway. When it comes to copyright, I try to. I don't download pirated movies and things like that, so I do try to respect the rights of the creators, because it is their right.

Copyright issues regarding François's videos were covered under YouTube's agreement with publishing companies allowing copyright holders, YouTube, and cover artists to share in the revenue generated from videos.

I deal with copyright for my videos through the new content ID program that YouTube's had for the last year. The content ID program has been about two years old, but for about a year, YouTube has allowed people to monetize cover songs. I can actually wait for them to discover that and they'll notify me saying, "Oh, this is a copyrighted song," and then YouTube asks, "Is this a cover of the song?" and I say, "Yes." Then, ads will play with the video, and I can actually split revenue between Google, the publishing company or whoever has the rights, and me, which is great. Sometimes there can be a delay for that happening, so that original rush of views published might not be on time, but that's fine.

After posting his video on YouTube, François uploaded audio recordings of the song on iTunes, CDbaby, and sometimes Amazon, so they could be purchased by his fans. To do this, he secured the mechanical rights from Capitol CMG (Christian Music Group), which was formerly part of Universal Music Group.

Any songs not controlled by Capitol CMG may have other organizations administering copyright issues. In cases where the song is split between multiple publishers, there are third-party services that will obtain mechanical licenses on my behalf to save me the trouble of contacting each publisher and doing separate

payments. There is a fee in addition to the statutory mechanical license fee. In the past, I used the Limelight service provided by RightsFlow Inc. Another convenient service, Loudr, is now available, and I just used it to license a song.

Copyright agencies like those François mentioned above, The American Society of Composers, Authors and Publishers (ASCAP), and Broadcast Music, Inc (BMI) offer mechanical rights which allow artists like François to record copyright protected songs:

A mechanical right is the right to record and distribute (without visual images) a song on a phonorecord for private use. Mechanical rights or a mechanical license must be obtained in order to lawfully make and distribute records, CD's and tapes. (ASCAP, 2015)

François diligently worked at getting permission to sell recordings of his tracks because he wanted to not only uphold the law, but also support the musicians who wrote the songs he performed.

I do know people who make a living as songwriters and performers, and I know that they get by with sometimes with very little royalty checks that pay the utility bills when they're not out gigging. Being a musician, you tend not to have a very good pension plan either, so it's financial security for these people. When I look at the sometimes obscene amount of royalties I've paid (for recording other people's music), I can say I'm supporting these people that have written these songs. I actually know that they're getting a piece of what I'm doing. Because I wouldn't be able to do what I'm doing without them. It really is that personal connection with the songwriters that really makes me feel strong about trying to respect the rights of songwriters and publishers.

After producing a video, he monitored his videos' and channel's success by regularly checking his analytics on YouTube and pursuing Socialblade.com, a statistics website that tracks growth and ranks YouTube channels based on an algorithm taken from YouTube's analytics.

Arranging for a Virtual A Cappella Ensemble

The *David Wesley Treatment* described above was a template François adapted for each of his videos. In the following section, four of François's videos are described: *In Christ Alone* (V26), which featured the typical *David Wesley treatment*; *Run to You (Pentatonix Cover) (V41)*, a song originally performed by one of François's virtual a cappella ensemble inspirations, a group named Pentatonix; *Amazing Grace Medley (V50)*, a mashup of three songs that featured a similar theological theme; and *Sinking Deep (V62)*, a song in which François diverted from his typical arrangement style.

Adapting previously arranged songs. François moved homes again after he created his first two virtual a cappella ensemble videos, and in June 2013, he set up another basement studio in his newly rented townhouse. To christen the recording space, François had to decide how he wanted to perform one of his favorite songs. He had previously written an arrangement of *In Christ Alone* for his church worship band to lead his congregation. This arrangement was for a group of singers, violin soloist, and rhythm instruments including a keyboard, bass, guitar, and drum set. During the third verse, he diverged from the original tonality and modulated the song to a minor key. François's unedited arrangement did not lend itself to virtual ensemble performance. So he had to adapt it so he could create a virtual ensemble; however, he debated whether he wanted it to be instrumental or vocal.

In Christ Alone was a favorite or staple of mine for a number of years. I had written an arrangement for a full band that used the same chord progressions that I

incorporated into the a cappella version on video. Those chords were different than anything I had heard done before. I moved to the town I live in now, and I was in a fresh basement. It was June. *In Christ Alone* was something that I wanted to do, and the arrangement I wrote for praise band was too low for me to sing as a solo comfortably. A congregation does it in D major, so it goes down to a low A2. That's reasonable for a congregation, but I don't necessarily like my lower range because I don't get the power out of it. I don't spend enough time practicing down there.

I was thinking, "Am I going to record this song instrumentally with the arrangement I had written or am I going to try the a cappella thing?" I went with the a cappella. I had to transpose it up from D to Gb, which tends to be my go-to key, just because I can hit a low G flat for the bass parts as a foundation. So then my lowest note singing the melody doesn't cross over the bass line. That's the key I go for, because I do have a limited range to work in. I try not to go below the bass part with the melody. So that does limit some songs that I do. It was one of my favorite songs; I had already written an arrangement, and it was just a final decision of whether to do it instrumental or a cappella, and I guess I thought it was a good idea to do it a cappella.

François was pleased with his decision, especially because the video brought him more attention than any other song he had published at the time of this study. *In Christ Alone (V26)* had 717,811 views, 1,110 comments, 9,114 likes, and 100 dislikes; each of these analytics was higher than any other video on David Wesley with a total screening time of over 3 years. This video had two remarkable aspects: it had a large online presence, and it was put together guided

by the experiences he had from his previous virtual ensembles. François's online presence and popularity will be discussed later in the chapter during the social network analysis. However, *In Christ Alone* represents the culmination of experiences including adapting previous arrangements he created for his church and using what he learned from his two previous virtual a cappella ensemble videos.

In Christ Alone was the third a cappella video. The first one started with no plan. I sang the melody, sang a couple of harmonies and a bass, and there were those three pips that came in on the verses. Then, the next video I started with some singers who are laying down some textures in the background. It worked out okay. They were pretty unobtrusive in the background there.

François noted there were four parts of this arrangement: the melody, two backup harmony voices, three support voices, and a falsetto voice that imitated a violin. This arrangement was typical of most of François's original arrangements, except the falsetto voice was not always featured and was usually included with the other support voices as the highest tenor support part. François received requests from viewers asking for a copy of this arrangement; however, he never wrote this arrangement down. He used his worship band arrangement as a guide and adjusted his harmonies by ear as he practiced and recorded.

The visual layout of François's videos was fairly consistent; however, the placement of clones varied slightly. Like most of the videos on David Wesley, this video was divided in half horizontally so there were two rows of clones (see Figure 5.5). In *In Christ Alone (V26)*, the clones singing supporting parts were on the bottom, and the clones singing harmony were on top on either side of the clone singing melody.

<u>In Christ Alone (V26)</u> brought François more attention through views, comments, and (dis)likes than any of his other videos. Yet François was unsure of why the song was so popular.

I think it is a landmark song. It's funny, because a lot of people thought it was an old song, but it was written in 2001. It has a broad appeal for people who otherwise wouldn't listen to newer music. It falls into the category of what you call modern hymn. I think it is accessible to people of multiple generations. Also, it has a very strong message that encapsulates the Christian gospel in its entirety. Also, it's sung in lots of churches as well. I think, like *Amazing Grace* and some of the other staples, *In Christ Alone* is going to stick around for a long time. I can't say why my video became so popular. How much of it is was because of the particular way I did it, or because the song was one people already knew, I'll never know.

While François could only speculate reasons for the popularity of *In Christ Alone (V26)*, his inclinations can be confirmed with comments from his viewers. He cited the song's broad appeal, the song's popularity, and his own treatment of the song as potential factors. The following comments from viewers support his inclinations:

I was looking for arrangements on YouTube that weren't overdone or too different from the hymn, and I found this one! Your voice is amazing!

What a brilliant a cappella arrangement! As a choirmaster, I've heard lots of versions of this song. I have to say it's the best, so far! 10/10

I am impressed. The power is in the lyrics and the testimony behind them. The arrangement, in my opinion, is of secondary importance. Well done.

François's decision to publish Christian music brought him a lot of attention online, and fans requested his permission to share his video with their congregations. One notable preacher commented on the video:

David, I want to post this on my Facebook page. I'm letting you know because you may get a flood of thumbs down. There are thousands of atheists who comment on my page (I have banned over 3,000 this year for cussing). So don't be discouraged if this happens.

The preacher's warning was misguided, as the seven comments that referred to him on the video's website were positive and thanked François for his song or the preacher for suggesting the video; however, one commenter attacked the preacher because he perceived that the preacher banned people from his Facebook page not for swearing but for disagreeing with his religious views. Such conversations that extend beyond the music, performance, and song occurred regularly on François's videos, and a common theme of discussion was the topic of lyrics and religion.

A tribute to musical heroes. After François began creating virtual a cappella ensemble videos on his YouTube channel, he also shifted genres from adult contemporary to worship music. However, his YouTube channel contained one secular virtual a cappella ensemble. He covered a song from one of his favorite a cappella groups, Pentatonix, when he performed Run to You (V41).

I bought their album, and I think that it was one of three songs on the album that they had written. I listened to it, and I was like, "Wow, that's crazy." It's just so beautiful. I didn't think that I would be able to do it. I still don't think that I really did it justice.

It's kind of funny, because they said in interviews that *Run to You* was different because the singers recorded it at the same time. So it was not done traditionally where it was like, "Hey, it's your turn in the booth." By recording all the parts at the same time, they were able to maintain that organic quality when a group sings together live.

Before I knew that they had the sheet music out on their website, I transcribed it by ear, and then I said "Oh crap. It's already out there." I did some checking, and I was pretty accurate. I really liked the texture of the harmonies, and I wanted to see if I could reproduce that.

François desired to create an organic sound similar to Pentatonix, but knew he could not because multiple tracks for a one-person recordings cannot be recorded synchronously. So he attempted to create an arrangement that attempted to capture the harmonies and textures of the song. An analysis of the digital scores he provided for both the original and his arrangement showed that they were nearly identical in regards to pitches. François captured the textures and harmonies accurately. The differences between François's arrangement and the original were minor, such as inverted chords and shifted octaves. For example, the notes assigned to the second highest singer in François's virtual a cappella ensemble were not always sung by the second highest singer in Pentatonix.

As François created *Run to You (V41)*, he ran into difficulties with musical interpretation and range.

Unfortunately, in my rendition I ended up doing it a bit faster than it should have been done, but that has to do with how long I can hold notes and also the nature of multitracking, which precluded capturing that really intimate, really organic feel you get with a live group. For example, doing a swell that's one note long. That's hard to reproduce.

As one creates a virtual multitrack ensemble, decisions made early in the recording process can lock the musician into a musical interpretation, as François suggested with his example of a crescendo on a held note. The feeling of singing with a live ensemble, for François, was very different than singing with his one-person virtual a cappella ensemble.

Another complication François encountered when recording *Run to You (V41)* was the limits of his vocal range. The song challenged François's range because it was originally performed by a live ensemble of five singers with a combined vocal range of C2 to C5. To address this problem, François turned to his pitch correction program, Melodyne.

Range was a huge problem that turned out not so great. I had to use Melodyne for the top two parts, and I had to cheat for the bottom parts, too. Ari (the bass) goes down to a low C2 at one part (François attempts to hit the note), so I had to transpose it up an octave. At times, I had to sing the bass part a full tone higher, and then pitch shift it down, because I couldn't get those low E's and I couldn't move the whole thing higher because the higher voices are so damn high.

So if I was going to do it all, I had to cheat it. And I'm pretty sure I said as much when people asked in the comments. My range is okay, but it wasn't quite enough. It was like a tone or a tone and a half off, I think. I had to flub and make that one adjustment for the low run.

François's sentiment that he had to *cheat* accentuated the belief that pitch correction or pitch shifting is thought of as inferior to a natural ability to produce sounds. The following

comments show the diversity of views François's audience had regarding the use of pitch correction:

The Auto-Tune and effects really diminish the dynamics and thus the emotion of the song. Great vocal range though, dude.

I am totally digging this cover, Auto-Tune and all! I think the Auto-Tune actually gives it a unique sound. :D

Dude, this is so stupid amazing. It's beautiful this isn't Auto-Tuned. The color of your voice is extremely gorgeous. Dude, I'd love to do a cover with you. I didn't know anyone else did self-harmonies the way you do them.

Don't use Auto-Tune!

There is no Auto-Tune. I listened over and over, and either you're trolling or have something stuck in your ear. I don't mean to sound rude so please forgive me if I do. This is perfection. With this many vocals in line it might give it that sound of a vocoder, but try it sometime, and you'll see. His timing is so dead on that it just has that effect.

The viewers responded with a plethora of opinions about the perceived pitch correction, and they exhibited emotions that ranged from disbelief and awe to outrage and disappointment. However, one adept viewer responded with expert insight:

He's probably using Melodyne for pitch correction (not Auto-Tune, that's a completely different beast that's used specifically for the effect it creates). Pretty much every studio-mixed vocal is touched up with this software or something similar. Thing is, though, you still have to be pretty damn close to the right pitch for the editing to not be completely obvious. This is a ridiculously hard song to

sing, and I think he did it very well, pitch correction or not. Like you said, it's still quite impressive. I know I couldn't do it.

This viewer was correct about his use of Melodyne, and François commented on the video, "I actually don't have Auto-tune, but I am able to make small surgical fixes." Even though some viewers perceived François used pitch correction, most commenters praised François for his performance. Some commenters wrote even commented that his version was better than the Pentatonix's original.

Bringing virtual ensembles to life. Shortly after François produced *Run to You (V41)*, his wife gave birth to their son, and his commitments to work and family became so time-consuming that he felt like he had to take a break from creating virtual ensemble videos. In *Intro to Baby Theon and the Church Video Archive (V43)*, on February 9, 2014, François said to his viewers:

So as you can imagine, I'm a little bit preoccupied with a baby in the house, and it can be a little bit loud sometimes, not the best for recording music videos. So I'll be taking a little bit of a break, but in the meantime there is some things I like to share with you.

Instead of focusing on producing new content, François published a number of videos he had previously created for his church and called them his Church Video Archive. However, his hiatus from virtual performance was short-lived. Less than two months later, on April 5, 2014, François released *Concert Announcement and Giveaway (V49)* in which he told his fans about his first live concert, which took place later that month. François described how the concert was booked:

I was asked to perform at this charity event by Joe Carney who is the director of Youth for Christ, Ingersoll. I first met Joe when my voice was a little higher, about 25 years ago. Joe was probably the first person to introduce me to church music that wasn't found in a crumbling hymnbook, and I quickly fell in love with his 12-string guitar.

So now it's time to return the favor, and I helped him spread the gospel in the old hometown. So I recognize that most of you won't be able to attend, and even if you could, by the time the concert rolls around, I'll have more YouTube subscribers than there are people in Ingersoll, which is about 12,000. However, there is still a way that you can help Youth for Christ, show your appreciation to me, and get something in return.

For every donation of \$10 or more to the Youth for Christ organization, you'll receive an mp3 download of my *Amazing Grace Medley* weeks and weeks and weeks before anybody else. Youth For Christ, Ingersoll is a registered Canadian charity, so for my fellow Canadians, you can expect an income tax receipt.

This concert emphasized the convergence of François's digital world and his offline life. It allowed François an opportunity to share his music with people from both contexts. Until this point, François had not advertised his YouTube channel or music with his offline community, although some locals had discovered his YouTube channel through his Facebook page or through the viral nature of social media. As he said in the announcement above, the director of Youth For Christ had introduced him to the 12-string guitar and contemporary Christian music. François felt honored and compelled to give back to the community that had raised him. By speaking directly to his subscribers and anyone else who might have found his video, his online

audience was larger than the population of the town in which he was performing. By reaching out to his online community, François tapped into a virtual audience that far outnumbered any live audience for which he performed.

This concert allowed François to take the skills he had developed through virtual a cappella ensemble creation and apply them to live performance. In preparation for the concert, François created virtual a cappella ensemble videos that were stripped of their melody so he could sing with them live.

I re-cut the audio to eliminate the lead vocal. I then re-cut the video to eliminate the panel with the lead vocal. The video was far more time-consuming, as all the panels had to be sized, cropped, and animated into different positions. For the concert itself, I ran my laptop from the stage, which played the edited video. I sang along with an in-ear monitor to hear myself and the accompaniment. For songs where the melody comes in right at the beginning, I added a 4-count at the pitch of the lead vocal's first note.

These live hybrid virtual a cappella performances provide an added window to the ways multitrack recording mediates ensemble.

Making a mash-up. While François was preparing for his concert, he released <u>Amazing</u>

<u>Grace Medley (V50)</u>, a mash-up featuring three songs that adapted the lyrics of the classic hymn.

François used his arranging abilities to give each song in the medley its own style of a cappella performance. The arrangement concluded with all three songs layered on top of each other.

François arranged the song and recorded it in his typical fashion. The medley began with a four quadrant layout featuring the support singers who established a key and the song's feel. The clone singing melody performed the first verse, and in

the second verse, a backup singer joined in at 0:43. The backup singer left the mix at 1:06 when the second song of the medley was introduced. The backup singer rejoined the rest of the clones at 1:30. The medley shifted to the third song, and a second harmony singer entered at 2:38, also not notated in the original arrangement, exhibiting the traditional trio found in most David Wesley arrangements. At 3:37, the song slowed down, and François's arrangement turned into a mashup layering all three melodies being sung by a trio accompanied by four support singers.

Figure 5.6 provides an excerpt of the mashup and shows how François layered the three melodies over the chord progression sung by the support singers.

François explained to me how songs like <u>Amazing Grace Medley (V50)</u> were fulfilling for him, as creating arrangements was particularly meaningful.

What the most rewarding part of creating these videos is the creative aspect of coming up with the arrangements. For me, that used to be part of the recording process before I started writing them out, so that was sort of a different experience. Especially the first time, it was like, "Oh yeah. This is actually going somewhere. Okay. This is really cool. This is getting really cool, right?" So I do miss [the emergent aspect] for that reason.

Throughout François's life, musical arrangement was an activity of interest to him. The hours he spent on his Tandy 1000 led to creating arrangements for his marching band and churches. One-person virtual a cappella ensemble creation allowed François to have a group of singers at his disposal any time he wanted. However, this comment alluded to something more than the joy of arrangement; it showed how François was continually looking for ways to outdo himself. While

he enjoyed the emergence of recording a performance without a plan, he felt that planning his videos and arrangements led to a higher quality product. As he became more experienced in virtual a cappella ensemble creation, he imposed this expectation on himself.

The hardest thing about creating multitrack videos is probably the fear of disappointing myself. There's that pressure of well, the next video should be better than the one that came before it because of the benefit of experience, right? And you're supposed to learn from your mistakes. So, I think that to me it's like, Okay, now I have to top what I've already done.

Exploring new musical ideas. In our final interview, François shared his frustration about being in a "creative rut." The *David Wesley Treatment* served him well. However, most of his videos featured similar sounds with the same formula applied to different songs. There was a melody singer and two harmony singers who were accompanied by four support singers. The support singers tended to sing homorhythmic chords. A beat-boxer or handdrum player sometimes made an appearance. François had even combined his trio of melody and harmony singers with his one-man band techniques and created a few one-man worship band videos. He was struggling with how he could transcend his most recent song, which was the song he felt most proud of. Like most of the songs François chose for his virtual a cappella ensembles, the song *Sinking Deep* got into his head, and he had to create his own arrangement.

I first heard *Sinking Deep* online, because a group called <u>Worshipmob</u> did a cover of it. They are a group in Colorado Springs based out of a church setup in a house, which is set up like a massive recording studio. They covered *Sinking Deep*, and I had never heard it before. I thought it was incredible. So, I looked it up and tried to find originals, and their version, I think, was the best.

The song got stuck in my head, and I thought, "I just gotta do something!" That's why I think my version turned out so well. I had lived with it for so long. I would sing it on my own, without thinking about what I was going to do with the arrangement. Then, when it actually came down to recording it, it only took maybe two or three takes, and that made the recording process a lot easier—the fact that I'd lived with it for so long, and that I knew what I wanted my voice to do.

The following vignette describes <u>Sinking Deep (V62)</u>:

The video started with four clones singing chords on the syllable "dum" in an arpeggiated style. The clones were arranged in a four quadrant layout, each wearing a t-shirt covered by a hooded sweatshirt. The microphone was placed slightly to the right of each singer so the viewer could see the clones' faces. The four support singers' panels split to either side of the screen with a key frame animation, and a fifth clone singing melody appeared in the middle of the screen at 0:14. Three of the clones had natural and neutral expressions on their faces. The melody and the tenor support singers squinted their eyes when they sang because their pitches were higher than the others. However, the stress on their faces had little effect on the sound as the melody was sung fluidly and effortlessly. In the second verse, typical of The David Wesley Treatment, a high harmony backup singer entered at 1:37, and a lower harmony backup singer joined in at 2:18. Like the tenor support singer, the high harmony backup clone squinted his eyes, too. The song's texture changed at the climax at 2:45 when the arpeggios

became a chorus of "ahs," and a handdrum appeared below the clone singing melody.

The majestic interlude lasted only 14 seconds. The visuals jump cut to only five singers, and the song became more reflective as the melody clone sang, "Your love's so deep. It washes over me. Your face is all I see. You are my everything," supported by four clones singing "ooh." As before, François introduced the two backup singers, but this time the lower voice entered first, and later the handdrum joined in when the higher voice joined in. At 3:57, the drum left, and the seven clones closed the song as they sang the last verse in a homophonic, homorhythmic style.

This vignette provides insight on the complexities and interplay of François's video editing and arranging. Not only did François vary his transitions by including key frames and jump cuts, but he also varied the layout of his video panels from verse to verse (see Figure 5.7). François used a visual layout of panels and the musical arrangement to interact with each other, providing a visually and aurally dynamic performance. As the song became more complex, more panels were added, and the positioning of these panels was determined by the musical arrangement. François's musical arrangement was varied, as sometimes the lower harmony backup singer joined the melody first, and other times the higher harmony singer entered first. The drum accentuated key points in the song, especially at the song's climax.

François claimed <u>Sinking Deep (V62)</u> was his favorite video on his YouTube channel. I'd have to say my favorite video is actually the last one, <u>Sinking Deep (V62)</u>. It's very different from the other ones. The background singers are doing something a little different. It's kind of like a bell choir in the background. With the "bum bum

bum," where each person is still singing one note, but it sounds like a sort of chiming cacophony. The melody is very simple, but in that simplicity is just, it's just really beautiful, and when you have the transition in the middle, with the voices sort of shouting, and the drums come in, and then draw it back down, and build it back up, and then the unison at the end. . . I think there's a real journey in the song, so I liked how it turned out. So, I'd say that is my favorite one.

François's emotions while describing this song were enthusiastic, and his explanation got faster and louder as he talked about his arrangement. The creativity he exhibited with this arrangement reflected the insatiable curiosity from his childhood and desire to continually outdo himself as an adult

The David Wesley Persona

Throughout his time producing videos on YouTube, François was aware of the image he created, and his virtual identity was often at the forefront of his mind. In the next section, the case diverges from musical performance and describes the online identity François created for himself on YouTube. François used this identity to become more personable to his viewers, which led to interactions between François and his audience. The interactions bred relationships and encouraged viewers to continue their support of François as they shared his videos with others, resulting in an expanded online community or fandom.

Through creating videos and producing them on YouTube, François created a virtual persona for himself. François had three distinct ways in which he performed on YouTube: single-take performances, one-man bands, and virtual a cappella ensembles. Below, François's musical and technical identities are expanded with findings from earlier in the chapter. Then the

David Wesley persona is described, followed by a detailed look at how he used vlogs and archives to augment his online identity.

Establishing a Musical and Technical Identity

François's musical and technological identities on his YouTube channel became clearer as he produced more content. As discussed in the first part of this chapter, François's musical identity was influenced by the type of music he presented and the way he mediated his performances. The music he used to display his identity made it clear that he was a Christian, as most of his later performances were of worship and contemporary Christian music. He was also able to establish musical credibility in his local community by accumulating millions of views from his audiences

I think that it definitely does give me more credibility in terms of when I talk about musical things to people in churches. For example, so when I state my opinion, I think that it has more weight than it would in the absence of having my YouTube channel.

As a young adult, he was refused admittance to a musical group because his keyboard playing and vocal technique were not proficient enough for their group. However, after creating his YouTube channel, he was asked to perform as the headliner for a charity benefit.

Opportunities like this led François to claim ownership of his musical activities, and his identity as a musician began to strengthen. François's fans thought he was a professional musician due to the fact that his videos were so well made.

There is a bit of variety in what people take from my online image. A lot of people assume that I was working as a worship pastor in a big church. That is not the case. Some people would also assume that I have pursued formal music

training, and I was trying to make music my main source of income or my life's work. That'd be nice, but it was never really the plan.

François developed a solid identity as a musician and referred to himself in the comments of his videos and in our interviews as "just a guy making music in my basement." Similarly, in the comment section of his videos, he frequently reminded his fans that he was not seeking fame, but simply sharing his gift with the world.

V26: Not looking for stardom – just a guy making music in his basement. :)

V59: No desire to be famous – just doing what I've done from the start: having a little fun worshipping in my basement. The only difference is the number of people that want to join in.

These comments, however, were not simply modest responses but reflections of the solid way François saw himself. In *How Deep The Father's Love For Us (V29)* he commented, "I have no plans to make a career out of music, though I did already do a concert last week. I'm busy enough with my family and the two jobs I already have!" François's identity in music was that of an amateur musician who loved playing and singing music and tinkering with technology.

François's technical identity was established as a video maker and sound editor before he started making YouTube videos. He had been creating videos since high school. He had been sought out by classmates to direct and edit videos. He was a soundboard operator at various churches and mixed multitrack recordings for one church. As he began to produce videos on YouTube, his videos had a certain look and sound to them, which was the result of years of informal learning as François explored how to use audio and video editing software programs. François's video creation process showed how he was technically savvy.

Branding his product

François's development of what he referred to as a *brand* shows how he combined his technological prowess and his business knowledge to develop his online identity. He was proactive about setting up his YouTube channel so that it was attractive and accessible. François learned how to set up his YouTube channel in both formal and informal ways.

I went to a YouTube Bootcamp in Toronto with other Canadian YouTubers, and a lot of the information was about how to optimize video titles and the description box, and also having a *call to action* at the end, which included stuff that you can click on to be directed to another video.

While the practical information about how to set up an optimized YouTube channel was helpful to François, the characteristics he mentioned in the above quote were evident in his videos. He exhibited an entrepreneurial disposition that led him to treat his YouTube channel like a business.

While The David Wesley Treatment had to do with the musical and technical aspects of François videos, the David Wesley brand included his appearance on his videos, his artistic icons, and his actions. François wore hooded sweatshirts, and his fans became so accustomed to him wearing them that he earned the nickname "hoodie man" from one of his fans. He also had an icon present in the *call to action* portion—or as I described earlier, the coda—of his videos (see figure 5.8).

François's actions were more representative and embodied innovation, charisma, and integrity. François's actions online were more refined than they were in real life.

I have to be a little more careful about what I say on social media as David
Wesley because my fans run anywhere from quite conservative Mennonites in the

Bible Belt of America, all the way to 11-year-old boys. I'm a pretty rated PG person, generally. I try to not be political in any way when at all possible. Even though I do have political views, I try being fairly friendly and apolitical. I obviously would share less about what's going on in my personal life than I do on my personal social media sites. You know, I'll post little fun things that my son is doing, but I think that people in the 21st century are a lot more open about that.

François also discussed how he was more critical in real life than he was online. For example, when François talked to his wife, he had no hesitation pointing out how bad a virtual performance of someone may be; yet online, he did not post negative comments. "I try to keep things positive. I have opinions, but they're not necessarily relevant to why people are seeking me out on the internet." As a public figure, François felt his role was to provide a quality product, not critique.

As David Wesley, you generally won't see me criticizing other people, whether its political figures, religious figures, musical groups. People might ask my opinion of what I think on things and ask me if I have seen certain videos. But I try not to tear people down.

François purposefully modified his own behavior to present himself first and foremost as a musician and audio-visual technician.

Creating a Compact Disc

To further promote his brand, François created a CD which displayed his icon and 11 songs from his YouTube channel: 10 virtual a cappella ensembles and a single one-man band arrangement.

All the songs on my CD, *Basement Praise*, were available as singles before on CDbaby or iTunes. It was nice to tidy the audio a bit and have a collection that people could buy. Compared to selling the individual tracks online, a CD did drive up sales. I think it was because people were like, "Oh! Well, I can get 12 songs for 9.99," so they got them all instead of picking and choosing. But mostly, people wanted a physical CD. That was the big reason I decided to produce it.

François remastered the audio tracks of his YouTube videos to create a tangible disc. Regarding these enhanced recordings, François said:

I used a mastering plugin called *Ozone* by *Izotope* that included multiband compression to raise the overall level without letting the low end pull everything else down. What you get from the videos is what you get from the CD in terms of audio, but some of the remastered songs were retouched with Ozone. When my father heard the version of *One Thing Remains* I had put out on iTunes, he said that it sounded so much richer, and he wanted to know what I did differently. It was because of that Ozone plugin. The stereo widening, the multiband compression all work together to make a nicer, richer sound. He couldn't put his finger on what it was, but he could definitely notice the difference.

Sharing Life through Video

In addition to the musical and technological identity and branding François displayed,
The David Wesley persona was also exhibited when he talked to his audiences through vlogs. A
detailed description of vlogs and how they are used can be found in chapter two. A vlog consists
of videos that feature the creator talking to the camera for the purposes of sharing information.
François's vlogs featured him talking to his audience about aspects of his YouTube channel,

performances, and video archives. The two video archives on his YouTube channel were the high school archives and the church video archives, each briefly described earlier in this chapter. He also vlogged about the birth of his son, his CD release, and his live concert announcement.

Each vlog featured a greeting, information about the event or archive, and a description of the event or archive. François's archive videos featured various styles of editing and cinematic approaches. The high school archive videos were made for class projects on VHS and featured light sabers, scrolling texts, and a musical score. The rendering for these analog projects took hours. In François's church videos, several interview styles were displayed as well as scripted and humorous short skits featuring special effects such as his high school videos, which were similar to the effects in commercially produced movies such as Star Wars, Mission Impossible, and Shakespeare movies.

The archive videos gave viewers a glimpse of how François learned how to become a video and sound technician, while the vlogs allowed François to express his gratitude to his audiences. The following excerpts are quotes from François's vlogs:

V34: This is the first time you actually heard my voice without me singing. So feel free to leave any comments below about my accent or lack thereof.

V43: This is Theon. This is my son. He was born on January 25, and he was 8 pounds and 8 ounces. He's got all fingers and toes. He is incredibly healthy. Mom's doing really well, too.

V49: I was asked to perform at this charity event by the director of Youth for Christ, Ingersoll. I first met him when my voice was a little higher, about 25 years ago. He was probably the first person to introduce me to church music that wasn't

found in a crumbling hymn book, and I quickly fell in love with his 12-string guitar.

V58: I'm here today to announce the release of my debut CD called *Basement Praise*. It's called *Basement Praise* because it was recorded right here in my basement on this computer in front of this video camera.

In each of François's four vlogs, he shared personal information about himself: in <u>The High School Video Archive (V34)</u>, he revealed he was Canadian; his son was introduced to the Internet in <u>The Church Video Archive (V43)</u>; François recollected a story from his childhood in <u>Concert Announcement and Giveaway (V49)</u>; and <u>CD Release (V58)</u> allowed him to show off his basement studio from his point of view. Each of these glimpses into François's life encouraged his audience to learn more about him and broke down the barriers between performer and fans.

Growing a Fandom

Like many high profile musicians, François decided how he interacted with his fans. He balanced giving fans enough information to foster a feeling that they knew him with maintaining an appropriate amount of privacy for him and his family. In the following section, prominent themes found in the comment section of François's YouTube videos are discussed. Because François had a personable relationship with his viewers and a high quality video performance, his fans shared his videos with others. A detailed network analysis of how people shared and discovered François's most popular video is provided. Finally, François's divergence from virtual performance is discussed by describing his self-produced CD.

Interacting through Comments

François's interactions with his viewers in the comment section revealed a few trends: he answered questions about the creative process and his resources, he debated faith and the type of

music appropriate for Christians to sing, he participated in personal conversation with his audience, and he responded to the critique of his viewers. These themes are explained below with excerpts from both the comments from David Wesley and interviews conducted with François.

Answering viewer questions about virtual music making. François was bombarded by questions from curious viewers who wanted to know what equipment and programs he used to create his videos. He usually responded with the make and model of his recording equipment and the name of his software programs. However, these simple questions were answered with caution. François did not want to give anyone the impression that the programs magically allowed him to create his videos; instead, he reiterated how his videos were the result of hard work, research, and practice from years of exploration. In the comment section of *The Stand* (V61), a viewer asked François for suggestions on what program to buy so he could create multitrack videos. François responded, "I suggest playing around with what you have before deciding that you need to invest in something more expensive. In all honesty, it's not about the equipment or the software but the person running them."

In addition to information on which programs François used, his viewers asked him for advice on how to create videos like his. He did not find it necessary to teach his fans how to make his videos. It was important to François that he was accessible to his fans. "I'm not like, 'Oh, talk to my agent.' When people post questions, I try to answer as much as possible." However, because his YouTube channel had over 4,000 comments, it got monotonous for him to answer the same few questions over and over again.

Eventually, I get tired of the same questions again and again. I have to answer them 30 times in the same video. Which is like, "What app do you use?" Unless someone sounds really, really interested, I might not answer the question.

François had to be decisive about the number of people to whom he would respond; otherwise he would have had to invest a lot of time explaining the same answers.

Debating faith and music. François was also selective in how often he responded to people criticizing his faith. Debates regarding faith and whether his song choices were appropriate for Christians to perform were common in the comments of François's videos. An open forum based on religious music attracted naysaying non-Christians who challenged François's religion. However, some non-Christians appreciated François's music, and their presence and comments were sources of tension among his viewers. In the comment section of *In Christ Alone (V26)*, a debate ensued, started by an atheist who told François how he appreciated his music:

Larry: I am an atheist, and yet I love this song! It is so beautiful. I don't care if the lyrics are religious. I just appreciate it as beautiful music regardless of what the lyrics are about. *In Christ Alone* is a great song, atheist or not. It doesn't matter. I hope we can all just love each other and appreciate this beautiful song.

Donald: I wish more atheists were like you. ;-D⁹ God bless

Bill: Larry just said the lyrics mean nothing to him, and he just likes the sound. In essence he is rejecting the gospel. If you are Christian (I'm assuming here) why do you, Donald, wish more atheists were like that, and how can you say, "God

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⁹ The use of emoticons such as ;-D and 8+) are ways commenters show emotion. They were left in to display the encouragement in this conversation.

bless," without trying to share the gospel through scripture with him? You make void the word of God and take God's name in vain.

François: Please take a step back and have a little grace. Someone coming from outside the Christian faith could have attacked the gospel or ridiculed it (and Christians) as others have on my videos. The lyrics of this song contain the core of the gospel message, and a seed was planted. Who knows what this one listening may lead to in God's good time.

Donald: [to François]¹⁰ That's what I meant. I was appreciating that the atheist wasn't complaining that the song had Christian lyrics, but that the music was beautiful.

The thread was started by a man who appreciated the musicality of François's video. However, the information about his own spirituality steered the conversation in a religious direction. Adversarial conversations began, but François responded quickly to play the role of peace keeper. This type of interaction was typical on his YouTube channel. However, another unique feature of this conversation was that François said his piece and then stepped away from the conversation allowing the viewers to discuss among themselves.

François allowed others to discuss controversial topics before posting his own response, if he even responded at all. In his silence, sometimes fans came to his defense and stood up for him, especially when a comment was overly critical. When I asked François about how he felt when viewers supported him through their comments, he responded:

It feels good, but they are strangers. The same way I can brush off the attacks of a stranger, I shouldn't be too quick to embrace the defense of a stranger. They don't

¹⁰ [to username] denotes when a viewer replied specifically to another user by tagging their username in the text comment.

know me in my personal life. They don't know if, in my daily life, I live up to some of the principles that may appear in the lyrics of the song. So they don't know me any better than strangers do. So I try to accept the good and the bad of what people say as it actually would apply to me and not let the good stuff puff me up and the bad stuff pull me down.

Regardless of the nature of comments, François appreciated thoughtful responses from his fans, whether they were positive or negative. He examined his own life and saw if the comment was pertinent. If not, he disregarded it and moved on.

Viewers criticized François, just like they did the atheist in the example above when the music he chose was not in line with their religious views. This type of critique was something François could not help but retort. In the *Speak, O Lord (V27)* comment section, a 29-comment conversation commenced between François and one of his viewers. The conversation pertained to what type of music and performance styles were acceptable for Christians to sing. François's viewer suggested that modern hymns and contemporary songs were not appropriate for a Christian to sing. François responded with how he chose all of his songs because they were representative of the bible. The two clarified that they did not mean to disrespect each other and discussed a cappella music, hymnals, performance styles, church denominations, and "the inherent evils of certain rhythms," among other things. The two quoted bible verses and discussed essays they found on the Internet. François ended his side of the conversation with the following comment:

Like I said, I don't expect to convince you. I have read these very arguments before, and still see leaps of logic and assumptions that are passed off as the only possible conclusions. I do appreciate the respectful tone of your disagreement,

which is not always present in either of our camps. Though we may disagree, I remain, ever, your brother in Christ. Signing off, DW

This respectful exchange was an example of the wholesome and respectful persona François performed on his YouTube channel.

Responding to Musical Feedback

While politics and other musicians' performances were areas from which François steered clear in conversation, his own religious views and the musical and technological decisions he made with his music were areas he defended vehemently. In addition to the criticism François received about the contemporary nature of his Christian music, he also received feedback about his technique as a singer. François dismissed these comments about his musical shortcomings with a humble attitude.

Usually I respond, "Ya, that's me, just an untrained guy singing in my basement." You know, that is the truth, right? Somehow, they think that I don't recognize these faults in my voice, but I do. My ears are much better than my vocal chords, always have been.

The following comments illustrate how François responded to his viewers' feedback:

V04: I agree that my version is a bit anti-climactic—I don't know if I could have done it any bigger without drums and guitar.

V32: My lack of training is more than evident.

V41: Believe me, I'm fully aware of the mistakes in my videos. When one does live takes all the way through a song, sometimes it's not worth risking the rest of the take to fix it.

V62: Being an amateur, I wish I had more time to focus on technique. I basically have only one day to record all the parts and get each one right from start-to-finish. It's hard to do that with good technique!

Some of those who left feedback were professionals offering friendly advice. However, François did not have any time to seek professional training or work actively on his voice.

Some commenters have actually been vocal coaches, and they mean well by leaving little tips, so that's kind of neat. Vocal training is not something that you can read a tip and automatically improve your voice. All the big professional acts have vocal coaches for a reason. They get better by developing good habits over time. Like Justin Bieber, in his movie you see his vocal coach on the road with him. She tries to do things to preserve his voice when he was getting a little sick. When he went home and was yelling with all his friends, she was like, "No, you can't do that. You have to maintain your instrument." So the advice from my viewers, I accepted it for what it was, a well-meaning suggestion. But the guy that called me Kermit the Frog was annoying. I usually don't respond to that.

François decided he would rather spend time making videos than working on refining his vocal technique. Most of François's critics were well-meaning supporters who wanted to give him helpful tips. However, there were also those who posted flames and made fun of François for his vocal timbre. François ignored flames unless they pertained to faith, and then he articulately explained his beliefs.

Expanding a Social Network

Regardless of its flaws, François's music became wildly popular in a short amount of time, and his videos were accessed through various gateways. *In Christ Alone (V26)* stimulated a

complex social network of viewers and curators that emerged in its first 16 months of existence. François had a global audience, and a network analysis of the referee data provided by YouTube showed that the video was viewed in 217 countries. *In Christ Alone (V26)*, like most of his videos, was very popular in the United States. Table 5.2 displays the views from the United States were 64.53% of the total count, and Canada, the country with the next most views, was responsible for only 6.17%. Great Britain, Germany, Australia, Philippines, Netherlands, and Brazil were each responsible for slightly over 1.00% of the total views. The other 209 countries combined made up the remaining 16.99% of the total.

The YouTube analytics accounted not only for the country from which the view came, but also for how the viewer discovered the video (see Figure 5.9). I grouped the referee sources into three categories: YouTube algorithmic, YouTube user sources, and non-YouTube sources. Each category accounted for approximately one-third of the references. The YouTube algorithmic referees included advertising as well as promoted and related video links. The YouTube user sources required action from a person. A viewer had to purposefully seek or share the link. This category included annotation, playlist, subscriber, YouTube channel, YouTube search, and other YouTube page links. Non-YouTube sources required the purposeful sharing or seeking of links and included external applications, external URLs, Google searches, unidentifiable embedded, and other unidentifiable links.

The referee sources and their corresponding percentages can be found in Figure 5.10. The most common referee source was related videos, which was a YouTube algorithmic source.

These views came from other YouTube video pages. In Figure 5.11, the two areas in which related videos appear can be seen. Links appeared in the video viewing area after the video concluded. Clickable links were also found on the right side of the default view screen. If one

were watching a David Wesley video, the YouTube algorithm for related videos would feature his other videos. The more views a video had, the more it showed up in the suggested videos; therefore *In Christ Alone (V26)* was suggested by YouTube more often than his other videos, perpetuating its visibility and high view count. Links to *In Christ Alone (V26)* were also recommended by YouTube on other videos with similar genres, song titles, and tags.

The YouTube search source represented the views which came from viewers who actively searched for a keyword which led them to *In Christ Alone (V26)*. There were 8,767 different keyword searches that yielded at least one view on François's video, and only seven phrases comprised over 1.00% of the total YouTube search references: in christ alone (36.32%), in christ alone acapella (6.99%), david wesley (5.02%), david wesley in christ alone (4.06%), acapella christian songs (2.11%), in christ alone david wesley (1.77%), and christian acapella (1.64%). Viewers actively sought out the song's title, creator, genre, and style of performance. Other themes found in the search data pertained to gender, race, and other musical artists.

The other two main sources required the active sharing of François's video. Playlists (10.61%) denoted links that included *In Christ Alone (V26)* in a playlist, or "collection of videos that can be viewed sequentially and shared with other users" (Google Developers, 2014). The *No link provided* category included both unidentifiable embedded links and unidentifiable other links, which represented 12.81% and 16.30% of the total views, respectively. These referees were from websites outside of YouTube, including e-mail, social media sites, and web pages. Viewers posted a link or embedded code, which directed their intended audience to François's video. People shared his videos with their congregations. Famous pastors provided links to David Wesley videos on their Facebook pages. Referring to the diversity of his fans, François said in an interview:

The cool thing is that there's a wide cross-section of people that listen to and watch my stuff. There's a big cluster in Pennsylvania. Amish people, actually. Not the old, old Amish people that obviously don't have computers and stuff, but the sort of middle-ground Amish where the women still dress very traditionally and still wear the bonnets. They are conservative religiously and socially. I like being able to be that bridge, and people say, "Oh thank you for exposing us to this song that like, we would have never heard this otherwise." That keeps me going. I get private messages and posts on my wall on Facebook, and I also get responses to posts that I've made, and I will respond back to people's comments. Recently, I said, "If I were to release a new music video on Thursday, would you share it far and wide?" People were like, "Yes! Please! Why make us wait?" and, "I'm from Singapore and I'll share it here!" I responded to that person.

François's Facebook page was not the only venue in which videos were shared. François attributed most of his popularity to his fans:

Part of it was social media. On Facebook, people would post, "Hey have you seen this? Have you seen this?" and there were people with big followings that shared it on blogs or on Facebook pages or whatever that got the ball rolling. There was that big spike, and then there's been a steady rise after that.

The spreadability of social media is exemplified in the analytic data of *In Christ Alone* (V26). By analyzing the country data by the source data, the complex social network created by posting a virtual a cappella ensemble can be better understood. In Figure 5.12, this network is depicted with nodes representing the countries and sources. While the size of the countries'

nodes are all the same, the size of the sources' nodes portray how many views came from that source type.

Each country's node is connected to the sources it used by edges. The strength of the connection between the country and source is represented by the thickness of the edge. For example, the strongest edge http://youtu.be/oab9giH2cG0 was United States by related video. In Figure 5.13, the line connecting United States (US) and related video (RELATED_VIDEO) is the thickest. Most edges are thin. For example, Andorra (AD) had one view that came from an unidentifiable embedded link (NO_LINK_EMBEDDED) and represents a very weak connection. Figures 5.12 and 5.13 display visual representations of the complexity of the social network and spredability of social media as seen in In Christ Alone (V26). François's global audience was expanded by users being referred to his video through algorithms, actively searching for his video or keywords pertaining to his video, and fans sharing his videos with others.

Conclusions

This case report began with a quote in which François described himself as "just a guy making music in my basement." His goal was to produce a quality musical performance while sharing a message about his faith. Yet he always attempted to become a creator as he produced subsequent videos on YouTube. In his eyes,

A good multitrack video has some dynamic and emotional contours where the song can take you a couple different places and back. Something that's not overwhelming in its complexity, but also kind of stays interesting through the whole time.

François's desire to be accessible yet dynamic complemented his insatiable curiosity to learn, or as he suggested, his intellectual wanderlust, and his desire to be accessible contributed to his success as an amateur musician who makes high quality videos.

Fulfilling an Obligation

While he was excited to perform new songs, he always wanted to outdo himself in each subsequent video. As a result of his popularity, François felt obligated to his fans to continue to produce multitrack videos. The problem he had was that he ran out of new ideas. His biggest fear was disappointing himself by not creating innovative videos. At the time of our interviews, François felt like he was in a dry spell and was struggling to figure out how to do something new. The concept of obligation came not only from his wanderlust, but also from trying to respond to his 20,000 subscribers who were looking forward to new content. As we concluded our time together, the sense of obligation weighed heavily on him.

I make YouTube videos partly because it's expected that I will. Right now, I'm kind of in a creative dry spell, like I can't figure out what I'm going to do next. Like, my go to, there's a few things that I want to try, but I can't work up the energy to pull up Sibelius and start arranging. I'm like ughh . . .

While it was difficult for him to find time to record with two part-time jobs and a wife and child, he saw multitracking as an escape or an opportunity for solitude. For François, multitrack video recording was an introverted activity that allowed him to retreat into his basement and express himself creatively.

Exercising and Maintaining Skills

François identified himself as an amateur musician, and his obligations prohibited him from spending time on refining his vocal skills. Even though he admitted to me, "Sometimes I

wish that I sounded like a different singer than the one that I am," he was unable to dedicate the time to improve his voice. When given feedback from professional musicians, music teachers, and vocal coaches, he thanked them, admitted his faults, and told them he was not going to do anything about it. However, François found that creating multitrack videos helped him in a number of ways. He developed skills as a sound and video technician by learning new software and experimenting with editing. He felt multitrack music making helped him maintain, but not necessarily improve, his skills.

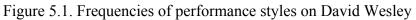
Being a Jack-of-All-Trades

François's self-identification as a *jack-of-all-trades* lent itself to his love for music, technology, and publishing. Each of these areas excited him for different reasons. As a musician, he expressed himself and shared the music he found meaningful. As a technician, he created mediated performances that were visually and sonically dynamic. He considered how accessible his arrangements were for others who might want to replicate his performance. He also considered himself accessible to his fans on a personal level, always willing to answer questions and give advice. As a producer, he watched his projects spread across the Internet via social media and capitalized on his virtual connections. His knowledge of all three areas was eclectic, and his self-directed learning served him well.

François sought out opportunities to hone his craft in all three areas. As a musician, he explored instruments and arranging through both formal and informal learning. As a technician, he spent hours watching tutorials online to learn how to edit audio and video. As a producer, he attended workshops like YouTube Bootcamp, read books, and searched websites to learn about how to market his brand. The combination of all of François's interests and talents was the impetus of his success as a YouTube musician. For François, his hobby provided him an outlet in

which he could combine a variety of interests.

Figures and Tables for Chapter Five



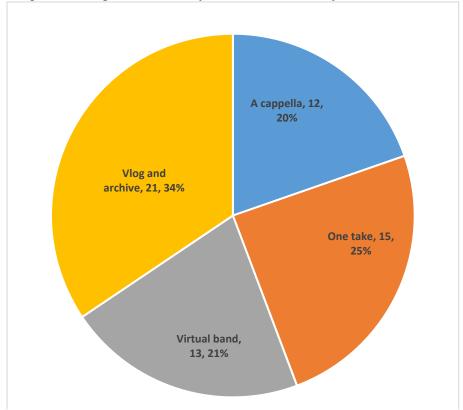


Figure 5.2. Screenshot from *Hamburg Song (V01)*



 Table 5.1

 Instruments and Number of Tracks for David Wesley Videos

	Vocal Solo	Backup Vox	Support Vox	Beatbox	Hand drum	Aux perc	Drum set	Keys (Piano)	Keys (Synth)	Keys (solo)	Tin whistle	Guitar	Bass	Total Tracks
Live recordings: V01; V03-04; V06-14; V17	X							X						1
Live recordings: V02; V05								X						1
V15. Shiver (Collaboration)	X						X	X						3
V16. Trouble	X							X				X	X	4
V18. Bedshaped	X							X	X	X			X	5
V19. Us Against The World	X	X							2			X	X	6
V20. The Starting Line	X	2					X	X	2	X			X	9
V21. Beautiful Things	X	2						X	X			X	X	7
V22. Stars and Boulevards	X	2					X	X	X	X			X	8
V23. One Thing Remains	2	3	3	2										10
V24. You Are Young	X	X						X	X			X	X	6
V25. Wonderful Merciful	X	3	4											8
V26. In Christ Alone	X	3	4											8
V27. Speak, O Lord	X		4											5
V28. Sovereign Light Cafe	X				X				X	X		X	X	6
V29. How Deep	X	2	4											7
V32. Whom Shall I Fear	X	2	4		X									8
V36. Oceans	X	3				2*		X	2			X	X	11
V38. Immanuel	X		5		X									7
V41. Run to You	5 ^													5
V48. 10,000 Reasons	X	3												4
V50. Amazing Grace Medley	3 ^		4	X										8
V51. Worlds Apart	X		6		X	X								9
V52. God of Wonders	X	2						X	X			X	X	7
V54. Here By The Water	X	2			X			X			X	X	X	8
V55. Real Life Offering	X	4		X										6
V61. The Stand	X	2			X			X	X	X		X	X	9
V62. Sinking Deep	X	2	4		X									8

Notes: * an additional audio track is used to add claves which is symbolized by Wesley striking the side of his drum with his mallet; ^ all parts are equal importance because of arrangement.

Figure 5.3. Screenshot from *Trouble (V16)*



Figure 5.4. Screenshot from *The Starting Line (V20)*



Figure 5.5. Screenshot from In Christ Alone (V26)



Note. Labels were added to show position of clones.

Figure 5.6. Excerpt from Amazing Grace Medley (V50) Score



Figure 5.7. Layouts from Sinking Deep (V62)

Arpeggiated support singers



Layering harmony singers (verse 2)



Full ensemble with drum



Melody with support singers



Layering harmony singers (verse 2)



Layering harmony singers (verse 3)



Figure 5.8. Screenshot of a Call to Action



Note: The following are clickable annotations: grey borders link to previous David Wesley videos, the green box links to François's iTunes discography, and the red box directs the viewer to a confirmation page which subscribes him or her to David Wesley.

Table 5.2.

Views for In Christ Alone by Country

Country	Number of views	Percent of total
United States	472,923	64.53%
Canada	45,185	6.17%
Great Britain	23,820	3.25%
Germany	22,982	3.14%
Australia	12,760	1.74%
Philippines	12,076	1.65%
Netherlands	10,806	1.47%
Brazil	7,787	1.06%
All other 209 countries	124,491	16.99%

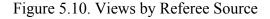
Note: All other 209 countries individually had less than 6,500 views which made up < 0.88% of the total view count.

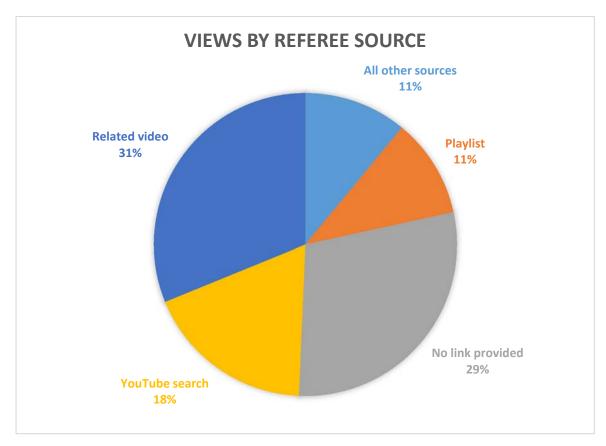
Figure 5.9. Description of Referee Source Types

Source type – The referrer for the video views. This field will contain one of the following values:

- **ADVERTISING** The viewer was referred to the video by an advertisement.
- ANNOTATION Viewers reached the video by clicking on an annotation in another video.
- **EXT_URL** The video views were referred from a link on a web page. The Detail field in the row will identify the web page.
- GOOGLE_SEARCH The video views were referred from Google search results.
- NO_LINK_EMBEDDED The video was embedded on another website when it
 was viewed. The Detail field in the row will identify the web page where the video
 was embedded.
- NO_LINK_OTHER It is assumed this category includes NO_LINK_MOBILE and NO_LINK_VIRAL. These categories included unidentified mobile device views and views in which the user navigated directly to the video, perhaps by copying and pasting the URL.
- **PLAYLIST** Represents a single YouTube playlist. A playlist is a collection of videos that can be viewed sequentially and shared with other users.
- **PROMOTED** The video views were referred from an unpaid YouTube promotion, such as the YouTube "Spotlight Videos" page.
- **RELATED_VIDEO** The video views were referred from a related video listing on another video watch page. The Detail field in the row will specify the video ID for that video.
- YT CHANNEL The video views occurred on a channel page.
- YT_OTHER_PAGE The video views were referred from a link other than a search result or related video link that appeared on a YouTube page.
- YT SEARCH The video views were referred from YouTube search results.

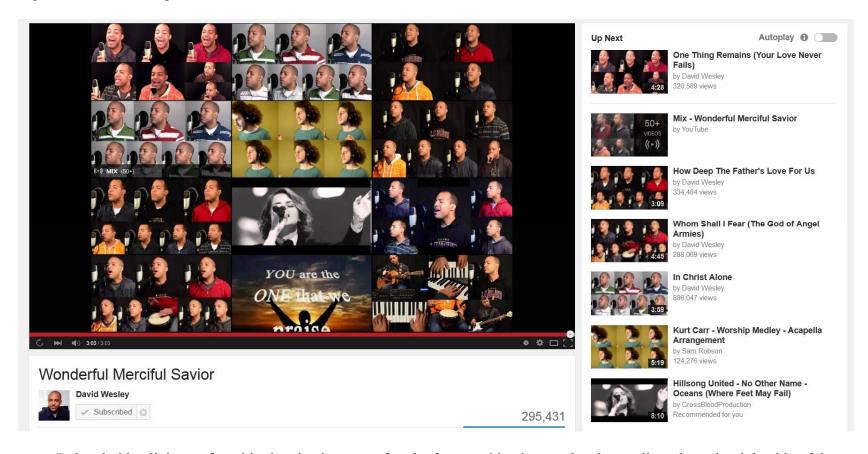
Note: Taken directly from Google Directors (2014; 2015).





Note: Sources that yielded less than 5.00% of the total views are represented by the All other sources label and include advertising (0.02%), Google search (0.17%), promoted (0.22%), external application (0.48%), annotation (0.53%), other YouTube page (0.64%), YouTube channel (1.77%), subscriber (2.73%), and external URL (4.40%); The No link provided label includes both the unidentifiable embedded (12.81%) and unidentifiable other link (16.30%) categories.

Figure 5.11. Screen Capture of Related Videos



Note: Related video links are found in the viewing area after the feature video is completed as well as along the right side of the video page.

Figure 5.12. Social Network Nodes for In Christ Alone (V26)

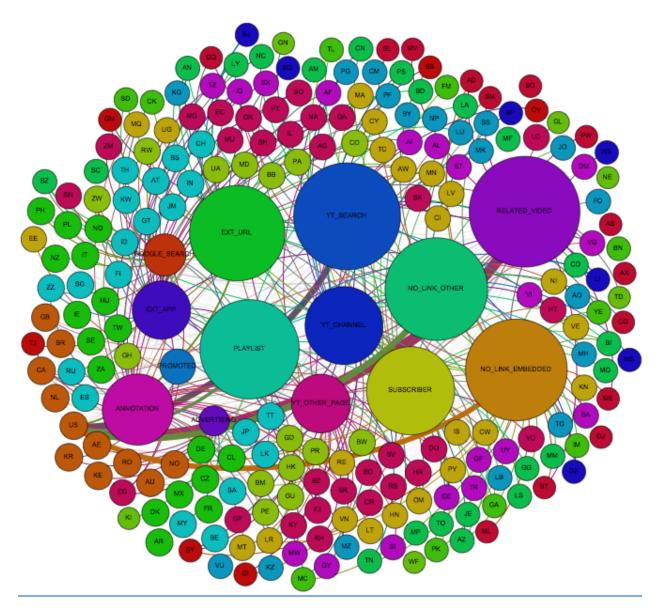
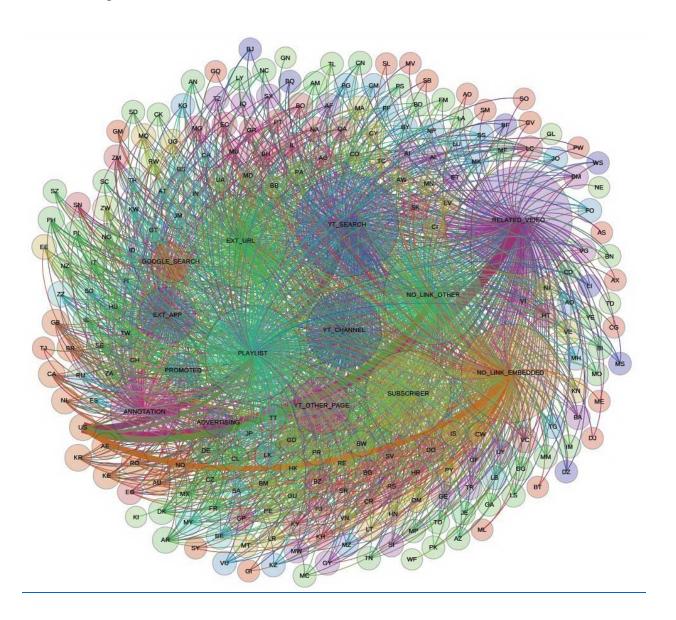


Figure 5.13. Social Network Edges for *In Christ Alone (V26)*



CHAPTER 6

"I FEEL COMPELLED TO ENTERTAIN PEOPLE AND SHARE MY LOVE OF MUSIC"

THE CASE OF MELODY MYERS AND THE MELODY MYERS YOUTUBE CHANNEL

My ultimate goal is to entertain people or make them feel happy, to help them feel the way I feel when I sing, and I want to make that grow. I want to reach out to as many people as I can, and honestly, I don't know how to handle all this attention. (Melody Myers, personal communication, January 15, 2015)

Introduction

For Melody Myers, sharing music videos on YouTube was a way to express herself through performance and entertain others while also practicing her musical and technological skills. Music was a part of all facets of Myers's life. She created her YouTube channel as a high school student, majored in vocal performance as an undergraduate, and became a musician who actively sought to make music performance her profession.

Myers's YouTube channel, *Melody Myers*, featured a variety of virtual performance styles including karaoke videos, live performance recordings, solo and micro-performance videos in which she sang for an audition or as part of a collective, and virtual vocal ensembles. She also published vlogs on her channel (see figure 6.1). Her 69 videos earned her 1,187,243 views, 10,740 likes, 239 dislikes, and 4,541 comments. She also had over 4,500 subscribers.¹¹

This chapter describes the data and interpretations relevant to the case of Melody Myers and her YouTube channel. The data are organized by theme rather than chronologically and begin by describing Myers's musical experiences offline paying particular attention to how the

¹¹ All analytics for Melody Myers in Appendix D and in this chapter were gathered on February 8, 2015.

time before her first experience with virtual vocal ensembles prepared her for mediated music making. Then, an account is provided of the way the Eric Whitacre Virtual Choir (EWVC) served as a catalyst to her own one-person virtual vocal ensemble endeavors. After that, Myers's video creation process addresses her various styles of virtual performance. Myers's online reputation led to opportunities to collaborate with other virtual vocal ensemble creators; her projects with Julien Neel and Julie Gaulke are discussed. The social aspects of Myers's YouTube channel and the identities she portrayed are then explained. The chapter concludes with salient themes from the case study.

Dreaming of Becoming a Singer

The road to becoming a professional singer was a progression for Myers. "When I was young, I didn't think that I would become a singer at all. It sounds cliché, but I just loved to sing. When I started growing older, I was in choirs and things like that." Described in the following section are Myers's experiences predating her first involvement with virtual ensemble music making including her musical experiences as a child and her involvement with choral singing.

Making Music with her Family

At the time of her birth, her family lived in Los Angeles, CA and her father was trying to make a living as a professional electric guitar player. The family left Los Angeles and moved to Nashville, TN where Myers grew up. Myers's father often practiced guitar in the living room in front of the television, and her mother performed in a church choir and sang along with her favorite popular songs.

I think it's my mom's fault that I love singing. I have a home video of me popping in a cassette tape when I was about five years old. I used to love singing *Crocodile Rock* and other 60s songs. I started harmonizing in the car with Mom.

Dad doesn't like music in the car, but Mom would be singing, and it would just happen. She'd sing the melody, and I'd sing something that just sounded good to me. It was how I learned how to sing harmony.¹²

As a former studio and live musician, Myers's father also influenced her informal musical endeavors.

I did some musical recordings with my dad of some older rock and roll music, and I have one of those videos on my YouTube channel from a long time ago. It's just an audio recording, and he did all the recording and editing. He did the instrumental parts and the background music, and I did the vocals. I think I was about fourteen or fifteen at the time.

Choral Beginnings

Being immersed in a musical household, Myers experienced the joy of singing and through her formal music training she learned the joy of entertaining. Myers joined her first choir while she was in sixth grade. Because she was good at singing harmonies and had a low speaking voice, Myers was assigned alto 2 in her middle school choir. As she became older, her voice rose in pitch. In later middle school it settled on alto 1. By her senior year in high school, she was singing soprano 2, and in college she sang soprano 1. Singing throughout her entire range in choirs prepared her to sing the various parts required for virtual vocal ensembles.

Finding Confidence as a Performer

Myers was part of two high school extra-curricular music groups since the school did not have curricular choirs. She participated in a chamber choir that performed mostly vocal jazz music and a larger classical choir. Singing in these choirs provided Myers with an outlet to

¹² Unless otherwise noted, all quotes are taken from personal interviews conducted with Melody Myers on January 15, 2015, January 22, 2015, February 12, 2015, and March 2, 2015.

express her emotions through performance. However, she suffered from a sense of insecurity about her musical performance. Even though she had a negative self-image in her youth and struggled with confidence, her mother encouraged her to pursue situations where she could succeed.

I had confidence issues like everybody does. One time when I wanted to audition for a solo. I told my mom, "I can't do this. I'll never make it. I'll never have this solo." She told me I should go for it, and I finally auditioned for the song just to make her be quiet. My parents were very supportive and they helped me through high school and college.

Myers's fear and lack of confidence were not visible while she was on stage. As a young singer, she was a theatrical performer who showed a wide range of emotions. As I observed videos she published on YouTube of her singing in her high school choir, I noted:

V01: Melody sticks out because of her highly expressive face. She smiles throughout the live performance.

V02: Melody's eyes expressively connect to the music in a way that is different than her peers. She also moves her head throughout the song while her peers keep their heads still. Melody, like her peers, keeps her eyes fixed on the conductor.

V03: Most of Melody's peers are not smiling. Melody smiles at times the music strikes her as emotional. I only saw one other singer break a smile in the song which lasted nearly 2 minutes.

Myers's theatrical facial expression was the source of conflict among her peers.

Being in choir a lot of my peers would say things. I heard rumors, drama. I don't necessarily think I've gotten comments on my channel or on Facebook saying that

I was cocky. I've never received that kind of feedback online, but as far as real life goes, in high school and in college I was regarded as cocky, arrogant, and my peers would avoid me. It was a tough time for me.

There's a fine line between confidence and arrogance, but you can also be humble. Sometimes when someone who is humble, kind of quiet and confident, and does what they're supposed to do, other people see that as arrogant.

Sometimes I just have nothing to say.

Myers's quiet demeanor in choral rehearsals and highly expressive performance style contributed to negative feedback from her peers and may have contributed to her low self-confidence.

However, she felt that showing emotions through singing allowed her to express music the way she wanted and continued to perform with visible expression.

A Competitive Spirit

Myers's talent and hard work drove her to become a highly accomplished singer. In junior high and high school, Myers was chosen for various honor choirs including the American Choral Directors Association, regional, and statewide groups. As a freshman, she was ranked second chair in the Middle Tennessee Vocal Association's honor choir. She was the only freshman to be placed in her school's audition-based jazz ensemble. While in high school, she consistently ranked in the top 10 singers for her voice part at the state level.

Beyond school-based ensemble and honor choir experiences, Myers also competed in Sweet Adelines competitions during high school. Sweet Adelines International is an organization that produces female barbershop music and encourages women to sing in harmony.

Quartets are really fun to sing with, and I remember competing in the Regional Star regional competition in Chattanooga, TN. It was a Sweet Adelines competition, and it was my freshman year of high school that I made third place with my quartet. My second year I made fifth place, my junior year I made second place, and then my senior year I made first place with my quartet.

Preparing for a Career as a Singer

While in high school, Myers took voice lessons every other week. She explored opera music with her voice teacher at that time. She fell in love with operatic singing and decided to go to college for vocal performance. While in college, she received vocal training as a lyric soprano and performed in various classical choral ensembles.

Once in college, I studied and practiced opera every day for roughly two hours, sometimes more. When I had a junior or senior recital coming up, there wasn't a day that went by where I didn't practice, unless I became ill.

The one thing I had a slight problem with singing in choirs was holding back from singing freely or without tension in order to blend with my peers. Sometimes I would come out of choir rehearsal exhausted and fatigued. I've learned to sing without tension by singing opera, and I had to hold back in choir so I wouldn't stick out. That was challenging. I specifically remember when I would forget to hold back, I felt as if I was the 'diva' soprano in the choir. Sort of embarrassing and clichè!

The joy of making music consumed Myers, and she actively sought opportunities to continue her vocal studies and have meaningful musical experiences. The brief history above addresses her live music making experiences. The remainder of the chapter presents her virtual musical endeavors. The struggle to find balance in the choral rehearsal room parallels Myers's journey to find balance as a YouTube musician as she created videos of various genres including

opera, classical, barbershop (mostly published by Sweet Adelines International) rock and roll, Broadway, and contemporary popular music. Each of these genres required Myers to sing with different timbres, styles, and degrees of theatricallity.

Becoming a YouTube Video Creator

Myers initially created her YouTube channel as a video repository for archiving recordings of her high school performances. While in high school Myers's YouTube channel username was *SugarbabyLA*, a nickname her father had given her. Since, she switched her YouTube channel name to *Melody Myers*. Her first five published videos archived her live performances from high school.

People from my high school knew that I took pictures and videos of everything, because I loved to document things so I could look back on them when I was older. My mom sat in the audience, and she recorded all the performances. That's what started my YouTube channel. I started uploading high school choir videos, and after that, it became my own thing.

As a senior in high school, Myers prepared to transition to her life at Cumberland University in Lebanon, TN. Part of that process included finding scholarships to help fund her collegiate experience. As Myers searched, she came across a scholarship funded by EWVC.

Participating in a Collective Virtual Choir

In December of 2009, EWVC was recruiting singers to produce one of the Internet's first large-scale virtual collective vocal ensembles. EWVC since has become one of the most prominent collective virtual vocal ensembles (research on this group is discussed in chapter two). According to Myers, EWVC offered scholarships for singers who created a video of themselves singing their part for *Lux Aurumque*, a choral piece composed by Whitacre.

I was looking for scholarships for college. I was going through these scholarships, and Eric Whitacre popped up from my Google search: Eric Whitacre Scholarship for *Lux Aurumque*. In the past I sang *Lux Aurumque* by Eric Whitacre. I opened the link up, and it talked about how he had this idea of getting all of these different videos from people and putting them together, and I said, "Oh my gosh, this is awesome. I want to audition." At first, I thought that the scholarship was for going to college, but I was totally wrong. Eric was paying the way for the scholarship winners to participate with him in his performance of *Paradise Lost* at Carnegie Hall in New York. If you won, you got to participate in the choir for no charge.

Myers recorded the soprano 2 part, the part she sang in her high school choir. Myers eventually submitted videos for all the treble voice parts to be included in *Eric Whitacre's*Virtual Choir – 'Lux Aurumque'. However, only three remained on her channel at the time of this study: Eric Whitacre Virtual Choir: Lux (Soprano III) (V06), Eric Whitacre Virtual Choir:

Lux (Alto II) (V07), and Eric Whitacre Virtual Choir: Lux (Soprano I + solo) (V08). The following fieldnote excerpt describe the scholarship audition and virtual choir submission videos from all three of the aforementioned videos:

Melody has a sound that is full, but when she sings, her mouth opens more horizontally than vertically. In the lower voice auditions, she opens her mouth more vertically, but when she sings higher, her mouth is more closed and tense. Her closed vowels like *oo* are forward and resonant; her open vowels like *ah* are bright, which are affected by the smile that is present throughout most of the video. She heaves her shoulders during inhalation. Her soft palette is raised most

of the time, but not consistently. She has a vibrato that naturally comes out on longer notes and some of the shorter notes, especially in her lower range. Her attacks on long, high notes are poor because she seems timid. These notes tend to dip in pitch slightly, but she brings them back to the center of the pitch quickly. Melody sings with lifted eyebrows and is free with her body and head movement. At one time, she put her hand to her chest as she repeated a phrase she found particularly meaningful. When she finishes a phrase, Melody smiles at the camera as she waits for the next time she sings. She slowly blinks as she takes delight in vocal passages. Melody has a lot of dynamic contrast reaching both pianissimo and fortissimo. Melody ends the recording with a smile as she stopped the capture software.

Myers recorded her videos in her bedroom (see Figure 6.2) where the backdrop included plaques, medals, pictures, and PlayStation2 games. In her *Soprano I + solo (V08)* submission, she included an annotation that said, "I'm sorry about the chirping in the background. I tend to set my bird off when singing high pitches, haha I couldn't do anything about it." Myers invited the Internet into her bedroom to sing for anyone who wished to listen; a phenomenon Whitacre referred to as "intimate" as he described the video of Britlin Losee, his inspiration for the first Virtual Choir (Whitacre, 2011).

Myers's three virtual choir submission videos offered a unique perspective for the implications of virtual ensemble singing. EWVC required participants to post their submissions publicly on YouTube, which meant that singers had to publish videos featuring a single choral part sung a cappella. This type of mediation required the creation of "micro-performances" (Armstrong, 2012, p. 26) that would not exist outside of the virtual ensemble. For example,

virtual choir participants would not have created individual choral part videos if it were not for the recruitment efforts of Whitacre for this project.

In Myers's videos, she exposed her unedited voice to the Internet and those three videos received over 333,000 views and 382 comments. Viewers commented on her videos, and while most were congratulatory praise for her vocal skills, some commenters offered her feedback:

When you breathe in, you should expand your stomach. So instead of breathing in from your chest, breathe in from your stomach. This technique is used in my high school choir and our performance level has increased so much!

I can't tell if your voice is beautiful or not. The sound of scratch, fuzz, and

In 2014, four years after the video was published, Myers commented on her videos about her poor vocal technique, "Agh, It has been almost 4 years. I cringe at the way I'm singing in this video: horrible vowels, breathing with my shoulders!? Bad Melody, BAD! Please watch something else! LOL¹³."

microphone noise is too loud.

Even though her performance exhibited a few bad vocal habits, her video caught the attention of the EWVC, whose creator commented on the *Soprano III (V06)* submission, "Beautiful. Favorite track yet! Thank you for sustaining good facial expression throughout your entire track." On December 30, 2009, EWVC asked Myers to submit a video of her singing the soprano solo for *Lux Aurumque*. On January 1, 2010, Myers uploaded *EWVC* - "*Lux Aurumque*" - *Soprano Solo Audition (V12)*. Approximately a month later, Whitacre posted on his blog:

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 $^{^{13}}$ Myers often used the acronym lol, which stands for laughing out loud, in her comments. This exemplifies the friendly and jolly nature of her comments. All other lols will be omitted from this chapter.

Hila (my wife) and I just listened (again) to all of the entries for the soprano solo. Such gorgeous voices, and such profound courage. More than once I teared up, completely moved by the spirit and passion of the singing. Bravo to all of you! After watching a few times, and writing down our favorites (without showing each other) Hila and I both came up with the same entry (for our choice of soloist): the sparkling, effervescent track recorded by Melody Myers of Tennessee. (Whitacre, 2010)

On March 21, 2010, a 243-video compilation of Whitacre's first official virtual choir was published. As a 17-year-old, Myer's face became synonymous with the virtual ensemble, bringing her notoriety and fame.

Creating One-Person Choirs

Being part of a large collective virtual ensemble was a monumental experience for Myers, but creating her submissions for EWVC was only the beginning of her virtual performance journey. While still in high school, on of Myers's peers showed her a video of Julien Neel, a French multitrack YouTube musician who created virtual vocal ensembles with a four quadrant panel layout. Using Whitacre's *Lux Aurumque* as her musical inspiration and Neel's concept of a one-person virtual vocal ensemble, Myers decided to make her own one-person virtual vocal choir.

Myers practiced her recording techniques when she recorded the treble voice parts for EWVC. For her own one-person virtual choir, she rerecorded the soprano and alto lines so that the panels in the videos looked similar and the sound blended better. She then added the four bass voice parts. She recorded 13 audio-video tracks, and the project was finished within two days. She imported them into Adobe Premier Elements 4.0, a video editing software, but only

nine were visible in the finished product as she hid some of the videos because nine were more visually pleasing to her. Myers's video, *Lux Aurumque Virtual Choir by Melody Myers (V11)*, predated her soprano solo video for the collective by a week. The following vignette describes her first virtual vocal ensemble:

The video began with four panels, each with a clone of Myers in her bedroom wearing a grey and white t-shirt singing a tenor or bass part. Shortly after, five more panels appeared with clones wearing a black v-neck t-shirt singing the soprano and alto lines. All the clones sang in a relaxed, unaltered voice, "Lux." At 0:21, a larger panel was superimposed in the center of the screen as a clone wearing a red t-shirt sang the soprano solo. At 0:58, the two bass singer panels disappeared and reappeared with one clone wearing the same grey shirt as before and the other wearing the red shirt. The tenor and bass singers faded in and out of the mix as their parts required. The vocal sections lost their sense of visual uniformity at 2:29 when three clones donned a red shirt, while one singer wore grey. The five treble clef singers never left the visual stage.

After the first verse, the lowest voices exhibited a modified sound that was noticeably different than Myers's normal voice; Myers pitch-shifted the audio tracks that were too low for her to sing naturally. Myers originally sang the parts an octave above what was written in the score. The pitch-shifter made the clones sound as if they were singing in the back of their throats, essentially 'swallowing' their sounds. The enunciation of the pitch-shifted voices was over-accentuated as a result of the mediation. The edited bass voices overpowered the other singers because of the balance and equalization.

Myers sang with varied dynamics throughout the performance allowing the lush chords to ebb and flow with each phrase. Her facial expressions suggested that she delighted in singing the harmonies as she closed her eyes and smiled frequently throughout the performance. Her smile was more noticeable when the notes fit her range than when the notes were low for her. While singing the last note, the bass 2 clone physically manipulated her larynx by applying pressure to her throat with her hand. The song ended when all nine panels faded to black.

Myers's one-person virtual choir demonstrated her willingness to experiment with technology and desire to share the music she loved with others. Myers mediated her ensemble in Adobe Elements 4.0 with various editing techniques including special effects such as half-second fades, resizing panels so they fit on screen, and pitch-shifting transposition. She also used annotations on YouTube, which were creator generated notes that appear on the video that provide the viewer information or links. Three annotations were present in this video and each directed the viewer to other videos with an enthusiastic comment:

0:40: If you love this, click the link below to like my Facebook fan page and receive the newest videos and updates! Thank you!

3:42: Please click here to see more of my multi tracks and videos!

3:42: Click here to see *Go, Lovely Rose* multitracked! Also by Eric Whitacre! Myers's audio mix also included hidden panels.

I'll tell you a secret about *Lux Aurumque*. There's another video behind one of the soprano videos, and you can't see it because I had to double up on it vocally. I had to make multiple soprano I parts because I could not sustain that G4 at the very end. I just hoped I could blend together to make it sound like I held the note.

At this early point in her experimentations with virtual vocal ensembles, Myers was already technologically minded as she used the techniques listed above. The concept of a one-person virtual choir was novel at the time, and her viewers commented about their disbelief that a woman could create an ensemble that spanned C#2 to G#5. Her use of pitch-shifting software was the source of debate, but the amazement Myers's fans expressed over a one-person virtual choir showed that the novelty of the mediated performance overshadowed the few negative comments about pitch-shifting. While some thought she did a good job on the pitch-shifting, others felt it gave the ensemble a mechanical sound. Myers commented two years after the publication of the video:

Please don't accuse me of using Auto-Tune. I never have and never will use it. :) I personally very much dislike Auto-Tune (I call it cheating). What I used was a "pitch-shifter," which lowered the Bass 1 and Bass 2 part an octave lower than what I actually sang. It's a type of effect rather than pitch correcting.

In our interviews, Myers spoke more candidly about her decision to pitch-shift in her earlier videos.

I think back when I was like, "Oh, it's going to sound low, and it's going to sound awesome." Now, it doesn't sound natural to my ears. It sounds fake. Not Auto-Tuned, because Auto-tune changes the actual pitch itself. It just sounds unnatural for a woman, and it's not good to me anymore.

Her initial decision to pitch-shift the tenor and bass tracks down an octave was an attempt to make the ensemble sound like a "real choir". At the time of the study, she looked back with some embarrassment at her choices from 2009, as she felt the ensemble sounded fake. However, years later, she was still getting comments and having conversations about the video.

Collin: Unreal. I have tears on my cheeks right now. I kid you not, forgive me for being so self-defeatingly honest. I'm a[n accomplished] composer, but listening to this makes me feel infinitely small like I stand before the complete cosmos giving me a moment to experience its grandeur through you.

Myers: [to Collin] I just wanted to say thank you from the bottom of my heart for all the support you've given me. I've read all your comments on all my videos (as I read every single one from every person), and I really appreciate your kind and thoughtful feedback!

For Myers, the connections she made with her fans outweighed any self-doubt she had for her mediation decisions as her fans supported the decisions she made, told her how much she meant to them, and asked her for more videos.

Animal Crackers. A little over two months after she produced her one-person version of *Lux Aurumque (V11)*, Myers acquired the music for another Whitacre choral work from her high school. Myers performed each selection of Whitacre's *Animal Crackers Volume 1* with one voice on each part. The three videos included a wide range of dynamics as well as a variety of vocal timbres, and her theatrics, costumes, makeup, and props accentuated her musical interpretation (see Figure 6.3).

In <u>Eric Whitacre's Animal Crackers - The Panther, Multi-Track (V15)</u>, only one of the six clones looked like Myers did in her everyday life. The other five clones wore wigs, character glasses, and hats. The second movement, <u>Eric Whitacre's Animal Crackers - The Cow, Multi-track (V16)</u>, featured a stuffed cow with whom Myers pretended to fight as the two struggled for the spotlight in the bottom center panel. Myers created glow-in-the-dark firefly cutouts and pasted them in her hair and on her clothes for <u>Eric Whitacre's Animal Crackers - The Firefly</u>,

<u>Multi-Track (V17)</u>. She also created flying fireflies that zoomed across the screen accentuated by the black light she used while recording. The antics Myers displayed in this video were common throughout her channel.

My costumes and props are just fun. When I sing something, I think to myself, 'What can I do that's fun in this video?' and I usually buy things for props, mainly for entertainment purposes.

As she did for *Lux Aurumque (V11)*, Myers created the *Animal Crackers* videos on Adobe Premier Elements 4.0. The rendering of these videos left the audio and video slightly unsynchronized as each panel included the original audio and video. The processing power of Myers's laptop was inadequate to render a fully synchronized video. However, she made do with what she had and produced the videos even though she had technical limitations that left the virtual performance flawed.

The Process of Creating Videos

Myers created the virtual vocal ensembles mentioned above by layering one-take tracks in her video editing software. After receiving suggestions from her viewers and experimenting with editing software programs on her own, she developed a more refined process for creating YouTube videos. This process included selecting a song, learning the music while recording, editing the sound, editing the visuals, and publishing the video.

Selecting Music. Myers created YouTube videos for three primary reasons: to perform music she enjoyed, to express her emotions, and to entertain her fans. Her taste in music was eclectic, and genres she performed included opera, classical, rock and roll, Broadway, soundtrack, and popular music. After picking a song, Myers decided on a style choosing between

karaoke singing, live performance, and virtual vocal ensemble. She took requests from viewers seriously.

A lot of the times viewers make requests, and I try to choose songs that are similar to the ones they request. A lot of people say, "I want you to sing *Nessun Dorma*." I get that a lot. I can't sing *Nessun Dorma*, because it's a tenor piece. I'm not going to sing something like that when I'm a soprano.

Myers discerned which requests were good for her voice, and her range was a limiting factor in choosing repertoire to perform. She preferred music that was for mid- to high-range voices. Most of her barbershop arrangements were produced by Sweet Adelines' *Young Women in Harmony*, a series in which the vocal ranges of a female quartet are higher than traditional female barbershop quartet arrangements. Myers's larger virtual vocal ensemble began as SATB arrangements which required her to use a pitch-shifter; however, she later opted for either female barbershop chorus arrangements notated for tenor, lead, baritone, and bass or treble chorus octavos consisting of multiple soprano and alto parts. Her most common sources of choral music were her live ensembles.

Recording the sound. Myers initially recorded her audio and video at the same time. I basically had my \$50 M-Audio producer mic by the computer, and I recorded myself in front of the laptop with the built-in camera as I sang. I didn't even edit any of the sound. I sang the whole part while reading the music, and then that I put it together and didn't really do a lot of editing.

After getting suggestions from prominent virtual vocal ensemble creators, she began recording her audio and video separately. Myers claimed to be a great sight-reader, and in both techniques for recording her printed music gave her a sense of security.

I prefer to sit in my vocal booth right in front of my piano, and I have the score spread out in front of me. Now, I record one page at a time. I have the piano in front of me, because it helps to make sure I stay in tune and on pitch.

Myers recorded on her Macbook Pro laptop inside of her makeshift bedroom studio booth. She used aural cues from her mix to guide her as she recorded each part. Myers explained her process for recording barbershop music:

When I'm recording the separate tracks, sometimes I have to mute the lead, and if I sing baritone I just have to listen to the bass. If I listen to all the parts while I'm trying to sing tenor, my mind just blows up. However, I try to follow the lead as much as possible. Sometimes I would have to redo certain parts because I would not sing it the way I wanted to sing it in the lead. So I would go back and rerecord the lead and try to follow myself again. I listen very carefully. Usually, I did it completely aurally.

When creating larger one-person virtual vocal ensembles, Myers thought about the sound as layered.

Sometimes I decided that, if the mix sounds really good, I'd do four lead vocals, four bass vocals, four tenor, and four baritone. Then I mix it all and blend it into one, but it sounds kind of like a choir.

Sound editing. In her DAW, initially Audacity and later Pro Tools Express, Myers spliced together measures and phrases to create cohesive vocal tracks. She created all of her vocal tracks in the same manner, listening very carefully to what had already been recorded to guide her as she layered voices until the ensemble was completed. In regards to synchronization of a virtual choir:

I edit the mix to where all the s's and t's are together and not bleeding together. Then I continue with the process of doing soprano one, two, three and then alto one, two and three. After every voice is spliced together, I may add quite a bit of reverb so it sounds more full and ethereal if that's what the piece calls for. Also with the tracks, I recently learned that if you take one single track and make a copy of it and then take the copy track and move it a tiny bit behind the other one, it has a type of effect that makes it sound fuller. You put one each side so you can then pan one voice all the way to the right and one voice all the way to the left. I did that for each voice.

As Myers became more experienced as a creator, she became more precise and attentive to minute details. Early on, Myers took a minimalistic approach to sound editing and included only reverb. As she became more experienced, her sound editing techniques became more sophisticated by including reverberation, track doubling, and equalization. She learned by asking others for advice and by watching videos, identifying effects that impressed her, and discovering on her own how to achieve similar effects. She often learned informally by searching Google. However, her main source for sound editing tips came from conversations she had with other multitrack YouTube artists.

Entertaining through visual performance. Myers's videos contained an element of visual theatrics. After recording her audio, Myers selected clothing or costumes that accentuated her performance and prepared her hair, which was different for each clone.

It's fun for me, because I tend to be a goofball when I do barbershop. I like to dress up. I go to *Party City*, and I buy things for costumes and props. It's so much fun! Almost everything I have worn, normal clothes wise, I have already had in

my closet. I don't think I've actually had to go out and buy something. I've always just had the clothes I used. But I have an extensive wardrobe from drama at school—like old things that I've used for high school and middle school. I just step into the closet and say, "Well, what can I pull out that's fun for this song?" Myers also used her recording equipment to support her visual aesthetic:

Sometimes I record video with headphones and a microphone for entertainment purposes even though I lip-sync to my audio recording. It depends on what kind of mood I want to set for the audience. If it's something silly or really out there, I usually don't use headphones or a mic, but if it's something really professional, then I try to do a live recording or use the mic and headphones as props when I record the video.

Myers also acquired backgrounds that she hung on her wall with thumbtacks. Sometimes Myers performed in front of a white sheet, and other times she obtained posters or fabrics with prints that related to the theme of the song to display behind her.

Video recording and editing. After Myers set up her live background, she recorded her video.

I do my audio tracks on my Macbook Pro, and then I go to my desktop which is a Windows 7 computer. I do my videos on that. It's sort of a long process. For videos, I go one by one by one and on a rare occasion I have sheet music in front of the camera. Generally everything is memorized, and if I mess up during the video recording, I just have to rewind the audio track to a specific point and continue video recording again.

During video recording, Myers lipsynced to her audio soundtrack and acted out the song she was performing. In addition to the live elements Myers used to entertain her viewers, she also used video editing to captivate her audiences. The sophistication of Myers's visual layouts started off like her sound editing. Panels were stationary, and special effects were limited to simple techniques like fading in at the beginning and out at end of the video. However, as she began to develop her own style of video editing, she began to splice visual tracks like she did audio tracks.

If I can capture the video of an entire song in one take, then I do it in one take, but sometimes I mess up. I rewind the audio to before the point I made a mistake. I can then edit it to where one panel starts up on the top of the screen, and then the panel reappears down on the bottom of the screen in the next shot. That way I can splice it together, and it doesn't look like I messed up.

Myers also felt that panels shifting to different places on the screen kept the audience's attention better than panels that stayed in one place throughout a whole video.

It's an attention grabber. When people watch videos on YouTube, their attention goes down at the end of a video, because people just don't watch a song all the way through. They get bored. So I think changing up the scene, moving pictures, moving objects, and other things like that keep their interest.

In her later videos, Myers added more complex visual elements to keep her audience's attention.

These special effects included moving backgrounds, panels that faded in and out at different places on the screen, key transitions, and dynamic texts.

Publishing. After exporting her finished product from her video software, Myers published her video to YouTube and monitored the comments. Myers claimed to read every comment published on her YouTube channel. However, she did not respond to every commenter.

While Myers monitored the popularity of each videos by noting how many views, comments, likes, and dislikes a video received for its debut, she stopped paying attention to videos as she quickly moved to newer projects. Myers's mother monitored her subscription count and put the analytics on a calendar in her family kitchen, effectively alerting Myers how many new subscribers she gained each day.

Initially, Myers did not use annotations and discussion boxes when she uploaded new videos. However at the time of this study, nearly all of her videos had some text in both areas. Myers added annotations and filled out the discussion boxes for her older videos to link them to other, newer videos. These links encourage viewers to like, subscribe, and share her videos and provide a more personalized touch as Myers left commentary and discussion points on each of her older videos that encouraged fans to interact via comments.

Exploring Video Recording Styles

Myers's process for creating virtual performances differed for each style of virtual performance. In the following section, three salient styles of performance are discussed including live performance videos, singing karaoke, and virtual vocal ensembles.

Live Performance. As an undergraduate who studied voice, Myers had plenty of opportunities to perform solo vocal music live. She felt that recording and publishing these performances was the easiest way to produce content on her YouTube channel.

I have someone out in the audience like my mom record it. For example, for *Pie Jesu*, my mom recorded it, and I uploaded it. That was it. There was no work. I didn't add anything. I know there was one piece that I did for my Junior recital called *Je veux vivre* from *Romeo and Juliet*, and it was really blurry. It was one of the two French songs that I did, and I had to edit it to make it look not so shaky. I

think my live pieces are so much easier to produce. I just video recorded myself while I'm singing.

Sometimes, Myers added visual effects such as text translations for songs in a foreign language. These texts appeared as part of the digital backgrounds like in <u>"The Jewel Song" from Faust, by Charles Gounod (V59)</u> (see Figure 6.4). Because displaying translations through projections during a live opera performance is a common practice, Myers wanted to use this convention.

Karaoke. Myers's live performance videos featured only classical and opera music. One way Myers ventured into other genres was through karaoke performances. Her karaoke performances started off simple; she downloaded a karaoke audio track on YouTube and recorded herself as she sang the melody.

I try to be as fair as I can, and I don't monetize my videos if I have a karaoke track in the background. I don't want people to get mad at me and come down on me. My YouTube account is in good standing. I don't have any copyright strikes against my account yet.

Karaoke videos served one of three purposes: contest, entertainment, and tribute. Some of Myers's songs were audition tapes that were submitted for online contests. Others were created for fun as Myers hoped to entertain her viewers. She also created tribute videos, dedicating them to groups of people and causes that she felt were important ranging from victims of a school shooting to people with broken hearts.

As she became more adept at sound and video editing, she added background vocal singers to her karaoke videos. These additional backup vocal parts were arranged by ear. Myers described her video "Let it Go" from Frozen - Multitrack Cover (V64):

In the original movie, *Frozen* during *Let it Go*, Elsa (the singer) changes a lot. She starts with her hair up, and it's straight. She goes through a transformation. By the end, she is who she wants to be, and I figured I would do the same thing, but I'm going to look the way I look in real life. The difference between Elsa and me is that my hair is really curly. So, in the beginning of my video, I straightened it, and I put it up. Then, it came down, and it went on from there. I changed clothes to something that kind of resembled Elsa's wardrobe, but at the same time it resembled the real me. It wasn't like the Elsa dress, but it was a blue dress. As the video went on, I fixed myself up with more makeup. I added more makeup throughout the whole movie.

In this video, Myers included over 10 clones, two costume changes, and various hair styles in addition to the layers of makeup (see Figure 6.5). The layout included more panels as the song went on, culminating with a chorus of 10 clones who accompanied the soloist. The audience response to this type of video was peculiar according to Myers.

When I sang *Let It Go* from *Frozen*, a lot of people were like, "Whoa, this is so awesome!" and I spent a lot of time on the video. I think I had roughly 100 different videos clips in that one video. I did my hair different ways. I did a wardrobe change. It was a process, and it was really nice and different from my normal style.

But at the same time I noticed that I had three new dislikes. It doesn't bother me, but when I compare it to my other classical videos that aren't as popular, they have no or one dislike. So something that's more popular and well-known gets more views but not necessarily positive feedback.

Commenters would write what they liked as well as what they thought she could improve on.

Myers's biggest challenge was synchronizing so many panels; however, this was a limitation of her hardware because her computer was not powerful enough to render so many panels. Positive feedback motivated Myers to continue to create videos. Performing popular cover songs brought her a larger, yet more critical audience, and performing karaoke songs allowed her to sing in a certain style of music, usually popular or crossover popular-classical music.

Virtual vocal ensembles. *Let it Go (V64)* was unique on Myers's channel in that it incorporated karaoke with a virtual vocal ensemble aesthetic. Myers's virtual vocal ensembles ranged from four to over 16 voices. Below, both virtual barbershop quartets—four-voiced groups featuring one tenor, lead, baritone, and bass—and virtual choirs—ensembles with either one singer on more than four vocal parts or multiple singers on each of four vocal parts—are discussed.

Women in Harmony arrangements, which were published as sheet music by the Sweet Adelines organization. These videos featured four clones that acted like they were interacting with each other across panels. The following vignette describes "Alexander's Ragtime Band" Multitrack A Cappella (V58):

The video began with a black and white elegant floral border encompassing a picture of Myers in a 1930s dress similar to what the Andrews Sisters wore for their performances. The introductory screen also featured text: "Alexander's Ragtime Band/ Performed by Melody Myers/ For Young Women in Harmony." At 0:09, the title screen disappeared and four clones in full color appeared, each wearing a red dress, a hat with veil and bow, a white silver necklace, and

earrings. Each clone had a different hair style, but the same makeup. The panels were crudely cropped with rounded faded edges on the sides and straight lines on the top and bottom. Before the clones sang their first note, the vocal part of each singer appeared below the panels to help the audience know which clone represented each voice part but then disappeared (see Figure 6.6).

As the clones sang with big smiles, they used their hands to display choreography including sweeping gestures and pointing. Half of the movements were performed in unison, and the rest were individualized and spontaneous. The singers interacted with each other, and each clone, while similar, had its own personality. Myers's theatrics were enthusiastic as clones mimed playing a saxophone, made flirtatious faces, and danced to the sound of an imaginary Alexander's Ragtime Band.

While the balance between the singers was consistent in the audio mix, the bass was slightly louder than the other voices, and the tenor was slightly softer. The synchronization was slightly off as the sound sometimes lagged behind the visual. The soundtrack of the video featured four voices with matched timbres. However, a variance in each voice was caused by how much the singers were smiling. Myers took liberty with the tempo, which was seen at the beginning of the video when the clones sang a rubato introduction. There were two scenarios that led to pitch discrepancies: when a middle voice sustained the same pitch across multiple syllables and during the attack of the last note of a phrase. However, each time one of these problems was apparent, it disappeared as quickly as it appeared.

Myers sang the song stylistically with phrasing, dynamics, and appropriate slides and scoops.

After the song concluded at 2:44, the audio for the performance reprised in the background as Myers said to her audience, "Hey guys. I just wanted to take a minute and say thank you so much for viewing this video. I apologize that I haven't been making any videos lately. The reason for that is that I just graduated college. Wooo! In music performance, of course. Hopefully you'll see more of me on YouTube. Thank you so much for sticking around. Until next time, bye!"

Alexander's Ragtime Band (V58) was typical of Myers's virtual barbershop quartet videos in that she allowed small mistakes to remain in her videos. While Myers always strove for high caliber musical performance, she did not spend hours editing out slight pitch discrepancies or use pitch-correction software like Melodyne or Auto-Tune. She dealt with any discrepancies in her audio mix by rerecording trouble spots and using her ear to guide her as she recorded and edited her soundtracks. However, slight intonation problems, especially those that were barely noticeable to the average listener, were ignored. What bothered Myers was the technological problem present in a large number of her virtual performances.

Some of my problems were due to my camcorder at the time. I was really upset, and I knew what it was doing, but I would upload my videos anyway. Now when I look back at it, I'm like, "Man, that's terrible." I don't know why, but I could never get it to stop shaking. It had an autofocus feature so it would focus I guess on me and like the background would move. I never knew why. And I even asked someone that knew about it, and he was like, "Well, you have to turn the autofocus off," or something. I did, and it didn't make a difference so eventually I

was like you know what, I'm going to use a different camera all together and that fixed the problem.

Myers's hardware and software were limiting factors, and she slowly upgraded software as she continued to make videos for YouTube. When she started, she used free video editing software and her built-in laptop camera.

I had the M-Audio Producer mic for years until it basically fell apart, and then my laptops have changed throughout the years. They came and went. But currently I use an NT1-A RHODE condenser mic. I use a Macbook Pro for my audio, and I use ProTools Express for editing the audio and for the videos. I use a Windows 7 desktop computer with Sony Vegas Pro 12. The camera I use to record with is a Panasonic Lumix DMC-FH22, but I hope to upgrade that soon.

These newer technologies allowed Myers to synchronize her videos and produce more complicated visual effects.

Virtual choirs. Myers also created larger one-person virtual vocal ensembles consisting of 8 or more voices. These virtual choir voicings included four-part music that had multiple singers on each part, eight-voice chamber choirs with one voice on each part, and barbershop quartets accompanied by a group of backup singers. Myers found a lot of joy performing in live choirs, and her experiences in these types of ensembles inspired her virtual music making. When she was a part of a Sweet Adelines choir, Myers sang We Go Together in the typical barbershop chorus style. The chorus performed with choreography, and Myers wanted to create her own virtual barbershop chorus that resembled the live chorus. "We Go Together" Multitrack A

Cappella (V40) featured a 16-voice virtual choir performed with choreography that was similar

to what she learned in her Sweet Adelines chorus. The choreography included snaps, jazz hands, and other motions that matched the lyrics.

I was taught to do the snaps, the check sign, and all the choreography, and I thought 'I'm going to copy that, because it's so cute.' I figured I wanted a choral sound, and I thought if I did four voices in each part, maybe it would come together as a choir.

We Go Together (V40) was Myers's first experimentation with multiple clones visible on each part. With 16 panels on screen, there are notable similarities to Myers's virtual barbershop quartets. Like the virtual barbershop quartets, both planned and spontaneous choreography were present. However, the process of recording so many videos was more challenging than a quartet because 16 micro-performances needed to be recorded, each in one take. Therefore, if she forgot to do a choreographed move in a micro-performance, she continued the song as if it were planned that way. The clones were separated in quadrants by section with the leads in the top right, the basses on the top left, the tenors on the bottom left, and the baritones on the bottom right. In the first screen capture of Figure 6.7, the choreography was not performed in unison. However, the second screen capture was taken at 1:02 when each section displayed jazz hands in a contagion, or staggered entrance. Also, like in the virtual barbershop quartet videos, Myers's sound and video synchronization was slightly off as some clones mouthed words before or after they were heard on the soundtrack.

Natural theatrics seen through smiles, freedom of movement, and choreography were also present in Myers's virtual choirs as they were in her virtual barbershop quartets. However, intonation problems and rhythmic issues were less noticeable due to the larger number of voices. The virtual choir and virtual barbershop quartet videos also differed in that dynamic differences

were more prominent in the larger ensembles; a 16-voice choir had more versatility than Myers's quartets allowing for more extreme dynamics. Another noticeable difference was that in her choir, all the clones faced forward and the singers did not interact with each other. This phenomenon echoed what performers tended to do live: when performing barbershop quartet, the singers balanced singing to the audience and each other, and when singing in a chorus, the singers focused almost exclusively focused on the director and audience.

that featured eight clones singing an SSAA choral octavo. The song was dedicated to mothers and the opening screen displayed the text, "A mother's love is everything a daughter (or son) could ever ask for. I dedicate this piece to not just my mother, but to every mother in the world. Thank you Mom, for being you. Please Enjoy." Myers discovered the song when singing in her college choir. The video soundtrack exhibited the virtual choir's wide range of dynamics and nearly the whole performance included musical phrasing with crescendos and decrescendos. The video had eight square panels with faded edges and rounded corners. The clones wore one of two outfits featuring natural tones and accent colors including burnt orange and sky blue. Myers still experienced technical difficulty with synchronization. The description box included the following text:

I know the audio-video synchronization is off. It was processed that way because I have a super slow computer. It can't be helped. I've been really working hard on improving my editing and video skills. There's still so much to improve on though. I know the Soprano solo part is glitchy. I honestly have no idea why that happened. Perhaps it's because there are too many videos to render. Who knows?

Myers's technical problems were a source of frustration, and that caused feelings of insecurity that her viewers would not like her videos. However, the following comments from *O Eve (V51)* suggested the contrary:

This is really great. Your channel should have at least 5 times as many people subscribed as it currently does with the quality of your content! When there are more than 4 video streams, most computers 3+ years old start to explode when rendering. (Source: my exploded computer.) Don't worry about the AV sync, lovely audio, and that is what we come here to experience. Thanks for posting. Beautiful Melody, I love it! You have grown a lot since I listen you for the first time, I am proud of you. Keep going, and remember to always sing with all your being. Yes, technicality is important, but the human spirit is what connect us all.

These comments reflect the supportive nature of the viewers on Myers's YouTube channel. As she created videos to entertain and pay tribute, her fans encouraged her and forgave the technical difficulties she faced. For Myers and her fans, the visual aspects of virtual vocal ensembles enhanced the performance, but were subservient to the soundtrack, especially songs from the classical genre.

After Myers upgraded her technology and applied what she had learned to editing, both the musical and technical discrepancies disappeared. In Myers's later videos, she pieced together audio and video clips to get rid of wrong notes, rhythms, and lyrics. Myers's more advanced technological skills were apparent in "Lollipop" A Multitrack A Cappella Doo-wop (V60), which featured a barbershop quartet accompanied by an additional four backup singers. The two virtual choirs discussed above displayed the clones in stationary box-shaped panels; however, Lollipop

(V60), featured fades, key animations, and circular panels that appeared at various places on the screen.

Myers put emphasis on the visual aspects of her videos to keep the attention of her viewers. *Lollipop (V60)* had a brightly colored virtual background with multicolored lollipops. In addition, Myers used graphics and special effects with the panels.

I tried a new thing where I put each video in a circle, because I thought squares were kind of boring. Everyone does squares. When I did the circle I thought, "Oh! These could be lollipops!" So I got a picture for the background where there were suckers, and I thought, "I'm going to be a lollipop!"

Myers added four still graphics that resembled lollipop sticks and put her panels at the end of each stick. Myers also used various live techniques to visually appeal to her audiences.

I thought that I wanted to make the video to be really colorful, so I thought of Willy Wonka and the Chocolate Factory. I had this shirt that was like a rainbow and I said that's it! So I kind of went on from there, and I remember I went to a place called Sugar, and I bought a lollipop. It was big, and I still have four of them in my drawer. They cost five dollars apiece. They were kind of expensive, because they were just really big suckers.

The visual opulence of Myers's video seen in Figure 6.8 accentuated her theatrical performance which included snapping, clapping, making a popping sound by flicking a finger out of her mouth, choreographed movements, and exaggerated facial expressions. The featured quartet singers interacted with each other while the backup singers focused more on facing the camera.

The audio *Lollipop (V60)* shows how Myers developed as a sound editor. This hybrid virtual barbershop quartet-choir performance featured elements found in both Myers's large and small virtual vocal ensembles. The mix featured the lead soloist slightly louder than the other voices. The three members of the quartet were nearly equally represented with the tenor the loudest. The backup singers were quieter than the featured singers. The dynamics of this virtual choir were not as complex as the above mentioned ensembles; however, there were small contrasting differences between verses and choruses. Also apparent were the ebb and flow of phrases.

Interacting with Others

While the musical and technical characteristics of Myers's virtual vocal ensembles were important to the production of her videos, she experienced important social outcomes as she made connections with her viewers. In the comments of her videos, viewers interacted with her and these communications ranged from friendly and positive to critical and inflammatory. Her favorite part about producing YouTube videos was receiving feedback from her viewers. However, Myers had to learn the differences between fans and friends and consequently had to set boundaries to protect her privacy. Exchanges with some viewers led to meaningful relationships and musical collaborations.

Making Virtual Friends

Myers's YouTube channel elicited over 4,500 comments in her 69 videos. Her videos had a range of comments from two to 609, and the average video had a mean of 66 comments with a standard deviation of 91, a median of 41, and a mode of 45 comments. The bulk of Myers's comments were on her *Lux Aurumque* videos, both the micro-performances for EWVC and her one-person virtual choir. In contrast, her live videos from high school had the fewest comments.

The tone established from the comment section on all of Myers's videos was one of support, praise, and affirmation. An analysis of the 112 comments on "The Phantom of the Opera" by Melody Myers (V39) using the depiction coding system presented in chapter three showed that comments about Myers were almost exclusively positive. Eight of the comments (7.14%) were made by Myers, and all but one included her thanking viewers for their positive feedback. For example:

Thanks for the input, but I'm having a lot of difficulty noticing it like you can.

Your comment made me grin from ear to ear. Thank you! I still can't believe that I sang Alto II for most of my high school years and my classmates used to make fun of me for singing the Soprano I parts. Times sure change.

You probably don't even realize how much a simple compliment like that means to me. Thank you very much.

Gratitude was found in the majority of comments Myers made and the above comments were representative of all of her videos. Of all of the comments for *The Phantom of the Opera (V39)*, one comment (0.85%) portrayed a negative depiction and two comments (1.79%) had both positive and negative depictions. These mixed comments included praise and suggestions on how to improve. A majority (n = 95, 84.82%) of comments depicted Myers positively and included praise and accolades about her musical ability, theatrical performance, and artistic design of visual effects.

The positive nature of her fans' comments led Myers to establish a friendly disposition with them, and she had to consider how she could connect with them.

I feel like I need to reach out to my audience. It's been different the past couple of months or a year or so, because I wanted to reach out to my audience more. I

figure if I get more personal with them, they will like watching my videos more, because then they can see the real me and not just someone that's performing.

Besides sharing personal information about herself, Myers also reached out to her audiences through responding to comments. However, responding to her viewers required time and energy.

I try to answer almost every comment, but I know if I answer almost every comment it will look like I'm always on YouTube and on Facebook, and I don't want to look that way because I'm not. I try to stay off social media as much as I can, because it's just draining emotionally.

Myers felt compelled to connect with her audience through YouTube comments. This was congruent with her desire to entertain audiences and make emotional connections through performance, she had such a strong connection to her viewers that she referred to them as "friends and supporters."

Friends, Fans, and Flames

Myers struggled with distinguishing between friends and fans, especially early in her YouTube creating experiences. Because viewers took an interest in her and gave her positive feedback, Myers responded with words of gratitude. She appreciated the attention and her youthful zeal and innocence led her to give all of her viewers the benefit of the doubt that they had her best interest at heart.

Friends and fans. Myers treated her commenters with respect. However, her overly accepting and friendly nature became a source of conflict in her social media experiences. The dividing line between friend and fan was a complicated one for Myers and became an issue of safety and online privacy when she was in high school and college. Myers hoped to get strangers to subscribe to her YouTube channel because that was the venue for her virtual performances.

However, her Facebook contained information about her personal life. Myers recollected how she blindly accepted all friend requests on Facebook.

I had close to 2,000 friends on Facebook, and I didn't know more than half of them. I don't know if they were fans, because to me they seemed like strangers or people that I didn't know. I mean, they might have been fans, but they never contacted me and said "Hey, I know you from the virtual choir and would love to follow you." Some of them did that. Actually, a lot of them did that, but some of them didn't even message me, and I had no idea where they were from.

I thought it was kind of dangerous. My teachers and my professors at college were a little concerned for me, and they wanted the best for me. They suggested that I be more careful online. I can understand where they were coming from, and I said, "Well, the only way of fixing that problem is to delete Facebook permanently and create a new one instead of going one by one and deleting people, with people getting their feelings hurt."

Myers recreated her Facebook, and she only accepted people with whom she knew personally. She also created a fan page which allowed her viewers to *follow* the updates she had chosen to make publicly available. This allowed Myers to choose how involved fans could be with her on Facebook: a friend had access to more personal information posted by Myers while a fan only saw posts about her music.

Dealing with Flames. Myers also ran into difficulties with sexual harassment on her social media sites.

A man tried to contact me recently through Facebook. I didn't necessarily think he was spamming me until he started sending me the same message a few times, and I never responded, because I was not interested. I thought maybe he would get the hint. But he sent me a Facebook message me, and he said, "Please join my singing community where you can talk about singing and how to sing." However, it seemed kind of fishy. He was from Germany. I didn't reply, but he kept messaging me and finally, he started sending me really inappropriate things. One recent comment I deleted. [Myers repeats the comment]. I blocked him, and I deleted the comment. I banned him on YouTube so he can't comment on my videos anymore, and he messaged me the same thing on Facebook, so I banned him from my page. Other than that, I've never had someone who's been that forward and that stalker-ish. He's been the only one so far.

Myers's looks were a common topic in the comment section; however, that did not bother her. In *The Phantom of the Opera (V39)*, Myers had more marriage proposals than negative comments. However, these requests were endearing to her unlike the overtly sexual comments discussed above. While overtly sexual comments were not common, men posting sexually-charged comments occurred that focused on Myers's physical appearance, referring to her curly hair, red lipstick, or overall beauty. Myers suggested that she never noticed any overly sexualized comments from females; however, they did refer to her physical beauty.

The Importance of Feedback. The amount of negative feedback without suggestions on how to improve was small on Myers's channel. The critics on her channel were supportive of Myers and offered sound advice on how she could develop her skills. Comments suggesting improvement spanned a variety of topics including technical skills, musical techniques, and repertoire or stylistic requests. Criticism was met by Myers in one of two ways:

Usually, I either respond with, "Well, I can't make everyone happy, and I'm sorry that you don't like what I do," or I take it with a grain of salt. Sometimes I don't reply. Sometimes I get really, really inappropriate (mean) comments and I just remove them. I don't say anything.

The presence of flames on Myers's YouTube channel was minimal and probably due to her deleting the small number of "inappropriate" comments she received. However, when a suggestion or critique had merit in Myers's mind, she worked on improving her skills. Either she discussed feedback with her voice teachers at college and together they worked on ways to improve her singing, or she searched the Internet for ways she could improve her weaknesses. These informal searches for development were usually technologically oriented rather than music related.

Defending interpretations. In an open forum like YouTube, opinions about how music is supposed to be performed are expressed. In Myers's video, <u>V27. Go, Lovely Rose Virtual</u>

<u>Choir, Multitrack</u>, she performed a choral composition by Eric Whitacre. Myers's passionate and theatrical facial expressions were presented as they were in her live and virtual choir videos.

Some viewers felt her facial expressions were distracting to the music while others thought they were appropriate and enhanced the performance. Her musical interpretation also caused controversy among her viewers. Myers recollected a story of when a commenter attacked her for having an incorrect interpretation of the song.

There was a woman who contacted me and said, "The *Oh, Lovely Rose* is wrong and awful!" and blah, blah, blah. So, I contacted Eric Whitacre and said, "Please help me!" because I know he watches the stuff that I do of his works. Oh, that man, he stepped up for me. He was like, "I'm going to tell her to back off,

because what I heard is absolutely correct. I should know, because I wrote it."

And I was like "Oooh. You're such a nice man."

Even though the conversation has since been taken down by Myers, this story shows how the collective virtual ensemble she participated in allowed for the establishment of relationships that continued beyond the publication of the performance.

Collaborating with Other YouTube Musicians

Myers felt her relationship with composer Eric Whitacre was one of a few deeply meaningful friendships that she had with people she met through virtual vocal ensemble singing. Two other notable virtual relationships culminated in collaborative projects on YouTube. In the following section, Myers's interactions with collaborators, Julien Neel and Julie Gaulke, are discussed.

Working with a Master Collaborator. French video creator and YouTube musician Julien Neel and his YouTube channel, *Trudbol A Cappella*, amassed 88,675 subscribers and 20,124,052 views from August 26, 2007 until May 15, 2015. In eight years, Neel published 145 videos on his channel and collaborated with musicians from across the globe; the communication Neel had with the musicians he performed with on YouTube consisted mostly of virtual interactions.

Myers was in high school when she was introduced to Neel's videos. They inspired her to create *Lux Aurumque (V11)*. Neel was a leader in the virtual vocal ensemble community, and he reached out to other multitrack videos creators by giving advice on how to make better videos. Neel described how his relationship with Myers began:

We were both tiny YouTubers at the time. I think it was 2009. I had 500 subscribers. I commented on one of her videos, or she commented on mine. It

always starts like that with my collaborators. You find a video, and you leave a comment. The person responds, you click together, and you move on to the project.

After establishing a relationship through commenting on each other's videos, giving each other feedback, and encouraging each other, Myers and Neel moved their relationship beyond the borders of YouTube and communicated via e-mail, Google Hangouts, Skype, and Facebook.

Collaborating to create a YouTube video was a logical step for both artists. Neel coordinated their first project, "Tonight" (West Side Story) SATB collaboration - Julien Neel, Richard Bachand, and Melody Myers (V52). Neel wanted to perform a song with piano and recruited Richard Bachand, one of his friends and mentors he knew from performing live musical theater and barbershop. Neel explained in an interview:

I thought the musical genre fit Melody well, and Richard and I liked musicals. I picked a song that would sound good for everybody and everybody enjoyed. I did most of the coordinating work. I gave Melody the sheet music. I recorded Richard audio and video (simultaneously) first. He's an accompanist, not a solo pianist. He likes to play with a singer. So it was very different for him to play while accompanying nobody. He had to pretend. So we practiced a few times where he accompanied me. Then I recorded him playing alone, pretending I was singing. Then I recorded my voice on top of that, and Melody just had to add her parts.

To record the piano playing, Neel traveled to Bachand's home in Paris, a trip that took him two hours by train. To acquire Myers's vocal tracks, files were sent via the Internet. After Neel edited the sound mix, the two vocalists recorded their videos. Neel described, "Melody and I lip-synced to our own recordings for the video, while Richard's hands was the actual footage.

The 'real videos' are the piano, and the 'fake videos' are the singers." Like Myers, Neel also referred to recordings that were not recorded live with both sound and visual being captured at the same time as *fake*. However, both collaborators felt synchronizing mastered sound files to a lip-synced visual allowed for the cleanest and most well produced video.

Neel and Myers developed a relationship in which the two benefited each other socially, musically, and intellectually. The two both described their relationship as a close friendship, and Myers even labeled Neel as "one of my best friends, even though we've never met face to face." The two spoke not only about YouTube, creating videos, and how to expand audiences, but also about marathon races, family, school, and career aspirations. The relationships born out of comments and collaboration extended beyond music making into personal life.

For Neel, collaboration was more difficult than one-person virtual vocal ensemble creation. *Tonight (V52)* took a lot of time to create as Neel traveled to Bachand to record his part. The process was complicated by Bachand's lack of experience with recording. However, the pianist learned a new skill in the process. Then, more time was taken as the vocalists sent files back and forth. Neel noted a final drawback for collaborating had to do with the recording and mixing process:

It's a lot easier to create videos on my own. I blend better with myself, I can get exactly the result I want, and I can be a detail freak. If there's something I don't like, I can just redo it. But if someone sends me a track, it's hard to say, "Do it again," or, "Fix this." You can only ask a limited number of times, and if you don't like the recording, you're stuck with it. I'm not saying that I don't like what they do, but it's never exactly what you want or how you want it. You have to adapt more with other people. Sometimes you get to work a little bit less, and

sometimes more because you have to work with something that is tricky. I generally like the control you have over the production when you're on your own.

While collaboration can be a test of one's patience, Neel was also challenged as a musician, especially when he worked with Myers.

It is beneficial to work with others because there is the challenge of blending with somebody that has a very different voice from your own. I sing with people who have very different voices. For example, Melody is lyrically trained so her voice carries more. My growth as a musician was mostly because of YouTube. It's a result of making these videos one after another and getting feedback from friends.

Like Myers, Neel received a lot of feedback from his viewers through comments. Through these comments and collaborations, Neel met a woman named Julie Gaulke, another virtual vocal ensemble creator who he eventually introduced to Myers.

Women collaboratively creating. Gaulke and Myers had both established themselves on YouTube before making a connection with each other. Gaulke's YouTube channel, *Julie Gaulke Music*, was created on March 25, 2009 and her 172 videos accumulated 2,015 subscribers with 630,135 views by May 15, 2015. Gaulke posted virtual ensemble performances of various styles and genres. She and Myers had seen each other's videos and made comments on each other's performances, but neither felt the other had time to collaborate. Gaulke recollected:

I found Melody's channel through a simple search. I found out who she was from the Eric Whitacre video, and I typed her name into YouTube. Her channel came up. I found out that she had done all kinds of fun things on her own like I had. So I subscribed, and I've been following her. It sounds kind of stalker-ish when I say it like that.

While Gaulke uses the descriptor *stalker-ish* to depict how she followed and became a fan of Myers, Myers's relationship with Neel started in the same way. Conversation between Myers and Gaulke did not start until a fan suggested that they collaborate. Inspired by the fan's prompting, Neel took the initiative to introduce the women.

The collaborative process for Gaulke felt surreal because she though of Myers as a YouTube celebrity because of her involvement with EWVC and her own YouTube channel. Gaulke described how she felt when she first contacted Myers:

At first, I was starstruck. I had seen Melody's face all over the Internet, mostly because of that first Eric Whitacre video. She's so pretty. She is so popular. All of a sudden, she was talking with me. It was like meeting a celebrity. After a few minutes, you get to know the person, and you realize they are just like you. The same thing happened when I met Julien. The first time I Skyped with him, I was starstruck, because he has such a massive following. All of a sudden I'm talking with this person, and I feel so special. Then I get to know the people, and it's kind of cool. I'm part of that group. I'm one of them.

Gaulke wrote or adapted most of her own arrangements. Finding SSAA music that fit in her range was difficult, especially in genres that she felt appealed to a large audience on YouTube. Myers suggested the pair perform *Pure Imagination* from the movie *Willy Wonka & the Chocolate Factory*. Since the two were unable to find an arrangement that fit their voices, Gaulke arranged the song. Myers did the audio mixing, and Gaulke did visual editing. Gaulke created a MIDI file and recorded her voice parts and sent the file to Myers, who then added her parts and mastered the audio mix. The two sent the audio mix back and forth to finetune the soundtrack. Once it was done, Myers lip-synced two videos and sent the files to Gaulke, who

recorded her videos and synchronized the videos with the soundtrack. She included special effects like a moving slideshow background featuring brightly colored candy and panels where the clones faded in and out with each musical phrase. From conception to publication their collaborative process took six days to complete.

Female perspectives in a male dominated practice. Gaulke and Myers were two of the most prolific female virtual vocal ensemble creators on YouTube, each having produced 172 and 69 videos, respectively. For Gaulke, having a connection to another female virtual vocal ensemble creator was meaningful. Gaulke recalled what first drew her to Myers:

There aren't that many female multitrackers—I tend to hunt them out. I try to find other people that do what I do so that we can talk to each other about it. There are certain limitations to being a female vocalist. The most obvious being the lack of bass range, so when I hear other females doing things and adding basses to their vocals, I have an interest to find out what they're doing.

Myers initially used technology to shift her voice down an octave and then decided to use arrangements written for higher female voices. Gaulke too sought out arrangements that fit her voice; however, she elected to arrange most of the music she performed on YouTube. Both Gaulke and Myers felt that being a woman in a male-dominated practice was exciting and empowering.

Myers and Gaulke developed a close friendship and the starstruck feelings Gaulke experienced waned as they became more familiar with each other. Myers described Gaulke as maternal figure in her life.

I kind of look up to her as I look up to my mother, and they have the same astrological sign. She's a Gemini just like my mom. I can see resemblances in

that, and we get along great. Just the other day, I needed some help converting videos, because I bought a new camera. I needed help converting those videos into a different format so that my computer could play them. She said "Oh, here, try this site." So I did because I trust her, and I downloaded the software and it worked just fine. I think we have a closer relationship than we did before we started collaborating.

The two held each other in high esteem and both said that they admired the same characteristics in each other: their creativity, their musical ability, their use of color, and their cheerful dispositions. The pair not only made music together and helped each other learn, but they also supported each other personally and emotionally.

Identity

As a 17-year-old, Myers became an Internet sensation when she was selected as the soloist for the first Eric Whitacre's Virtual Choir. This opportunity led to her online identity shaping her musical identity and vice versa. In this next section, I discuss Myers's identity in three general categories: her musical identity as she balanced online and offline music making, her identity as an entertainer, and her technical identity as she navigated both her musical and online experiences.

Balancing Online and Offline Music Making

As Myers attended college to study vocal performance, she made decisions on how to balance her classical training with her informal online music making. The following paragraphs explore Myers's identity as a musician and how the music she chose to perform played into that identity.

Exploring Genres and Styles. The music Myers chose to perform affected her musical identity. If she sang only the music given to her by her voice teachers and choral directors, Myers would have sung strictly classical and opera music. However, she used her YouTube channel as an outlet online in which to perform and explore many genres. On YouTube, Myers performed music that was meaningful to her. Myers's parents loved rock and roll music, and they passed on that love to her.

I learned how to sing Rock like I did Jazz and Blues—by listening to vocalists who sing the genre, and I mimicked them. Every day I heard my dad playing on his guitar in the living room as he watched television. Sometimes I wondered what my father's voice would really sound like if he had the training I've had.

By listening, one can learn the nuances of the style and begin to mimic professional recordings. Informal music learning was contrasted with the formal voice lessons Myers received for classical and opera. Myers also love performing Broadway and soundtrack music. However, she learned this type of music with a hybrid approach, mimicking professional artists while also applying the technique she learned from her formal lessons.

The genre most prominent on Myers's YouTube channel was barbershop music. She had an affinity for Sweet Adelines, yet it was also at odds with her classical training. Barbershop music allowed Myers to perform for fun online, as opposed to acting professionally and focusing exclusively on classical vocal styles at school. Performing four part harmony by herself allowed for a genuine expression of identity.

I feel like what I do in my professional life is so much different than what I do for fun on YouTube. I mix it up a little bit as far as genres are concerned. I add a little opera on YouTube, because opera and classical is my main focus music offline, and that takes up about 80 to 90 percent of my time. Then the rest of my music making is on YouTube doing barbershop, a cappella, or something fun, something not really professional.

Challenges of Being a Professional. The bifurcation of classical and opera versus barbershop and a cappella caused discord in Myers's musical identity, because she worried how her popular genre singing would affect her professional career as a classical singer. Myers's identity in music skirted the amateur-professional divide, and as she got older and specialized more on live performance, this line became more blurred, especially in her online music making. Myers's amateur involvement as a musician online led to professional opportunities. The Whitacre virtual choir brought her notoriety, especially among the virtual vocal ensemble community and the exposure led to professional opportunities.

Being the soloist for *Lux Aurumque* has opened up so many doors for me. If it wasn't for Eric and his wife, Hila Plitmann, I wouldn't be where I am today. Since that happened, I had a producer contact me from Hamburg, Germany. He wanted me to come and sing on this project and all this stuff for a recording. And I said, "Yes! What an amazing opportunity!" He also asked me to sing background vocals for the new Sarah Brightman album that came out in April 2013.

While Myers developed a fandom online and pursued performance opportunities offline, she admitted that she worried that her professional career would require for her to take down her YouTube channel and not create videos anymore.

If I get involved within the music industry, my producer may not want me to do multitrack videos anymore, because they want me to stick with one genre. Also if I auditioned for graduate colleges, a lot of professors won't like me doing pop music when I'm supposed to be singing opera. They will only want me to do opera videos. That's a setback, and if I get signed to a recording label or into graduate school, I really don't want to take down my videos. But if I sign a contract, and I actually do start making a living singing opera, classical music, new age music, or Celtic music, I might have to take my videos down. I hope it doesn't work out that way.

Myers's YouTube channel was very important to her. Performing on YouTube provided balance in her life and music making, allowing her to perform various types of music that she did not have a venue for in her offline situations.

I see YouTube as a balance and an enhancement of my offline music making. If I'm really down or if I'm going through problems, I stop everything, sing, and record. When I'm in my studio all by myself, the trouble leaves me. It's like an outlet. It's like venting. You take all that emotion and you make it into something productive. That's the best thing about making videos.

Entertaining through Video

In addition to being an outlet to express emotions, Myers found creating YouTube videos fulfilling because she was able to entertain others. In her eyes, Myers was first and foremost an entertainer. When asked why she made videos, she said:

I want to entertain people. I want to give them what they want and make everyone happy. I really think that is important to me. It's my ultimate goal to make people happy. That's the benefit that I see in making videos. I mean, I hardly make any money. No money really at all, and I don't care about that.

In this next section, aspects of how Myers's identity as an entertainer and the actions she took to share her identity with viewers are discussed. These aspects include sharing personal information through vlogging, visual displays of identity in her videos, and developing multiple personae while performing.

Sharing life through vlogging and bloopers. Myers had to decide what information to divulge to her viewers. The concept of being a mystery is common in the professional music recording industry, and her mistakes of letting anyone who asked be her friend on Facebook made her more hesitant to share details about her life with her viewers. However, the practice of sharing mundane details about one's life common on social media is not out of the ordinary. Myers included both vlogs and bloopers in her videos so that her audiences would get to know her better while also allowing her to strategically control the information she published on YouTube.

On her YouTube channel, Myers published three full-video vlogs. The first two vlogs, <u>A</u>

Few Thoughts and A Lot of Thank Yous' (V19) and Whitacre Scholarship Winner, request "Sing With Eric" (V26), were produced before she went to college and chronicled her involvement with EWVC. In <u>A Few Thoughts (V19)</u>, Myers, who was a high school senior at the time, expressed her excitement and overwhelming gratitude for being selected as the soloist and first scholarship winner for the Sing With Eric contest, which allowed her to perform at Carnegie Hall. The vlog was unscripted and Myers got choked up as she spoke about how excited she was to go to New York and meet her fellow contest winners. She also expressed her anxiety about becoming a college student and was transparent about how she did not know what she wanted to do with the rest of her life.

The second vlog was recorded as a request by *Distinguished Concerts International New York* (DCINY), the company that sponsored the *Sing With Eric* concert that funded Myers's scholarship. Myers spoke about how touched she was by Whitacre's music and how intimidated she was to sing with 425 singers. In the video, she fought back tears as she recalled her experiences. Myers spoke about how she meet people from EWVC's *Lux Aurumque*, and encouraged her viewers to join future collective virtual ensembles:

There's always going to be people who think, "Oh, I'm not good enough," or you doubt yourself thinking, "This person is better than I am," or "I was sharp or flat on this pitch," or "I just don't think I have a chance now." Don't think like that, because it all depends on what kind of talent you have and what kind of people are looking for that kind of talent. Make sure you express yourself and sing with your heart.

This quote encapsulates Myers's own experiences of being afraid of trying out, deciding to audition, and ending up being the winner.

Her newest video, *The First Update in FOREVER! What's Going On?!?! (V69)*, was a vlog that updated viewers about her search for professional work. The video also included Myers's pets: her dog who was seen in the video and her bird who was heard in the video. This video was enhanced with dynamic texts that appeared next to Myers's head, which provided a comedic commentary and additional information as she spoke. The video also had picture in picture popups, which featured clickable graphics linking viewers to previous videos.

In the vlog Myers discussed how bloopers affected her audience and the way they viewed her videos:

A couple of weeks ago, I did a video called *Believe* and after the video, I talked a little bit and did a blooper reel. I got great feedback. After reading some of the comments I got, I figured I would start talking to you guys a little bit. I also posted on my Facebook page—by the way, if you haven't liked my Facebook page, go ahead and like it (Myers overexaggerates a wink). On Facebook I asked, "What do you guys think?" One of the comments I received said, "I think it's a great idea, I commented on the *Believe* video about how much I enjoyed the bloopers and how you should talk to the viewers more often. It's a way for people to feel closer to their favorite artists."

Myers's audience asked for ways to know her better, and she responded by sharing information about her life through vlogging. She discussed how she felt her time in Nashville was coming to an end and how she was searching for a graduate school to attend. Myers also discussed her experiences as a professional singer and the albums on which she sang. To provide a more interactive feature to her vlog, Myers asked her viewers questions both verbally and through the dynamic text commentary. She requested that they put comments on the video's page to answer her questions. These questions included inquiries about viewers' college choices, favorite music, and what they thought about various subjects.

Creating identity through visual displays. Myers displayed her identity through speaking directly to her audiences and allowing them to see the creative process including her mistakes. Another way Myers developed her online identity was through the way she portrayed herself and her clones. In her virtual performance videos, Myers paid close attention to what she looked like and what was visible behind her on screen. At the time of this study, she was embarrassed about the backgrounds of her early videos, which were filmed in her childhood

bedroom. As she became more aware of how the background of her videos effected how she was perceived, she began to purchase backgrounds to pin up behind her as she recorded, which included patterns or solid color sheets. She planned on using a green screen in the future.

Myers's physical appearance in her videos was always important to her. As early as her first videos, Myers put on makeup and styled her hair. She careful selected costumes, which accentuated an aspect of the song she was performing. She was not afraid of acting silly, as was evident in the *Animal Crackers* videos, and her attention to appearance is exemplified in *Let it Go (V64)*. When creating a virtual vocal ensemble, Myers gave each clone, or each section in a larger ensemble, a different hair style. Myers perceived that this variety was more entertaining to her audience than if her clones were all identical.

Vocal-part specific personae. While the hairstyle differences provided visual variety, they also served to accentuate individual personae in Myers's performances. When recording a barbershop quartet, Myers allowed each clone to have distinguishing characteristics.

My leads always have this look. It's my *normal* look with my hair down. The others have hair pulled to the side or straight hair. Usually the lead is me, the bass is sexy, and usually the tenor is kind of like a dumb blonde. Sometimes my baritone is a little bit sillier than my tenor. It just depends how I feel that particular day. Usually by the end the end of a video I get sillier because I'm like, "I'm done."

This variety allowed Myers to express different emotions while adding an additional element of entertainment for viewers.

Growing a Technological Identity

Musical performance was not the only thing that contributed to Myers's identity on YouTube. When she started producing videos, they were technologically simple and the quality of her performance relied on musicality, theatrics, and physical appearance. However, as she became more experienced as a creator, the technological mediation Myers used contributed to the formation of her identity. The technological aspects of her early videos were limited to fading panels and synchronizing audio and video that, unfortunately, were usually flawed. However, as she explored mediation and editing software, she was able to create more visually dynamic productions. Moving backgrounds, panel effects, and key animations were just some of the effects she used to entertain her fans.

I've grown so much, especially in editing, because I take the time to learn how to get better. I realize I've grown a lot in patience. Before I would say, okay this looks good enough, and now I'm like, "Oh my gosh, no. I'm going to look back and say I could have done that so much better. I should have the patience to actually make it look good." So now I try to make it look a lot more unified and together and not so thrown together, because I feel like patience is like the biggest thing.

The acquisition of technological skills for Myers was gradual and continuous. She tried to improve her skills with each successive video she made. Yet, she thought of herself as less accomplished than her peers like Neel and Gaulke. This self-criticism empowered her to strive for improvement.

I still believe that I have so much more to learn. I think there is definitely more (growth evident) in my new videos. I try to improve every time I do a video. My

next video is something that is completely different. It's got a moving background, and it's got other moving pictures and animations. It also has text.

Conclusions

This chapter presented the development of the *Melody Myers* YouTube channel. In the following paragraphs, four salient themes are discussed including Myers's connection between emotional expression and entertainment, the cultivation of virtual relationships, the balance between her professional and amateur music making, and the confidence she was able to gain as an online musician.

Emotional Expression through Entertainment

Two of Myers' rationales for creating virtual vocal ensembles were to express her own emotions and to entertain her audiences. For Myers, music making was a way for her to emote, and each genre she performed allowed her to express herself in meaningful ways. By sharing her emotions with her audiences through song, she was able to entertain them. She used both live and mediated techniques to entertain her audiences, which included theatrical performances and costumes as well as dynamic texts and vibrant backgrounds. Everything Myers included in her virtual performances served two purposes. A high visual and sound quality allowed Myers to feel accomplished and have fun as she expressed herself musically. Her attention to detail provided audience members both visual and sonic stimulation.

Virtual Relationships

Myers's desire to please her audiences was always in forefront of her mind. She reached out to her audiences and showed her viewers gratitude and compassion by attending to their requests, vlogging, and responding to comments. Friendly interactions took place on YouTube between Myers and many of her fans. Viewers commented on her videos to express their

gratitude for her performance, and Myers responded by thanking them for their support. As a young singer, Myers learned she had to be careful with how she interacted with her audiences. She quickly found herself overwhelmed by the number of strangers requesting to be her friend on Facebook. As a trusting individual, she found it hard to deny fans access to her social media sites. However after the encouragement of her mentors, she set up new boundaries to restrict strangers from laissez-faire access to her social media. While inappropriate comments were made to Myers, she was able to control those affronts by blocking users.

Myers was also able to develop meaningful relationships with other virtual ensemble singers like Neel and Gaulke. These two friends gave her advice about virtual ensemble creation and her personal life, and their relationships resulted in collaborative music making online.

Collaborations led to musical and technological learning, expansion of audiences, and personal friendships that transcended the particular.

Finding Balance

The case of Melody Myers and her YouTube channel provided insight on how virtual music making can serve as a balance for professional musicians. Myers found that performing popular genres online allowed her to explore different techniques and musical styles. This venue gave her a way to continue her involvement with Sweet Adelines barbershop choruses even though her live music making in that arena had come to an end because she had to focus on classical and opera music in school and her career. While live music making tends to be a social activity, one-person virtual vocal ensemble creation tends to be a solitary endeavor. When the stress of school and troublesome activities in life started to upset Myers, she was able to retreat to her bedroom studio and express herself through music.

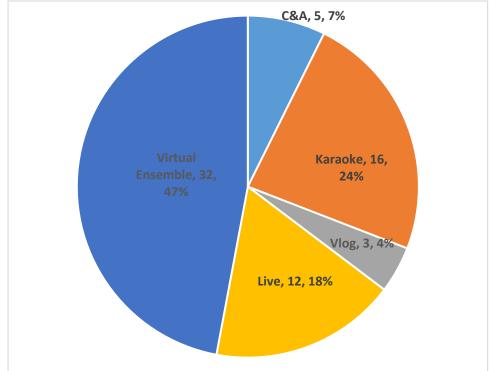
By capturing her emotional performance on video and putting it online, Myers was able to create a raw, authentic performance that featured what she considered pure emotional expression. A disconnect from this purity comes in that Myers lip-synched her videos. With Myers's desire to be theatrical, the visual display of her videos may be considered more contrived than a live performance. Myers's earlier videos show a more spontaneous display of emotion than her lip-synced videos because the videos were recorded in one take and no editing beside synchronization was done. In these videos, Myers visibly delighted in music making as was the case in the live choral performances that started her channel.

Confidence

As a high school student, Myers was unsure of herself and her abilities as a singer. Myers saw her mother as a strong source of support, who encouraged her to push herself as a musician. Participating in EWVC strengthened her confidence and had an effect on propelling her into pursuing music as a profession. After winning a scholarship and being chosen as the soloist in *Lux Aurumque*, Myers gained confidence and began to encourage others to challenge themselves and become better musicians. Myers's viewers commented on her videos, which gave her emotional support and boosted her confidence. The relationships she had with her voice teachers at college also contributed to her confidence level. These traditional tutors were contrasted by her informal friends who helped her learn technological aspects of virtual vocal ensemble creation. Part of Myers's technical identity included feelings of inadequacy. However, her desire to improve her video making resulted in visually and sonically dynamic performances that brought her acclaim not only online, but in the professional music recording industry.

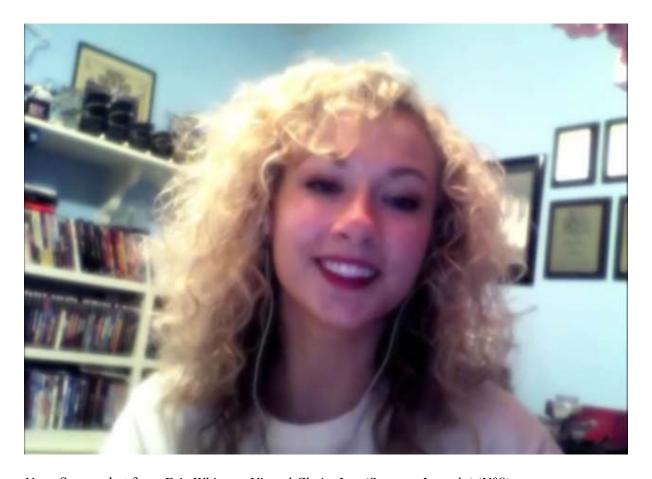
Figures for Chapter Six

Figure 6.1. Frequencies of performance styles on Melody Myers



Note: C&A stands for collective micro-performances and audition videos.

Figure 6.2. Myers and her bedroom background



Note: Screen shot from *Eric Whitacre Virtual Choir: Lux (Soprano I + solo) (V08)*

Figure 6.3. Screenshots from Myers's Animal Crackers by Eric Whitacre

Eric Whitacre's Animal Crackers - The Panther, Multi-Track (V15)





Figure 6.4. Screenshot from *The Jewel Song (V59)*



Figure 6.5. Screen shots from *Let it Go (V64)*



Figure 6.6. Screenshot from Alexander's Ragtime Band (V58)



Figure 6.7. Screen shots from We Go Together (V40)



Figure 6.8. Screenshot of *Lollipop (V60)*



CHAPTER 7

CROSS-CASE ANALYSIS

The purpose of this multiple case study is to explore virtual vocal ensembles, their implications to those who create or participate in them, and the medium that emerged from the development and distribution of those videos. The case reports of YouTube channels and their owners who created virtual vocal ensembles provide the groundwork for a cross-case analysis. This study examined the creators and the medium that emerged as a result of virtual vocal ensembles. The study focused on three early adapters in the virtual vocal ensemble community and their practices, an area of increasing interest to researchers and educators. This chapter first presents the assertions that were established as a result of the cross-case analysis, and then Sterne's (2003) framework of medium is discussed.

Review of Cross-Case Analysis

A quintain is the area of focus common to multiple cases that are studied. The cross-case analysis of the study focused on the quintain of virtual vocal ensembles by condensing the case reports in previous chapters and examining the data that they contained. By adapting a method developed by Stake (2006), a series of worksheets (see Appendix B) were used to identify the most relevant information from each case to the quintain. The guiding questions of the study served as themes by which the case reports were analyzed. To review, the guiding questions were as followed:

- 1) What are the musical and social implications of virtual vocal ensemble creation and participation?
 - a. How do virtual vocal ensemble creators find the process fulfilling and meaningful?

- b. How does the production of videos on YouTube affect the identity of the virtual vocal ensemble creators?
- c. What type of community emerges through the creation and distribution of virtual vocal ensembles?
- d. How does creating virtual vocal ensembles influence the creator's skills and understanding?
- 2) How does a medium emerge as people create virtual vocal ensembles?
 - a. Who are the people creating virtual vocal ensembles?
 - b. What practices are involved in making virtual vocal ensembles?
 - c. How do institutions influence virtual vocal ensembles?
 - d. How is technology used to mediate ensembles and performance?
 - e. How do recurring relations create a network through which the medium emerges?

These guiding questions were the impetus for researching and data was extracted from each case and organized by themes that correspond directly to the guiding questions. The thematic data was analyzed and case specific findings were developed. These findings were then clustered by their content and merged findings were generated, which were considered as cross-case assertions were developed. Each assertion in this chapter attends to multiple themes; to avoid redundancy, instead of attending to each guiding question and sub-question individually, the author encourages the reader to keep in mind all of the questions as each assertion is presented.

Cross-Case Assertions about Virtual Vocal Ensembles

In the remainder of this chapter assertions are discussed using examples from the three cases presented in chapters four, five, and six. In the assertions, the term *creators* will be used to

group two or more of the main participants together and in some instances, the term also refers to the subcases, which included Neel's and Gaulke's YouTube channels. The assertions serve to show commonalities across the three cases to point out salient distinctions in individual cases.

The assertions are presented in no particular order in regards to importance or subject.

Creators develop methods to construct and publish their videos.

To make virtual vocal ensembles, creators put their visions of ensembles into video form. When first creating virtual vocal ensembles, layouts and soundtracks are often simplistic and effects are minimized or non-existent. However, as creators became more accomplished, they developed a creative process which includes song selection, preparation, recording, editing, and publishing. These processes evolve as creators decide what works for them. They often develop a routine that stays consistent. For example, creators started their creative process by selecting a song. Song selection was influenced by factors including but not limited to personal preference, viewer requests, and the pitch of vocal arrangements. Creators then prepared for recording, which consisted of learning the music and creating an anchor. An anchor is an object that helps the artist record various tracks consistently. For the Eric Whitacre Virtual Choir, Whitacre created a conducting track that was accompanied by a solo piano. Wright and François always created MIDI files with click tracks to help them stay in time. Myers did that at times, but preferred to use the melody to guide her subsequent recordings. Creators prepared their score in different ways, and techniques included making notations in scores, learning parts while arranging and then singing through each line, and learning while recording, sometimes capturing an adequate take while sight-reading.

François recorded his tracks in one take, capturing the audio and visual aspects of his performance. He subsequently mastered the audio and then the video from those tracks. Wright

and Myers both preferred to record their audio first and master it before they moved to recording and put together their video tracks. After the audio and video tracks were combined, creators published their videos. They considered when to publish their videos, on which social media sites to announce their videos, and the degree to which they interacted with commenters. The creator also decided which YouTube tools such as annotations, description box, and comments they used to interact with and inform viewers.

The technology used to create videos has an effect on virtual vocal ensembles.

While the steps in the video makers' creative processes were usually consistent, the execution of various steps in the creative process sometimes diverged across videos. For example, the layout of the panels during the visual editing process may have changed while the steps of the process stayed in the same order. Evolution of the creative processes resulted in the creators learning more sophisticated technologies and techniques. For example, audio editing processes in the cases of Myers and Wright went from using free, amateur software with no effects to using professional software to balance tracks, combine spliced recordings, and add special effects.

Creators purchased more advanced software and hardware because they could not create the type of video they wanted with their initial resources. Synchronization problems occurred in Wright's and Myers's videos due to the lack of processing power in their hardware. Myers created her first virtual vocal ensembles on a laptop with a built in webcam. She eventually bought a new video camera and moved her video editing practices to her desktop, which had more processing power. Wright and François both decided to purchase lights to boost the quality of their videos giving their virtual vocal ensembles a more professional look. While it is possible for high quality videos to be produced with amateur quality equipment, as was the case with

Neel who used Audacity, a free software program for sound editing, and an economical handheld video camera, the sound and visual quality of a virtual vocal ensemble was effected by the technology the creators chose to use.

Creators' personal choices and opinions guided the way they created virtual vocal ensembles.

As the designers of a virtual vocal ensemble, creators chose how to construct their video and portray their ensemble. Their personal choices and preferences guided the way they created their video and their choices were informed by their beliefs about fidelity and the conventions deemed acceptable by the community. By considering both their own feelings and the virtual vocal ensemble community at large, creators followed a set of self-governed rules by which they constructed their videos.

Fidelity as authenticity. Discourses of fidelity challenge the similarity and differences between synchronic and recorded sound. The creators had different levels of desired fidelity and those levels evolved and changed over time. For example, in her earliest videos, Myers used pitch shifting to make her voice sound an octave lower when singing tenor and bass parts. At the time, she felt that pitch shifting made the choir sound like a live mixed choir. As time passed, she did not agree with her previous choice and decided that pitch shifting made the ensemble sound more synthetic.

François and Wright identified imperfections in their recordings and had different methods of fixing discrepancies. François believed recording tracks in one take gave his performances a sense of urgency with genuine musical lines and an authenticity that could not be achieved by splicing multiple takes together. To avoid re-recording entire songs when he made a mistake, François used Melodyne, a pitch and rhythm correction software program, to adjust

intonation and rhythmic flaws technologically. Wright felt that pitch correction was not a viable option and that it lessened the authenticity of a performance. He opted for the splicing method that allowed him to navigate between takes without having to rerecord full songs each time he made a mistake. These methods are examples of how the creators used different methods to create their best mediated performance, yet each felt that the other method made for a performance with less authenticity.

As virtual vocal ensembles are audio-visual displays of music performance, fidelity pertains not only to how life like a recording sounds, but also how realistic it looks. Visual perception was also an area of concern as creators chose how to make their ensemble look similar to or different than a live group performing. Creators used both technological means and live practices to attend to visual perception. For example, in Wright's first videos, the same frame of his bedroom provided the background for all four of his quadrants. Later, he also attempted to splice together his video panels and create the illusion that he had four clones standing in the same room performing with each other. He eventually opted for a green screen, which gave the illusion that all four singers were in the same space. Mediated practices were not only used to make a virtual vocal ensemble seem more like a live ensemble, but they were also used to create opulence or accentuate precision. Wright eventually opted for a more mediated approach in which the clones had their own distinct space, a border, and voice part label. In all cases, when video editing and effects were used, the ensemble seemed less like a live ensemble and more like a music video. Moving panels, transitions, animations, fading, and highlighting all accentuated the mediated nature of virtual vocal ensembles.

Live performance practices were also used to establish fidelity in virtual vocal ensembles.

Myers and Wright created virtual barbershop quartets in which the clones interacted with each

other by pretending to look at each other and making gestures, a practice was similar to what one would see from a live barbershop quartet performing on a stage. Wright also angled his singers toward the center in his later virtual choirs, giving the illusion that the group was facing a conductor, which was also seen in the EWVC where the panels of the singers faced inward towards the director.

Influence of the virtual vocal ensemble community. As the practice of virtual vocal ensemble creation became more prominent since Whitacre produced his first massive collective virtual choir, the population of creators and audiences grew. Wright paralleled the popular conventions of creators as he tried to emulate the video layouts and effects of other virtual vocal ensembles he found impressive. In this manner, Wright's videos exemplify the popular practices such as how panels were arranged on screen, the 32-box virtual choir, the green screen, and the special effects such as scrolling lyrics and dimmed panels. Myers imitated others as well with her choices to go from boxes to quadrants to side-by-side panels. She admired the cleanliness of others' videos, which let her to consider using green screen in the future. Both Myers and Wright, two of the early adapters of the multitrack video community, asked other virtual vocal ensemble creators for suggestions. Fellow creators like Neel shared tips and collaborated to both learn and share knowledge. In contrast, François claimed that he was at first unaware of multitrack videos and created videos in his own style.

Developing preferences that influence creation. Creators navigated the YouTube community and took into consideration what was successful for others. However, they also used their own opinions and preferences to choose how to present themselves and their art. Creators developed preferences, both stated and implied, that directed the way they created their virtual vocal ensembles. These stylistic decisions, governed by heuristics, ranged from their thoughts on

fidelity and copyright to the way they interacted with viewers and how much personal information they put on the Internet. This is not to say that the preferences of the creators never changed. On the contrary, creators were at liberty to adjust their preferences as they saw fit.

One-person virtual vocal ensembles afford autonomy for their creators.

Making one-person virtual vocal ensembles allowed creators to develop a sense of autonomy as they crafted their videos. The creators directed their own learning to acquire skills they needed to produce virtual vocal ensembles and experience musical freedom in the performance process.

Self-directed learning. One way the creators experienced autonomy was through self-directed learning. The creators often had a vision of what they wanted to produce, whether it was making a one-person virtual barbershop quartet, adding a video element to sound mixing skills, or creating a one-person virtual choir after singing in a collective virtual choir. The creators developed strategies to meet those goals and better their art form, but they first had to experiment with the performance practice. Learning strategies included interaction with more experienced creators, searching for tutorials online, taking formal workshops and courses, and creating practice virtual vocal ensembles. Both Wright and François created multitrack recordings before starting their virtual vocal ensemble production on their main YouTube channels. Myers was inspired by her experiences with EWVC, which taught her how to record her microperformances and inspired her to attempt her own one-person virtual vocal ensemble by rerecording the parts she submitted for EWVC and expanding her virtual vocal ensembles to include bass clef voices.

Creating on one's own terms. Creating one-person virtual vocal ensembles was a solitary endeavor for the creators. They experienced some sort of event that led them to virtual

vocal ensemble creation as a way for making the music they wanted to sing. Wright wanted to put together a barbershop quartet, but was unable to find a cohort in his high school. François sought to sing in his church's worship team, but did not make the cut, so he refined his musical and technological skills by turning to sound technology, which led to the refining of skills that allowed him to make his virtual vocal ensembles, and singing in another church's choir. Myers desired to continue her popular music styles online as an amateur while performing classical and opera in her academic and professional career. Creating virtual vocal ensembles allowed creators to make music on their own terms. They were able to interpret the music without the influence of a director, collaborator, or manager. Creators developed the skills often required of an ensemble director: score preparation, attention to balance and blend, and repertoire selection.

Complete freedom was challenged, however, as the creators felt a sense of obligation to please their fans. Creators noted that they initially selected repertoire based on their own preferences, and they produced a video on a schedule that was comfortable for them. With additional followers came additional pressures from fans; two of which were influences from their fandom on the kinds of choices creators made and the expectation to produce at a regular pace. A sense of obligation was evident in Myers's case as she felt her fans pushed her to perform more opera, yet she desired to publish a balance of popular and classical music.

Wright's earlier repertoire was chosen completely autonomously. If he liked it, he performed it. As his fandom developed, he was influenced more by his fans' preferences. François's pressures stemmed from the need to consistently produce videos. When he was a newer creator, he had the option to post when he wanted. After he became popular, he felt compelled to produce more regularly so that his fans would stay happy. The implications of having an audience made the

creators' decisions feel more obligatory as the audiences' expectations were taken into consideration.

Becoming the master of everything. Independence was also apparent in the way creators exhibited the skills needed to perform and produce music. Virtual vocal ensemble creators need to be able to perform with their voices, prepare scores, have an understanding of recording and editing practices for both sound and visual elements, and be able to produce for the Internet. Creators exhibited a sense of ownership and pride in their music videos that was in part attributed to their growth in these areas of expertise. Producing one-person virtual vocal ensembles is a solitary activity that allows a creator to explore various aspects of music production and performance. François retreated into his basement and become immersed in the creation of a virtual vocal ensemble. The activity allowed him to focus on a project and be responsible for every aspect of the video, which also afforded the opportunity to practice and develop musical, technical, and production skills. As Neel noted, virtual vocal ensemble creation lends itself to working alone as it is easy to work on your own timeline and make fixes when you hear or see something wrong. This was in stark contrast to collaborations, which he suggested take much more time and resources to create.

The creation of virtual vocal ensembles leads to the emergence of a multifaceted community.

The type of community that emerged because of the creation of virtual vocal ensembles had aspects of a fandom, music making community, and learning community. As virtual vocal ensemble YouTube channels became more developed, a multifaceted virtual vocal ensemble community emerged allowing for personal, musical, and educational connections to take place; however, social activities were balanced by an element of solitude required as creators spent time

in their recording studios. The characteristics of the virtual vocal ensemble community guided people to act in ways that are indicative of online music making and listening.

Building a fandom. A fandom is a group of people organized around a shared appreciation of a pop culture object (Baym, 2012). Fandoms developed around YouTube channels on which creators published virtual vocal ensembles. YouTube provided a venue for musicians to publish their works and gather audiences. In this venue, feedback was encouraged through the tools available on the website. (Dis)likes and comments facilitated social interactions between creators and viewers. As creators became popular and developed a following online, fandoms evolved.

Social connections within the fandoms varied in strength, and the people involved included casual viewers, subscribers, distributors, commenters, and collaborators. The point of entry into a virtual vocal ensemble fandom was viewing videos and reading comments.

Individuals who stayed at this level of interaction could be considered lurkers and their dedication to the fandom was minimal as they could come and go as they pleased leaving only view counts as their digital footprint. Additional affiliation resulted as viewers became subscribers of the YouTube channel, and subscriptions were a way creators measured their success. By subscribing, a viewer connected their YouTube account to a channel, thus developing connections algorithmically and socially. Channels with more subscribers were more prominent than their less popular counterparts on YouTube searches, and algorithms constructed YouTube pages based on how popular content was.

People within the fandom distributed videos from YouTube channels through social media and other means. YouTube tools allowed people to easily spread videos, and sharing techniques left digital artifacts on the website. Fans also distributed videos by sharing, tagging,

and cutting and pasting URLs. The *share* function was built into mobile applications and the website versions of YouTube, and fans shared videos by simply clicking a button. Comments in which a user shared a video on their Google+ profile had the tag "Shared on Google+" attached on the YouTube page. Tagging was done when a commenter typed a username into a comment, thus making the tag an active link that created a two-way connection between the video and the tagged user. Fans also distributed videos or channels by cutting and pasting URLs, which were often shared via social media, emails, personal websites, and text messages. Sharing "spreadable media" (Jenkins et al., 2013) was one way fans could help expand a creator's reach, and the main participants all noted that they enjoyed seeing how far and wide their content reached.

Commenting was another way fans participated in YouTube fandoms, allowing them to interact with other fans and creators. The relative permanence of comments allowed for an asynchronous conversation that was publically displayed until an entity, whether the commenter, channel owner, or YouTube moderator, took them down. Comments also allowed for the creators' fandom to connect to other fandoms. Creators connected their audiences with larger, more prominent fandoms as was the case with Wright's homage to Dr. Who, François's admiration of *Pentatonix*, and Myers's involvement with EWVC. Other fandoms were conduits through which people could find other content in which they were interested. By starting conversations that elicited popular icons, creators used other fandoms as a gateway for viewers to join their fandom. Viewers expressed their excitement or distaste for the icons and the creators' elicitation of the icons. Comments were an active way in which viewers could contribute to the fandoms, and some commenters showed high levels of loyalty, dedication, and territorialism.

A way of participating in a fandom with a high level of involvement was becoming a collaborator. All the main participants contributed to at least one virtual collaboration. Creators connected with their collaborators through comments or private messages on YouTube and moved those conversations to other venues like email or Skype. These endeavors allowed for multiple fandoms to grow through sharing audiences and building upon each other's skills.

Connecting through virtual music making. Virtual vocal ensemble fandoms afforded social interactions between fans and creators. As the fandom aspects of virtual vocal ensemble communities were personal and cultural in nature, musical aspects were more prominent through collaboration. The prevalence of collaborative virtual vocal ensembles on the creators' YouTube channels, their attitudes about collaborating, and willingness to seek additional collaborations provide insight on the connections made through virtual music making with others.

Among the benefits of virtual music making for creators were the exposure to new audiences, challenging participants musically, dividing work among collaborators, and meaningful social connection. Myers's case provides examples for each of these areas. By participating in EWVC, thousands of singers shared the spotlight in a collective virtual vocal ensemble. Myers became recognizable by members of the virtual vocal ensemble community when she was featured as a soloist in the collective. She developed a following by creating one-person virtual vocal ensembles and other types of videos. She further expanded her audience by collaborating with Neel. Neel discussed how singing with Myers stretched him as a musician, requiring him to blend his voice with hers and pay attention to the minute details of her performance as he constructed their collaborative virtual vocal ensemble. Myers and Gaulke split the work in their collaboration, one focusing on the audio and the other attending to the video. Finally, Myers developed relationships that she found meaningful with her collaborators. These

relationships provided her not only musical and technological experiences, but also support in her personal life.

Creators had to weigh the drawbacks of collaboration against the benefits. When collaborating, the schedules and abilities of several people needed to be taken into account. Therefore, creators discussed waiting lengthy amounts of time for collaborators to fulfill their responsibilities. Creators noted that it was usually easier to fix something by one's self instead of asking a collaborator to fix a problem. For example, if a collaborator sang a wrong note, the editor had to decide whether to fix it alone, ask a collaborator to rerecord the selection, or ignore the discrepancy. A final drawback with collaboration was the potential for soured relationships. When dealing with decisions and delegating to others, collaborative virtual vocal ensemble participants may find themselves in situations where they disagree with collaborators. Conflicts among fellow creators could lead to both social and musical implications, some of which were purposely left out of the study at the request of a participant.

Reaching out to popular virtual vocal ensemble creators was an intimidating feat. Myers and Gaulke were both convinced that the other was too busy to collaborate. However, at the encouragement of Neel, they found that they were both ready to work together as a team. The potential of being star struck when working with one's collaborators was a common occurrence. Myers felt intimidated because of Neel's popularity, something Gaulke also experienced when she met Myers. While for some, the benefits of collaborating outweighed the drawbacks, others found collaboration to be an exercise in patience that led to frustration.

Creating in solitude. Even though communities were developed as a result of virtual vocal ensemble creation, making videos often requires creators to spend large amounts of time in solitude, especially when creating one-person virtual vocal ensembles. The creators experienced

limiting factors that prevented them from making the music they wanted in the way they wanted. Wright wanted to sing barbershop music but turned to creating one-person virtual vocal ensembles when he could not find peers to join him. François was denied admittance into a worship team, and eventually created his own one-person virtual band, which led to him creating virtual vocal ensembles. Myers experienced frustration as her fellow students in high school were not as serious about music performance as she was. By creating one-person virtual vocal ensembles, she had a chorus of willing singers at her disposal. The freedom afforded by one-person virtual vocal ensemble creation also required that the participants spend a large amount of time alone in their recording studios. Each of the creators spoke positively about the time they spent in the recording studios. It allowed for deep exploration of repertoire, an escape from daily pressures, balance from professional or educational activities, and a safe space for emotional expressions.

Learning from others on YouTube. As creators produced virtual vocal ensembles, they entered into a community of practice in which creating multitrack videos to resemble ensembles was a relatively new custom. Wenger's (1998) social theory of communities of practice focused on how members learn through social interactions. In this study, the creators entered into a budding and evolving community. The community of practice theory involves a group of veterans who have established accepted practices and behaviors. However, the creators in this study were pioneers in the one-person virtual vocal ensemble community.

Wright and Myers were heavily involved in the virtual vocal ensemble communities that surrounded classical, popular, and barbershop music. Both creators made their first virtual vocal ensemble after being inspired by viewing another virtual vocal ensemble. However, at the time of these discoveries, the more experienced creators were still novices. Creators were

simultaneously exploring the performance practice. The early adapters of virtual vocal ensembles left each other comments, editing tips, notes of encouragement, and critiques. When Myers and Wright began creating, there were no real veterans of the virtual vocal ensemble community. EWVC published *Lux Aurumque* in March 2010, and Myers decided to publish her first one-person virtual vocal ensemble in December of 2009 while EWVC was recruiting participants. Wright joined the community less than a year from the time during which most one-person virtual vocal ensemble creators were still relatively new to the performance practice.

At the time of this study, the creators were considered veterans of the virtual vocal ensemble community of practice. As successful creators in the eyes of their viewers, they were asked through comments about how they made their videos. The questions were often answered; however, the nature of the medium and the creators' experiences influenced the way they responded. Creators answered the same question multiple times, both across their YouTube channel and even on the same video's page. This led creators to put detailed information in the description boxes of their videos including hardware, software, and processes. François was more skeptical about sharing information about his creative process. He felt there are too many ways to create virtual vocal ensembles and often explained his processes to his fans; however, he included a disclaimer stating that what worked for him may not be the best way for his commenters to create.

After experiencing the autonomy of artistic decision-making in the recording process, creators opened themselves up to critique, opinion, and suggestion once they published their videos. Creators discussed two ways in which they dealt with suggestions that were given by commenters. Sometimes creators ignored or dismissed suggestions. This was due to the creators having no interest in fixing an issue or not having the means to address the problem. Alternately,

creators addressed the shortcoming that viewers pointed out by seeking help from knowledgeable people they knew offline. Wright and Myers showed growing discernment as they determined which suggestions to which they would attend and which ones they would ignore. This is an example of how a community of practice works, where experienced vocalists saw Wright's and Myers's performances and gave musical suggestions to a novice singer. Through their personal musical study, in conjunction with the suggestions of their online critics, Wright and Myers were able to refine their skills and became veterans of the virtual vocal ensemble community.

Virtual musical collaboration was a time and resource intensive activity.

When this study began, I expected to be able to include a large number of collaborative virtual vocal ensembles as I explored the cases. However, that proved to be more difficult than I had anticipated. François explained that collaborations were much more difficult than creating one-person virtual vocal ensembles as finding people to record with him was very difficult. Wright's discontent with former collaborators made it difficult for me to get information about them. However, Myers's interactions with others offered a picture of what positive collaborative experiences could look like. Neel became a very close friend to Myers, and Gaulke was a motherly figure in her life. While Myers was not physically close to her collaborators, she was able to interact with them via e-mail and Skype. The collaborators had a mutual respect for each other and the way they conceived of projects allowed for a give-and-take that benefited all involved parties. While Myers found her relationships with others in EWVC meaningful and exciting even though she did not pursue further collaborations with them.

All collaborative efforts, with the exception of the Myers-Gaulke collaboration, were perceived to be more work than one-person virtual ensembles. Wright and Neel noted that collaboration takes much more time than creating a one-person virtual vocal ensemble. Neel also

suggested that it was easier to re-record something yourself than it was to ask a collaborator to fix something. Not only does it take less time to fix something by one's self, but it is less confrontational as asking others to fix something could also result in hurt feelings.

In contrast, Myers and Gaulke believed that collaborations can make life easier as work can be divided up such as when Myers did the audio and Gaulke did the video editing in their video. These types of collaborations allow for a division of labor, and because both parties were willing and open to criticism and compromise, the two were able to quickly put together a collaboration about which both were proud.

Experiences are effected by how creators portray themselves online.

Creators decided how they want to share information about themselves and their art on YouTube. In the following section, these portrayals are discussed in three areas: the physical appearance of the performer, communication through talking directly to their audiences, and the interplay with audiences facilitated by creators' use of tools YouTube provided.

Visual displays of self. From the conception of a virtual vocal ensemble to the monitoring of discussion on its YouTube page, the publication of virtual vocal ensembles allows creators to share aspects of their identity with their audiences. Superficial displays of self are seen in the location a video was filmed, the creator's physical appearance, and the visual representation and layout of singing clones. By displaying their physical appearance on video, creators may or may not realize what they are sharing about themselves. For example, creators showed increased awareness of their physical background while videotaping as they became more experienced as a virtual vocal ensemble creator. They went from videotaping in a room without thought about what was behind them to making a conscious decision to record in front of a purposefully chosen background. Creators felt that their videos looked more professional by

taking personal objects out of their videos' backdrop. Similarly, clothing allowed creators to share information about themselves. Wright's bowtie displayed his love for Doctor Who, François's hoodies became synonymous with the *David Wesley* brand, and Myers's playfulness and love for entertaining were displayed through costumes and hairstyles.

Sharing personal information through vlogging. The YouTube channels created by François and Myers included videos in which they spoke directly to their audience through vlogs. François used vlogging to introduce his video archives and tell fans about upcoming events and milestones in his life. Myers included mini-vlogs at the end of some of her videos telling her audiences that she hoped they enjoyed her performance as well as full-video vlogs in which she shared information about her musical experiences, career, studies, and personal life. Although Wright did not have any videos of him speaking on his YouTube channel at the time of this study, he used vlogs to notify his fans about his live barbershop quartet's performances and asked his audiences to financially support their travels to an international competition.

Using YouTube tools to share. Personal information was also shared explicitly with audiences through the tools YouTube provided including description boxes, annotations, and comments. The description box allowed creators to include text about their song choices, experiences creating, and future plans. However, creators used the discussion box for different purposes. While all three often included information about the songs they performed, Myers and Wright also used it to start conversations. They included information they thought would entertain their audiences and encourage interactions in the comment section. Wright felt that the description box was a chore, and both he and François felt there was little to gain for the time spent in crafting a message to potential viewers. As they became more popular, then, the description boxes became less important to fill out except to include original artist information

and links to their websites. In contrast, Myers added more information to description boxes and annotations of previously published videos to inspire conversation about her videos and vlogs. François also used annotations at the beginning and end of videos, most notable during his call to action. Wright used annotations to link new videos to previous videos. Creators used text comments to share information about themselves. Oftentimes, audience members asked questions of the creators. These questions prompted the creators to share information about themselves that ranged from job and school experiences to deeper issues like relationships, family, and religion.

There is a two-way connection between the audiences and creators of virtual vocal ensembles.

By displaying personal information, creators found that they were able to connect better with their audiences. Text comments allowed creators to feel connected to their audiences as they answered questions, debated, and conversed. Conversations ranged from technological and personal information to opinions about music, religion, pop culture, and personal beliefs.

Conversations started between two people often led to more people joining their exchange. Both audience members and the creator drifted in and out of the conversation as their interests piqued or waned.

Feedback as learning. Due to the nature of musical performance, viewers offered feedback on the video. Feedback, which was predominantly positive, gave the creators a sense of accomplishment and was a driving force in their decisions to continue creating, especially in the cases of Wright and Myers. As new creators, Myers and Wright prompted a lot of feedback from other virtual vocal ensemble creators. These others provided suggestions about layout, editing techniques, and musical interpretation, which guided the creators in their own development.

However, as they became more experienced, they became more discerning in dealing with feedback from viewers. As college musicians, they shared feedback with their voice teachers. As they became more experienced and believed they had a solid musical understanding of their voices and musical performance, they began to be more selective in the feedback they allowed to influence their growth and musical decisions.

Creators requested feedback from their audiences pertaining to song selection, ideas for new videos, video construction, musical performance, and personal preferences. However, creators noted that feedback had to be treated with caution as anyone with access to a YouTube account could comment on their videos. Therefore, the creator had to decide if the feedback had merit. François was confident in his abilities and accepting of his shortcomings. Critique, while welcome, held little influence on his progress as a creator and musician.

Meaningful relationships. As people shared information and gave feedback, relationships developed, especially with those who had a consistent presence in the comment section of a YouTube channel. Relationships that started with text-based comments sometimes became deeper than casual conversations. Longtime fans became familiar to creators and conversations developed as comments expanded beyond talking about the music and video. François experienced both encouraging and antagonistic exchanges with his viewers as they discussed religion; most conversations ended in an acknowledgement of faith and mutual respect. Myers's interactions with fellow virtual video ensemble creators fostered some meaningful relationships as was the case of Neel and Gaulke. The relationships Myers had with her collaborators were strengthened by their experiences in creating together.

Setting up boundaries. Creators also set up boundaries regarding both access of online profiles and information shared. Wright purposely separated his online persona from his offline

life. While audiences knew where he attended college, he often kept personal information focused on musical endeavors. François initially created the David Wesley YouTube channel with his middle name to make it more difficult for people who knew him online to find him offline, and vice versa. Myers experienced an overwhelming amount of online connections to her personal social media accounts. She subsequently deleted her Facebook page and created a new fan page, which allowed her to separate her online and offline connections.

Creators' voice ranges influence how they make virtual vocal ensembles.

Creators noted that they had issues singing all the parts the repertoire required. Wright struggled with singing tenor in his earlier videos. However, after he pursued singing tenor and countertenor in college, he was restricted in the music he could perform because singing low notes became more difficult. He captured his lower voice part by recording in the early morning when he was able reach notes that were normally out of his range, and at times he capitalized on illness when a sore throat allowed him to sing lower. Myers, as a treble voice, could not sing bass clef parts when she sang SATB music arrangements. François struggled with singing soprano and bass when he created a cover of a mixed voice a cappella group. François and Myers used technology to adjust and shift pitches. Editing software allowed creators to reach pitches that they could not sing unaided. All three had to keep their voice range in mind when choosing repertoire or arranging what they performed. Similarly, Gaulke wrote an arrangement for her collaboration with Myers because there was no SSAA version available.

Creators identified themselves by voice part. In an ensemble, voice part identification allows singers to assimilate within their section as well as distinguish themselves from other sections. Within virtual vocal ensemble creation, singing multiple parts allowed for both solidification and complication of identity. Fans would complement Wright on his bass voice,

yet he consistently reminded his viewers that he was a tenor. In contrast, Myers claimed to be a soprano; however, when creating virtual vocal ensembles, she created different personae for each voice part: her lead was the closest to her normal personality, her tenor was silly, her baritone was ditsy, and her bass was flirtatious. Wright clung to his live music making identity while Myers expressed varied aspects of herself for each voice part.

Virtual vocal ensembles exist in commoditized spaces, and creators have options on how to participate in monetization.

Becoming a music producer. A popular YouTube channel with consistently successful virtual vocal ensembles benefits when it is supported by a creator who possesses music production and management skills. While the video making process of virtual vocal ensembles is the most obvious to onlookers, popular YouTube channel creators must be able to promote their music and channel as well as connect to viewers personally to ensure a responsive audience. François used YouTube as a way to share his music with other likeminded Christians. As he made music out of his basement, he decided to produce an album that he sold as digital files and via compact disc. His YouTube channel also allowed him to gain popularity and credibility as a musician within his church, and as a result he began leading worship bands and headlined a concert. Wright expanded his YouTube music making to include learning tracks and selling his mp3s on Bandhub. He also set up a Patreon account that allowed fans to become patrons who paid him every time he uploaded a new video. Myers was able to gain exposure through her virtual music making and was hired by commercial artists as a backup singer. Myers then told her fans through her vlog about her experiences and how they could get a copy of the recordings.

Working with institutions. While creators found that institutions like iTunes, Amazon, and Patreon allowed them to share their music and make money from their music making, they

also acknowledged that such institutions could deter progress. For example, François only used Amazon to sell mp3s for a limited time because the company took too long to approve his requests to make tracks available for purchase. He defaulted to iTunes, which had a much quicker turnaround time. Creators dealt with copyright differently. François gained copyrights to reproduce all the songs he recorded, and Myers did not monetize her videos because she knew she was recording copyright protected material. Wright approached copyright with a laissez-faire attitude as he waited for YouTube to note any copyright breeches.

Institutions, whether they are copyright holders, recording companies, or advertising firms stand to gain from the popularity of a virtual vocal ensemble. As viewers navigate YouTube, money exchanges hands through advertisement clicks, sponsorships, and sales. Creators decided how they want to participate in that monetization. By being a partner and monetizing a video, the creator can split revenue generated with the copyright holder of the song and YouTube. By selling recordings of their songs, creators can collect money while also paying royalties to the sellers and copyright holders. Sites like Patreon and GoFundMe allow for patron sites to facilitate the raising of funds while circumventing copyright restrictions.

Virtual Vocal Ensembles and Media

By applying Sterne's (2003) conceptual framework to the media that exist in and around virtual vocal ensembles on YouTube, the enmeshment of technologies and music makers can be better understood. I use a set of four quotations by Sterne to establish a lens through which to interpret the assertions and data from this study. These quotes regard the network of recurring relations among people, practices, institutions, and technologies; the network of recurring relations and its plasticity; the fidelity of sound recordings; and the nature of mediated performance. It is important for the reader to remember that the medium is not the YouTube

website, but a network of relations that result from the creation of virtual vocal ensembles.

Therefore, in this section italics will be used to distinguish the difference between *YouTube* as a placeholder for the medium and the YouTube website.

A Network of Relations

Any medium of sound reproduction is an apparatus, a network—a whole set of relations, practices, people, and technologies. (Sterne, 2003, p. 225)

To best understand Sterne's (2003) definition of medium, one must be aware of the separate entities of the people, practices, institutions, and technologies that are responsible for the social interactions that develop a medium. However, individual entities do not make up the complexity of the network. The relationship between the entities makes *YouTube* what it is.

Listing the people who are implicated in *YouTube* is not as important to Sterne's framework as the nature of the relationship between people. While the creators were instrumental to the development of *YouTube*, the nature of the medium was constructed by the way people interacted with others; developed and executed practices; learned from, worked with, and benefited from institutions; and used, adapted, and were changed by technologies. To continue with this logic, institutions also exhibited and created practices that were influenced by technologies, and so on. In sum, each of the separate components, when placed in relation to the other components, constitutes the network from which the medium emerges.

The data from this study show how the relations between people influenced *YouTube*. Creators' relations effected the way they made virtual vocal ensembles. They interacted with viewers by talking, singing, and typing. Viewers consumed through simply watching, or became more active by commenting and sharing. Commenters interacted as they discussed topics. Sterne (2003) pointed out that there are people who are often forgotten because they are eclipsed by the

technologies they serve. In this study, those people included those who invented and sold the technologies implicated in the medium, YouTube employers, advertisers who fund the commoditization of websites and music, and a plethora of others.

The virtual vocal ensemble community was also developed through the practices developed and shared with others by creators. Neel left feedback and suggestions for many virtual vocal ensemble creators, and people were then inspired to try creating their own videos. Practices were molded and adapted as creators found their own video making methods. Creators chose the practices they wanted to apply to their creative processes. Audiences made suggestions about which practices were acceptable or preferable. Acceptable practices regarding commenter interaction were established in each YouTube channel as creators moderated the discussion on their videos' pages. Fans defended creators from flames, and supported others through encouraging notes. The support of the fans often discouraged the flamer from continuing the rant, and often, the antagonist's opinions were changed or deleted after discussion.

Relations between people and institutions included learning, provision, production, and commoditization. Institutions like school music programs, colleges, churches, and workshops provided resources for creators to learn about music, technology, and production. Some of these institutions also served creators in a provisionary role. For example, creators used music they had sung in their schools' choirs for their virtual vocal ensembles. Other provisions included the companies that sold hardware, software, sheet music, copyrights, and accompaniment tracks. YouTube, digital music sales sites, CD producers, and social media sites were some of the institutions that creators used to help produce their music.

Institutions develop their own practices that implicated people and technologies. One example is the YouTube partner program. Advertising companies purchased advertising space

from YouTube, which displayed either a banner or commercial video on select sites and pages. YouTube's algorithms determined which advertisements appeared on which pages, usually influenced by the content of the page and habits of the viewer. Creators chose whether or not they wanted to monetize their videos and become a YouTube partner, which allowed them to share revenue generated from advertisements. Often, revenue was shared between YouTube, the copyright holder, and the creator.

A Contingent and Plastic Network

I am . . . less concerned with the particular forms that sound media would eventually come to take than with the malleability of form itself. A medium is a recurring set of contingent social relations and social practices, and contingency is the key here. . . . A medium is . . . the social basis that allows a set of technologies to stand out as a unified thing with clearly defined functions. (Sterne, 2003, p. 182)

In each of the cases, the plasticity of the medium was apparent. Each creator began publishing on YouTube for different reasons, with a different set of experiences and contexts that made their situation unique. As Sterne (2003) suggested, the social basis of a medium allows for a plasticity of the relations among the comprising entities. Social connections infer that the relationship between entities in *YouTube* are malleable, and the changing nature of those connections is part of what makes the medium. Creators went through substantial changes in their lives such as graduation, career decisions, marriage, and childbirth. As contexts of creators' lives changed, so did the lens through which they viewed *YouTube*. Events, including rising popularity online, played a part in the way they experienced their music making. Practices within the creative process also changed as they honed skills, they acquired different technology, and

the virtual vocal ensemble community online grew. Fellow creators influenced each other through suggestions, inspirations, and interactions.

The technologies creators used also changed. When the creator started their video making, the technologies they used were not as advanced as they were at the time of the study. The development of more powerful hardware and software technologies, institutions' advancement of production and distribution opportunities, and creators' ability to obtain and use these new technologies contributed to the malleability of *YouTube*. Creators used increasingly sophisticated practices as they acquired advanced technologies. As a result, audiences changed the way they perceived virtual vocal ensembles. The tools available on YouTube as well as the practices that resulted stretched the plasticity of the network. Wright noted how interacting with his viewers on YouTube became more difficult when private messaging was integrated into Google+. The new YouTube website design was not as intuitive for him as the old design, and a number of private messages from viewers were undetected.

The people, practices, institutions, and technologies implicated in *YouTube* changed throughout the time the main participants were creating videos, and the relationships between the individual identities were consistently in flux. As Sterne (2003) suggested, the entities have social relations that create a network by which *YouTube* is experienced. By interacting with and within the medium, individual entities shape the medium and are changed themselves. As a performance medium like *YouTube* develops, people and institutions use technologies to create, make, and distribute music. To do so, they develop practices to accomplish their goals. As new musical performance practices become commonplace, audiences develop new listening and viewing practices that allow them to make sense of these new modes of performance.

Fidelity, Perception, and Learning how to Listen

Audile technique depends on the supplementation of listening through both technique and technology so that listeners can hear leading musicians in their own homes. The notion of fidelity is necessary for the medium to function as a vanishing mediator and thereby construct a relation of social correspondence among the sounds emanating from a musician's instrument and the sounds emanating from radios in listeners' homes. (Sterne, 2003, p. 282)

When a new way of experiencing recorded music becomes available, consumers learn how to listen within the limitations and capabilities of the technologies involved. Music recordings became a privately consumable commodity with the ubiquity of portable playback devices and personal computers, and listeners learned how to interpret the sounds that came out of their headphones and speakers. Sterne (2003) refers to this concept as audile technique, which he defines as "a set of practices of listening that were articulated to science, reason, and instrumentality [that] encouraged the coding and rationalization of what was heard" (p. 23). Virtual vocal ensembles creators need to keep the audile technique of their audiences in mind as they prepare their performances.

Technologies like sound playback devices such as the phonograph (Katz, 2004) or the radio (Sterne, 2003) and the formats these machines use like the mp3 (Sterne, 2012) require audiences to learn how to listen to new media in ways that were different from their previous experiences. The hiss of phonographs and record players were ubiquitous in the early formats of sound recording and playback technology. A reduced range of audible frequencies and compression artifacts were a consequence of the mp3 file format (Sterne, 2012). The goal of a

recording with high fidelity would be that the listener would forget about the sound production device, making the mediator disappear (Sterne, 2003).

New performance practices were developed by virtual vocal ensemble creators as they create videos for online publication. By recording a single voice multiple times and layering tracks on top of each other, virtual vocal ensembles produce distinct sounds. An ensemble in which every voice has an identical timbre may result in a ghostlike or robotic sound, especially if there is little to no vibrato as was the case in Wright's early choral videos. The audile techniques of audiences were and still are being developed. For example, creators were accused of using Auto-Tune to create their ensembles. The commenters who made these accusations had a limited knowledge and vocabulary of technical skills and were skeptical that one person could sing so many tracks with correct intonation. Splicing techniques and pitch correction software were used to fix pitch discrepancies, but none of the creators in this study used Auto-Tune software.

Audiences were getting used to hearing one person record multiple tracks with a high degree of musical accuracy; furthermore, some did not understand the effects that were possible with audio editing software.

The creators drew upon their own standards of fidelity as they constructed their virtual vocal ensembles. François knew what he could accomplish because of his experiences with mixing live and recorded sound. However, Wright and Myers displayed a malleable standard of sound fidelity. Myers changed her opinion about the use of pitch shifting. When Myers published her SATB video, she thought the effect would make the ensemble sound more like a live choir, but at the time of the study she felt that mediation made the ensemble sound less real. This change in opinion demonstrates the plasticity of fidelity standards.

Not only does sound fidelity affect the way audience members experience a virtual vocal ensemble, but visual cues also affected the viewers' perceptions of performance. Layout and positioning of clones affected the way viewers perceived virtual vocal ensembles as can be seen in the videos on *DanWright32*. Wright created virtual vocal ensembles that visually resembled real ensembles. A green screen was used to blur or erase the lines and boundaries of the panels. Clones faced the center as if they were following a conductor. They interacted with each other and were similar sizes.

Clones' appearances played a part in the visual perception of one-person virtual vocal ensembles. Wright often wore the same outfit for each clone, sometimes varying clothing for the soloist. This gave his virtual vocal ensembles a unified look, accentuating the character of clones. In contrast, François used hooded sweatshirts to distinguish his clones. Each hooded sweatshirt was assigned a voice part, and he did not deviate from that across videos. Myers used both elements of assimilation and differentiation. Within any given video, clones wore similar outfits, but each had a distinguishing characteristic such as colored shirts, bowties, or hair styles that differentiated one from the others.

As Wright suggested, "Nobody's ever going to think [a virtual ensemble with clones is] realistic, but I think [having the clones interact] makes it seem a little more realistic than it really is." However, Wright hoped the interaction between his clones would give the audience a similar experience to the one they would get if they were watching a live barbershop quartet. To connect visual perception to the concept of fidelity, *YouTube* has required viewers to learn not only audible but also visual techniques. Similarly, as creators have made videos for YouTube, they have developed a set of practices to use with technologies.

Mediated into Existence

The medium does not mediate the relation between singer and listener, original and copy. It *is* the nature of their connection. Without the medium, there would be no connection, no copy, but also no original, or at least no original in the same form. The performance is for the medium itself. The singer sings to the microphone, *to the network*, not to the woman listening at the other end. (Sterne, 2003, p. 226)

The nature of performance to *YouTube* is different than in a live venue, and the performance practice of virtual vocal ensembles has influenced *YouTube*. The way in which a singer performs in virtual vocal ensembles is influenced by both live and mediated practices. However, as Sterne (2003) would suggest, without *YouTube*, there would be no connection between audience and creator, there would be no micro-performance, and there would be no virtual vocal ensembles—at least not in the form described here. Because of the opportunity to share virtual performances as video recordings on the Internet, with the affordances and constraints on YouTube at the time these videos were made, creators learned how to sing *to* that medium. Virtual vocal ensemble creators developed processes in which they were able to perform for their audiences. Creators sang through the equipment in their home studios and mastered the recordings. They performed visually for their cameras and created visual representations of ensembles with video editing software. Their performances, both visual and sonic, were aimed toward *YouTube*, a network that included their potential audience.

Virtual vocal ensembles have been primarily distributed via YouTube, an institution that provided a website where creators published their videos. While YouTube has been instrumental in the development of virtual vocal ensembles, it is just one part of the medium. If creators

decided to produce virtual vocal ensembles on other websites, the medium would be different. What YouTube offers virtual vocal ensemble creators is a centralized gathering space in which both people and institutions can access videos of this performance practice. By providing the YouTube website, audiences can experience the performances made by virtual ensemble creators. As time progresses, virtual vocal ensemble practices will change as the people, practices, institutions, and technologies evolve.

CHAPTER 8

IMPLICATIONS

Virtual vocal ensemble creation is a complex process that provides an outlet for creators to explore technologically mediated musical performance. While performing in or creating a virtual vocal ensemble requires some of the same skills one would use in a synchronic choir, the practices, outcomes, and performances exhibit differences as well. Virtual vocal ensembles have both affordances and limitations for what a performer can do. However, this study explores what it means to mediate choral performances, especially through one-person virtual vocal ensemble practices. Authors such as Barrett (2005), Jorgensen (2003), Miksza (2013), Regelski (2013), Thibeault (2012a), Tobias (2013), and Williams (2011) challenged music educators to consider how they might expand their practices to be relevant to modern society and culture. Online music performance practices are emerging as the Internet becomes ubiquitous. Applying the practices of virtual vocal ensembles to music education is one way the profession can expand instructional practices to be inclusive of modern technologies, media, and society.

I begin this chapter with discussing the differences between virtual and synchronic choral practices to better understand the implications the mediation of choral performance may have on education. Then, issues that are of interest for students and musicians who create virtual vocal ensembles are presented. Finally, implications for those who conduct research on YouTube are discussed with specific attention to ethics, boundaries, and suggestions for future research.

Implications for Music Education

Comparing the Virtual and the Synchronic

It is possible to better understand the online performance practices and how they may fit in the music education profession by looking at the characteristics of virtual vocal ensembles.

The creation of this type of video often requires creators to spend a lot of time in a studio where they record, mix, master, and produce their music. Affordable hardware and software allows musicians to record and produce music at their leisure in the comfort of their own studios on their own schedules, without the need to rent time at expensive recording studios. Virtual vocal ensembles afford creators the sole responsibility for decision making, song selection, musical expression, and mediated representation. Creators are obliged to self-reflect on their performances to ensure that their products are of an acceptable quality; this self-assessment allows for creators to expand their musical abilities and chart courses for improvement.

The benefits of creating virtual vocal ensembles are plentiful and include the development of musical, technological, and production skills; having a sense of accomplishment as a result of performance; and developing meaningful relationships with others. Connections occur between performers and viewers, commenters and creators, and among fellow musicians. Creators receive feedback from audiences and can ask for suggestions on how to improve their processes. Music educators can consider using the resources available on the Internet to inspire and facilitate music making by being mindful of the technologies and social media that are prevalent in the lives of students and by being knowledgeable about the plentiful venues for publishing video performances online.

There are also aspects of virtual vocal ensembles that limit creators' ability to experience and learn as they would in a synchronic ensemble. When singing in a choir, people are temporally and spatially near their fellow performers. The social connection that many choristers find so important to choral singing is different in synchronic ensembles than it is in virtual ensembles. In synchronic ensembles, being in a choir allows a singer to take cues from other performers, the director, and the audience. Virtual vocal ensemble performers sing their parts,

often unaccompanied by other performers, with an anchor instead of a conductor and with an imagined audience in mind. This means that virtual vocal ensemble singers do not take cues from other performers and depend heavily on an anchor and their standards of musical judgment to remind them of expression, dynamics, and other musical elements.

When creating tracks, the anchor serves as the guide to synchronization. However, the anchor does not change or react to the performer like a conductor would, and the anchor will often lock the performer into a certain interpretation of the song. However, a well-crafted anchor can supply virtual vocal ensemble singers with the temporal guidance they need to create the desired performance. Anchors range from minimalistic metronome beats to fully scored MIDI files. Some creators use a sung melody track to anchor the rest of their tracks while others use recordings of professional groups to guide their choral covers. Anchors do not change unless the creator manipulates them, and sometimes creators will use different anchors throughout their creative process to allow them the freedom they want for expression. For example, a fully scored MIDI may be used while singing the melody of a virtual barbershop quartet. The MIDI may then be abandoned so that the melody track then becomes the new anchor for recording the harmony lines. Finally, the melody could be muted and the three harmony lines used as an anchor for creating a more expressive version of melody line for the final performance.

The iterative process of virtual vocal ensemble singing shows how creators are limited to their own experiences and interpretations. While creating virtual vocal ensembles allows for autonomy, the experiences, knowledge, and understanding of the creator both restrict and enable their performance. Synchronic choirs have a collective knowledge that is readily available in the rehearsal room. Singers within a section can discuss and practice difficult passages. The accompanist may be available to help a voice section to learn a part. Often a highly skilled

director is available to help shape and mold the group's musical expression while educating and learning with the performers. Virtual vocal ensemble performance resources are often developed by the creator or are limited to those involved in a collaboration or the community of practice.

Developing a Community

Synchronic choral ensembles focus on face-to-face music making and live public performance. The interactions of the rehearsal room and the live performance space encompass relationships between director and singers, singers within sections, singers across sections, accompanists and vocalists, performers and audience, and audience members among themselves. These connections are experienced simultaneously and face-to-face. However, the community that emerged from virtual vocal ensembles looked very different. As was discussed in chapter seven, fandoms based on personal and cultural connections emerged from virtual vocal ensemble creation, and were a large part of the overall communities on YouTube. However, these communities also had aspects of collaborative and collective music making and learning.

In virtual vocal ensemble communities, preparation for a performance is not bound by space and time. Synchronic choirs require participants to be in the same place at the same time to rehearse and perform; yet virtual vocal ensemble participants record their parts of the ensemble at their leisure whenever they please. Without studies like this one, one may assume that virtual vocal ensembles discourage personal connections and community. However, the community that emerges from virtual vocal ensembles allows for an asynchronous line of communication that focuses on intermittent musical discussion and post-performance feedback that can last for years. The musical connections occur in collective virtual vocal ensembles during the learning process as musicians share learning and singing strategies (Armstrong, 2012). Collaborative virtual vocal ensembles afford the most musical interaction as participants discuss ideas for song selection,

musical interpretation, performance, and editing. Creators of one-person virtual vocal ensembles exhibit a musical community that often includes critique, mentorship, and feedback.

Educators must first be aware that communal music making looks very different in virtual vocal ensembles than in synchronic choral groups. The community building characteristics found in *YouTube* can be applied to the classroom. Having students create virtual vocal ensembles or micro-performances can foster shared learning strategies, interactive discussions of musical interpretations, and peer-reflection of musical performance.

Skills Required for Creating Virtual Vocal Ensembles

Creating virtual vocal ensembles requires a set of musical, technological, and production skills to be successful. By watching the archives of videos on creators' YouTube channels, one can observe the diversity of skills required to create virtual vocal ensembles, and this study has shown how these skills were developed and refined as creators became more experienced and sophisticated as musicians, technicians, and producers. By understanding the skills required to create virtual vocal ensembles, music educators can help guide students to learn how to record and edit their voices to create virtual vocal ensembles and the micro-performances that can be used for collaborative and collective groups. These skills, once learned, can lead students to pursue music making long after they leave school whether they are no longer in a situation where synchronic ensemble participation is available or they want to create videos while also participating in synchronic ensembles.

Exercising and developing musical skills. By recording themselves and posting videos on YouTube, creators display their musical skills for a global audience. The YouTube website serves as an archive of musical performances. Virtual vocal ensembles often reflect the abilities

and practices of the performers such as theatrical finesse in virtual barbershop quartets, the reverence of worship songs, and emotive expression in choral octavos.

How creators prepare their scores, interpret their music, and execute their singing are displayed in one-person virtual vocal ensembles. YouTube as a video repository provides a timeline that shows the growth of creators, but also allows creators to look back at their progress and reflect on past performances to see how much they have changed. Creating one-person virtual vocal ensembles provides ways for creators to exercise skills that may have gone unused through singing in synchronic ensembles. Singing at the extremes of one's range, for example, is not often required when singing only one vocal part in a chorus. However, when creating one-person virtual vocal ensembles, creators must sing multiple voice parts; range extension is often necessary.

Score preparation, often the responsibility of a director in a live ensemble, is also required of one-person virtual vocal ensemble creators. Studying a score, singing vocal lines multiple times, and learning how vocal lines interact are skills that can be used to challenge students in the classroom. Musical exploration goes beyond singing a single vocal line requiring creators to consider whole scores and the interaction of parts within that whole. After recording vocal tracks, creators are responsible for adjusting them in post-recording editing and mastering to develop their desired sound. This process requires self-reflection and musical interpretation as the creator is given the opportunity to accentuate what they recorded by mastering and editing audio, which involves additional skills and creativity not often required in synchronic ensemble performance.

Informal learning through virtual vocal ensemble creation. Recording and editing skills allow creators to compile micro-performances into cohesive virtual vocal ensembles. In

this study, the way creators attained technological skills was quite different from the way they learned musical skills. While musical learning was done mostly through formal education such as voice lessons, private tuition, and live ensemble participation, technological skills were primarily learned informally. Learning with friends, exploring through side projects, and experimenting with technologies were avenues for creators to acquire technological capabilities. New creators can practice their technological skills before publishing their own virtual vocal ensembles by participating in collectives, producing recordings, and mixing live sound. Basic technological abilities can be learned through exploration, experimentation, and live experience, and more sophisticated skills can often be learned informally within the multitrack community of practice through discussion with other creators.

In addition to the technological and musical skills required for making virtual vocal ensembles, creators on YouTube would be more successful if they learned how to become music producers. With the exception of resources like YouTube Bootcamp, skills in this area are also often learned informally. The use of annotations, links, and comments allow creators to direct viewers to more content by connecting videos together. Creators can exploit the spreadability of media through social media by sharing music with others and eliciting fans to distribute. Posting announcements of new videos, sharing old performances, and interacting with others can broaden a creator's audience. As was evident in this study, creators' online music making can also expand beyond YouTube to include self-produced recordings, learning tracks, patron websites, and commercial recordings.

The informal learning the creators pursued is similar to the processes that Green (2002) found in her study of popular musicians. Most popular musicians experienced musical learning through self-guided explorations or with peers outside of formal classrooms. Virtual vocal

ensemble creators often had similar experiences as they explored technologies on their own, searched for resources on the Internet, and published videos to get feedback.

Creators can learn and practice not only musical skills, but also technological and production skills. The understanding required for creating virtual vocal ensembles goes beyond what one would need for participating in a synchronic ensemble, and the technological and production aspects of all the skills listed above can be applied to live ensembles. For example, a chorus can record an album, create learning tracks, and publicize musical performances. However, one-person virtual vocal ensembles require that the creators are able to perform a variety of tasks, usually on their own, to produce successful videos.

Finding Meaning by Creating Virtual Vocal Ensembles

As the creators in this study made virtual vocal ensembles, they found the performance practice meaningful in various dimensions. Singing in and creating virtual vocal ensembles can fulfill goals in participants' lives. Creators may make virtual vocal ensembles for reasons that include performing music they may not be able to perform with a synchronic ensemble, practicing musical and technological skills, and finding new ways to entertain audiences. There are rationales for creating virtual vocal ensembles that are similar to the reasons why people join face-to-face choirs. The research of Adderley et al. (2003), Paparo (2013), and Sweet (2010) describe a variety of motivations for participating in synchronic ensembles that include musical inspirations, social benefits, and balance in the lives of participants between the arts and other subjects. Similar rationales are apparent in the meanings creators derived in this study. Ability to select repertoire, provide constructive musical feedback, and forge personal connections with viewers are motivating factors for virtual vocal ensemble creators. Participating in and creating

virtual vocal ensembles can also serve as a way to find balance in one's life as it may be perceived as a leisure activity.

The above examples show how virtual vocal ensembles and face-to-face ensembles have similar motivating factors. The dimensions of motivation described by Hylton (1981) can also be applied to virtual vocal ensemble creators. Musical-artistic motivations are exemplified in virtual vocal ensemble creation because it allows for autonomy through which creators navigate their music making. The achievement dimension is seen when creators achieve high levels of performance in their one-person virtual vocal ensembles. When making a new virtual vocal ensemble, creators often attempt to outdo their previous videos and this can result in a sense of accomplishment. The communicative dimension of virtual vocal ensemble creation is seen between creators and their fans and among collaborators. Durrant (2005) found that participating in a choral ensemble gave singers a sense of belonging. The creators in this study found a sense of belonging through their YouTube channels; however, the community in which they participated was very different than the communities that emerge from synchronous ensembles.

Connecting Virtual Vocal Ensembles to Practice

The motivations of virtual vocal ensemble creators are multi-dimensional and contextual. By understanding the implications of virtual vocal ensembles, music educators can assess which practices might be beneficial to their students and classroom. The skill acquisition and meaning creators found can help music educators develop pedagogy and instructional strategies for incorporating virtual vocal ensembles into their current practices. Creation of virtual vocal ensembles comes with benefits, some of which are similar to being a part of a synchronic choir. It is unknown as to how prevalent virtual vocal ensembles are within educational institutions; very little literature has been written about virtual video performance with research of Whitacre

(Armstrong, 2012; Konewko, 2013; Paparo & Talbot, 2014) and my own work (Cayari, 2011, 2014, 2015) starting the conversation. However, the practices used to create multitrack videos are becoming more abundant as creators publish informally on YouTube. This popularity leads to the question of whether or not virtual vocal ensembles should be brought into formalized music education.

Part of the appeal of creating virtual vocal ensembles is that publishing a video may bring accolades and notoriety through YouTube. This study looked at three successful video creators. However, there are channels with virtual vocal ensembles that have received little attention. No literature to date has focused on lesser known videos like these. Therefore, the experiences of students within a classroom, with the lack of a community of practice and a fandom, may be much less compelling than the three cases presented. While it is not yet known about how students participating in and creating virtual vocal ensembles will affect music education, music educators have a great opportunity to help shape the medium as pedagogies and instructional strategies are created to utilize the potential of this performance practice. By incorporating the practices of virtual vocal ensemble creators, music educators may be able to help students learn skills that will allow them to make music outside of the synchronic choral ensemble context.

By helping students learn recording techniques and acquire editing skills, music educators can equip students for a lifetime of sharing music through audio-visual recordings.

One-person virtual vocal ensembles allow creators to develop not only their own voices, but also conceive of their own musical interpretations and explore repertoire. As students sing multiple voice parts within a composition, they expand their range and see how musical lines fit together. As singers record their voices, they can self-reflect on their micro-performances and decide if they should rerecord, edit, or adjust their vocal tracks. Teaching students how to analyze their

own voice and learn how to discern what is acceptable and what should be improved is a skill many educators desire for their students.

Recordings also can serve as an archive in which growth can be assessed. Collaborative projects can encourage students to work with and assess each other. If it is not practical for students to record their parts individually, students could be split up into small groups or sections and given an anchor to record. These small group performances could then be combined into a virtual vocal ensemble. Micro-performances could be used for assessment, instead of or in addition to live performance tests. Hybrid performances could be created in which a double chorus could be displayed as recordings provide one group and live singers present the other. There are copious possibilities as educators and performers explore technologies and apply what has been learned from virtual vocal ensembles.

For Those Who Create

This study provides three experiences of virtual vocal ensemble creators and their YouTube channels. The perspectives in this study on creating are contextual; everyone's experience is different. However, in the following section, three implications of this study as they pertain to creators are discussed. The first addresses identity and how creating virtual vocal ensembles affects how creators are perceived by themselves and others. The second deals with the communal aspect of virtual vocal ensembles contrasted by the amount of time required to spend alone while creating. The final issue attends to how popularity affects the creation process and the benefits and drawbacks creators experience as they develop a fandom.

Establishing an Identity

Creators developed an identity as they published virtual vocal ensembles. Therefore students and creators must be aware of the implications of participating in this medium.

Publishing videos on a site like YouTube allows a creator to develop an online identity, and in some instances, multiple identities can be expressed. The development of various personae is influenced by both online and offline experiences.

Musical identity and virtual vocal ensembles. Repertoire selection is one way that creators construct identity. The music a creator chooses allows for the display of aspects of identity. The creators in this study performed multiple genres, which required them to balance between the styles of music as they performed both virtually and live. If opportunities are not available to perform a certain type of music synchronically with an ensemble, musicians can opt to perform in or create virtual vocal ensembles. However, the tension between profession and hobby can influence how creators regard various genres, the role music plays in their lives, and the role they play within musical and online communities.

The genre of music the creators sang influenced performance styles of their videos.

Popular genres were often performed in a small group setting while classical music was sung in larger ensembles or in solo performance. This paralleled the creators' experiences from their live music making. While popular genres allowed for more casual dress and spontaneous theatrics, classical genres were portrayed with more formal clothing and a refined stage presence.

Performing varied repertoire allowed creators to portray themselves in different lights and display their understanding of diverse practices and performance styles.

In addition to the way music is represented in creators' identities, creators can also find ways to display their identities as they pertained to being musicians. Successful virtual vocal ensembles can bring notoriety to creators. For example, François became known for arranging a cappella worship music, and as a result he gained credibility online and locally as a church musician. Because of his online popularity, viewers made assumptions about François's life,

often thinking he was a professional worship leader. However, creating virtual vocal ensembles was a hobby. Creating was also a hobby for Myers, but her online performances led to an opportunity to sing on a commercially produced album. Virtual vocal ensemble creators' identities tell audiences about who they are, and creators need to be able to navigate the assumptions and opportunities that may come from a global audience.

Online representation and identity. Musical aspects are not the only things that influence creators' identities. The personae creators display online affect how creators act and how they are perceived by others. Clothing, costumes, and hairstyles display identity in virtual vocal ensembles. When making virtual vocal ensembles with clones, creators must decide if they give the singers distinguishing characteristics or assimilate them. Differentiation or assimilation of clones allow virtual vocal ensemble performers to display themselves in various ways. Physical appearance, personality, and character acting can be shown to audiences, which leads viewers to perceive the performer in a certain light.

Creators should be aware that behavior on the Internet has different ramifications than conduct offline. The relative permanence of virtual content must be taken into consideration as creators and participants of virtual vocal ensembles publish and interact with others. The creators in this study all admitted to acting differently online than they do offline. Their actions on YouTube were more refined. By publishing on YouTube, creators are placed in the public spotlight and therefore, had to define standards of appropriate behavior. Modifications include the way creators discuss and debate topics, how creators speak with audience members both through video and comments, and the frequency with which creators interact through social media. Not commenting when being asked for feedback, using less sarcastic comments online than with friends, and keeping a professional distance from fans were tactics creators used online

that were distinctive from their synchronic interactions with friends. However, they felt the actions necessary because of the identities they were creating on YouTube.

As a result of becoming popular online, creators kept their online identity in mind as they interacted and produced videos. Making virtual vocal ensembles allows creators to express themselves and develop a rich musical identity. Publishing videos and interacting online also leads to the development of a persona by which people would recognize a creator. Video makers should keep in mind that when they publish videos, they may inadvertently be posting information about themselves that influence how they are perceived by others. Therefore, creators should consider their appearance and interactions, not just their musical performance when publishing.

Relationships and Solitude

The term ensemble often refers to a group of people who are making music together at the same time. However, a virtual vocal ensemble requires creators to spend a lot of time in the recording studio and on the computer editing. There is an element of solitude required when making videos. While this element can be very beneficial, cathartic, or enjoyable, it can also bring with it unexpected consequences. Turkle (2012) critiqued Internet-based communications and challenged how virtually mediated social connections give people a feelings of togetherness while they are really alone. She argues that people are not interacting with people, but with machines, a theory that is not too divergent from Sterne's (2003) suggestion that the radio singer is singing to a microphone and medium, not to the listener at home. A disconnect can be felt between performer and listener as the medium is a conduit and at times an obstacle for human connection, and creators must keep in mind that the musical production of virtual vocal ensembles is a solitary endeavor. In the case of one-person virtual vocal ensembles, social

connections online tend to occur after production and only after viewers begin to notice a creator's page. In collaborative and collective virtual vocal ensembles, musical connections may occur before and after the recording phases, but the act of making music tends to be solitary. While this is very different from synchronic ensembles, the solitary music making that happens in the recording studio can allow performers to deeply express emotions they may not feel comfortable sharing while others are in the room. By recording alone in a studio, singers may feel less anxious as they do not have to worry that their mistakes will be heard by their fellow ensemble members; discrepancies can be rerecorded or edited out of the final project.

Fame and Obligation

If creators develop a following, an element of fame is introduced into their lives.

Successful creators are influenced by viewers and the pressure fans put on those they admire.

The first of those pressures is invasion of *virtual space*. Social media allow for users to post usergenerated content, and common practices led to vast amounts of personal information being shared on the Internet. The creators in this study used Facebook to post personal profiles, but they also created fan pages to allow their fans to connect with them. The creators can fragment their online identities to include musician profiles and personal profiles on Facebook. The distinction between personal profiles and musician-based pages can help creators achieve a separation that allows them to keep some privacy from fans, who sometimes seem like strangers from the Internet.

In contrast, creators may find that sharing personal information allow them to connect with viewers in more meaningful ways than only producing music performances. These connections can lead to meaningful relationships. Famous commercial musicians can develop strong feelings for the people in their fandoms, and act from a desire to make sure their fans are

happy (Baym, 2012). Creators of virtual vocal ensembles may have similar experiences. Newfound fame and attention can lead to an attitude of compliance as creators are pressured to change the way they do things or select songs they do not want to perform because well-meaning fans make suggestions or even badger them into making decisions. Creators may feel like they let their fans down when they do not produce enough content. They may feel compelled to continue creating when creation as a hobby loses its allure. Pressures of always doing more than a creator has done in the past can be an inspiration, but also a burden that impedes enjoyment.

There are many benefits and drawbacks to producing virtual vocal ensembles, and creators should keep in mind what they are trying to accomplish. Creators ought to focus on their motivations and pursue endeavors that allow them to accomplish their goals, whether those are to practice their skills, perform the music they want to sing, connect with others virtually, or to gain notoriety online or in the professional work of musical performance. There are members of the virtual vocal ensemble community who are willing to help with resources, collaborative opportunities, and offer suggestions. Creators can reach out to veterans who may be willing to mentor and encourage new comers to the community.

Researching on YouTube

This study has required the use of a methodology that couples traditional qualitative research methods with Internet inquiry practices. The process of researching YouTube channels has brought up challenges that future researchers should be prepared to navigate. In the following section, ethics will be discussed followed by setting boundaries for online research. This section concludes with suggestions for future research.

Ethics and Seeking Permissions

Because YouTube is a massive, publicly available website, the ethical use of content on it is complicated. Working with an Internal Review Board (IRB) can help safeguard researchers from conducting unethical activity. However, those who serve on an IRB may be unaware of the implications of research on public Internet forums, especially websites that include high volumes of video content. The observation of videos and forums for research is of minimal risk beyond what participants have already taken in their everyday lives. For example, by deciding to post content on YouTube, whether it is a video or a comment, the poster has control on how much personal information is included. A video creator chooses to post their likeness, voice, and ideas on YouTube, which is publicly available for others to see. When people comment on videos, their YouTube profiles are linked to that comment, and the user can remain anonymous or choose to be identifiable.

It is important to let easily identifiable participants know of the risk they are taking by consenting to be part of a study. There is a possible risk that people might read the research and have a negative response to the participants, whether that is because of their personal beliefs, ethics, performance, or processes. Therefore, researchers may want to consider giving their participants the option to use their real name or a pseudonym. Because of the nature of music performance, creators may insist on being identified in a study, which could lead to increased viewing and exposure to new audiences. In this study as well as previous studies I conducted (Cayari, 2011, 2015; Cayari & Fox, 2013), most participants have requested the inclusion of real names, YouTube channels, and links to videos in any research report.

Collaboration presents further ethical complications as virtual vocal ensemble creators may not be in contact with those who submitted micro-performances. Therefore, when a creator

agrees to be part of a research study, their collaborators are implicated. Because collaborators take a more passive role in this study, creators were asked to notify others who appeared in their videos. Performing participants were given the option to opt out of the study; however, no one decided to request their likeness be excluded. However, the age of the collaborators at the time a video was created should be taken into consideration so the researcher can determine if they were old enough at the time of collaboration to give consent for inclusion in a study.

Another ethical concern occurs with music performance on YouTube regarding copyright. When posting on YouTube, there is very little restriction when one uploads copyright protected material. Initially, it is the responsibility of the creator to notify YouTube if they are publishing copyright protected material, and YouTube and music publishing companies have algorithmically-driven programs that identify protected content. However, these methods are not completely accurate as materials that are not protected are sometimes flagged, and videos that are protected are occasionally overlooked. Researching videos that contain copyright protected material that has not been appropriately acquired puts creators at risk as the dissemination of the study may bring attention to their practices. When a copyright breach is found on YouTube, sometimes the uploader is warned and asked to cease and desist. More often, YouTube and the copyright holder capitalize on the video and monetize the content. Current practices allow for the sharing of revenue from copyright protected material, which allows YouTube, the copyright holder, and the creator to benefit from advertisements placed on videos.

A Mass of Data

One characteristic of researching on YouTube is that data can seem ever-expansive.

Researchers must consider the potential for their Internet inquiries to enlarge as boundaries are not easily definable online and have the potential to be constantly changing. As seen in the data

from this study, comments can provide a wealth of data for analysis; videos, as they become popular, can reach to global audiences; and the number of participants in a study can multiply as collaborators are asked to give their perspectives. The analytics of a YouTube video are a representation of the thousands or even millions who have viewed it. Links to auxiliary website and social media pages give so much information that a researcher can be easily overwhelmed. Therefore, boundaries are important to keep in mind when developing methods by which to research YouTube channels. For this study, I tried to keep all my data within two clicks from the YouTube channels I was studying. For example, when looking at DanWright32, I clicked a link that directed me to wrighttracks.com, and all the data I gathered was found on that page or any link that was on that page. This was a general rule and there were times where my curiosity directed me to look beyond two clicks, but as I ventured farther from the YouTube channel, more scrutiny was required to identify important data. I also had to bind my study in regards to time, and the date I made my first observation was the boundary I would not pass as the creators in this study continued adding content to YouTube after we started our discussions.

I have found that using the boundaries of a YouTube channel for case studies very beneficial. The content is published by a creator or team of collaborators, who could be considered the gatekeepers for information. The boundaries of a channel allow me to focus on the creator and their content, keeping me grounded from exploring tangents. The nature of case study is often emergent. Therefore, researchers may find themselves expanding their study as I did to include comment analysis, analytic analysis, and mini-cases. However, these inquiries were useful to answer the questions that guided this study.

Suggestions for Future Research

This exploration of virtual vocal ensembles has provided data on various aspects of the media, performance practices, and creators involved. While this study has shed light on areas where future studies could focus in regards to virtual vocal ensemble, music education, and online communities, it also leaves many questions unanswered. How does learning within the virtual vocal ensemble community of practice occur? What benefits and drawbacks overlap between virtual vocal ensembles and synchronic choirs? How does the discourse of fidelity affect the way people perform for, create, and listen to virtual vocal ensembles? To what degree does virtual vocal ensemble creation hinder or encourage performers to expand their musical knowledge and ability? How do the media of virtual communities influence the music classroom?

This study attempted to include people of color as well as representation across the genders and age ranges. As I searched for virtual vocal ensemble creators to be part of my study, I found that they tended to be of similar demographic disposition: white affluent males between the ages of 18 and 30. As I scan the virtual vocal ensemble community on YouTube two years later, I am pleased to see many new faces representing various genders, races, and ages. However, future research should include the representation of various demographics, spanning gender, racial, and age divides. Another surprising challenge of this study was finding cases that focused on collaboration. The participants who agreed to be part of this study had limited collaborative virtual vocal ensemble experiences. Similarly, new collective and collaborative groups are appearing, often focused on performing the music of famous a cappella groups like Pentatonix or composers who have advocated for virtual music making such as Eric Whitacre.

Therefore, future research could attend to the processes of not only collaborative but also collective virtual ensembles.

The research done on collective virtual ensembles has previously been limited to EWVC. This study provides an in depth look into one creator whose collective experiences led her to pursue one-person virtual vocal ensembles. It would be beneficial for explorations to be conducted on other types of collectives including choral and instrumental groups. The online music communities most explored in this study were the barbershop and classical virtual vocal ensemble communities; however, the creators also performed popular and Christian music. The creators were on the periphery of these communities and served as a link between their preferred genres and the other styles they performed.

Another area of future research that could be pursued is the learning acquisition of skills required for the creation of virtual vocal ensembles. This study focused on successful creators who pursued music making experiences beyond the Internet. They had rich musical experiences at home and in school. Future studies of less popular creators or newcomers in the virtual vocal ensemble community could provide compelling data. Studies connecting video creation to music education classrooms would provide pedagogical accounts of how educators help students learn about online participatory practices. Creators learned how to make videos informally because more formal means of learning were not easily available. Educators can apply the ideas and practices that are used by creators of virtual vocal ensembles to synchronic choral programs. Learning multiple parts, allowing chorus members to make larger ensemble decisions, and collaborating on musical expression are some of the practices that could be applied to synchronic ensembles and researchers can explore the implications this may have on the curriculum.

In addition to virtual vocal ensemble performance and the connection to the classroom, researchers can also explore the medium surrounding YouTube. Collaboration, community, identity, and practices are all areas of interest in such a complex online community. Online communities of practice, especially on YouTube, could be explored to see how people interact with each other, institutions, and technologies. While online communities of practice are being studied, the specific nature of video affords opportunities for communication and artistic creation and distribution. Online mentoring within online communities of practice could also be explored.

The Influence of a Medium

The exploration of this study would not have been possible without the presence of a medium. Virtual vocal ensembles emerge from a contingent network of recurring relations among people, practices, institutions, and technologies. The nature of these relations allowed the creators of virtual vocal ensembles to find meaning, become part of a community, learn new skills, and further develop their identities. As people and institutions develop new practices and refine current ones, the medium will evolve. As current technologies become obsolete and are replaced by new machines, online spaces, and software that allow for different effects and practices, the virtual vocal ensemble medium's plasticity will allow for new ways to perform and experience music. For example, since the data collection for this study concluded, the YouTube channels and their creators continued to evolve their creative processes and produce more content. There is no way to tell when a creator may decide to cease producing content or delete their YouTube channel. However, even if one of the main participants of this study decides to stop their virtual vocal ensemble activities, a network will still be present, and it can be certain that their presence would have left a lasting impact on the medium, and the relations between the entities that make it up.

As the music education profession explores how to make music in a society where recording technologies abound and social media websites are ubiquitous, educators can respond to these movements by helping students discover ways they can use these tools to become lifelong music makers. By connecting participatory culture practices and synchronic musical groups, the virtual vocal ensemble is one of many ways technology can be used for meaningful musical experiences. This study shows some of the benefits video creators are experiencing when they make music and publish it online. Educators can explore those practices and relate them to the classroom to help their students' experience meaningful virtual music making.

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APPENDIX A: INFORMED CONSENT FORMS

Sample of Informed Consent Form for Creator

[Date]

To YouTube channel owner:

Re: Informed Consent Form for Research Study

You are invited to participate in a research project on virtual choirs and performance on YouTube. This project will be conducted by Christopher Cayari and Dr. Janet Barrett from the Music Education Division at the University of Illinois at Urbana-Champaign.

In this project, YouTube channels, videos, and surrounding material will be selected and analyzed to better understand the process of creation, the use of YouTube as a performance venue, and its implications on music education. Mr. Cayari will observe your YouTube channel and videos, note observations, and analyze that data. Your videos will be downloaded and screenshots of your channel will be taken for the purposes of archiving data and will be stored in a secure location on the University campus. You will also be asked to participate in three 45 to 60 minute interviews which Mr. Cayari will conduct at your convenience. In these interviews, which will be conducted via internet video messaging, you will be asked to discuss your experiences, YouTube Channel, Live performance, and musical career. The videos will then be encrypted and stored in a zip file that is protected with a password. These files will be stored on the computer of the researchers and only authorized personnel will have access. Finally, you would be asked to help identify some people in your life that have been particularly influential in your musical career and the creation of your videos. We would request that you help me by contacting them and seeing if they are interested in being interviewed or filling out an email questionnaire. Alternatively, you could also supply us with their contact information, and we could contact them directly.

Please note that if YouTube videos or pictures are used, complete anonymity is not possible, but it there are measures that can help create some privacy. It is important that you know that your safety is important to the University and me. By retaining your true identity, anything you say may be reported on in my research. By connecting your real name with this research, there is a risk that things you say or do may be perceived negatively by others. However, every attempt will be taken to minimize that risk. Any quotes and transcripts will be submitted to you for your review; by checking for accuracy, you can make sure that misunderstandings are minimized. It is also important to note that if you wish to keep your identity in this research, all performances, videos, and affiliations will be given credit with citations. For example, if your excerpts from your videos or audio selections are used, they will be identified as your work. If you choose to opt out of using your own name, all information will be reported in a similar fashion, but no links, videos, or images will be included in the study.

We do not anticipate any risk to this study greater than normal life and we anticipate that the results will increase our understanding of effective teaching techniques and music performance. The results of this study may be used for a dissertation, a scholarly report, and a journal article and conference presentation. In any publication or public presentation pseudonyms will be substituted if requested for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. You are also free to refuse to answer any questions you do not wish to answer. You will receive a copy of the research results after this project is completed.

If you have any questions about this research project, please contact Mr. Cayari by telephone at 708-712-4282 or by e-mail at WirtualChoirResearch@gmail.com or Dr. Barrett by telephone at 217-244-6310 or by email at janetbar@illinois.edu.

Sincerely,

Christopher Cayari

If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the University of Illinois Institutional Review Board at 217-333-2670 (collect calls will be accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

I have read and understand the above information and volunt described above. I have been given a copy of this consent for	rm.
yesno I agree to have the interview video/audic preservation. (If you do not consent to this process, we will refer to the process of	
yesno I agree to allow my YouTube videos and purposes of academic and research presentation.	I personal likeness (screen captures) to be used for
Check one:	
I agree to allow my real name to be used in this researc I would like for this research to use a pseudonym. Chos	
Print name	
Signature	Date
Please print, sign, and scan in a copy of this informed conser <u>VirtualChoirResearch@gmail.com</u> . If you are unable to do se copy via fax or mail.	
Raw Data File Consent Form	
I,	
yesno I agree to allow these files to be displayed. For example, an iMove file could be shown at a conference of	
Print name	
Signature	Date

Please print, sign, and scan in a copy of this informed consent for and send it to Christopher Cayari at VirtualChoirResearch@gmail.com. If you are unable to do so, please let Mr. Cayari know and he will help you get a copy via fax or mail.

Sample of Informed Consent Form for Secondary Participant (Performer)

[Date]

To [Secondary Participant]:

Re: Informed Consent Form for Research Study

You are invited to participate in a research project on virtual choirs and performance on YouTube. This project will be conducted by Christopher Cayari and Dr. Janet Barrett from the Music Education Division at the University of Illinois at Urbana-Champaign.

In this project, YouTube channels, videos, and surrounding material will be selected and analyzed to better understand the process of creating virtual choirs, the use of YouTube as a performance venue, and its implications on music education. You will also be asked to participate in *number of interviews* lasting 45 to 60 minutes with Mr. Cayari. In this interview, which will be conducted via internet video messaging, you will be asked to discuss your experiences collaborating with *owner's name*, his or her YouTube Channel, and both his or her and your musical careers. Please confirm on the consent portion of this form if you would like your real name to be included in this study or if you would like to be assigned a pseudonym.

It is important that you know that your safety is important to the University and me. If your relation to *owner's name* is easily identifiable, it allows you to be linked to this research. By connecting your real name or situation with this research, there is a risk that things you say or do may be perceived negatively by others. However, every attempt will be taken to minimize that risk. Risk is minimized because a transcript of the interview will be sent to you for your review to check for mistakes and misunderstandings.

We do not anticipate any risk to this study greater than normal life. The results of this study may be used for a dissertation, a scholarly report, and a journal article and conference presentation. In any publication or public presentation pseudonyms will be substituted if requested for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. You are also free to refuse to answer any questions you do not wish to answer. You will receive a copy of the research results after this project is completed. By participating in this interview, you are agreeing that you understand the above information and voluntarily agree to participate in the research project described above. You also acknowledge that you have been given a copy of this consent form.

If you have any questions about this research project, please contact Mr. Cayari by telephone at 708-712-4282 or by e-mail at <u>VirtualChoirResearch@gmail.com</u> or Dr. Barrett by telephone at 217-244-6310 or by email at janetbar@illinois.edu.

Sincerely,

Christopher Cayari

I have read and understand the above information and voluntarily agree to participate in the research project described above. I have been given a copy of this consent form.
Check one: I agree to have the interview video/audio recorded for the purposes of transcription and preservation. I agree to have an interview via e-mail. I do not agree to be interviewed for this study.
yesno I agree to allow the YouTube videos on <i>owner's name</i> channel which I have appeared in and my personal likeness to be used for purposes of academic and research presentation.
Check one: I agree to allow my real name to be used in this research I would like for this research to use a pseudonym.
Print name

Please print, sign, and scan in a copy of this informed consent for and send it to Christopher Cayari at <u>VirtualChoirResearch@gmail.com</u>. If you are unable to do so, please let Mr. Cayari know and he will help you get a copy via fax or mail.

Date

Signature

Sample of Informed Consent Form for Secondary Participant (Non-Performer)

[Date]

To Participant:

Re: Informed Consent Form for Research Study

You are invited to participate in a research project on virtual choirs and performance on YouTube. This project will be conducted by Christopher Cayari and Dr. Janet Barrett from the Music Education Division at the University of Illinois at Urbana-Champaign.

In this project, YouTube channels, videos and surrounding material will be selected and analyzed to better understand the process of creation, the use of YouTube as a performance venue, and its implications on music education. Mr. Cayari will send you this introductory e-mail with a few questions. You will be asked to discuss your experiences with *owner's name*, *his or her* YouTube Channel, live performance, and musical career. A follow-up e-mail may be sent to clarify information.

It is important that you know that your safety is important to the University and me. If your relation to *owner* is easily identifiable, it allows you to be linked to this research. By connecting your real name or situation with this research, there is a risk that things you say or do may be perceived negatively by others. However, every attempt will be taken to minimize that risk. Risk is minimized by allowing you to write your responses and review before submission; also, the follow-up e-mail will help so that misunderstandings are minimized.

We do not anticipate any risk to this study greater than normal life. The results of this study may be used for a dissertation, a scholarly report, and a journal article and conference presentation. In any publication or public presentation pseudonyms will be substituted if requested for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. You are also free to refuse to answer any questions you do not wish to answer. You will receive a copy of the research results after this project is completed.

By participating in this e-mail questionnaire, you are agreeing that you understand the above information and voluntarily agree to participate in the research project described above. You also acknowledge that you have been given a copy of this consent form.

If you have any questions about this research project, please contact Mr. Cayari by telephone at 708-712-4282 or by e-mail at <u>VirtualChoirResearch@gmail.com</u> or Dr. Barrett by telephone at 217-244-6310 or by email at <u>janetbar@illinois.edu</u>.

Sincerely,

Christopher Cayari

Sample of Informed Consent E-mail and Notification for Performing Collaborator

Email:

To whom it may concern:

I am contacting you on behalf of, Christopher Cayari, a doctoral candidate at the University of Illinois. I have been selected to be the subject of a research project at the University of Illinois. This project includes the use of YouTube as a performance venue and virtual choirs. As you may or may not know, you are in a video that is on my YouTube channel. Please contact the researcher, Christopher Cayari, if you object to a video with you being used in his research and publications. His e-mail is VirtualChoirResearch@gmail.com. Please see the attachment for more details.

Thank you, *Owner's name*

Attachement:

[Date]

To Collaborator:

Re: Informed Consent Form for Research Study

You are invited to participate in a research project on virtual choirs and performance on YouTube. This project will be conducted by Christopher Cayari and Dr. Janet Barrett from the Music Education Division at the University of Illinois at Urbana-Champaign.

In this project, YouTube channels, videos and surrounding material will be selected and analyzed to better understand the process of creation, the use of YouTube as a performance venue, and its implications on music education. Mr. Cayari will send you this introductory e-mail with a few questions.

It is important that you know that your safety is important to the University and me. If your relation to *owner* is easily identifiable, it allows you to be linked to this research. We do not anticipate any risk to this study greater than normal life. The results of this study may be used for a dissertation, a scholarly report, and a journal article and conference presentation. In any publication or public presentation pseudonyms will be substituted if requested for any identifying information.

Your participation in this project is completely voluntary, and you are free to request that the video in which you appear is not included in the study. You my request a copy of the research results that pertain to your video after this project is completed.

If you have any questions about this research project, please contact Mr. Cayari by telephone at 708-712-4282 or by e-mail at VirtualChoirResearch@gmail.com or Dr. Barrett by telephone at 217-244-6310 or by email at janetbar@illinois.edu.

Sincerely,

Christopher Cayari

Sample of Informed Consent E-mail and Notification for Commenter

Email:

To [User name]:

My name is Christopher Cayari, a doctoral candidate at the University of Illinois. I am currently conducting a study on the use of YouTube as a performance venue and virtual choirs. While reviewing the YouTube channel of [owner], I came across a comment that you made on [video name] which was posted on [date of video] which can be found at [url address]. Your comment is of particular interest to my study and I would like to request your permission to include it in my data. While your comment is a matter of public record, I write to you as courtesy so that you can choose a pseudonym for the study. Attached is an information sheet stating your rights as part of this study and your comment will be used unless you reply to me via email at VirtualChoirResearch@gmail.com or contact me via the Google+ messaging system. Please contact me via e-mail if you are do not want your comment to be part of the study or would like to choose a pseudonym for your comment.

For your convenience, your comment for the video mentioned above was:

[Place text here]

Thank you,

Christopher Cavari

Doctoral Candidate

Music Education

University of Illinois at Urbana-Champaign

Attachment:

[Date]

To [participant]:

Re: Informed Consent Form for Research Study

You are invited to participate in a research project on virtual choirs and performance on YouTube. This project will be conducted by Christopher Cayari and Dr. Janet Barrett from the Music Education Division at the University of Illinois at Urbana-Champaign.

In this project, YouTube channels, videos and surrounding material will be selected and analyzed to better understand the process of creation, the use of YouTube as a performance venue, and its implications on music education. Your comment on *owner's name*'s video *name of video* is of value to the study. It is important that you know that your safety is important to the University and me. If your relation to *owner* is easily identifiable, it allows you to be linked to this research. By connecting your real name, username, or situation with this research, there is a risk that things you say or do may be perceived negatively by others. Therefore, a pseudonym will be used to minimize risk. Therefore, if you would a specific pseudonym, please e-mail me at VirtualChoirResearch@gmail.com with your request, otherwise a pseudonym will be assigned to you.

We do not anticipate any risk to this study greater than normal life. The results of this study may be used for a dissertation, a scholarly report, and a journal article and conference presentation. In any publication or public presentation pseudonyms will be substituted if requested for any identifying information.

Your participation in this project is completely voluntary, and you are free request that your comment is not used. Similarly, as mentioned before, if you would like to choose your own pseudonym, please contact me at the e-mail provided.

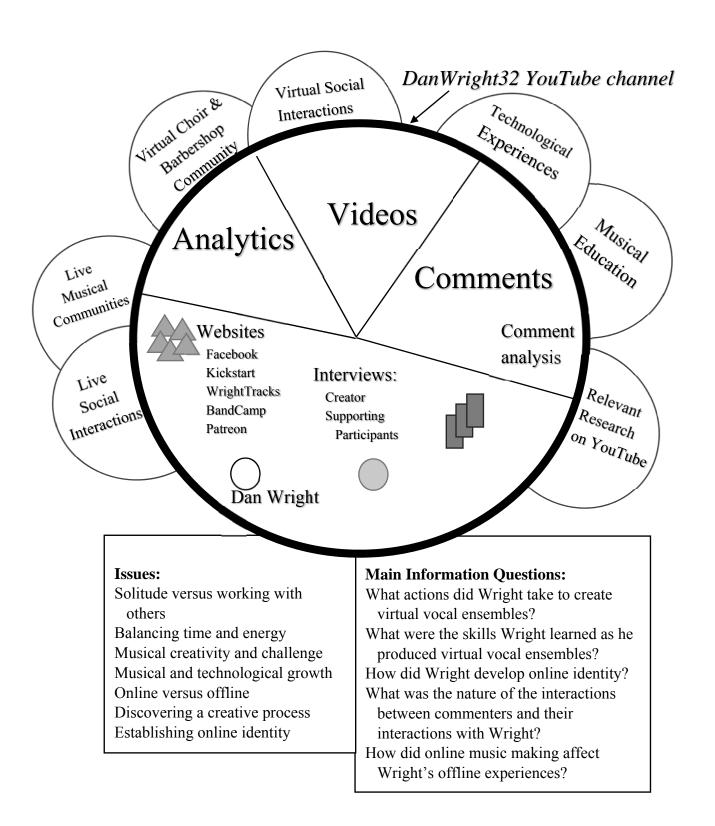
If you have any questions about this research project, please contact Mr. Cayari by telephone at 708-712-4282 or by e-mail at VirtualChoirResearch@gmail.com or Dr. Barrett by telephone at 217-244-6310 or by email at janetbar@illinois.edu.

Sincerely,

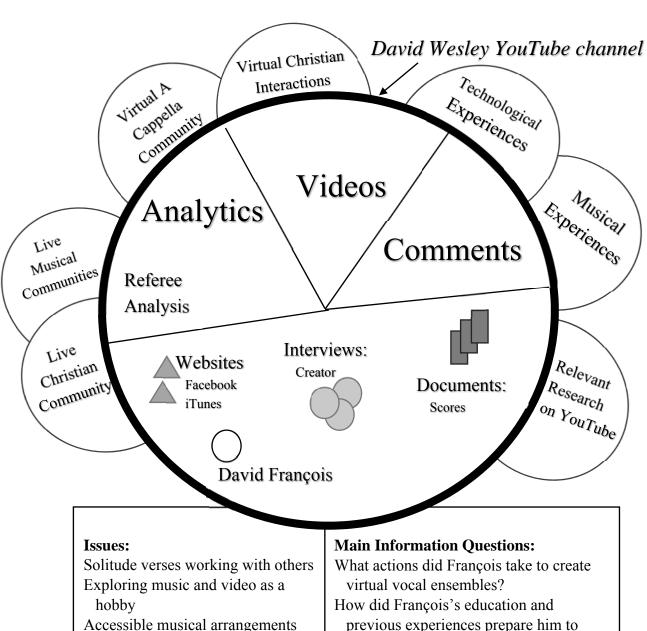
Christopher Cayari

APPENDIX B: CROSS-CASE ANALYSIS WORKSHEETS

Worksheet B.1.1. Graphic Design of DanWright32 YouTube Channel Case Study



Worksheet B.1.2. Graphic Design of *David Wesley* YouTube Channel Case Study



Accessible musical arrangements Branding and online identity Discovering a creative process Formal and informal education Evolution of a YouTube channel Spreadability of media Expectations of excellence Spirituality

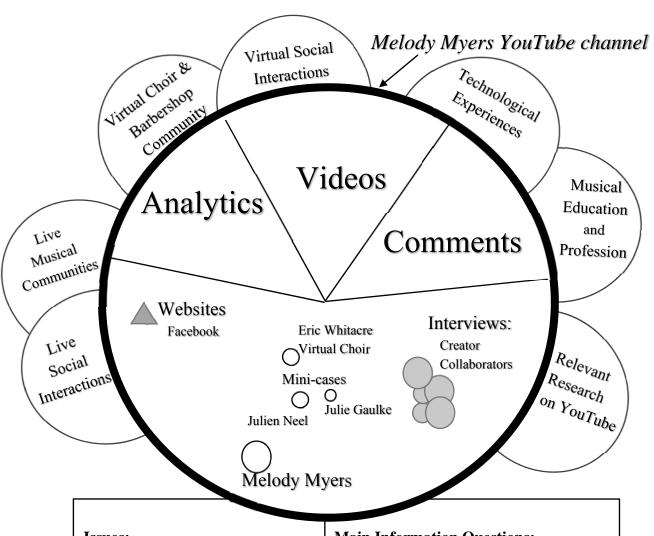
previous experiences prepare him to create videos?

What practices were used to brand François's YouTube channel?

How did François's branding help him develop a fan base?

What role did spirituality play in the construction of François's fandom?

Worksheet B.1.3. Graphic Design of Melody Myers YouTube Channel Case Study



Issues:

One-person, collective, and collaborative virtual ensembles Balancing profession and leisure Musical creativity and challenge Musical and technological growth Discovering a creative process Expressing emotions through performance Evolution of a YouTube channel Boundaries with online relationships

Main Information Questions:

What actions did Myers take to create virtual vocal ensembles?

How can learning be seen through Myers's virtual vocal ensembles?

What effect did vlogging have on Myers's ability to connect with fans?

How did Myers portray her emotions and express herself through video?

How did Myers navigate the relationships she started online?

How much interaction with Myers have with others when creating videos?

Worksheet B.2.1. Themes of Virtual Vocal Ensemble in the DanWright32 YouTube Channel

Theme 1: Who are the people creating virtual vocal ensembles?
3, 4, 9, 20, 20-21, 27, 30, 34, 44
Theme 2: What practices are involved in making virtual vocal ensembles?
5, 13, 14, 16, 17, 27, 43, 44, 60, 73, 74
Theme 3: How do institutions influence virtual vocal ensembles?
5, 7, 21, 34, 43-44, 59, 75
Theme 4: How is technology used to mediate ensembles and performance?
Technology
8, 9, 14, 16, 17, 18, 39, 51, 74
Mediation
8, 11, 16, 16-17, 18, 25, 26, 28, 33, 37, 40, 42, 45, 47, 48, 51, 52, 53, 72
Theme 5: How do the recurring relations create a network through which singers perform?
Theme 6: How do virtual vocal ensemble creators find the performance practice fulfilling and
meaningful?
13, 17, 19, 21, 28, 29, 30, 31, 34, 35, 36, 80
Theme 7: How does the production of videos on YouTube affect the identity of the virtual vocal
ensemble creators?
Technological identity
17, 71
Musical identity
13, 24, 30, 30-31, 31, 32
Online identity
9, 20, 34, 35, 36, 75, 81, 84
Theme 8: What type of community emerges through the creation and distribution of virtual vocal
ensembles?
Learning Community
7, 10-11, 12, 27, 40, 41, 42, 45, 58, 58-59, 65, 66-67, 72, 77, 78-80, 81
Musical Community
32, 39, 85
Social Community
10, 56, 60-61, 61, 67, 75, 84
Fandom
35, 56-57, 58, 64, 73, 74
Solitude
4, 84, 85
Theme 9: How does creating virtual vocal ensembles influence the creator's skills and
understanding?
Technology Skills
5, 11-12, 39, 55
Musical Skills
11-12, 12, 19, 27, 31, 37, 38, 40, 42, 43
Producer Skills
9, 19
<i>Note</i> : Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of

Note: Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of the chapter of the corresponding case. Data were then analyzed to construct Worksheet 3.1. Data from themes 1, 2, 3, and 4 cover information germane to theme 5; therefore theme 5 was intentionally left blank. Subthemes are identified above in italics.

Worksheet B.2.2. Themes of Virtual Vocal Ensemble in the David Wesley YouTube Channel

Theme 1: Who are the people creating virtual vocal ensembles?
3, 4, 7, 10, 13
Theme 2: What practices are involved in making virtual vocal ensembles?
10, 14, 16, 17, 18, 19, 22, 23, 26, 32, 35, 47
Theme 3: How do institutions influence virtual vocal ensembles?
3, 5, 6, 7, 8, 9, 24, 25, 28, 29, 32, 36, 42, 43, 51, 51-52
Theme 4: How is technology used to mediate ensembles and performance?
Technology
14, 15, 16, 19-20, 20, 21, 22, 31, 42, 50
Mediation
15, 16, 18, 19, 20, 21, 22, 23, 27, 30, 31, 33, 37
Theme 5: How do the recurring relations create a network through which singers perform?
Theme 6: How do virtual vocal ensemble creators find the performance practice fulfilling and
meaningful?
1, 10, 18, 33, 35, 38, 39-40, 50
Theme 7: How does the production of videos on YouTube affect the identity of the virtual vocal
ensemble creators?
Technological identity
40, archive videos
Musical identity
39, 40, 49
Online identity
16, 21, 24, 32, 41, 42, 43
Theme 8: What type of community emerges through the creation and distribution of virtual vocal
ensembles?
Learning Community
15, 27, 31, 42, 45, 48, 49
Musical Community
39
Social Community
29, 46, 47, 48
Fandom
28, 31, 32, 33, 41, 44, 50, 51-52, 52
Solitude
1, 27
Theme 9: How does creating virtual vocal ensembles influence the creator's skills and
understanding?
Technology Skills
1, 3, 4, 6, 7, 8, 10, 13, 43
Musical Skills
1, 3, 4, 5, 6, 9, 10, 19, 30, 39, 49
Producer Skills
1, 32, 33, 40, 41, 42, 52
Note: Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of

Note: Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of the chapter of the corresponding case. Data were then analyzed to construct Worksheet 3.2. Data from themes 1, 2, 3, and 4 cover information germane to theme 5; therefore theme 5 was intentionally left blank. Subthemes are identified above in italics.

Worksheet B.2.3. Themes of Virtual Vocal Ensemble in the Melody Myers YouTube Channel

Theme 1: Who are the people creating virtual vocal ensembles?
2, 3, 5, 6, 13, 20, 36, 39
Theme 2: What practices are involved in making virtual vocal ensembles?
4, 6, 6-7, 8, 9, 12, 15, 16, 18, 19, 21, 23, 26, 29, 38, 41, 46, 47
Theme 3: How do institutions influence virtual vocal ensembles?
5, 7, 16, 18, 21, 23, 26, 27, 33, 37, 39, 45, 46, 47
Theme 4: How is technology used to mediate ensembles and performance?
Technology
6, 11, 12, 15, 16, 18, 20, 25, 28, 37, 48
Mediation
9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 22, 23, 25, 26, 27, 28, 29, 37, 47
Theme 5: How do the recurring relations create a network through which singers perform?
Theme 6: How do virtual vocal ensemble creators find the performance practice fulfilling and
meaningful?
7, 15, 18, 21, 27, 30, 302, 35, 41, 42, 43, 44, 45, 46, 47
Theme 7: How does the production of videos on YouTube affect the identity of the virtual vocal
ensemble creators?
Technological identity
15, 25, 32, 49, 50
Musical identity
5, 13, 16, 31, 43, 44, 45, 45-46, 49
Online identity
14, 21, 33, 45, 46, 47-48, 48, 49
Theme 8: What type of community emerges through the creation and distribution of virtual vocal
ensembles?
Learning Community
9, 13, 15-16, 16, 17-18, 22, 28, 34, 35, 36, 37, 38, 42, 47
Musical Community
9, 10, 36, 38, 40, 42, 44, 46, 47
Social Community
32, 33, 34, 38, 42, 48
Fandom
13, 19, 22, 31, 35, 38, 40, 43
Solitude
45
Theme 9: How does creating virtual vocal ensembles influence the creator's skills and
understanding?
Technology Skills
17, 19, 25, 30, 34, 49, 50 Musical Skills
3, 4, 5, 9, 13, 16, 21, 34, 37, 39, 41, 42, 44
Producer Skills
20, 33, 46 Note: Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of
<i>note</i> . Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of

Note: Numbers refer to occurrences where information pertinent to the theme appeared in an early draft of the chapter of the corresponding case. Data were then analyzed to construct Worksheet 3.3. Data from themes 1, 2, 3, and 4 cover information germane to theme 5; therefore theme 5 was intentionally left blank. Subthemes are identified above in italics.

Worksheet B.3.1. Case Report Notes for the DanWright32 YouTube Channel

Synopsis of Case

Creator Dan Wright began his YouTube channel as a high school junior because he wanted to sing barbershop music. He was unable to find peers with which to sing live, so he made one-person multitrack videos instead. He began with songs he performed with his choir and recorded one track for each part. One of his videos was featured on the news of a Texas television station, and the publicity jumpstarted his YouTube channel's popularity. His early videos were unrefined both musically and technologically, and his YouTube channel served as an archive that shows how he progressed as a performer and audio-video engineer. Wright produced small and large virtual vocal ensembles that resembled barbershops and choirs.

The visual effects he used were minimal, and the panels in his videos were usually stationary. He experimented with visual effects, but preferred static panels where he could give the impression that the clones were singing next to each other as they would in a live performance. Other live characteristics included angling large groups toward the center as if they were facing a conductor and spontaneous choreography in barbershop singing. He developed a virtual vocal ensemble creation process from which he rarely deviated. This included selecting a song, creating a MIDI file, preparing the score, recording the audio, mastering the sound, recording the visual, editing the video, and publishing the product. When recording, Wright spliced various audio tracks together to get rid of discrepancies and showed a great deal of growth in his musicality, theatrical presentation, and sound editing.

Wright claimed that he had no online identity, yet one was established without his conscious development of it as he produced videos, interacted with audiences, and developed his webpages. He always worked at keeping a professional persona online, treating his commenters with respect, but also moderating the communities surrounding his videos. He shared personal information, answered questions, and reprimanded people when they were offensive to others. He allowed his supporters to defend him and each other against flames, and he often ignored overly negative comments. He rarely deleted any comments. Wright took both positive and negative critique with a grain of salt and thoughtfully considered whether suggestions had merit. His YouTube channel had a large amount of conversation on comments, which provided an opportunity for an analysis of viewer comments with a large sample of texts. The data showed that YouTube videos like Wright's could lead to the following: an environment that was predominantly positive; constructive criticism that included a balance of negative and positive feedback; conversations that were both topical and extended conversations beyond the video and creator; and a forum where there was a high level of evaluation.

While Wright did five mediated collaborations, he requested to not talk about them as he did not want to offend any of his collaborators and since the act of collaborating was a source of stress and tension to him. While he preferred to perform with live ensembles, he kept his YouTube channel going because of his over 20,000 subscribers; their presence instilled a sense of obligation to continue to produce more content. Wright chose music that appealed to a large audience, but also challenged him musically. A pattern developed in Wright's activities: he becomes interested in an activity; he then achieves a high level of success; he continues to have meaningful experiences; and finally, he moves on. While a projection, this cycle happened when Wright was a child actor who did national tours of Broadway shows, commercials, and sitcom television. It also occurred when Wright decided to not pursue music education but rather decided to pursue photography as a career. As we interviewed, Wright being less productive on YouTube was accompanied by the impression that he saw virtual vocal ensemble creation

as a burden to create instead of something he looked forward to. Never the less, Wright kept it as a creative outlet and has produced five videos in the last 10 months since the study started.

Situational Constraints

Soured relationships with collaborators; creator insists that he has no online identity; creator is no longer as driven to continue making videos with the same vigor as before; creator did not like talking about other people.

Uniqueness among Other Cases

Wright was the most popular 32-voice virtual choir creator on YouTube. While he was not the first, he quickly adapted the style. The growth is obvious and included musical, technological, and social aspects. No videos were online with Wright's speaking voice.

Prominence of Themes

Prominence of Theme 1 (People) in This Case: highly successful performer as child actor and competitive barbershop singer; driven artist; still finding what type of artist he wants to be; barbershop and choral music enthusiast; chorister; supportive family; highly involved in live music communities; innovative thinker; worked with voice teachers to become a better performer; worked at churches for supplemental income; live barbershop quartet was well received by judges; husband and wife pair who created virtual choirs.

Prominence of Theme 2 (Practices) in This Case:

- *Making music*: preparation of score was similar to live music making; learned music through running music over and over as recording; used different timbres depending on type of ensemble.
- *Making videos*: practiced creation before creating YouTube channel; vernacular speech on comments; guiding track used to record; lip-synced visuals; commoditized music, files, and learning; entrepreneurial aspects were included in running a YouTube channel.
- Practices spanning live and mediated music making: live music making practices emulated online; small difference between the way virtual choirs and virtual barbershop quartets were performed, and this emulated live performance.
- *Creative Process:* selecting a song, creating a MIDI file, preparing the score, recording the audio, mastering the sound, recording the visual, editing the video, and publishing the product.

Prominence of Theme 3 (Institutions) in This Case:

- *Learning:* educators were credited for helping creator to perform with expression; created tracks used in schools and churches to learn music.
- *Provision:* used printed music from school; dorm living was troublesome for recording and had to go to parents' house to record.
- *Production:* local news coverage (across the country); websites were used to crowd-source and fundraise; various revenue sources including patronage and commoditization; covers of commercial artists brought viewers and discussion.

Prominence of Theme 4 Technology and Mediation in This Case:

Prominence of Sub-Theme 4a (Technologies) in This Case: used presets and minimal use of sound effects; filming equipment; sync problems; music notation software; MIDI files; professional DAW; description box considered useless/ tedious; adversity toward Auto-Tune;

lighting achieved better visual recordings; analytics told things about the video and the way viewers interact.

Prominence of Sub-Theme 4b (Mediation) in This Case:

- *Fidelity (attempts to make like live performance):* clones interacted with each other; strove for a high level of fidelity in the sound; singers placed across the sonic panorama.
- Editing and Effect: voice parts displayed to differentiate singers; rerecorded trouble spots; mediated music can have less flaws than live; good multitrack sounds in tune and has musicality; special effects used to direct focus; synchronization problems apparent; visual anomalies like the 3D effect led to more views; tried effects like lyrics visually displayed in one video and clones represented sections of voices.
- Results of Mediation: harder to be part of a collaboration than create one-person
 ensemble; musical decisions made early on were hard to change; live music is thought of
 as more authentic than mediated; virtual ensembles do not replace live music; ease of
 blending multiple recordings of the same voice; all singers in a one-person choir have
 unity of thought; there is a value of both fidelity and mediated innovation; time required
 was compounded as the more voices and clones were added; problems during recording
 process required more time and effort.

Note: Theme 5 is intentionally absent as Themes 1-4 all influence the development of the medium.

Prominence of Theme 6 (Meaning) in This Case:

- *Musical:* expansion of range; challenging; enjoy performing preferred music; creation process was fun; deep reverence for human voice; expansion of range; singing high notes resulted in pride.
- *Production:* lip-syncing was annoying; disliked creating description box.
- Social: audience growth encouraged more creating; views were important as a young creator; extrinsic feedback was more important than self; notoriety is important; be the best you can in what you do and get credit and attention for it; saved special comments and private messages; enjoyed good feedback; met criticism with skepticism.
- *Hobby:* seen as a hobby, creation can be usurped by other activities; activity was a small part of his life as a whole; creating was consuming as a young creator; cycle of learning new activities.

Prominence of Theme 7 (Identity) in This Case:

Prominence of Sub-Theme 7a (Technological) in This Case: not knowledgeable about sound editing; sometimes lied about process and skills to impress fans.

Prominence of Sub-Theme 7b (Musical) in This Case: voice ranges limited music making decisions; range determined what songs could be done; chose songs that featured a high tessitura; voice part labels distinguished clones; performer for life (since childhood).

Prominence of Sub-Theme 7c (Online) in This Case: costumes differentiated singers; dismissed discrepancies in live music videos; disparity between live and mediated music making; online interactions are more refined than face-to-face; flaws show growth; other activities take precedence; personal information was shared by both creator and viewers through comments; never spoke on YouTube channel; only communicated through text and music, not speaking; responded to flames with sarcasm; portrayed as a respectable young man who loved music.

Prominence of Theme 8 (Community) in This Case:

Prominence of Sub-Theme 8a (Learning) in This Case: received advice from other creators who pointed out places for improvement; criticism and praise from viewers; criticism required discernment; creator emulated what he saw others produce; veterans helped guide learning; veterans discussed how the varied ways to improve; videos were used in classrooms by teachers and shared by students; created wrighttracks to help others learn; when negative comments were made, half the time positive comments accompanied; veterans validated how difficult tasks of creation were; negative comments were more prominent in categories that lent themselves to evaluation; when negative feedback was given, asked for clarification to decide if the idea had merit:

Prominence of Sub-Theme 8b (Musical) in This Case: produced live performance videos of choirs; invited virtual audience to sing with him at festival choirs; conflict between barbershop and virtual barbershop community; collaborations required more work; struggled with collaborating with others;

Prominence of Sub-Theme 8c (Social) in This Case: comments led to social connections; responded to comments and answered questions; comments gave feedback, debate, and conversation; people used private messages on YouTube, Facebook, and Google+; topical conversation was found in comments and extended the conversation past the subject at hand; clothing was a source of interest for fans; conversations through comments led to viewers learning about creator; discussion allowed for changing of viewpoints and understanding of others:

Prominence of Sub-Theme 8d (Fandom) in This Case: variety of entry points to YouTube channel including algorithms, social media, and sharing; connected YouTube to Facebook, Twitter, Tumblr, and Google+; creator kept meaningful notes from people; commercial television contributed to spreadability; comments were predominately positive; fans insulted by negative feedback and dislikes; fans viewed videos multiple times; opinions were expressed about creator by viewers; some fans crossed friendly boundaries with adoration, marriage proposals, and deeply personal questions; flames appeared and support from fans combatted that; expert fans defended against negative comments; too good led to accusations of pitch correction and wrong notes led t harsh critique;

Prominence of Sub-Theme 8e (Solitude) in This Case: liked to do own thing; could not find ensemble; lonely before YouTube; more responsibility than just singing; collaboration was not common on channel; wanted to express himself on his own terms.

Theme 9 (Skills)

Prominence of Sub-Theme 8a (Technological) in This Case: practiced before creating official channel; multiple takes to splice together; splicing allowed for less mistakes; better technological skills led to more polished ensembles;

Prominence of Sub-Theme 8b (Musical) in This Case: score interpretation; live weaknesses were also apparent in mediated videos like theatrics and expression; used skills learned in choirs to create ensembles; YouTube channel archived musical skill development; creator claimed virtual vocal ensembles did not contribute to development; range expanded as music required a larger range; bass range was often denied and attention was brought to tenor range; skill differences are very apparent from beginning to end; YouTube helped expand range lower; score preparation became a more prominent skill; musicality became better; theatrics developed; Prominence of Sub-Theme 8c (Production) in This Case: linked videos through costumes and annotations.

Findings Specific to the DanWright32 YouTube Channel Case

- 1. Creator was a highly successful performer and had experiences in academic, professional, and leisurely music making.
- 2. Practices emerged that were specific to making music and making videos as well as practices that related to both.
- 3. After creating several videos, a fairly consistent process evolved with which the creator made virtual vocal ensembles.
- 4. Institutions facilitated learning, provisions, and production throughout the virtual vocal ensemble process.
- 5. Creator used what technologies they have and eventually upgraded to make more dynamic products.
- 6. Creator used discernment on which technologies and mediations were acceptable to use to create. These decisions are influenced by audiences, norms, and personal preference.
- 7. Creator attempted to create virtual vocal ensembles with high fidelity, both visually and sonically, by emulating live performance practices.
- 8. Creator viewed live performance as more authentic than mediated performance.
- 9. Visual effects were used to focus audiences.
- 10. Creating offered an opportunity for autonomy allowing to perform preferred music with preferred ensemble in preferred style. This freedom gave meaning to music making.
- 11. Positive feedback was initially meaningful and propelled high levels of output and growth.
- 12. Voice range limited repertoire selection.
- 13. Voice range influenced identity construction.
- 14. Creator both differentiated and assimilated clones.
- 15. Creator shared personal information with viewers via text comments.
- 16. Creator's online persona was more refined than live personality.
- 17. Veterans in community helped creator early on. Creator then offered help to others.
- 18. Negative statements were often accompanied in the same message by positive statements in the comment section.
- 19. Keeping up old performances showed growth and used to encourage beginners.
- 20. Criticism was met with skepticism.
- 21. Creator found collaboration to be more work and less satisfying than one-person virtual vocal ensembles.
- 22. Comments included topics germane to the videos as well as extended to other areas of interest.
- 23. Fandom spread across various websites and social media platforms.
- 24. Online performance required a more polished product than live music making.
- 25. Creator used various websites to get money from his music making.

Note: Subthemes in bold were determined a priori to the cross-case analysis. Subthemes in italics were emergent as the cross-case analysis was executed.

Worksheet B.3.2. Case Report Notes for the *David Wesley* YouTube Channel

Synopsis of Case

David François, the creator of the *David Wesley* YouTube channel, used his skills as a musician and recording technician to create virtual ensemble videos on YouTube. His varied experiences as a child, teenager, and young adult gave him the drive and understanding of how to put together audio-visual multitrack recordings. As a self-proclaimed "jack-of-all-trades" and as someone who did not like to stay idle for too long, François used his skills to create predominantly Christian genre virtual a cappella ensembles.

After creating his first virtual a cappella ensembles, François found his YouTube channel rapidly gained popularity and he took notice of how he was able to accumulate views, comments, and attention from a global audience. His choice of Christian music was important to him personally, yet he attributed his success to a combination of the music's popularity as well as his treatment of the music, as he was his own arranger. While he started creating his virtual vocal ensembles spontaneously, he eventually settled on a process that he called *The David Wesley Treatment*. He created a cappella arrangements with a melody singer, two backup singers, and four support singers. For some of his songs, he added percussion in the form of a hand drum or beatboxing, and other songs even featured a full worship band of tracks created by him.

François developed an online brand and used his self-taught production skills to promote his music and merchandise. His videos inspired him to mediate performance in two additional ways: creating a CD and developing a hybrid live-mediated, one-person virtual ensemble which he performed at a live concert. The communities that emerged because of the *David Wesley* YouTube channel were predominantly a fandom and a Christian social community as François steered away from learning and collaborative music making, mostly because of his own time restrictions from his work and family life.

Self-motivation is what drove François to continually produce quality videos. He found that creating these types of mediated performances allowed him to maintain his musical and technological skills. He also found that it satisfied an "intellectual wanderlust" in him that he did not get from working three part-time jobs that were service oriented.

Situational Constraints

Only one collaboration that occurred as more of an accident; only been doing virtual vocal ensembles for a year and a half; unwilling to work on vocal skills, but constantly looking to better videos technologically and through more innovative arrangements.

Uniqueness among Other Cases

François was an adult professional when he created and developed his YouTube channel; he created his own arrangements; he was half black; from Canada; had instrumental videos; lots of experience with technological mediation; a large amount of momentum for growth (same size as Dan Wright, but François's growth predominantly occurred in a year and a half as opposed to a steady growth).

Prominence of Themes

Prominence of Theme 1 (People) in This Case: intellectually curious; struggled with structured learning as a child; created videos as a high school student and collaborated with classmates; wanted a separation between offline and online so he used his middle name instead of last name; searched

for collaborator when skills were not proficient; after working with collaborator, decided to use hand drum, beatbox, or no drums because it took too much time/effort.

Prominence of Theme 2 (Practices) in This Case:

- *Making music:* music would be performed at church and he wanted to get it out of his head and sometimes do it better; used smooth voice leading and chords from the original arrangements.
- Making videos: Used YouTube channel as an eclectic video repository; started creating virtual
 ensembles with no initial plan, but then developed a creative process called the *David Wesley*Treatment; MIDI and click tracks help keep recording in time; created markers in DAW to
 identify important sections; backdrop, lights, tripod, camera, microphone, and pop filter all used
 for recording; used laptop for audio and desktop for video editing; recorded audio and video at
 the same time; listened to recording in multiple scenarios for quality assurance; call to action after
 videos to encourage involvement.
- Practices spanning live and mediated music making: constantly felt he should outdo himself by adding more instruments, more voices, or more challenging arrangements; gave credit to original artists by paying royalties.
- Social media: sometimes allowed fans to talk before formulating responses.
- *Creative Process:* selecting, arranging, recording, sound editing, visual editing, and producing the song; hybrid performance was created by taking out the melody and rearranging panels so a live soloist could sing.

Prominence of Theme 3 (Institutions) in This Case:

- *Learning:* instructional pedagogies; school music programs; government music programs; various commercial entertainment conglomerates which inspired various projects.
- *Provision:* software program companies; church community fostered interest and skills and allowed for development of new ones; copyright agencies like ASCAP and BMI and the artists who wrote and originally performed the music he covered.
- *Production:* served in churches; performed live at religious organizations; commercial mp3 and CD dealers; search engines help spread media.

Prominence of Theme 4 Technology and Mediation In This Case:

Prominence of Sub-Theme 4a (Technologies) in This Case: purchased recording equipment for church CD; started with cheaper all-in-one video editing; bought high-end video editing and sound editing software to create better ensembles; arranging software and MIDI files were used to prepare for videos; used pitch correction; used pitch correction to hit notes he could not hit on his own.

Prominence of Sub-Theme 4b (Mediation) in This Case:

- *Fidelity:* all micro-performances were recorded in one take; desired to create a live feel, but could not due to asynchronous recording; using pitch correction was seen as cheating;
- Editing and Effects: crisp transitions; soloist was dominant; only active audio tracks were visible on screen; paid great attention to fine details while mastering the recording; used pitch correction for minor adjustments; visually covered up as much of the screen as possible with key transitions and animations;
- Results of Mediation: by arranging songs before recording, he was able to create more complex performances; his typical seven voice arrangement evolved from spontaneously

creating virtual vocal ensembles; support singers served as background padding to the melody line; hybrid performance was inspired by virtual ensembles.

Note: Theme 5 is intentionally absent as Themes 1-4 all influence the development of the medium.

Prominence of Theme 6 (Meaning) in This Case:

- *Musical*: songs get stuck in his head and he would get them out by arranging and then recording them; creating the arrangements was the most meaningful thing.
- *Production:* enjoyed creating for others to use and learn; fell into a creative rut because everything was so similar; variety created meaning; experiencing a journey through a song was meaningful; would rather spend time creating than learning about how to sing better.
- *Personal:* lyrics were particularly meaningful and Christian music allowed him to sing about what he cared about; hardest thing about creating was the fear of letting himself down; was not seeking fame but sharing his gift with the world.
- *Hobby:* gets bored easily; likes to spread himself thin.

Prominence of Theme 7 (Identity) in This Case:

Prominence of Sub-Theme 7a (Technological) in This Case: involved with ministry as a video creator; high school videographer.

Prominence of Sub-Theme 7b (Musical) in This Case: genre effected identity; amateur musician; loved tinkering and exploring; dismissive about critical comments because he is not a "professional".

Prominence of Sub-Theme 7c (Online) in This Case: wanted a separation between offline and online; preferred making music in his basement and used that to brand his channel; microperformances for each video were done the same day so that all clones looked the same except for their hoodie; used a coda to direct viewers to other songs and display logo; shared basic information about family through vlogs; hoodie became a trademark; more refined online about controversial topics and criticism; kept everything rated PG; shared personal items to keep fans connected; less critical of other artists online than offline; CD was an extension of online identity; speaking voice and conversational pattern was displayed via vlogs; both good and bad feedback was met with apprehension because they do not know the real creator.

Prominence of Theme 8 (Community) in This Case:

Prominence of Sub-Theme 8a (Learning) in This Case: community would argue about pitch correction; sought learning opportunities in offline world to apply to online music making; viewers would ask for copies of arrangement, but he refused because he did not have copyright; does not criticize other musicians; gave advice about software and process with caution because he felt everyone needed to find their own way of doing things; explained that his success was the culmination of many years of experimentation and learning; wanted to be accessible to fans and answered questions as much as possible; appreciated thoughtful responses and examined life to see if they had merit; vocal feedback was dismissed as he had no time to work on them.

Prominence of Sub-Theme 8b (Musical) in This Case: YouTube channel helped establish credibility with offline musicians; fans thought he was a professional musician/ worship leader; "just a guy making music in my basement."

Prominence of Sub-Theme 8c (Social) in This Case: famous preachers and church goers alike would share his music with their congregations; conversations extended beyond videos; common discussion points were lyrics and religion; lots of adversarial conversations with deeply

passionate retorts (usually because of religion); acted as a peacekeeper in adversarial conversations; was often the subject of attack because of choice of music by atheist, but more viciously attacked by conservative Christians.

Prominence of Sub-Theme 8d (Fandom) in This Case: his use of popular music and his own treatment of the songs attracted a large, diverse fan base; established fandoms connected to his YouTube channel by sharing videos; diverse reactions to controversial issues like pitch correction and religion; attempted to connect offline friends and family with online fans through donations and concert; used Facebook to expand fandom and connect with others; online community was larger than any offline audience; fans spanned age ranges from child to adult; by sharing personal information, he felt fans would connect; balanced giving information and keeping privacy; global audiences expanded through sharing, searching, and algorithms; social media perpetuated fan involvement.

Prominence of Sub-Theme 8e (Solitude) in This Case: wants to do all the jobs himself; learning was both offline in musical communities and self-directed experimentation alone.

Prominence of Theme 9 (Skills) in This Case:

Prominence of Sub-Theme 9a (Technological) in This Case: independent learning and exploration as a child; self-taught to use various technologies; was drawn to creative technologies for arrangement and audio-video editing; moving schools required the learning and leaving of new instruments; established video creator with special effects, skits, and directing experience; transcribed arrangements into notation software; created CD by teaching self; skills learned during CD production led to YouTube channel; vlogs allowed to express gratitude and announce. Prominence of Sub-Theme 9b (Musical) in This Case: private tuition as a young child; orchestra and band in school; preferred own pace of learning; played music by ear with skills that he learned from traditional learning; created arrangements for school band, marching band, and self; was refused admittance to church worship team as keyboardist and vocalist; learned how to sing by joining church choir; vocal range limited repertoire; transcribed covers by ear; breath support limited tempi because he could not hold notes out too long.

Prominence of Sub-Theme 9c (Production) in This Case: included giveaways and concert announcements through vlogs; offered incentives for donations including free music and early release; YouTube bootcamp; treated YouTube channel as a business; decided to create and sell a CD so people could have a tangible object to buy; sales went up when full CD was available for purchase as opposed to individual songs; used teasers to create hype.

Findings Specific to the David Wesley YouTube Channel

- 1. Creator had an intellectual curiosity that spanned musical, technological and production skills, which were used in tandem to create videos.
- 2. Creator used YouTube as a repository to archive projects, music videos, and vlogs.
- 3. Creator developed a method to create music videos, which evolved as he created each subsequent video.
- 4. Creator challenged himself to outdo his previous accomplishments for each subsequent video.
- 5. Creator used MIDI tracks to keep himself in time.
- 6. Creator used professional hardware and software to create audio-visual tracks.
- 7. Copyright allowed for proper attribution of music as well as legal reproduction of protected performance material.
- 8. After developing a following, Creator produced a CD for fans to purchase, which resulted in an increase of track sales.

- 9. Creator used music editing, video editing, and music notation software.
- 10. During editing, creator used pitch adjusting software to make surgical fixes.
- 11. Size and placement of panels were designed to draw the viewer's focus.
- 12. Creator felt that mediated asynchronous recording could not capture the intimacy of a live performance with multiple performers.
- 13. Creator and his fans, in general, felt that one-take recordings allowed for a sense of immediacy and authenticity. They made the recording feel more *real*.
- 14. Pitch correction was seen as cheating.
- 15. Making music videos was a creative outlet that allowed for music and visual expression.
- 16. Creator's largest fear was to let himself down by not producing high quality products.
- 17. Creator had a well formed technological identity as a video editor, producer, and sound technician.
- 18. Creator identified as "just a guy making music in his basement."
- 19. Creator wanted some separation of online and offline life.
- 20. Creator wanted a uniform look in body but used clothing to differentiate voice parts.
- 21. Online personality was more refined and less critical than offline.
- 22. Creator linked videos with clickable annotations to generate more online traffic.
- 23. Creator set up his basement as a recording studio.
- 24. Creator was skeptical about giving advice and encouraged viewers to try things for themselves.
- 25. YouTube channel was a source of credibility with offline musicians.
- 26. Musical genre inspired a social community that resulted in a lot of support as well as adversity.
- 27. Shared personal information to connect with audiences
- 28. Creator wanted to do all the jobs himself, which gave him a sense of accomplishment and pride.
- 29. Informal learning and exploration of technological, musical, and production skills culminated in the ability to successfully manage a YouTube channel.
- 30. Special effects were used to visually enhance a virtual vocal ensemble.
- 31. Musical arrangement skills allowed creator to perform the music he wanted the way he wanted.
- 32. Treated YouTube channel as a business.

Note: Subthemes in bold were determined a priori to the cross-case analysis. Subthemes in italics were emergent as the cross-case analysis was executed.

Worksheet B.3.3. Case Report Notes for the *Melody Myers* YouTube Channel

Synopsis of Case

Melody Myers was probably best known for being selected as the soloist for Eric Whitacre's first Virtual Choir, *Lux Aurumque*. Her experiences with that large collective virtual choir were just the beginning of her virtual music making endeavors as she went on to create various virtual vocal ensembles, solo performances, and vlogs. First and foremost, she performed mediated music to entertain people. Everything she did on her YouTube channel was to connect with viewers musically and emotionally. She did this through theatrical recorded performances.

Musical and technological growth were evident in her YouTube channel as the quality of performance and mediation became more sophisticated over time. As a young singer in middle school and high school, she found much success and acclaim as she was placed in select groups at the local, state, and national levels. Her barbershop quartets consistently won awards at competitions. As she started to publish her own videos on YouTube, she used what she learned from her choirs as inspiration to perform theatrically. By asking for advice, watching others, and informally learning on her own, her technological skills became more refined, and her videos became more polished, both sonically and visually.

Myers appreciated the social connections made through her YouTube channel. Her friendly online disposition was the source of conflict in her life as many strangers requested to become friends with her. She found herself overwhelmed by the number of strangers populating her Facebook friends list; this led her to deleting her social media profile and creating another one. When she started over, she was more discerning when she added people to her friends list and permitted people she did not know to follow her as a *friend*; this distinction allowed for only some material to be publically available while those close to Myers were able to see more personal information.

Virtual vocal ensemble creation led Myers to develop meaningful relationships with people including Whitacre and other creators. These relationships included collaborative music making as well as personal friendships. In contrast, there were viewers who were offensive to Myers, and she used features on websites that block people from viewing her videos and posting inappropriate content.

Creating virtual vocal ensembles allowed Myers to explore and perform aspects of her identity. For example, the type of music she performed was diverse and allowed her to express herself in various ways. She also allowed different characteristics of herself to show through her performances. She acted silly. She crafted costumes, props, and choreography. She gave each clone personality. She used colorful backgrounds and special editing effects. She crafted visually dynamic videos that accentuated her musical voice. She did this all to entertain her audiences and express herself musically, which gave her satisfaction as a performer.

Situational Constraints

While Myers seemed honest and open about everything, there is an image she must maintain and all conversations and representations are influenced by a professional identity; smaller fandom than other cases.

Uniqueness among Other Cases

Female creator; good experiences in one-person, collective, and collaborative virtual vocal ensembles.

Prominence of Themes

Prominence of Theme 1 (People) in This Case: grew up in a musically prominent household with musical parents; struggled with a negative self-image and confidence; competitive and accomplished singer at school, state, and national levels; enjoyed performing live and sharing with audience; cover musician; performed various genres; virtual relationships brought likeminded people together; live and virtual friendships led to collaboration; arranger-composer-vocalist-pianist.

Prominence of Theme 2 (Practices) in This Case:

- *Making music:* theatrics were part of all performance styles; performed nuances of various genres; freedom of movement and expressive face in traditional choral performances and mediated performances; musicality was exhibited through singing; live visual effects like props, costumes, and grooming were used to create dynamic performances.
- Making videos: video recordings initially happened in childhood bedroom; micro-performances
 of a collective are created and published online, a cappella, alone; recorded while looking at
 music and learning music; lip-synced videos to audio; displayed translation for opera texts;
 performance mistakes in visual recordings were ignored in one-take recordings.
- Practices spanning live and mediated music making: attempted to make mediated ensembles like live ensembles through pitch-shifting, but then found arrangements that could be done unaltered; barbershop clones interacted with each other; the choreography of live groups were used to create mediated performances; clones mimicked the style of performance (barbershop: interaction: choir: forward-facing).
- *Creative Process:* selecting a song, learning music during the recording process, editing the sound, editing the visuals, and publishing the video.
- *Collaborative*: travel needed to obtain recordings of live collaborator; some collaborations include a collective like acquisition of tracks while others include a back and forth; sharing personal information via social media.
- *Collective:* figurehead is responsible for the gathering and recruitment of performers;

Prominence of Theme 3 (Institutions) in This Case:

- Learning and performing: school music program (extracurricular); state music organization; competitive barbershop organizations; large collective virtual vocal ensembles organized by professional composer-conductor; had to consider future producers and representation; professional musicians who employ creators for recording; collective organizations and concert organizations.
- Provision: used sheet music companies that specialized in higher voices; bought props and
 costumes from stores; downloaded karaoke tracks from YouTube; performing groups inspired
 some videos.
- *Production:* does not monetize for copyright reasons; social media sites; messaging systems to communicate; use YouTube to sell arrangements and compositions.

Prominence of Theme 4 Technology and Mediation

Prominence of Sub-Theme 4a (Technologies) in This Case: began with lower quality equipment to begin with and eventually acquired high-level equipment; quality of technology limited the quality of ensemble; used pitch-shifting software to jump octaves; used annotations to link videos and converse with audience; use of both laptop for audio and desktop for video; used

dynamic texts for foreign language videos; both musical and technical discrepancies disappeared with upgraded technologies.

Prominence of Sub-Theme 4b (Mediation) in This Case:

- *Fidelity:* used pitch-shifting to sing SATB music; Auto-Tune was thought of as unacceptable; initially recorded audio and visual at the same time.
- Editing and Effect: used visual effects to make project look clean; low quality of technology led to problems with synchronization; spliced audio tracks together to get rid of problems; dubbed tracks for large choruses to make a fuller sound; used visual fades for variety; voice part labels were used in barbershop quartets; small mistakes were often ignored or unnoticed.
- Results of Mediation: micro-performances were hidden initially because editing was done
 to extend notes; groupings of singers used to create momentum in a video; fades lined up
 with phrases to allow for a visual "splicing"; live recordings were easy to publish and
 required minimal effort.

Note: Theme 5 is intentionally absent as Themes 1-4 all influence the development of the medium.

Prominence of Theme 6 (Meaning) in This Case:

- *Musical:* putting herself out there as a performer led to success and then confidence; created videos to perform music she enjoyed, express emotions, and entertain; enjoyed competing;
- *Production:* used props and costumes to have fun; popular music allowed for relaxing and having musical fun.
- Social: desired to be part of a group larger which led to participation in collective; viewers' encouragements inspired her to continue and lessened the self-doubt; dedicated her music to causes that were important to her; found social media emotionally draining; positive feedback was rewarding; the friendships made with prominent composers and creators were emotionally fulfilling; meeting other collective singers live and sing with them was met with anxiety but then joy and excitement; being a female in a male dominated community was empowering and exciting.
- *Hobby versus profession:* made no distinction of importance between virtual ensembles, live recordings, and live performance—it was all performance to her; YouTube allowed for a balance of professional and fun music making.

Prominence of Theme 7 (Identity) in This Case:

Prominence of Sub-Theme 7a (Technological) in This Case: YouTube channel started as a video repository; flawed videos were still published with technical difficulties as she made do with what she had; did not like to give the impression she spent too much time online; used patterned and solid backgrounds and hoped to use green screen in future; not confident but can admit growth.

Prominence of Sub-Theme 7b (Musical) in This Case: was considered a low voiced singer until college when she pursued lyric soprano; gender was the subject of disbelief as audiences did not expect a female to sing with such a large range; preferred to perform music that was mid-to high-voice ranged; mostly classical and professional identity live; added popular and amateur identity online; and a mix of professional and amateur online; (professional is to classical as amateur is to popular); worried popular music would affect classical career; professional career may require taking down YouTube channel; graduate professors may not allow pop music; voice parts dictated various personae.

Prominence of Sub-Theme 7c (Online) in This Case: costumes, props, and physical appearance allowed her to represent herself as an entertainer; each clone had a different costume in most videos; put elements of herself into characters portrayed through song; deleted Facebook and created new one with the fan page and "follow" option to keep privacy; struggled with mystery and openness; bloopers and vlogs allowed for sharing of personal and online identity; dynamic texts and annotations used to create additional dialogues and share more information; was embarrassed by background of bedroom in earlier videos;

Prominence of Theme 8 (Community) in This Case:

Prominence of Sub-Theme 8a (Learning) in This Case: feedback and suggestions were given on how to sing more effectively; criticism was given about the quality of the technology she used; pitch-shifting led to controversy and debate; took repertoire suggestions, but often performed similar pieces; learned the practices of the community and started to record audio and visual separately; asked for advice of other creators; searched how to achieve effects she liked on other videos; popular genres led to more critical audiences with comments and (dis)likes; commenters shared similar experiences to relate and help educate both other viewers and creator; responded to criticism with "can't make everyone happy" and tried to decide if it was worth considering; discussed and worked on criticism with voice teachers; interpretation of songs was challenged; composers defended interpretations; veterans gave advice to novices (no real veterans?); recording techniques were taught; encouraged others to put themselves out there; felt less accomplished than peers.

Prominence of Sub-Theme 8b (Musical) in This Case: collective creator encouraged her in hopes to get others to do similar things; selected as soloist, scholarship winner, and exemplar; there are leaders who tend to reach out to others; musicians seek other like-minded creators out; one-person creation is easier than collaboration; collaboration can lead to challenging self; collaboration can be more fun to try new things and work with others; fans suggest collaborations; fellow creators facilitated collaborations and meetings; a sorority formed as female multitrackers sought each other out; online virtual ensembles led to professional opportunities; vlogs allowed for thanking collective musical community leaders; positive collective experiences led to encouraging others to make music in similar ways.

Prominence of Sub-Theme 8c (Social) in This Case: reached out to audience, but struggled during busy times in her life; tried to answer every comment; struggled with distinguishing between friends and fans; had a lot of information on Facebook and blindly accepted people as friends; had to delete Facebook because of too many strangers; experienced sexual harassment; received various marriage proposals; comment, critique, and collaboration can lead to lasting friendships; friendships can resemble family relationships; asked questions on vlogs through speaking, annotations, and dynamic texts.

Prominence of Sub-Theme 8d (Fandom) in This Case: comments on old videos continued to come in years after they were published; creator read every comment; majority of creator's responses were of gratitude and inquiry; popular genres brought larger audiences; the majority of comments were found on videos connected to an established fandom; viewers used comments to express gratitude; collaboration can lead to the combining of fandoms; fans can feel like they are stalking artists; being a fan of a fellow creator can intimidate leading to the impression that fellow creator is too busy or to big; starstruck feelings can occur with prominent collaborators; fandom was launched by a "break".

Prominence of Sub-Theme 8e (Solitude) in This Case: solitary music making and recording allow for truer emotional expression; everyday troubles left while making music alone in studio.

Prominence of Theme 9 (Skills) in This Case:

Prominence of Sub-Theme 9a (Technological) in This Case: learned how to be more precise and started to attend to minute details; learned techniques to allow for more economical editing; more powerful technologies allowed for more sophisticated products; mixing became more equalized with experience; informal learned new skills for editing; continually looking for ways to improve; tried to improve skills and try something new each video; self-criticism empowered to strive for improvement.

Prominence of Sub-Theme 9b (Musical) in This Case: sang as different voice parts throughout life span starting with lowest and going to highest; theatrical musical performance style regardless of genre; explored opera music as a high school student and continued throughout college; struggled in choral singing because she had too large of a voice; self-assessment results in embarrassment of early work because of the less refined skills; range and pitch-shifting was embarrassing years later; good sight-reading allowed for quick recording; sang harmonies by ear; worked with voice teachers to address weaknesses pointed out by viewers; recording techniques; musical growth leads to reflection on older videos as well as seeing how far one as come.

 Julien Neel: growth as musician is because of YouTube and practicing and producing; learned nuance of style by listening and imitating; applied techniques from traditional study.

Prominence of Sub-Theme 9c (Production) in This Case: annotations were added to old videos to promote cross-referencing and discussion; deleted inappropriate comments and blocked users; strategically controlled personal information published online.

Findings Specific to the Melody Myers YouTube Channel

- 1. Creator found confidence through creating and participating in virtual vocal ensembles on YouTube.
- 2. Creator was pursuing music performance in college and as a career while developing YouTube channel.
- 3. Creator used theatrics, costumes, hairstyles, layout, and special effects to create a visually dynamic virtual ensemble.
- 4. Creators participated in educational and performance oriented institutions that gabe them experiences that were applied to virtual vocal ensembles.
- 5. Creator began to pay attention to live background as she became more popular. She went from a bedroom background to a solid background and has plans to use a virtual background in the future.
- 6. Creator performed similarly to how she did live, with expression, freedom of movement, and musicality. However, she also felt she could be more true to her emotions while recording alone than she could live.
- 7. Personal information was shared via social media sites and discovered her boundaries with
- 8. Creator was limited by range and sought out arrangements that fit her voice.
- 9. Videos with known flaws due to technical difficulties were published. The quality of equipment was a limiting factor and as the creator become more adept, she upgraded to more sophisticated technology.
- 10. Annotations were used throughout the YouTube channel to connect videos and leave creator commentary.

- 11. Creator used pitch altering technology to hit notes outside of range; however, she eventually felt this was cheating.
- 12. Used sound mastering techniques to create a sound similar to a live choir.
- 13. Virtual vocal ensembles allowed creator to perform the music she wanted to sing the way she wanted.
- 14. Positive feedback from viewers was rewarding, although there were also negative ramifications for being a public figure including privacy and harassment.
- 15. Regarding importance, creator made little distinction between performing live and mediated.
- 16. YouTube channel was started as a repository to archive high school videos.
- 17. Creator's range and experience of singing all voice parts prepared her to be able to sing virtual vocal ensembles.
- 18. Creator felt a tension between professional-classical music and amateur-popular music; however, YouTube allowed her to practice both and was a balance between the two.
- 19. Physical appearance allowed creator to represent herself as an entertainer.
- 20. Informal learning, feedback, and self-discovery were ways creator learned how to make virtual vocal ensembles.
- 21. Creator used vlogs to connect with audiences by sharing personal information and asking questions.
- 22. Creator used old videos to advertise for newer videos with annotated links.
- 23. Comments were generally positive and the result of an established fandom.
- 24. Self-criticism empowered creator to improve each subsequent video.
- 25. Creator developed a personality for each clone that sang a different voice part.
- 26. YouTube channel served as documentation of how skills were developed.

Findings Specific to Myers's Experiences with the Eric Whitacre Virtual Choir YouTube Channel

- 1. Collective virtual vocal ensembles have a coordinator who serves as a figurehead, recruiter, and focal point.
- 2. Collective virtual vocal ensembles provided participants opportunities to compete as well as make music with other musicians virtually.
- 3. Being part of a collective allows participants to feel like they are a part of a larger group.
- 4. As a prominent member of the collective, participant was able to develop an ongoing relationship with coordinator.
- 5. Incentives encouraged collective participation.

Findings Specific to the Collaborations found on the Melody Myers YouTube Channel

- 1. Collaborative virtual vocal ensembles occurred after fellow creators developed a social relationship by commenting. The correspondence then moved to other platforms and then to collaborations
- 2. Various virtual vocal ensemble creators shared tips with each other to learn how to make videos.
- 3. Some creators seek out like-minded people to discuss and collaborate.
- 4. Collaborating with more experienced singers can lead to musical skill development.
- 5. Fellow creators can experience a period of being star struck with collaborators.
- 6. Creating YouTube videos was the main source of musical improvement for creator.

Note: Subthemes in bold were determined a priori to the cross-case analysis. Subthemes in italics were emergent as the cross-case analysis was executed.

Worksheet B.4. Ratings of Expected Utility of Each Case to the Development of Themes.

	DanWright32	David Wesley	Melody Myers
Cross-Case Themes and Subthemes			
Theme 1: People	High	Middling	High
Theme 2: Practices	High	High	High
Theme 3: Institutions	High	High	High
Theme 4: Technology	Middling	High	High
Theme 5: Mediation	High	High	High
Theme 6: Meaning	High	High	High
Theme 7a: Technological Identity	Low	Middling	Low
Theme 7b: Musical Identity	High	Low	High
Theme 7c: Online Identity	Middling	High	High
Theme 8a: Learning Community	High	High	High
Theme 8b: Musical Community	Middling	Low	High
Theme 8c: Social Community	High	Middling	Middling
Theme 8d: Fandom	High	High	High
Theme 8e: Solitude	Middling	Low	Low
Theme 9a: Technological Skills	Low	High	High
Theme 9b: Musical Skills	High	High	High
Theme 9c: Production Skills	Low	High	Low

Note: This worksheet was constructed after Worksheets 3.1, 3.2, and 3.3 were developed to determine the utility of each case to the themes. Utility was determined by the researcher based on his knowledge of cases, number of occurrences of each theme within the case write-up, and the relevance of data to inform the theme. High utility means that the case is potentially very useful for developing the corresponding theme. Middling utility means that the case is of moderate usefulness for developing the corresponding theme, and Low utility means that the case is of low usefulness for developing the corresponding theme. This data was then used to guide the creation of merged findings and their utility to each theme in Worksheet 6.

Worksheet B.5. Clustered Findings Organized by Merged Findings

Merged Findi	ng
Case	Case Specific Finding
I. After establ	ishing a fan base, creators may commoditize their services.
Francois	After developing a following, Creator produced a CD for fans to purchase,
	which resulted in an increase of track sales.
Francois	Treated YouTube channel as a business.
Wright	Creator used various websites to get money from his music making.
II. Learning o	communities emerge on YouTube as creators produce content.
Myers	Positive feedback from viewers was rewarding, although there were also
	negative ramifications for being a public figure including privacy and
	harassment.
Myers	Comments were generally positive and the result of an established fandom.
Wright	Negative statements were often accompanied in the same message by positive
	statements in the comment section.
Wright	Positive feedback was initially meaningful and propelled high levels of output
	and growth.
Wright	Veterans in community helped creator early on. Creator then offered help to
	others.
Collaborative	Various virtual vocal ensemble creators shared tips with each other to learn
	how to make videos.
Collaborative	Collaborating with more experienced singers can lead to musical skill
	development.
Neel	Creating YouTube videos was the main source of musical improvement for
	creator.
Francois	Creator was skeptical about giving advice and encouraged viewers to try
XX7 : 1.4	things for themselves.
Wright	Criticism was met with skepticism.
	engage with others to varying degrees to make music on YouTube.
Collective	Being part of a collective allows participants to feel like they are a part of a
Collective	larger group.
Conective	As a prominent member of the collective, participant was able to develop an ongoing relationship with coordinator.
Francois	YouTube channel was a source of credibility with offline musicians.
Wright	Creator found collaboration to be more work and less satisfying than one- person virtual vocal ensembles.
Collective	Collective virtual vocal ensembles provided participants to compete as well as
Concenve	make music with other musicians virtually.
IV. As fandon	ns developed around a YouTube channel, social exchanges occurred.
Wright	Fandom spread across various websites and social media platforms.
Collaborative	Collaborative virtual vocal ensembles occurred after fellow creators developed
	a social relationship by commenting. The correspondence then moved to other
	platforms and then to collaborations.
Collaborative	Some creators seek out like-minded people to discuss and collaborate.
	• •

Francois	Musical genre inspired a social community that resulted in a lot of support as well as adversity.
Wright	Creator shared personal information with viewers via text comments.
Wright	Comments included topics germane to the videos as well as extended to other areas of interest.
Myers	Personal information was shared via social media sites and discovered her boundaries with fans.
Myers	Creator used vlogs to connect with audiences by sharing personal information and asking questions.
Francois	Shared personal information to connect with audiences
Collaborative	Fellow creators can experience a period of being star struck with collaborators.
V. Online and	offline activities can simultaneously work in tandem or create tension.
Francois	YouTube channel was a source of credibility with offline musicians.
Myers	Creator was pursuing music performance in college and as a career while developing YouTube channel.
Myers	Creators participate with educational and performance oriented institutions that give them experiences that can be applied to virtual vocal ensembles.
Myers	Creator felt a tension between professional-classical music and amateur-popular music; however, YouTube allowed her to practice both and was a balance between the two.
Wright	Creator was a highly successful performer and had experiences in academic, professional, and leisurely music making.
VI. Creators s	shared personal information with their fans via YouTube and beyond.
Myers	Personal information was shared via social media sites and discovered her
,	boundaries with fans.
Myers	Creator used vlogs to connect with audiences by sharing personal information and asking questions.
François	Shared personal information to connect with audiences
VII. Creators	made both conscious and unconscious decisions on how to present
themselves an	d their art on YouTube.
Myers	Creator began to pay attention to live background as she became more popular. She went from a bedroom background to a solid background and has plans to use a virtual background in the future.
Myers	Physical appearance allowed creator to represent herself as an entertainer.
Myers	Creator developed a personality for each clone that sang a different voice part.
Francois	Creator had a well formed technological identity as a video editor, producer, and sound technician.
Francois	Creator identified as "just a guy making music in his basement."
Francois	Creator wanted a uniform look in body but used clothing to differentiate voice parts.
François	Online personality was more refined and less critical than offline.
Wright	Voice range influenced identity construction.
Wright	Creator's online persona was more refined than live personality.
François	Creator set up his basement as a recording studio.
François	Size and placement of panels were designed to draw the viewers focus.

Francois	Special effects were used to visually enhance a virtual vocal ensemble.
Wright	Visual effects were used to focus audiences.
Wright	Creator both differentiated and assimilated clones.
VIII. Autono	omy is a strong rationale for creating virtual vocal ensembles.
François	Musical arrangement skills allowed creator to perform the music he wanted the
	way he wanted.
Wright	Creating offered an opportunity for autonomy allowing to perform preferred
C	music with preferred ensemble in preferred style. This freedom gave meaning
	to music making.
Francois	Creator wanted to do all the jobs himself, which gave him a sense of
	accomplishment and pride.
Myers	Self-criticism empowered creator to improve each subsequent video.
Francois	Creator challenged himself to outdo his previous accomplishments each
	subsequent video. Creator's largest fear was to let himself down by not
	producing high quality products.
Francois	Making music videos was a creative outlet that allowed for music and visual
	expression.
Myers	Virtual vocal ensembles allowed creator to perform the music she wanted to
	sing the way she wanted.
IX. Feedback	k propels creators to continue making virtual vocal ensembles.
Wright	Positive feedback was initially meaningful and propelled high levels of output
	and growth.
Myers	Creator found confidence through creating and participating in virtual vocal
	ensembles on YouTube.
X. Institution vocal ensemb	ns facilitated learning, provisions, and production throughout the virtual ble process.
All	See worksheet 3.1, 3.2, and 3.3.
XI. Acceptal	ble practices were influenced by the community as well as the creators
themselves.	
Myers	Creator used pitch altering technology to hit notes outside of range; however,
	she eventually felt this was cheating.
Francois	During editing, creator used pitch adjusting software to make surgical fixes.
Francois	Pitch correction was seen as cheating.
Wright	Creator used discernment on which technologies and mediations were
	acceptable to use to create. These decisions are influenced by audiences,
	norms, and personal preference.
Francois	Copyright allowed for proper attribution of music as well as legal reproduction
	of protected performance material.
Wright	Online performance required a more polished product than live music making.
XII. Creator performance	rs decided which live performance aspects were included in their mediated
Myers	Used sound mastering techniques to create a sound similar to a live choir.
Myers	Regarding importance, creator made little distinction between performing live
1.1, 010	and mediated.
	and mediated.

Francois	Creator felt that mediated asynchronous recording could not capture the intimacy of a live performance with multiple performers.
Francois	Creator and his fans, in general, felt that one-take recordings allowed for a
Tuncois	sense of immediacy and authenticity. They made the recording feel more <i>real</i> .
Wright	Creator attempted to create virtual vocal ensembles with high fidelity, both
8	visually and sonically, by emulating live performance practices.
Wright	Creator viewed live performance as more authentic than mediated
	performance.
Myers	Creator used theatrics, costumes, hairstyles, layout, and special effects to
	create a visually dynamic virtual ensemble.
Myers	Creator performed similarly to how she did live, with expression, freedom of
	movement, and musicality. However, she also felt she could be more true to
	her emotions while recording alone than she could live.
	rs developed a method that became standard in their own creative process.
Francois	Creator developed a method to create music videos, which evolved as he
	created each subsequent video.
Francois	Creator used music editing, video editing, and music notation software.
Wright	After creating several videos, a fairly consistent process evolved with which
	the creator made virtual vocal ensembles.
Francois	Creator used MIDI tracks to keep himself in time.
Wright	Practices emerged that were specific to making music and making videos as
\$71\$7 (D)	well as practices that related to both.
_	ality of virtual vocal ensemble was effected by the technology and skill of the
creator. Myers	Videos with known flaws due to technical difficulties were published. The
WIYCIS	quality of equipment was a limiting factor and as the creator become more
	adept, she upgraded to more sophisticated technology.
François	Creator used professional hardware and software to create audio-visual tracks.
Wright	Creator used what technologies he had and eventually upgrade to make more
**********	dynamic products.
XV. Creator	s used the YouTube website in various ways to produce their content and
direct their v	
Myers	YouTube channel was started as a repository to archive high school videos.
Myers	Creator used old videos to advertise for newer videos with annotated links.
Myers	YouTube channel served as documentation of how skills were developed.
Francois	Creator used YouTube as a repository to archive projects, music videos, and
	vlogs.
Francois	Creator linked videos with clickable annotations to generate more online
	traffic.
Wright	Keeping up old performances showed growth and used to encourage
	beginners.
Myers	Annotations were used throughout the YouTube channel to connect videos and
	leave creator commentary.
	range influenced a creator's ability to make virtual vocal ensembles.
Myers	Creator was limited by range and sought out arrangements that fit her voice.

Myers	Creators range and experience of singing all voice parts prepared her to be able
	to sing virtual vocal ensembles.
Wright	Voice range limited repertoire selection.

Note: Case specific findings taken from Worksheets 3.1, 3.2, and 3.3. Case specific findings were then clustered and merged finding was constructed. Merged findings were then used to construct Worksheet 6.

Worksheet B.6. Matrix of Merged Findings with Rated Importance According to Theme.

	Themes								
Merged Findings	1	2	3	4	5	6	7	8	9
Creators decide to what degree they		M	Н	M	M	M		M	L
commoditized their services.									
Learning communities emerge on YouTube as	M	Н		L	L	L		(H)	Н
creators produce content.									
Creators engage with others to varying degrees	Н	M			L			Н	L
to make music on YouTube.									
As fandoms developed around a YouTube	L	L			L	M	L	(H)	
channel, social exchanges occurred.									
Online and offline activities can simultaneously	M	M	L		M		Н	LC	
work in tandem or create tension.									
Creators shared personal information with their	Н	L	L	L	L	L	(H)	Н	
fans via YouTube and beyond.									
Creators made both deliberate and incidental	Н	M		M	Н		(H)	LC	LC
decisions on how to present themselves and									
their art on YouTube.									
Autonomy is a strong rationale for creating	L	M			LC	(H)			
virtual vocal ensembles.									
Feedback propels creators to continue making	M			L	LC	Н		Н	M
virtual vocal ensembles.									
Institutions facilitated learning, provisions, and			Н	L	M	L		M	M
production throughout the virtual vocal									
ensemble process.									
Acceptable practices were influenced by the	M	(H)	L	Н	(H)	M	L	M	M
community as well as the creators themselves.									
Creators decided which live performance	M	(H)		(H)	(H)	M	L	L	LC
aspects were included in their mediated performances.									
Creators developed a method that became		(H)	L	Н	(H)		Н		Н
standard in their own creative process.		(11)	L	11	(11)		11		11
The quality of virtual vocal ensemble was		M	M	(H)	Н	LC	Н		M
effected by the technology and skill of the		1,1	1,1	(11)					1,1
creator.									
Creators used the YouTube website in various		M	Н	Н	M		Н	M	M
ways to produce their content and direct their									
viewers.									
Voice range influenced a creator's ability to	M	M	L	L	M		Н		L
make virtual vocal ensembles.									

Note: Merged Findings from Worksheet 5 were rated based on the researchers perceived importance to each theme. High = high importance; M = middling importance; L = low importance. A high mark means that for this theme, the finding is of high importance. Parentheses around an entry means that it should carry extra weight when assertions are drafted. The notation "C" within a cell means that this situation warrants caution in drafting assertions. The matrix was analyzed to develop a list of cross-case assertions found in Worksheet 7.

Worksheet B.7. Cross-Case Assertions and Their Relation to Themes

Cross-Case Assertion		Т	hen	ne		Important information to incorporate in
	5	6	7	8	9	cross-cass analysis
Creators develop methods to construct and publish their videos.	X	X	X	X	X	Creative processes, patterns in videos, outliers, learning from others
The technology used to create videos has an effect on virtual vocal ensembles.	X		X	X	X	Growth, learning, technology issues, discrepancies, previous knowledge vs. learning as you go
Creators' personal choices and opinions guide the way they create virtual vocal ensembles.	X	X	X	X	X	Fidelity, live practices, standards, communities of practice, personal choices which can lead to a philosophy of performance, autonomy, laws, sharing
One-person virtual vocal ensembles afford autonomy for their creators.	X	X	X	X	X	solitude, rationale (fun, music they want to make), self-directed learning, one- person virtual vocal ensemble creation as an musical "anti-community"
The creation of virtual vocal ensembles leads to the emergence of a multifaceted community.	X	X	X	X	X	Fandom, learning, solitude, community of practice, relationships with others
Virtual musical collaboration is a time and resource intensive activity.	X	X		X	X	Collaboration preference, mini-cases, distaste for unequal visions, stretching skill levels, learning from each other
Experiences are effected by how creators portray themselves online.	X	X	X	X	X	Sharing personal information, haters, fandom, offline effects, audience, social media, networking, YouTube conventions (annotations, linking, description box)
There is a two-way connection between the audiences and creators of virtual vocal ensembles.	X	X	X	X	X	Feedback as learning, meaning, and encouragement/deterrent statistics, community (venue, learning, fandom)
A creator's voice range influences their ability to make virtual vocal ensembles.	X	X	X		X	Pitch adjustment, voice as identity, expanding range due to practice/performance
Virtual vocal ensembles exist in commoditized spaces, and creators have options on how to participate in monetization.	X	X	X	X	X	Producer skills, recordings, learning tracks, copyright, choices of what to partner

Note: Potential assertions were analyzed and final cross-case assertions were developed. It was noted to which themes the assertions pertained. Themes 1, 2, 3, and 4 were combined into theme

5 as a medium is made up of the recurring relations between people, practices, institutions, and technologies. Important information was also noted to guide the writing of the cross-case report in chapter 7.

APPENDIX C: CODING SCHEME FOR DANWRIGHT32 COMMENTS

Comment Depictions of Dan Wright

Directions: All comments should be coded for how the text depicts Dan and his video. If a comment depicts Dan in both a positive and negative light, both can be marked. A neutral mark should only be used if the comment does not lean one way or the other.

- (+) for a positive portrayal of Dan;
- (-) for a negative portrayal of Dan;
- (O) for a neutral portrayal of Dan; and
- (D) will be entered if Dan made the comment.

Notes

• If someone requests or suggests something, discernment should be used to determine if it is positive, negative, or neutral. For example, "I would like to hear you do another song that I like" is positive because the commenter is saying that they like a song and would enjoy hearing Dan perform it. "You should stick with classical songs" would be a negative portraying because it is a suggestion to not do the current style of music. "I think it would be interesting if you sang this song with a different style" is a neutral comment that could be positive or negative portrayal.

Comments that Involve Community Cohesion or Interaction

Directions: Each comment can contain multiple statements, usually the size of a sentence. Each statement may be exclusively evaluative, inquiry (question or answer), topical, expansive or suggestive (requests and recommendations). In addition, any statement may express gratitude, be supportive (affirming or confirming a previous idea), or be a flame.

- **(E) Evaluation**: A statement or opinion that evaluates or assesses. This includes constructive or unsolicited criticism as well as both positive and negative comments that point out perceived flaws or weaknesses. This code can include all aspects of evaluation including format, musicianship, arrangement, or any other aspect.
 - The faces you make really distract me from the song.
 - Great job
 - Your intonation is spectacular.
 - This is the worst multitrack on YouTube
 - o Note: Saying you like or hate a song is not an evaluation. However, good job or bad job is
 - Note: Saying that this is something you should do is not evaluation but recommendation or support.
- (X) Extension: A statement or question that extend the conversation beyond the video or performance; comments that initiate or maintain dialogue or debate that does not have to do directly with the video or performance. Comments that refer to the musician beyond the scope of the song or performance can be included.
 - The classical music singing style usually has tall vowels.
 - o Note: If the comment was, "Dan is singing in a classical music singing style, which has tall vowels," it would be coded as **(T) Topical**.
 - Imogen Heap recorded this song on the vocoder and was using a form of pitch correction.

- I love listening to music when I fall asleep.
 - o Note: If the comment was, "I love listening to *this song* when I fall asleep," it should be placed in coded as **(T) Topical**.
- I sing Soprano in my school choir.
 - o Note: statements and questions that extend the conversation should be included.
- **(F) Flame**: a statement that is overly negative that focuses on attacking a person's being, personality, or a video. Comments from a *troll* or someone who is being purposely mean, sarcastic, or offensive. Emoticons of a negative nature can be placed in this category. Punctuation can be a clue as to whether a comment is a flame or not.
 - You're stupid. (mean)
 - Good try. Better luck next time. You'll get better eventually. (sarcasm)
 - Gay video. (offensive)
 - o Note: Negative comments that are simply statements or evaluations are not necessarily flames
 - o Note: Not all swearing should be considered a flame.
- **(G) Gratitude:** a statement that expresses appreciation, gratitude, or thanks.
 - Thank you for all your kind words.
 - I don't know what to say. You flatter me.
 - You have touched my heart.
- (I) Inquiry: a statement that gives an answer or question. These can include both Dan's or others' questions and answers. Most inquiry statements will be coded as either (X) or (T).
 - I am 19 years old.
 - It took him 3 months to complete the recordings.
 - Are you a professional musician?
 - How did sing such a high note?
 - Where can I get a copy of this song?
 - o Note: If the viewer says, Will you send me a copy of this song, it becomes a **request**.
- **(R) Recommendations and Requests**: a recommendation that forwards Dan's progress as a virtual choir creator; recommendation that suggests or advises someone do something. This could include a suggested link, a musical tip, guidance, or process suggestions; a request for information or performance.
 - You should sing a Beach Boys song!
 - Please do it through my website: danwright32(dot)bandcamp(dot)com
 - Why don't you try opening up your mouth more when you sing?
 - It would be cool if he tried doing this with a bowtie on.
 - You should e-mail me!
 - Why don't you share this video with your friends?
- (S) Supportive: a statement that either affirms or confirms a previous statement, opinion, or person; comments that are encouraging or defend another person or their thoughts. Portrayal of Dan does not matter in the support code. For example, if someone is supporting a previous comment that a negative or accusatory against Dan, it is encouraging the criticism and therefore, the comment is supportive of an idea.
 - Dan doesn't use autotune. He can sing without it.
 - Don't feed the trolls! You can't please everyone.

- Someone should talk to those people who disliked this video and figure out what their problem is.
- I agree that the diction was pretty poor.
- As you said, he did not have a good concept of phrasing.
- You should continue to do this. It's like you were made for this type of thing.

(T) Topical: a statement, questions, or opinion that is about the song, the artist, the performance, or the included a statement that either affirmed or confirmed the previous statement, opinion or person.

- You really remind me of someone I know. (artist)
- Dan looks like he is asleep at the beginning. (performance)
- I can't believe he recorded 32 versions of himself. (video)

No Code: Statements that do not fit into any of the other categories or are simple exclamations

- Whoa.
- <3

Comment Content Analysis

Directions: Comments then should be coded according to their content using as many of these (20) codes as necessary.

Musical Codes

Arrangement: comments that have to do with the musical arrangement and sheet music. This includes the arrangements found on Dan's YouTube channel. Requests for sheet music should also be included.

- Where can I get a copy of the sheet music?
- How many vocal parts are there in this song?
- This song is arranged by my friend.

Collaboration: comments having to do with collaborating with other musicians whether it be mediated or in person. Includes comments about using samples, mixing, or re-mixing the videos.

- I played this and sang with you five times!
- You should come to my school and sing with my choir.

Compare: comments that compare arrangements, performances, or videos.

- I like the original better.
- I saw this done live at school. They weren't as good as you.
- This reminds me of a church choir.
- This sounds like a choir of angels.
- I think that this is your worst video yet.
- This is good, but not as good as my version.
- You have really gotten better at sound editing since your first video.

Lyrics: comments that have to do with the words of the song. This includes comments that are explicitly about the original lyrics or any discussion of words sung.

- I like your accent when you sing certain vowels.
- What are the words at the beginning of the song?
- Why did you change the lyrics?
 - o Note: Statements on diction should be coded under musicianship.

Musicianship: comments that have to do with musical interpretation and decisions. This includes dynamics, intonation, tempi, and diction. General praise and flames should not be included in this category.

- Your intonation is impeccable.
- You should have more dynamic contrast.
- I used a metronome for recording so I didn't rush.
- I wish you would open your mouth more when singing.

Range (subcode): comments that have to do with Dan's range. While range is part of musicianship, it will be coded separately.

- How high can you sing?
- There's no way he could hit all of those notes.
- I sing counter-tenor in choir.

Mediation Codes

Multiplicity: comments that have to do with multiple embodiments of Dan. This pertains to both the visual and audio aspects of the video and includes 3-D comments, seeing with oneself, synchronization, and see multiple parts at one time. Comments about harmony should also be included.

- If you cross your eyes, you get a 3-D effect.
- How many of you are there?
- Is that all the same person?
- How did you get all the singers to line up together?
- You really hit all those chords nicely.

Sound Editing: comments having to do with the process of creating during the editing phase including effects. For example, equalization, panning, amplification, and compression. Do not include synchronization in this category.

- All I use is equalization, panning, and amplification.
- The mix has too much bass.
- What type of audio effects are you using?

Autotune or Pitch (subcode): comments that discuss autotune and pitch correction software or machines like a vocoder. While autotune is part of sound editing, it will be coded separately.

- He does not use autotune!
- There has to be some pitch correction in this video.
- This is fake. You can't make it sound this in tune without some help.
- She uses a vocoder to make it sound like she is a group of people singing.

Recording: comments that have to do with the recording process including microphones, recording, and repetition during the recording process.

- I use a bluebird mic.
- How many times did you have to record this?
- What camera do you use?
- Do you lip sync to your own voice?
- Did you record the audio and the video separately?

Visual editing: comments having to do with the visual effects, layout, and visual editing style of the video.

- Where are the sopranos?
- That one guy lit up in the middle of the song.
- I like how you changed the angles form the camera.

Media Codes

Business: comments that have to do with the business aspect of a YouTube channel including sponsorship, patronage, downloading and purchasing recordings, competition, contests, and any other monetary concerns.

- I really need to get an itunes account.
- Do you make any money making YouTube videos?
- How much did your microphone cost?
- Go download my song at my website.
- Did you win any contests yet?

Stats: comments that affect or have to do with the analytics of a video including sharing the videos, recommended videos, subscriptions, likes, dislikes, annotations, repeated views, and view counts.

- You should share my video.
- I wish I could like this 5 times.
- I've watched this video on repeat for a day now!
- I subscribed to your account.
- Why does this not have more views?
- What were the 50 people who disliked this video thinking?
- I saw this video when my choir teacher showed me.

Time (and Effort): comments that have to do with the amount of time and effort spent creating throughout the whole process.

- How long did it take you to do this?
- You sure did put a lot of effort into this.

Social Codes

Adoration: Romanticized comments that often focus on Dan but not his videos or musical abilities.

- I love you!
- Will you marry me?
- You're so cute.

Culture: comments that have to do with a cultural icon, whether it be popular or historical. Comments on costumes should also be include. This should also include discussion or comments about performers, other covers, or the original.

- Nice bowtie!
- Dr. Who rules.
- Do you watch the Simpsons?
- They did this song on Saturday Night Live!
- A cappella music is often thought of as the most pure of all musical performances.
- Rap music is cool.
- I love the original version of this.

Flame: overly negative comments that focus on attacking a person's being, personality, or a video. Blatant disregard for another's opinion. Comments from a *troll*, or someone who is being purposely being mean, sarcastic, or offensive. Emoticons of a derogatory nature can be placed in this category, but text around the emoticon should help distinguish if the comment is a flame. Punctuation can be a clue as to whether a comment is a flame or not. Depiction of Dan does not necessarily have to influence a flame.

- You suck
- Maybe if you looked at the description you'd figure it out!
- You have just been trolled.
- I don't care what you think.
- If you had any videos, I might decide to listen to what you have to say.
- :-(

Personal: comments that are of a personal nature including stories, information, emotions, or opinions that do not fit in another category. This includes stories about ones experiences as well as actions, emotions, and inspirations the video or song elicits. In other words, if the song or performance connects to one's personal life, it should be included.

- I'm 19 years old.
- I go to school.
- When I was younger, I would listen to this song every day.
- This song reminds me of church.
- When I grow up, I hope to do be able to be a professional singer.
- This song makes me sad.
- You did a cover of my favorite song.
- I love this song.
 - o Note: When they say, "I love your song," or "I love your performance," is praise. But if they are talking about the song itself, it is personal.

Praise: comments one might hear after a live performance. Congratulations or praise that has to do with the video or performance of the song. Emoticons of a positive nature can be placed in this category, but text around the emoticon should help distinguish if the comment is praise or congratulations. Punctuation can be a clue as to whether a comment is praise or not.

- Great job.
- Awesome video.
- You are amazingly talented.
- You Rock!
- :D

Uncategorizable

Uncategorizable: comments do not fit into any other category.

- Note: A simple thank you can be placed in this category if there is no other content.
- Note: This does not mean that the comment is not interesting, but that it does not fit in any of the prescribed categories.

APPENDIX D: LIST OF VIDEOS AND ANALYTICS

DanWright32 Videos

Video Number and Title (sic)	Date Published	Dislikes	Likes	Views	Comments	Video Length
01. The Christmas Song multitrack	12/26/2010	0	63	6,650	19	3:02
02. Hark, I Hear the Harps Eternal multitrack	12/26/2010	3	42	3,982	27	1:48
03. The Luckiest multitrack	12/26/2010	1	14	2,460	2	4:04
04. Danny Boy	12/26/2010	6	23	4,570	11	2:25
05. Be Our Guest multitrack	1/18/2011	5	74	7,774	17	1:51
06. Let's Get Started - MUPPET'S SHOW) one-man a cappella	1/28/2011	6	36	7,343	21	1:15
07. I Wanna Be Like You one-man a cappella	2/5/2011	20	377	52,252	144	2:49
08. I'm Beginning to See the Light one-man a cappella	2/6/2011	0	34	3,906	15	2:02
09. Tonight, Tonight one-man a cappella	2/14/2011	1	158	17,480	98	2:03
10. Go the Distance one-man a cappella	2/19/2011	22	1,021	83,679	365	3:30
11. Sleep One Man Virtual Choir	8/28/2011	20	890	84,886	516	4:39
12. When Somebody Loved Me one-man quartet	3/15/2011	5	111	7,864	53	4:08
13. Let's Live It Up one-man a cappella	3/20/2011	1	66	4,873	25	2:24
14. Sold (The Grundy County Auction Incident) - One Man Barbershop Quartet	4/6/2011	2	98	10,400	30	2:14
15. Lux Aurumque one-man choir	4/10/2011	13	1,062	69,182	384	3:37
16. Good Vibrations One Man A Cappella	4/23/2011	18	413	43,682	202	4:17
17. Eleanor Rigby one-man choir	5/10/2011	18	1,375	113,748	327	3:42
18. A Little Patch Of Heaven - One Man A Cappella	5/16/2011	6	50	5,927	27	3:28
19. Let's Get Started (MUPPET'S THEME) One-Man A Cappella	10/8/2011	14	262	266,908	58	1:22
20. America The Beautiful	6/3/2011	0	10	1,127	4	2:59
21. Eleanor Rigby	6/3/2011	2	7	1,646	10	3:28
22. Swingle Song	6/3/2011	2	7	822	3	1:54
23. The Song Is You	6/3/2011	1	4	691	2	3:09
24. Swingle Song One-Man Jazz Choir	6/16/2011	5	242	24,567	85	2:01

Video Number and Title (sic)	Date Published	Dislikes	Likes	Views	Comments	Video Length
25. Country Dances One Man A Cappella Octet	6/21/2011	1	157	8,361	71	3:31
26. America, The Beautiful One-Man Choir	7/5/2011	5	406	39,524	123	3:08
27. Grow Old With You - One Man A Cappella Quartet	9/3/2011	0	149	7,963	63	1:47
28. Come Fly With Me - One Man A Cappella	9/7/2011	3	71	8,935	26	1:51
29. Scarborough Fair - One Man A Cappella Chorus	9/10/2011	52	1,306	147,736	326	2:09
30. You Don't Know Me - A Cappella Multitrack - Feat. Naomi	9/25/2011	1	135	5,309	65	3:14
31. Close Your Eyes One Man A Cappella Steve Jobs tribute	10/8/2011	8	90	28,221	20	0:22
32. The Headless Horseman - One Man A Cappella	10/30/2011	2	45	2,973	23	3:09
33. Harmonium Halloween Song	10/31/2011	0	11	1,166	8	0:25
34. Hide and Seek One Man A Cappella Imogen Heap Cover	11/11/2011	292	24,445	1,342,531	4461	4:43
35. I'll Make A Man Out Of You - Original Tag	11/24/2011	29	115	11,152	41	0:23
36. Good Luck Charm One Man A Cappella	12/12/2011	2	68	2,655	29	1:37
37. Jingle Bells One Man Quartet	12/19/2011	1	101	5,197	37	1:17
38. All I Want For Christmas Is You One Man Quartet	12/22/2011	3	165	7,533	75	3:21
39. Bring Him Home - No Borders Youth Chorus Feat. Tim Waurick	12/27/2011	0	50	4,266	19	4:02
40. Come On Get Happy - No Borders Youth Chorus	12/24/2011	4	72	5,840	16	1:50
41. God Only Knows - No Borders Youth Chorus	12/24/2011	2	36	3,534	6	2:40
42. It's the Most Wonderful Time of the Year - No Borders Youth Chorus	12/24/2011	2	42	4,466	8	1:26
43. Tribute to World Peace - No Borders Youth Chorus	12/24/2011	4	80	6,204	39	6:51
44. Auld Lang Syne One Man Choir	12/28/2011	12	548	45,430	77	1:27
45. Voice Dance One Man Choir	1/7/2012	16	1,010	79,806	203	2:23
46. Blue Skies One Man Quartet	1/13/2012	4	302	13,196	66	2:04
47. Battle Hymn of the Republic TAG One Man Quartet	1/17/2012	6	126	14,190	47	0:44
48. Come On Get Happy	1/9/2012	1	67	3,380	54	1:41
49. New York Tag feat. Rhett Roberts	1/27/2012	1	41	2,485	20	0:56
50. Nox Aurumque One Man Choir	1/29/2012	14	366	24,779	299	5:26
51. With A Little Help From My Friends International Collab with Trudbol!	2/2/2012	1	40	7,043	28	0:27
52. Love Me and the World Is Mine One Man Barbershop Quartet	2/13/2012	3	106	5,036	88	3:17

Video Number and Title (sic)	Date Published	Dislikes	Likes	Views	Comments	Video Length
53. Dan & Doug "We Are Young" at Hofstra open mic	3/5/2012	7	76	4,822	19	3:31
54. Midnight Rose Tag	3/9/2012	1	13	1,452	4	0:28
55. Love Me and the World Is Mine Tag	3/9/2012	2	9	2,011	5	0:25
56. On The Street Where You Live Tag	3/9/2012	0	15	2,402	11	0:23
57. When You Wish Upon A Star One Man Quartet [original	3/26/2012	1	210	10,584	67	2:35
arrangement]	3/20/2012	1	210	10,504	07	2.55
58. Sound Of Your Voice Original Tag	3/31/2012	2	59	2,722	20	0:55
59. Chordbuster's March One Man Quartet	4/10/2012	2	145	6,527	56	1:54
60. Lucky Old Sun One Man Barbershop Quartet	4/22/2012	11	112	6,750	47	4:51
61. The Music Of The Night One Man Quartet Phantom of the Opera	4/30/2012	9	454	20,965	173	5:04
62. Soft Kitty Tag One Man Quartet [The Big Bang Theory]	5/7/2012	9	365	22,210	62	0:38
63. On The Street Where You Live One Man Quartet	5/14/2012	2	110	4,411	42	5:05
64. A Barbershop Thank You	6/4/2012	3	11	1,611	5	0:16
65. Smile Tag	6/4/2012	7	15	2,382	16	0:14
66. When She's All Mine (Dinah) Tag	6/4/2012	7	25	3,088	8	0:25
67. Cheer Up Charlie Tag	6/6/2012	1	15	2,519	0	0:23
68. You Got A Friend In Me One Man Barbershop Quartet	6/8/2012	14	1,049	59,127	240	3:16
69. Somebody That I Used To Know One Man A Cappella Gotye Cover	6/22/2012	38	1,503	77,707	389	3:52
70. Star Spangled Banner One Man Quartet	7/3/2012	11	538	33,466	151	1:37
71. MLK One Man Quartet	6/12/2012	4	174	7,579	65	2:13
72. Aladdin Medley One Man A Cappella Quartet	6/28/2012	55	4,232	190,699	796	7:08
73. Seasons Tag One Man Quartet	11/10/2012	0	98	3,541	28	0:48
74. Once Again Tag One Man Quartet	12/17/2012	2	87	3,584	54	0:58
75. Last Night Was The End Of The World	12/21/2012	1	111	3,511	24	0:46
76. Cool Yule One Man Quartet	12/24/2012	2	127	5,129	53	0:50
77. Baby on Board (Simpsons) One Man Quartet	1/26/2013	6	276	13,147	51	0:50
78. Only in my Dreams - One Man Quartet Original Composition	2/8/2013	2	110	3,832	36	1:00
79. Heart of my Heart One Man Barbershop Quartet	2/13/2013	1	90	5,814	39	1:17

Video Number and Title (sic)	Date Published	Dislikes	Likes	Views	Comments	Video Length
80. When I'm 64 (International Collab) - A cappella multitrack TEASER	2/14/2013	1	58	4,321	12	0:19
81. Smile One Man Barbershop Quartet	2/28/2013	6	323	12,457	106	2:08
82. Why Don't We Just Dance One Man Quartet	3/15/2013	7	428	17,863	150	2:22
83. A Boy and A Girl (Eric Whitacre) One Man Choir	5/14/2013	5	169	6,460	80	4:19
84. God Only Knows (Beach Boys) One Man Quartet	6/5/2013	15	570	31,448	124	2:52
85. The Stars and Stripes Forever One Man Barbershop Quartet	6/30/2013	7	363	22,266	134	3:22
86. To My Beautiful Lifelong Friends Tag	6/3/2013	2	35	2,478	24	0:37
87. The Dream Tag One Man Quartet	7/27/2013	4	111	3,980	32	1:09
88. Lost TAG One Man Quartet	6/14/2013	2	78	3,173	17	0:42
89. Bohemian Rhapsody One Man A Capella QUEEN	8/30/2013	87	1,339	94,303	270	7:00
90. Grim Grinning Ghosts One Man Quartet (Dapper Dans)	10/27/2013	6	243	7,691	49	1:28
91. And So It Goes One Man A Cappella Billy Joel cover	12/4/2013	4	341	13,640	64	4:04
92. Believe One Man Barbershop Quartet (Polar Express)	12/23/2013	3	298	7,978	73	4:00
93. Every Breath You Take STING AND THE POLICE cover One- Man A Capella	1/4/2014	10	291	18,301	63	4:25
94. Lullabye (Billy Joel) One Man A Capella	1/17/2014	5	422	19,505	68	3:51
95. Cruella De Vil One Man Barbershop Quartet	4/5/2014	7	348	11,505	57	3:50
96. Ob La Di, Ob La Da (Life Goes On) - THE BEATLES One-Man A Cappella	7/21/2014	4	200	5,524	27	4:01

David Wesley Videos

Video Number and Title (sic)	Date	Dislikes	Likes	Views	Comments	Video
	Published	2	1.0	1.054		Length
01. Keane - Hamburg Song	7/22/2010	3	19	1,254	6	4:01
02. Coldplay - Shiver (Piano Cover)	7/23/2010	2	1,466	9,357	29	5:13
03. Keane - The Frog Prince	8/19/2010	1	53	2,321	12	3:31
04. Coldplay - Fix You	8/19/2010	0	43	3,361	13	4:09
05. Coldplay - Death and All His Friends. (Piano Cover)	8/20/2010	0	64	2,440	18	2:57
06. Coldplay - Lovers in Japan	8/20/2010	1	20	1,207	5	3:04
07. Coldplay - Amsterdam	8/29/2010	3	42	2,454	13	4:30
08. Coldplay - Lost	8/29/2010	2	17	1,164	5	3:26
09. Keane - A Bad Dream	9/17/2010	3	89	5,572	13	4:06
10. Coldplay - Cemeteries of London	10/12/2010	1	40	1,582	12	3:24
11. Coldplay - Swallowed In The Sea	11/17/2010	2	75	5,164	33	3:41
12. Coldplay - Violet Hill	12/10/2010	2	37	1,360	3	2:43
13. O Holy Night	12/28/2010	1	48	4,296	3	3:19
14. Coldplay - Glass of Water	1/18/2011	3	23	1,820	11	4:43
15. Coldplay - Shiver (Trans-Atlantic Collabo Version)	2/6/2011	5	48	3,466	20	5:06
16. Coldplay - Trouble (One-Man-Band Version)	6/25/2011	3	53	3,901	18	3:58
17. Coldplay - Prospekt's March	8/28/2011	1	14	1,332	6	2:39
18. Keane - Bedshaped	9/27/2011	6	341	17,226	144	4:40
19. Coldplay - Us Against The World	12/15/2011	0	45	4,130	10	4:06
20. Keane - The Starting Line	8/23/2012	2	80	4,394	26	4:10
21. Beautiful Things	9/18/2012	5	431	46,023	54	4:01
22. Augustana - Stars and Boulevards	11/21/2012	0	43	3,797	16	4:38
23. One Thing Remains (Your Love Never Fails)	1/19/2013	29	3,361	255,899	485	4:27
24. Keane - You Are Young	2/15/2013	6	112	11,162	39	3:35
25. Wonderful Merciful Savior	4/20/2013	16	2,236	229,388	275	3:03
26. In Christ Alone	6/7/2013	100	9,114	717,811	1,110	3:58
27. Speak, O Lord	8/22/2013	13	1,282	131,402	173	3:57

Video Number and Title (sic)	Date	Dislikes	Likes	Views	Comments	Video
	Published	1	120	10.510	27	Length
28. Keane - Sovereign Light Cafe	9/12/2013	1	130	12,519	27	3:51
29. How Deep The Father's Love For Us	10/7/2013	23	2,547	250,213	289	3:08
30. Scripture Video - 1 John 4:7-16	10/16/2013	0	58	2,499	11	2:02
31. Scripture Video - Ephesians 6:10-18	10/25/2013	0	76	3,721	7	2:10
32. Whom Shall I Fear (The God of Angel Armies)	11/7/2013	26	2,620	217,110	267	4:42
33. Last Post - Baritone Horn	11/10/2013	2	40	1,647		1:24
34. Introduction to the High School Video Archive (1998-1999)	11/17/2013	0	39	1,464	10	5:01
35. The Life & Times of Kirby O'Neill (High School Video Archive, 1998)	11/17/2013	2	7	790	1	22:48
36. Oceans (Where Feet May Fail)	11/24/2013	14	1,414	111,275	171	6:19
37. The Ones Who Walk Away From Omelas (High School Video Archive, 1999)	12/2/2013	4	2	1,883		5:00
38. Immanuel (From The Squalor of a Borrowed Stable)	12/12/2013	6	605	56,796	109	5:21
39. Ontario Ice Storm (December 22, 2013)	12/22/2013	0	80	3,500	15	3:28
40. Relativity (High School Video Archive, 1999)	12/30/2013	2	4	1,781	2	13:07
41. Run to You (Pentatonix Cover)	1/15/2014	23	769	64,170	159	4:29
42. Hamlet Strikes Back - Special Effects Reel (High School Video Archive, 1999)	2/4/2014	0	8	1,538	3	3:40
43. Intro to Baby Theon and the Church Video Archive	2/9/2014	0	88	5,180	28	10:34
44. The Difference Jesus Makes (Church Video Archive, 2000)	2/15/2014	0	22	2,109	5	3:49
45. Why Do We Go To Church? (Church Video Archive, 2000)	2/24/2014	2	10	1,956	9	3:18
46. Volunteer Recruiting (Church Video Archive, 2001)	3/2/2014	0	6	1,369	2	2:32
47. Mission Announcements 1 (Church Video Archive, 2001)	3/16/2014	0	3	1,758	4	4:34
48. 10,000 Reasons (Bless The Lord)	3/23/2014	17	1,565	109,747	130	4:59
49. Concert Announcement and Giveaway	4/5/2014	1	24	2,803	7	3:21
50. Amazing Grace Medley	4/6/2014	13	1,173	82,897	139	5:59
51. Worlds Apart	4/13/2014	6	319	27,852	49	5:48
52. God of Wonders	5/8/2014	3	447	27,514	66	5:01
53. God of Wonders (Lyrics)	5/13/2014	0	91	4,121	15	5:05
54. Here By The Water	5/22/2014	1	231	15,398	28	4:56

Video Number and Title (sic)	Date	Dislikes	Likes	Views	Comments	Video
	Published					Length
55. Real Life Offering	6/4/2014	0	270	47,326	34	4:49
56. Efezanima 6:10-18 (Ephesians 6:10-18 in Serbian)	6/13/2014	3	14	2,036	6	2:10
57. Live Worship Music @ Waterfront Festival 2014 (Cobourg Alliance	7/2/2014	6	44	3,155	14	1:20
Church)						
58. CD Release - Basement Praise: A Cappella Worship	7/11/2014	0	106	9,096	28	4:35
59. David Wesley Interview by Northumberland Radio 89.7FM (July 29,	7/29/2014	0	25	1,436	7	8:56
2014						
60. Mission Announcements 2	9/7/2014	1	7	1,081	5	4:12
61. The Stand	9/28/2014	1	275	9,756	58	5:37
62. Sinking Deep	10/26/2014	1	342	7,543	89	4:58

Melody Myers Videos

Video Number and Title (sic)	Date	Dislikes	Likes	Views	Comments	Video
	Published					Length
01. Women's Choir "Gloria" Christmas performance	12/07/08	2	7	2,765	7	1:26
02. "I'll Be Home For Christmas" Women's Choir	12/07/08	0	15	4,568	7	1:48
03. Men's Choir "Come and Worship the New Born King" Christmas	05/07/09	0	1	2,294	2	1:01
04. Women's Choir "Rise Up" (my love)	05/07/09	0	23	6,435	19	1:52
05. Women's Choir SIngs "Ubi Caritas"	05/07/09	3	58	14,767	26	3:28
06. Eric Whitacre Virtual Choir: Lux (Soprano III)	11/18/09			230,226	210	4:31
07. Eric Whitacre Virtual Choir: Lux (Alto II)	11/23/09			70,507	117	4:31
08. Eric Whitacre Virtual Choir: Lux (Soprano I + solo)	11/23/09			33,715	55	4:31
09. Cry tag (I made you cry)	12/19/09	2	62	6,326	23	0:19
10. When She Loved Me tag	12/20/09	1	34	5,943	22	0:31
11. Lux Aurumque Virtual Choir by Melody Myers	12/23/09	8	1733	119,716	609	4:04
12. EWVC - "Lux Aurumque" - Soprano Solo Audition	01/01/10	18	777	167,742	277	1:09
13. My Heart Will Go On	01/03/10	8	176	19,580	90	4:03
14. Rise Up, My Love Multi-Track	02/01/10	4	139	12,663	78	1:34
15. Eric Whitacre's Animal Crackers - The Panther, Multi-Track	02/07/10	0	44	9,478	11	0:51
16. Eric Whitacre's Animal Crackers - The Cow, Multi-track	02/09/10	0	67	8,346	18	1:06
17. Eric Whitacre's Animal Crackers - The Firefly, Multi-Track	02/19/10	3	73	11,300	15	0:29
18. Il Est Bel Et Bon, Women's Choir	02/19/10	0	18	5,054	13	1:28
19. A Few Thoughts and A Lot of Thank Yous'	03/23/10	2	31	3,019	24	4:14
20. Danny Boy, For Our Troops, Multi-Track	03/28/10	3	140	12,542	54	3:36
21. I'm Havin' a Party!	05/05/10	6	44	6,414	33	4:16
22. Embraceable You - Multitrack - A Cappella	06/06/10	2	266	17,769	91	2:11
23. Susan's Search "Silent Night"- by Melody Myers	07/10/10			6,873	56	1:35
24. "Think of Me" The Phantom of the Opera - by Melody Myers	06/12/10	23	1226	84,030	395	3:31
25. In the Arms of the Angel	06/19/10	17	335	30,803	149	4:27
26. Whitacre Scholarship Winner, request "Sing With Eric"	06/16/10	0	49	11,834	25	5:53
27. Go, Lovely Rose Virtual Choir, Multitrack	09/05/10	6	346	22,729	119	3:38

Video Number and Title (sic)	Date	Dislikes	Likes	Views	Comments	Video
	Published	2	<i>C</i> 1	0.176	20	Length
28. Sleep_VC_2.0_Soprano_1	12/16/10	2	61	8,176	30	5:50
29. "White Christmas" sung by Melody Myers	12/23/10	0	59	3,713	27	3:16
30. "Wishing You Were Somehow Here Again" Phantom of the Opera	03/05/11	3	138	11,257	48	3:01
31. "The Sun Whose Rays Are All Ablaze" by Melody Myers	04/20/11	1	46	3,161	21	3:03
32. "The Voice" by Melody Myers	05/16/11	5	241	10,799	72	3:06
33. America's Got Talent Audition - Melody Myers	05/21/11	15	123	17,263	62	1:56
34. "My Buddy" Multitrack A Cappella	05/23/11	1	131	5,741	55	2:59
35. "Reflection" from Mulan	07/11/11	3	103	8,166	45	1:41
36. "You Raise Me Up" sung by Melody Myers	08/22/11	6	104	7,375	49	3:56
37. "Ave Maria" sung by Melody Myers	09/16/11	2	387	20,294	133	4:35
38. "Last Night Was the End of the World" Barbershop Multitrack	09/23/11	5	107	5,864	52	0:44
39. "The Phantom of the Opera" by Melody Myers	10/16/11	12	368	12,015	137	3:32
40. "We Go Together" Multitrack A Cappella	11/12/11	3	318	14,461	85	2:19
41. "Silver Bells" A Cappella Multitrack	12/18/11	2	86	3,724	42	2:29
42. "Oh Come All Ye Faithful" Multitrack A Cappella	12/23/11	3	149	6,135	64	1:56
43. "I Love to Sing 'Em" Barbershop Tag	01/18/12	6	131	8,892	52	0:41
44. "Swing Down Chariot" Multitrack A Cappella by Melody Myers	01/22/12	5	147	8,706	48	3:34
45. "Love Me Tender" A Multitrack A Cappella	02/26/12	6	155	11,635	45	2:52
46. "Eine Kleine Nachtmusik" Multitrack A Cappella by Melody Myers	05/16/15	10	162	7,578	40	4:40
47. "One Fine Day" A Multitrack A Cappella	07/06/12	5	131	5,674	43	3:09
48. "Pie Jesu" by Andrew Lloyd Webber; sung by Melody	10/03/12	2	286	8,525	121	4:06
49. A Tribute to Newtown, Connecticut and Loved	12/17/12			2,336	13	3:18
50. "I Don't Know Why (I Just Do)" Multitrack A Cappella	01/24/13	2	91	3,499	34	1:51
51. "O Eve" Multitrack A Cappella (A Mother and Child Tribute)	02/20/13	1	104	3,323	58	4:23
52. "Tonight" (West Side Story) SATB collaboration - Julien Neel, Richard Bachand, and Melody Myers	03/21/13	1	92	4,645	33	1:38
53. "Ah! Je veux vivre" from Roméo et Juliette by Charles Gounod	04/29/13	3	62	2,245	31	4:33
54. Eric Whitacre - VC4 "Fly" Solo Audition by Melody Myers	06/17/13	7	401	28,845	142	4:46

Video Number and Title (sic)	Date	Dislikes	Likes	Views	Comments	Video
	Published					Length
55. "A Dream is a Wish Your Heart Makes" Young Women in Harmony -	07/09/13	2	123	7,770	52	3:33
Multitrack A Cappella						
56. Melody Myers sings "Pie Jesu" LIVE	11/24/13	1	71	3,268	14	4:54
57. "Signore ascolta" by Giacomo Puccini, performed live by Melody Myers	03/08/14	1	38	1,450	20	2:35
58. "Alexander's Ragtime Band" Multitrack A Cappella	05/21/14	1	90	1,398	41	3:12
59. "The Jewel Song" from Faust, by Charles Gounod	05/31/14	1	26	764	17	6:07
60. "Lollipop" A Multitrack A Cappella Doo-wop	07/26/01	0	74	1,763	37	2:42
61. "I Will Remember You" Multitrack Cover	07/24/14	1	78	1,613	39	4:06
62. "Walk Away" Cover Multitrack by Melody Myers	08/05/14	7	42	1,082	31	3:24
63. "Goody Goody" A Multitrack A Cappella	09/16/14	0	56	1,199	22	2:32
64. "Let it Go" from Frozen - Multitrack Cover	10/24/14	3	56	1,604	16	3:43
65. "Pure Imagination" Multitrack A Cappella by Melody Myers and Julie Gaulke	11/24/14	0	43	949	21	1:46
66. "Believe" from The Polar Express - cover by Melody	12/03/14	1	71	1,145	45	6:53
67. "The Christmas Song" Multitrack A Cappella by Melody Myers	12/24/14	1	36	661	18	3:16
68. "O mio babbino caro" sung live by Melody	01/01/15	1	51	563	11	2:32
69. The First Update in FOREVER! What's Going On?!?!	01/07/15	0	38	529	30	8:55

Note: No data in the dislikes or likes columns means that the feature was disabled by the creator.