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**Complex Personalities: An Original Composition For Virtual Wind Ensemble And
An Accompanying Exploration Of The Effects Of The Internet On Music
Collaboration And Composition**

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COMPLEX PERSONALITIES: AN ORIGINAL COMPOSITION FOR
VIRTUAL WIND ENSEMBLE AND AN ACCOMPANYING EXPLORATION
OF THE EFFECTS OF THE INTERNET ON MUSIC COLLABORATION
AND COMPOSITION

By

CHRISTOPHER JASON KAMERLING, Bachelor of Arts

Presented to the Faculty of the Graduate School of

Stephen F. Austin State University

In Partial Fulfillment

Of the Requirements

For the Degree of

MASTER OF MUSIC IN COMPOSITION

STEPHEN F. AUSTIN STATE UNIVERSITY

August, 2018

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ABSTRACT

This thesis explores the impact that the internet has had on the *esprit de corps* of the musical community. As a mechanism for that exploration, it also includes an original composition comprised of three character pieces. The exegesis of the piece will describe the basis of these musical representations and explore the application of the piece as a vehicle for a shared musical experience across the internet. A virtual ensemble was created by crowdsourcing from social media. Participants played different parts that were combined by computer manipulation into a final product.

PREFACE

My interest in the subject of this thesis goes back to my first encounter with Eric Whitacre's Virtual Choir. I was so enthralled with the idea that a person could take individuals from all areas of the world and combine them into a single unit that participated together virtually. I thought about those people whose only connection to the outside world might have been the internet and how wonderful it could be if they were able to collaborate on a musical endeavor with other like-minded people. Whitacre said it best when he described it as a bunch of individuals placing messages in bottles from their remote locations in hopes of making a connection.

Another aspect of this project that excited me was an exploration of what this new-found collaboration would entail. How will these virtual connections progress? Will it create a community? What are the dynamics of that community? Are we seeing a glimpse of what future musical collaboration might look like? What role will social media play in this future? The answers to these questions are continuing to define themselves following this thesis.

ACKNOWLEDGEMENTS

My acknowledgements have to begin with my faith in Jesus Christ. Without his guidance, grace, and mercy, I would not have been able to take on the task of seeking my master's degree. To quote Isaiah 50:4 – "The Lord GOD hath given me the tongue of the learned, that I should know how to speak a word in season to him that is weary: he wakes morning by morning, he wakes mine ear to hear as the learned."

My next thanks are to my family. They all have had to deal with their son, husband, daddy, etc. not being there at times so I could complete tasks toward my degree. I love all of you very much and thank you for your understanding.

Next is my advisor, Dr. Stephen Lias. I want to thank you for your willingness to share your vast knowledge with me. You made me feel like a part of the SFA family even when I had first submitted a portfolio for your consideration. I am very humbled by your friendship and consider it a prized possession.

Next are my thesis committee members: Dr. David Campo, Dr. Jamie Weaver, and Dr. Jeffery Brewer. Thank you so much for your help and willingness to bend your schedules to help accommodate my needs as a student.

I would also like to thank all my instructors and the SFA staff and administration for the chance to follow my dream of achieving a graduate degree. I will be forever thankful.

Finally, I would like to dedicate this thesis to my children who served as the inspiration for the music itself. I love you all so very much and am proud to be your dad.

Chris Kamerling

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CHAPTER ONE

Origins Of The Project

For several years I have been intrigued by the social media experiment called “Virtual Choir,” designed and implemented in March 2010 by composer/conductor Eric Whitacre. In a TED Talk in 2011, Whitacre described the impetus for the very first Virtual Choir. He said,

“I was thunderstruck! Britlyn (a young girl who had posted a fan video to YouTube of herself singing her part to one of Whitacre’s pieces, *Sleep*) was so innocent and so sweet and her voice was so pure. I even loved seeing the little teddy bears sitting on the piano behind her. It was such an intimate video. I had this idea. If I could get 50 people to all do this same thing: sing their parts; soprano, alto, tenor, and bass...wherever they were in the world...and post their videos to YouTube. We could cut it all together and make a virtual choir.”¹

Whitacre’s initial motivation was the attempt by a little girl in her own corner of creation to reach out to someone she admired using music: their common emotional language. This emotional connection is what I believe music should be. People should love participating in music, and the reason they form themselves into ensembles is to share that love with others who feel the same. Distance no longer needs to stop people from making a significant connection through music. It certainly didn’t stop Whitacre and Britlyn. They were not in the

¹ Eric Whitacre, “A virtual choir 2,000 voices strong” (video), March 2011, 3:25, accessed January 26, 2018, <https://www.youtube.com/watch?v=2NENIXsW4pM>.

same room, but through social media, they were able to have a “musical moment” similar to those that music educators generate with students on a daily basis.

After the initial contact with Britlyn, Whitacre’s project began to take shape. His first steps were to send out a “call to singers” through his blog appearing on his website. He made the music (a piece of his from the year 2000 called *Lux Aurumque*) available for free download. He prepared a recording from a prior performance and gave that to the singers as a guide track with which to sing along. He then asked them to upload their videos to YouTube. Singers began to upload and eventually numbered 185 people in the ensemble.

During this time, Scott Hanes approached Whitacre with the offer to compile, edit, and produce the project for him, and that offer was accepted. As one can imagine, aggregating this many videos posed its own problem for the project. Logistics of how to bring together video and audio from 185 singers and then assemble it into a presentable form was a daunting task. The initial form of Virtual Choir 1.0, however, was released on YouTube in 2010. The video quickly went viral, reaching one-million hits in the first month. Because of the attention that the first project generated, Whitacre has gone on to a Virtual Choir 2.0, 3.0 and 4.0. Partnering with UNICEF, Whitacre made a Virtual Youth Choir in 2014 to much acclaim.

This thesis will explore history and success of the virtual ensemble “movement” and create a new piece of wind ensemble literature that will be used to facilitate the project’s development. I will compose a piece for wind ensemble and distribute parts to players that I have crowdsourced from a previously existing Facebook group of band directors. Each person will create video recordings of him/herself playing his/her parts and submit them back through Dropbox. I will then compile and edit the video footage into a video project of the players as a complete ensemble. This is an affirmation and extension of the principals used for Whitacre’s Virtual Choir and its transition to instrumental music. Thus, the thesis will be comprised of both a written document and an accompanying video project that puts these principals into action. The project will generate the *esprit de corps* that is an integral part of a wind ensemble (or concert band) setting. While the transmission of ideas cannot be accomplished “live,” there has been a Facebook group formed of the “Virtual Band’s” members and they are urged to exchange ideas, not only about the music at hand, but also the process of making their videos. This is similar to the camaraderie found in a traditional wind ensemble. A great example of this camaraderie is a message received from a player just before the video submissions were due. He messaged saying that he was sorry, but his video would be coming in late. I asked why and he said that his wife was 37 weeks pregnant and they had just been admitted to the hospital because the baby was coming early. I told him not

to worry and go enjoy the birth of his child. I also invited him to post a picture of the baby when his wife delivered so everyone in Virtual Band could celebrate the birth. This type of interaction exemplifies the *esprit de corps* mentioned earlier. He did not have to share that glimpse into his life, but he did, and that is what encourages the camaraderie in the virtual ensemble. Love of music is the driving force behind the formation of this thesis/project, and it is central to the finished product.

Historical Trends in Technology

How people interact with each other is rapidly changing and technology is becoming more and more important to that process. The newly emerging field of social media has connected people from all over the globe. It is now easy for a stay-at-home dad in Spokane, Washington to converse with a retired grandmother in Hong Kong. It is a very fascinating time as this world becomes an ever-smaller village. Many groups exist that cater to specific hobbies or interests. Members of these social media groups can converse and make important contacts that expand the ability for an individual to engage in an activity. Advancing platforms are able to link people with text, audio, video and sometimes all three. Users are beginning to move to these social applications in greater and greater numbers.

Over the past five decades technology has increasingly impacted music. Now the internet has taken us the next step by allowing us to communicate over great distances virtually while not having to physically traverse the distance.

The internet formed in the mid-1960s and was initially a closed system including some technology and educational institutions.

“In late 1966 [Larry G.] Roberts went to DARPA (Defense Advanced Research Projects Agency) to develop the computer network concept and quickly put together his plan for the “ARPANET” (Advanced Research Projects Agency Network), publishing it in 1967. In August 1968, after Roberts and the DARPA funded community had refined the overall structure and specifications for the ARPANET, an RFQ (Request For Quotation) was released by DARPA for the development of one of the key components, the packet switches called IMP’s (Interface Message Processors). Due to [Leonard] Kleinrock’s early development of packet switching theory and his focus on analysis, design and measurement, his Network Measurement Center at UCLA was selected to be the first node on the ARPANET. All this came together in September 1969 when BBN Technologies installed the first IMP at UCLA and the first host computer was connected. One month later, when SRI International was connected to the ARPANET, the first host-to-host message was sent from Kleinrock’s laboratory to SRI. The original ARPANET grew into the Internet.”²

From there it continued to grow into the multi-faceted network that it is today.

Following the establishment of the internet, technology progressed to the modern application of social media. Social media was designed to connect humans across the internet. The first website that is universally accepted as being truly social media was Six Degrees (founded in 1997). This site allowed users to create a profile and connect to other users. The next step for social

² Barry M. Leiner et al., “Brief History of the Internet,” internetsociety.org, 1997, <https://www.internetsociety.org/internet/history-internet/brief-history-internet/> (accessed February 1, 2018).

media was the starting of weblogs (or “blogging”) and instant messaging. While not thought of strictly as social media, users could interact with these blogs, and with other users, instantly. In 2004, Mark Zuckerberg launched Facebook, the social media giant that would “set the bar for all other social media services.”³ Facebook and other social networking companies (like Twitter and YouTube) have changed the landscape of social networking and are currently some of the strongest technology companies in existence because of their vast number of users. Technology has become more interactive and user-friendly while those using the technology have become more and more native to the digital world.

The Impact of Technology on Music Making

The study and enjoyment of music has not been neglected during this social revolution. Popular artists share new singles to increase revenue at future live events. Students can search online for repositories of recordings (both audio and video) of particular pieces that are under study. Orchestra directors can set up groups allowing players to connect with questions or comments concerning the music currently being rehearsed. In general, this linking together digitally allows users to have a feeling of *esprit de corps* with others of that particular group or activity. That concept is one of the major aspects of this project/thesis.

³ Benjamin Hale, “The History of Social Media: Social Networking Evolution!,” historycooperative.org, June 16, 2015, <http://historycooperative.org/the-history-of-social-media/> (accessed February 1, 2018).

Esprit de corps gives the players a sense of community. Musicians work in practice rooms or other quiet areas perfecting their craft for long hours before ever joining with others at a rehearsal. This is mirrored in the digital world as well. In Whitacre's aforementioned TED Talk, he read a message from one of the singers for his (then new) Virtual Choir 2.0. She said, "When I placed a marker on the Google Earth Map, I had to go with the nearest city which is about 400 miles away from where I live. As I am in the Great Alaskan Bush, satellite is my connection to the world."⁴ This woman was isolated by the geographical location of her home. Sometimes the isolation is a hindrance to human connection. Music and technology are increasingly coming together to play a crucial role in human networking.

During the crowdsourcing portion of the process, I posted a request for players in an already existing social media group called the Band Director's Group. Although I had not specifically planned for this to become the sampling of players, band directors responded to the request for musicians so overwhelmingly that I didn't continue to seek out other players following the initial announcement to them. It has been interesting to gain a greater insight into their daily lives and the struggles they have. As they prepared and rehearsed the

⁴ Eric Whitacre, "A virtual choir 2,000 voices strong" (video), March 2011, 10:55, accessed February 8, 2018, <https://www.youtube.com/watch?v=2NENIXsW4pM>.

music, they worked through complications concerning technology and music practice.

The virtual ensemble “movement” almost exclusively traces its lineage back to Whitacre’s virtual choir. There are several interpolations and I will take a brief look at a few of the larger ones while contrasting them against this project. Shortly before Whitacre’s Virtual Choir, YouTube made the first “digital” steps to engage the world of music by sponsoring the YouTube Symphony Orchestra in 2009. The orchestra was made up of approximately 100 players from 70 countries spanning six continents. The organizers went through almost 3,000 YouTube video submissions to select the players. Those 100 players then made their way to New York City and had a three-day summit at the Julliard School of Music before culminating their experience with a concert at Carnegie Hall. Well-respected conductor Michael Tilson Thomas served as artistic director for the group and was also the master of ceremonies at the Carnegie Hall concert. Thomas described the event this way: “For us, it’s somewhere between a classical music summit conference and a scout jamboree with an element of speed dating thrown in!”⁵ The first steps of using the YouTube platform for networking had been accomplished. This was only the first step to what Whitacre would do later in 2011.

⁵ Aspen Steib, “YouTube orchestra debuts, wows Carnegie Hall,” *cnn.com*, April 16, 2009, <http://www.cnn.com/2009/TECH/04/16/youtube.orchestra/index.html> (accessed February 5, 2018).

YouTube was the vehicle selected for those wanting to audition for a spot in the orchestra. The orchestra itself, however, sat and rehearsed in a very traditional sense, and then performed in a concert hall just as traditional orchestras had done before (in contrast to the intended format of this thesis project). This enabled the players and artistic director to manage the problems of rehearsal and preparation in a normal way. Articulations, tempo changes, and other such basic musical elements were more easily unified across the ensemble in a traditional setting. Each of these musical attributes would present difficulties in the virtual world, but higher bandwidth and higher streaming quality are leading to a point where these difficulties can be overcome. Virtual groups that can rehearse “live” across platforms such as Skype will should soon become possible.

In September of 2011 (Shortly after Whitacre’s project), a YouTuber named Joe Penna crowdsourced a “virtual ensemble” of a different kind. The project consisted of many different videos and instruments cut together at one-or-two-note increments to play the theme of Edvard Grieg’s *In the Hall of the Mountain King*. Penna was the compiler (editor) of the project and all of the notes of the performance were played by fans and sent in using over 1,400 videos. The video, at a length of 2:27, was edited from a total of 1,560 minutes of

footage.⁶ Penna's project, similar to this thesis, used instruments instead of voices, but the structure consisted of no particular instrumentation at any given time. By using different instruments on nearly every note of the theme, Penna almost negates the idea of an ensemble itself. The individual sounds are used similar to a synthesizer that Penna "plays" throughout the project. The basic idea remains: Penna used social media to crowdsource players to send in videos to edit. Then he took a step past YouTube Symphony by editing the videos together and putting it back out on social media with no traditional "rehearsals" or intermediary steps.

Another project of virtual ensembles is the Little Symphony project by Cosarca, Craciun, and Corneanu from the University of Memphis also in 2011. This was much more like Whitacre's Virtual Choir in the crowdsourcing aspect and the video editing. The ensemble was made from many different instruments, not only standard orchestral wind and string instruments, but instruments like recorder, ocarina, and guitar. The music was again chosen from the classical repertoire: Pachelbel's Canon in D. The project used a quintet arrangement and each player would select which of the five parts to play and then record him/herself playing the part using a click track. The video was released to the public on January 17, 2012. There were 106 instrumental and vocal submissions

⁶ Joe Penna, "Mystery Symphony" (video), September 22, 2011, accessed February 13, 2018, <https://www.youtube.com/watch?v=Ul95hTnO3h4>.

from 30 different countries.⁷ The Little Symphony project differs from this thesis project in its use of a non-standardized instrumentation and the use of a five-part arrangement of a piece of pre-existing classical music.

This thesis project is incorporating a newly composed piece of music for winds. In all these aforementioned projects, there were a maximum of five different parts to link together. Whitacre's choral piece was four-part (SATB), the Little Symphony project used a quintet as it's model, and Penna's project didn't really approach the idea as a layered product but instead in a sequential manner. This thesis has taken the steps of combining close to thirty parts into one product. A video project with this many instruments, in a standard instrumentation, with a relatively complex piece of new "classical" music has not been attempted to my knowledge.

⁷ Laura Fenton, "Virtual Symphony a Reality for U of M Music Students," *University of Memphis Magazine*, 2012. accessed February 13, 2018, <https://issuu.com/univofmemphis/docs/spring2012magazine>.

CHAPTER 2

Musical Score

Score

Complex Personalities

(Mvt.1 - "Sister")

Chris Kamerling

Heroic $\text{♩} = 128$

Piccolo

Flute

Oboe

Bassoon

Clarinet in B \flat 1

Clarinet in B \flat 2

Clarinet in B \flat 3

Bass Clarinet

Alto Sax 1

Alto Sax 2

Tenor Sax

Baritone Sax

Heroic $\text{♩} = 128$

Trumpet in B \flat 1

Trumpet in B \flat 2

Trumpet in B \flat 3

Horn in F 1

Horn in F 2

Trombone 1

Trombone 2

Euphonium

Tuba

Heroic $\text{♩} = 128$
B \flat , D, F, C

Timpani

Bells

Xylophone

Marimba

Percussion 1
snare
bass

Percussion 2
cr. cym.

© 2017 Phantom K. Music

Complex Personalities - (Mvt.1 - "Sister") - Score

This musical score is for the first movement, "Sister", of the piece "Complex Personalities". It is a full orchestral score with the following instruments and parts:

- Picc.
- Fl.
- Ob.
- Bsn.
- B. Cl. 1
- B. Cl. 2
- B. Cl. 3
- B. Cl.
- A. Sx. 1
- A. Sx. 2
- T. Sx.
- B. Sx.
- B. Tpt. 1
- B. Tpt. 2
- B. Tpt. 3
- Hn. 1
- Hn. 2
- Tbn. 1
- Tbn. 2
- Euph.
- Tuba
- Timp.
- Bls.
- Xyl.
- Mrb.
- Perc. 1
- Perc. 2

The score is written in 4/4 time and features a variety of dynamics and articulations. Key markings include *mf*, *ff*, *f*, and *sf*. The score is divided into measures, with measure numbers 7, 8, 9, 10, and 11 indicated at the bottom of the Percussion 2 part.

Complex Personalities - (Mvt.1 - "Sister") - Score

The musical score is arranged in a standard orchestral format. The top section includes woodwinds: Piccolo, Flute, Oboe, Bassoon, and three Clarinets (Bb, B, and B). Below these are three Saxophones (Bb, B, and B). The middle section features three Bb Trumpets, two Horns (F and Eb), two Trombones (Bb and Bb), Euphonium, and Tuba. The bottom section contains Timpani, Bassoon, Xylophone, Maracas, and two Percussion parts. The score is written in 4/4 time and features complex rhythmic patterns, including triplets and sixteenth-note runs. The percussion parts are marked with measure numbers 12, 13, 14, 15, and 16.

Complex Personalities - (Mvt.1 - "Sister") - Score

18

Picc. *f*

Fl. *mp*

Ob. *mp*

Bsn. *mp*

B♭ Cl. 1 *mp*

B♭ Cl. 2 *mp*

B♭ Cl. 3 *mp*

B. Cl. *mp*

A. Sx. 1 *mp*

A. Sx. 2 *mp*

T. Sx. *mp*

B. Sx. *mp*

18

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1 *mf*

Hn. 2 *mf*

Tbn. 1

Tbn. 2

Euph.

Tuba *mp*

18

Timp.

Bls. *mf*

Xyl.

Mrb. *mp*

Perc. 1 *pp* *mp* *mf* *ff* *mp* *f*

Perc. 2 *p* *f* *gong* *L.V.*

17 18 19 20 21 22 23

Complex Personalities - (Mvt.1 - "Sister") - Score

The score is divided into two systems. The first system includes Piccolo, Flute, Oboe, Bassoon, B♭ Clarinet 1, B♭ Clarinet 2, B♭ Clarinet 3, B♭ Clarinet, Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone, and Bass Saxophone. The second system includes B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, Horn 1, Horn 2, Trombone 1, Trombone 2, Euphonium, Tuba, Timpani, Basses, Xylophone, Maracas, and Percussion 1 & 2. The score features various dynamics such as *ff*, *f*, *sf*, *pp*, and *mf*, along with performance instructions like *on head*, *gong*, and *sub. cym.*. Measure numbers 24 through 31 are indicated at the bottom of the page.

Complex Personalities - (Mvt.1 - "Sister") - Score

The score is arranged in systems. The first system includes Piccolo (Pic.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), B♭ Clarinet (B. Cl.), Alto Saxophone 1 (A. Sx. 1), Alto Saxophone 2 (A. Sx. 2), Tenor Saxophone (T. Sx.), and Bass Saxophone (B. Sx.). The second system includes B♭ Trumpet 1 (B♭ Tpt. 1), B♭ Trumpet 2 (B♭ Tpt. 2), B♭ Trumpet 3 (B♭ Tpt. 3), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Trombone 1 (Tbn. 1), Trombone 2 (Tbn. 2), Euphonium (Euph.), and Tuba. The third system includes Timpani (Timp.), Bass Drum (Bis.), and Xylophone (Xyl.). The fourth system includes Maracas (Mrb.) and two Percussion parts (Perc. 1 and Perc. 2). The score includes dynamic markings such as *f*, *mf*, and *sf*. Measure numbers 32, 33, 34, 35, 36, 37, 38, 39, and 40 are indicated at the bottom of the page.

Complex Personalities - (Mvt.1 - "Sister") - Score

This page of a musical score includes the following parts and measures:

- Picc.**: Piccolo, measures 41-48.
- Fl.**: Flute, measures 41-48.
- Ob.**: Oboe, measures 41-48.
- Bsn.**: Bassoon, measures 41-48.
- B♭ Cl. 1**, **B♭ Cl. 2**, **B♭ Cl. 3**, **B. Cl.**: Clarinets, measures 41-48.
- A. Sx. 1**, **A. Sx. 2**: Alto Saxophones, measures 41-48.
- T. Sx.**: Tenor Saxophone, measures 41-48.
- B. Sx.**: Baritone Saxophone, measures 41-48.
- B♭ Tpt. 1**, **B♭ Tpt. 2**, **B♭ Tpt. 3**: Trumpets, measures 41-48.
- Hrn. 1**, **Hrn. 2**: Horns, measures 41-48.
- Tbn. 1**, **Tbn. 2**: Trombones, measures 41-48.
- Euph.**: Euphonium, measures 41-48.
- Tuba**: Tuba, measures 41-48.
- Timp.**: Timpani, measures 41-48.
- Bls.**: Bells, measures 41-48.
- Xyl.**: Xylophone, measures 41-48.
- Mrb.**: Maracas, measures 41-48.
- Perc. 1**, **Perc. 2**: Percussion, measures 41-48.

The score features various dynamics including *f* (forte), *ff* (fortissimo), and *fp* (fortissimo-piano). It includes complex rhythmic patterns such as triplets and sixteenth-note runs. The percussion parts at the bottom show a steady eighth-note accompaniment.

Complex Personalities - (Mvt.1 - "Sister") - Score

49

Picc. *ff*

Fl. *ff*

Ob. *ff*

Bsn. *ff*

B♭ Cl. 1 *ff*

B♭ Cl. 2

B♭ Cl. 3

B. Cl. *f*

A. Sax. 1 *f*

A. Sax. 2 *f*

T. Sax. *f*

B. Sax. *f*

49

B♭ Tpt. 1 *ff*

B♭ Tpt. 2 *ff*

B♭ Tpt. 3 *ff*

Hn. 1 *ff*

Hn. 2 *ff*

Tbn. 1 *ff*

Tbn. 2 *ff*

Euph. *ff*

Tuba *ff*

49

Timp. *ff*

Bls. *ff*

Xyl. *ff*

Mrb.

Perc. 1 *ff*

Perc. 2 *ff*

49 50 51 52 53 54 55 56

Complex Personalities - (Mvt.1 - "Sister") - Score

58

Picc.

Fl.

Ob.

Bsn.

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

58

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1

Hn. 2

Tbn. 1

Tbn. 2

Euph.

Tuba

58

Timp.

Bls.

Xyl.

Mrb.

Perc. 1

Perc. 2

57 58 59 60 61 62 63

Complex Personalities - (Mvt.1 - "Sister") - Score

The score is arranged in a standard orchestral layout. The top section includes Piccolo, Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), and three Clarinets (B♭ Cl. 1, B♭ Cl. 2, B♭ Cl. 3). Below these are the Saxophone section (A. Sax. 1, A. Sax. 2, T. Sax., B. Sax.), the Trumpet section (B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3), the Horn section (Hn. 1, Hn. 2), the Trombone section (Tbn. 1, Tbn. 2), Euphonium (Euph.), and Tuba. The percussion section includes Timpani (Timp.), Bass Drum (Bls.), Xylophone (Xyl.), Maracas (Mrb.), and two Percussion parts (Perc. 1, Perc. 2). The score spans measures 64 to 71. Dynamics such as *mf* and *f* are indicated throughout. The Perc. 1 part features a complex rhythmic pattern with accents and slurs. The Perc. 2 part has a simpler, more melodic line. The woodwinds and brass sections have various melodic and harmonic parts, with some instruments like the Flute and Oboe playing more active roles than others.

Complex Personalities - (Mvt.1 - "Sister") - Score

This page of a musical score contains staves for various instruments. The instruments listed on the left are: Picc., Fl., Ob., Bsn., B♭ Cl. 1, B♭ Cl. 2, B♭ Cl. 3, B. Cl., A. Sx. 1, A. Sx. 2, T. Sx., B. Sx., B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3, Hn. 1, Hn. 2, Tbn. 1, Tbn. 2, Euph., Tuba, Timp., Bk., Xyl., Mrb., Perc. 1, and Perc. 2. The score is written in a common time signature. The woodwind and string sections (B♭ Cl., A. Sx., T. Sx., B. Sx.) have dynamic markings of *f* and *ff*. The percussion section (Perc. 1) has a rhythmic pattern of eighth notes with accents. The page number 23 is centered at the bottom.

Complex Personalities - (Mvt.1 - "Sister") - Score

This musical score page contains the following instruments and parts:

- Woodwinds:** Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Bass Clarinet (B. Cl.), Alto Saxophone 1 (A. Sx. 1), Alto Saxophone 2 (A. Sx. 2), Tenor Saxophone (T. Sx.), Bass Saxophone (B. Sx.).
- Brass:** B♭ Trumpet 1 (B♭ Tpt. 1), B♭ Trumpet 2 (B♭ Tpt. 2), B♭ Trumpet 3 (B♭ Tpt. 3), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Trombone 1 (Tbn. 1), Trombone 2 (Tbn. 2), Euphonium (Euph.), Tuba.
- Percussion:** Timpani (Timp.), Bass Drum (Bls.), Xylophone (Xyl.), Maracas (Mrb.), Percussion 1 (Perc. 1), Percussion 2 (Perc. 2).

The score is divided into two systems. The first system covers measures 79 to 83, and the second system covers measures 81 to 85. A rehearsal mark '81' is placed above the first measure of the second system. The music features complex rhythmic patterns, including triplets and sixteenth-note runs, and dynamic markings such as *sf* (sforzando) and *f* (forte).

Complex Personalities - (Mvt.1 - "Sister") - Score

This musical score is for the first movement, "Sister", of the piece "Complex Personalities". It is a full orchestral score with the following instruments and parts:

- Picc. (Piccolo)
- Fl. (Flute)
- Ob. (Oboe)
- Bsn. (Bassoon)
- B♭ Cl. 1 (B-flat Clarinet 1)
- B♭ Cl. 2 (B-flat Clarinet 2)
- B♭ Cl. 3 (B-flat Clarinet 3)
- B. Cl. (Bass Clarinet)
- A. Sx. 1 (Alto Saxophone 1)
- A. Sx. 2 (Alto Saxophone 2)
- T. Sx. (Tenor Saxophone)
- B. Sx. (Baritone Saxophone)
- B♭ Tpt. 1 (B-flat Trumpet 1)
- B♭ Tpt. 2 (B-flat Trumpet 2)
- B♭ Tpt. 3 (B-flat Trumpet 3)
- Hn. 1 (Horn 1)
- Hn. 2 (Horn 2)
- Tbn. 1 (Trombone 1)
- Tbn. 2 (Trombone 2)
- Euph. (Euphonium)
- Tuba
- Timp. (Timpani)
- Bls. (Bells)
- Xyl. (Xylophone)
- Mrb. (Maracas)
- Perc. 1 (Percussion 1)
- Perc. 2 (Percussion 2)

The score is written in 4/4 time and features a variety of dynamics and articulations. Key markings include *f* (forte), *mp* (mezzo-piano), and *ff* (fortissimo). The score is divided into measures, with measure numbers 86, 87, 88, 89, 90, 91, and 92 clearly visible at the bottom. The percussion parts include specific instructions for cymbals: "HCS CYMB." and "H7 CYMB.".

Complex Personalities - (Mvt.1 - "Sister") - Score

Picc.

Fl.

Ob.

Bsn.

Bb Cl. 1

Bb Cl. 2

Bb Cl. 3

B. Cl.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

Bb Tpt. 1

Bb Tpt. 2

Bb Tpt. 3

Hn. 1

Hn. 2

Tbn. 1

Tbn. 2

Euph.

Tuba

Timp.

Bls.

Xyl.

Mrb.

Perc. 1

Perc. 2

26

Complex Personalities - (Mvt.1 - "Sister") - Score

100

Picc.

Fl.

Ob.

Bsn.

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

100

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1

Hn. 2

Tbn. 1

Tbn. 2

Euph.

Tuba

100

Timp.

Bls.

Xyl.

Mrb.

Perc. 1

Perc. 2

98 99 100 101 102 103

Complex Personalities - (Mvt.1 - "Sister") - Score

Picc.

Fl.

Ob.

Bsn.

Bb. Cl. 1

Bb. Cl. 2

Bb. Cl. 3

B. Cl.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

Bb. Tpt. 1

Bb. Tpt. 2

Bb. Tpt. 3

Hn. 1

Hn. 2

Tbn. 1

Tbn. 2

Euph.

Tuba

Timp.

Bsn.

Xyl.

Mrb.

Perc. 1

Perc. 2

104 105 106 107 108 109 110

Score

Complex Personalities (Mvt.2 - "Bug")

Chris Kamerling

Plaintive ♩ = 86

5

Piccolo

Flute

Oboe

Bassoon

Clarinet in B-1

Clarinet in B-2

Clarinet in B-3

Bass Clarinet

Alto Sax 1

Alto Sax 2

Tenor Sax

Baritone Sax

Trumpet in B-1

Trumpet in B-2

Trumpet in B-3

Horn in F 1

Horn in F 2

Trombone 1

Trombone 2

Euphonium

Tuba

Bells

Marimba

Percussion 1

Percussion 2

Complex Personalities - (Mvt.2 - "Bug") - Score

The score is divided into three systems. The first system includes Piccolo, Flute, Oboe, Bassoon, B♭ Clarinet 1, B♭ Clarinet 2, B♭ Clarinet 3, B♭ Clarinet, Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone, and Bass Saxophone. The second system includes B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, Horn 1, Horn 2, Trombone 1, Trombone 2, Euphonium, and Tuba. The third system includes Bassoon, Maracas, and Percussion 1 and 2. The score features various dynamics such as *mp*, *mf*, *pp*, and *f*, along with performance instructions like *to sop.* and *sop. solo*. Measure numbers 9, 10, 11, 12, 13, 14, 15, and 16 are indicated at the bottom of the page.

Complex Personalities - (Mvt.2 - "Bug") - Score

The score is arranged in a standard orchestral layout. The instruments are listed on the left side of the page, with their corresponding staves. The score is divided into measures, with measure numbers 17, 18, 19, 20, 21, and 22 indicated at the bottom of the page. The key signature is one flat (B-flat major or D minor), and the time signature is 4/4. The score includes various dynamics such as *mp*, *mf*, *p*, and *pp*. The Piccolo, Flute, Oboe, and Bassoon parts are mostly rests. The Clarinet and Saxophone sections have active parts with dynamics ranging from *pp* to *f*. The Trumpet and Horn sections have rests. The Trombone, Euphonium, and Tuba parts are also rests. The Bismillah part is a single staff with rests. The Maracas part has a rhythmic pattern. The Percussion part has rests.

Complex Personalities - (Mvt.2 - "Bug") - Score

24

Picc. *mp* *mf*

Fl. *mp* *mf*

Ob.

Bsn. *mp*

B♭ Cl. 1 *mp*

B♭ Cl. 2 *mp*

B♭ Cl. 3 *mp*

B. Cl. *mp*

S. Sax. *mp* *no alto* *alto* *pp* *mp* *p*

A. Sax. 2 *mp* *pp* *mp* *p*

T. Sax. *mp* *pp* *mp* *p*

B. Sax. *pp* *mp* *p*

24

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1 *pp* *mp* *pp* *mp*

Hn. 2 *pp* *mp* *pp* *mp*

Tbn. 1 *pp* *mp* *pp* *mp*

Tbn. 2 *pp* *mp* *pp* *mp*

Euph.

Tuba

24

Bs.

Mrb. *mp* *pp* *pp* *pp*

Perc. 1

Perc. 2 *p* *f*

23 24 25 26 27 28 29 30 31 32

Complex Personalities - (Mvt.2 - "Bug") - Score

34 Poco più mosso

Picc.
Fl.
Ob.
Bsn.
Bb Cl. 1
Bb Cl. 2
Bb Cl. 3
B. Cl.
A. Sax. 1
A. Sax. 2
T. Sax.
B. Sax.
Bb Tpt. 1
Bb Tpt. 2
Bb Tpt. 3
Hn. 1
Hn. 2
Tbn. 1
Tbn. 2
Euph.
Tuba
Bsn.
Mrb.
Perc. 1
Perc. 2

33 34 35 36 37 38

mp *mf* *pp* *p* *BOM!* *mf*

Complex Personalities - (Mvt.2 - "Bug") - Score

This musical score page covers measures 39 through 44. The instruments listed on the left are Piccolo, Flute, Oboe, Bassoon, B♭ Clarinet 1, B♭ Clarinet 2, B♭ Clarinet 3, Bass Clarinet, Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone, Bass Saxophone, B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, Horn 1, Horn 2, Trombone 1, Trombone 2, Euphonium, Tuba, Baritone, Mallet Percussion, Percussion 1, and Percussion 2. The score is written in 3/4 time. Measure 43 is marked with a box containing the number 43. Dynamics include *f*, *mf*, *p*, *pp*, and *mp*. The score includes various musical notations such as slurs, accents, and articulation marks.

Complex Personalities - (Mvt.2 - "Bug") - Score

This page of a musical score contains 22 staves for various instruments. The instruments listed on the left are: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Bass Clarinet (B. Cl.), Alto Saxophone 1 (A. Sx. 1), Alto Saxophone 2 (A. Sx. 2), Tenor Saxophone (T. Sx.), Bass Saxophone (B. Sx.), B♭ Trumpet 1 (B♭ Tpt. 1), B♭ Trumpet 2 (B♭ Tpt. 2), B♭ Trumpet 3 (B♭ Tpt. 3), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Trombone 1 (Tbn. 1), Trombone 2 (Tbn. 2), Euphonium (Euph.), Tuba, Baritone (Bls.), Mellophone (Mrb.), Percussion 1 (Perc. 1), and Percussion 2 (Perc. 2). The score is written in 3/4 time and includes dynamic markings such as *mf*, *f*, *mp*, *sfz*, *sf*, and *fp*. It also features articulation marks like accents and slurs, and performance instructions such as *3* (triplets) and *tr* (trills). The page number 35 is centered at the bottom.

Complex Personalities - (Mvt.2 - "Bug") - Score

52 Broadly

Picc.
Fl.
Ob.
Bsn.
B♭ Cl. 1
B♭ Cl. 2
B♭ Cl. 3
B. Cl.
A. Sax. 1
A. Sax. 2
T. Sax.
B. Sax.
B♭ Tpt. 1
B♭ Tpt. 2
B♭ Tpt. 3
Hn. 1
Hn. 2
Tbn. 1
Tbn. 2
Euph.
Tuba
Bbs.
Mrb.
Perc. 1
Perc. 2

52 53 54 55 56 57

Complex Personalities - (Mvt.2 - "Bug") - Score

The score is a full orchestral arrangement for the second movement, "Bug", of the piece "Complex Personalities". It features a variety of instruments, each with its own part. The score is divided into systems, with measures 58 through 62 visible. The instruments and their parts are:

- Picc.**: Piccolo, playing a melodic line with triplets and slurs.
- Fl.**: Flute, playing a melodic line with triplets and slurs.
- Ob.**: Oboe, playing a melodic line with triplets and slurs.
- Bsn.**: Bassoon, playing a melodic line with triplets and slurs.
- B♭ Cl. 1, 2, 3**: Clarinets in B-flat, playing a melodic line with triplets and slurs.
- B. Cl.**: Clarinet in B, playing a melodic line with triplets and slurs.
- A. Sax. 1, 2**: Alto Saxophones, playing a melodic line with triplets and slurs.
- T. Sax.**: Tenor Saxophone, playing a melodic line with triplets and slurs.
- B. Sax.**: Baritone Saxophone, playing a melodic line with triplets and slurs.
- B♭ Tpt. 1, 2, 3**: Trumpets in B-flat, playing a melodic line with triplets and slurs.
- Hn. 1, 2**: Horns, playing a melodic line with triplets and slurs.
- Tbn. 1, 2**: Trombones, playing a melodic line with triplets and slurs.
- Euph.**: Euphonium, playing a melodic line with triplets and slurs.
- Tuba**: Tuba, playing a melodic line with triplets and slurs.
- Bs.**: Bassoon, playing a melodic line with triplets and slurs.
- Mrb.**: Maracas, playing a rhythmic pattern.
- Perc. 1, 2**: Percussion, playing a rhythmic pattern.

The score includes dynamic markings such as *p* (piano), *mp* (mezzo-piano), and *mf* (mezzo-forte). There are also performance instructions like *to st. music* and *mf* (mezzo-forte) at the beginning of the section. The score is marked with measure numbers 58, 59, 60, 61, and 62.

Complex Personalities - (Mvt.2 - "Bug") - Score

The score is for a 4/4 piece in 2/4 time. It features the following instruments and parts:

- Picc.**: Piccolo, starting with a *f* dynamic.
- Fl.**: Flute, starting with a *f* dynamic.
- Ob.**: Oboe, starting with a *p* dynamic.
- Bsn.**: Bassoon, starting with a *p* dynamic.
- B♭ Cl. 1, 2, 3**: Bass Clarinet parts, marked *niente*.
- B. Cl.**: B♭ Clarinet, marked *niente*.
- A. Sx. 1, 2**: Alto Saxophone parts, marked *mf*.
- T. Sx.**: Tenor Saxophone, marked *mf*.
- B. Sx.**: Baritone Saxophone, marked *mf*.
- B♭ Tpt. 1, 2, 3**: Trumpet parts, marked *Con sord.* and *p*.
- Hn. 1, 2**: Horn parts, marked *mf* and *mp*.
- Tbn. 1, 2**: Trombone parts, marked *mf*.
- Euph.**: Euphonium, marked *f*.
- Tuba**: Tuba, marked *f*.
- Bs.**: Bassoon, marked *f*.
- Mrb.**: Maracas, marked *mp*.
- Perc. 1, 2**: Percussion parts.

The score includes dynamic markings such as *f*, *p*, *mf*, *mp*, and *niente*. It also features performance instructions like *Con sord.* and *solo*. The page number 38 is centered at the bottom.

Complex Personalities (Mvt.3 - "Big Man")

Chris Kamerling

Score

Spirito ♩ = 146

Piccolo
Flute
Oboe
Bassoon
Clarinet in Bb 1
Clarinet in Bb 2
Clarinet in Bb 3
Bass Clarinet
Alto Sax 1
Alto Sax 2
Tenor Sax
Baritone Sax
Trumpet in Bb 1
Trumpet in Bb 2
Trumpet in Bb 3
Horn in F1
Horn in F2
Trombone 1
Trombone 2
Euphonium
Tuba
Timpani
Bells
Xylophone
Marimba
Percussion 1
Percussion 2

Spirito ♩ = 146

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Complex Personalities - (Mvt.3 - "Big Man") - Score

This page contains a musical score for the third movement, "Big Man", of the work "Complex Personalities". The score is arranged in a standard orchestral format with multiple staves for each instrument. The instruments listed on the left are: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Bass Clarinet (B. Cl.), Alto Saxophone 1 (A. Sx. 1), Alto Saxophone 2 (A. Sx. 2), Tenor Saxophone (T. Sx.), Bass Saxophone (B. Sx.), B♭ Trumpet 1 (B♭ Tpt. 1), B♭ Trumpet 2 (B♭ Tpt. 2), B♭ Trumpet 3 (B♭ Tpt. 3), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Trombone 1 (Tbn. 1), Trombone 2 (Tbn. 2), Euphonium (Euph.), Tuba, Timpani (Timp.), Bass Drum (Bls.), Xylophone (Xyl.), Mallets (Mrb.), Percussion 1 (Perc. 1), and Percussion 2 (Perc. 2). The score is written in 4/4 time and features a variety of musical notations, including dynamics such as *f* and *ff*, and articulation marks like accents and slurs. The percussion parts are particularly active, with the mallets playing a complex rhythmic pattern and the two percussionists playing different rhythmic figures. The woodwinds and brasses provide harmonic support and melodic lines, with some instruments playing in unison. The overall texture is dense and rhythmic, characteristic of a "Big Man" style of music.

Complex Personalities - (Mvt.3 - "Big Man") - Score

The score is a full orchestral score for the third movement, "Big Man", of the piece "Complex Personalities". It features a large ensemble of instruments. The woodwinds include Piccolo, Flute, Oboe, Bassoon, B♭ Clarinet 1 & 2, B♭ Clarinet 3, B♭ Clarinet, Alto Saxophone 1 & 2, Tenor Saxophone, and Bass Saxophone. The brass section consists of B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, Horn 1 & 2, Trombone 1 & 2, Euphonium, and Tuba. The percussion section includes Timpani, Bass Drum, Snare Drum, and Cymbals. The score is marked with a rehearsal sign [14] at the beginning of the page. The music is written in 4/4 time and features a variety of dynamics, including fortissimo (ff), piano (p), and sforzando (sf). The percussion parts are particularly active, with the snare drum and cymbals playing a rhythmic pattern throughout the movement. The woodwinds and brass play complex melodic and harmonic lines, often with intricate rhythms and articulation. The overall texture is dense and dynamic, reflecting the "Big Man" theme.

Complex Personalities - (Mvt.3 - "Big Man") - Score

The score is divided into three systems. The first system includes Piccolo, Flute, Oboe, Bassoon, B♭ Clarinet 1, B♭ Clarinet 2, B♭ Clarinet 3, B♭ Clarinet, Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone, and Bass Saxophone. The second system includes B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, Horn 1, Horn 2, Trombone 1, Trombone 2, Euphonium, and Tuba. The third system includes Timpani, Bass Drum, Xylophone, Maracas, Percussion 1, and Percussion 2. The score features various dynamics such as *p*, *mp*, and *f*, and includes a rehearsal mark [21] at the beginning of each system. The percussion parts at the bottom show rhythmic patterns with specific measures numbered 21 through 25.

Complex Personalities - (Mvt.3 - "Big Man") - Score

This page of a musical score features 23 staves for various instruments. The instruments listed on the left are: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Bass Clarinet (B. Cl.), Alto Saxophone 1 (A. Sx. 1), Alto Saxophone 2 (A. Sx. 2), Tenor Saxophone (T. Sx.), Bass Saxophone (B. Sx.), B♭ Trumpet 1 (B♭ Tpt. 1), B♭ Trumpet 2 (B♭ Tpt. 2), B♭ Trumpet 3 (B♭ Tpt. 3), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Trombone 1 (Tbn. 1), Trombone 2 (Tbn. 2), Euphonium (Euph.), Tuba, Timpani (Timp.), Bass Drum (Bls.), Xylophone (Xyl.), Maracas (Mrb.), Percussion 1 (Perc. 1), and Percussion 2 (Perc. 2). The score is written in 4/4 time and includes dynamic markings such as *mp*, *ff*, and *f*. Measure numbers 26, 27, 28, 29, 30, and 31 are indicated at the bottom of the page.

Complex Personalities - (Mvt.3 - "Big Man") - Score

The score is for a full orchestra and includes the following parts:

- Picc.
- Fl.
- Ob.
- Bsn.
- B♭ Cl. 1
- B♭ Cl. 2
- B♭ Cl. 3
- B. Cl.
- A. Sax. 1
- A. Sax. 2
- T. Sax.
- B. Sax.
- B♭ Tpt. 1
- B♭ Tpt. 2
- B♭ Tpt. 3
- Hn. 1
- Hn. 2
- Tbn. 1
- Tbn. 2
- Euph.
- Tuba
- Timp.
- Bls.
- Xyl.
- Mrb.
- Perc. 1
- Perc. 2

Rehearsal mark 32 is indicated at the beginning of the score. Dynamics include *ff*, *mf*, and *mp*. The score is in 4/4 time and features complex rhythmic patterns, particularly in the woodwinds and percussion.

Complex Personalities - (Mvt.3 - "Big Man") - Score

43

Picc. Fl. Ob. Bsn. B♭ Cl. 1 B♭ Cl. 2 B♭ Cl. 3 B. Cl. A. Sax. 1 A. Sax. 2 T. Sax. B. Sax.

B♭ Tpt. 1 B♭ Tpt. 2 B♭ Tpt. 3 Hn. 1 Hn. 2 Tbn. 1 Tbn. 2 Euph. Tuba

Timp. Bk. Xyl. Mrb. Perc. 1 Perc. 2

mf *ff* *mf* *cresc. poco a poco* *mf* *cresc. poco a poco* *mf* *cresc. poco a poco* *mf* *cresc. poco a poco*

38 39 40 41 42 43 44

Complex Personalities - (Mvt.3 - "Big Man") - Score

This page contains a musical score for the third movement, "Big Man", of the piece "Complex Personalities". The score is arranged in a standard orchestral format with multiple staves for each instrument. The instruments listed on the left are: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Bass Clarinet (B. Cl.), Alto Saxophone 1 (A. Sax. 1), Alto Saxophone 2 (A. Sax. 2), Tenor Saxophone (T. Sax.), Bass Saxophone (B. Sax.), B♭ Trumpet 1 (B♭ Tpt. 1), B♭ Trumpet 2 (B♭ Tpt. 2), B♭ Trumpet 3 (B♭ Tpt. 3), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Trombone 1 (Tbn. 1), Trombone 2 (Tbn. 2), Euphonium (Euph.), Tuba, Timpani (Timp.), Bass Drum (Bls.), Xylophone (Xyl.), Maracas (Mrb.), Percussion 1 (Perc. 1), and Percussion 2 (Perc. 2). The score is written in 4/4 time and consists of 31 measures. The key signature is one flat (B♭). The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamics such as *f* (forte) and *sfz* (sforzando) are indicated throughout. The percussion parts include complex rhythmic patterns with accents and slurs. The woodwind and brass parts have melodic lines with various articulations and dynamics. The string parts (not explicitly labeled but implied by the Perc. 1 and 2 staves) provide a rhythmic foundation.

Complex Personalities - (Mvt.3 - "Big Man") - Score

This musical score is for the third movement, "Big Man", of the piece "Complex Personalities". It is written in 3/4 time with a tempo of Adagio at a quarter note equal to 73 (♩ = 73). The score is divided into several systems, each with a section label on the left and a tempo marking on the right.

- System 1:** Picc., Fl., Ob., Bsn., B♭ Cl. 1, B♭ Cl. 2, B♭ Cl. 3, B. Cl., A. Sx. 1, A. Sx. 2, T. Sx., B. Sx. Tempo: *Adagio* ♩ = 73 (♩ = ♩)
- System 2:** B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3, Hn. 1, Hn. 2, Tbn. 1, Tbn. 2, Euph., Tuba. Tempo: *Adagio* ♩ = 73 (♩ = ♩)
- System 3:** Timp., Bk., Xyl., Mrb. Tempo: *Adagio* ♩ = 73 (♩ = ♩)
- System 4:** Perc. 1, Perc. 2. Tempo: *Adagio* ♩ = 73 (♩ = ♩)

Key performance instructions include dynamics such as *f*, *mp*, and *mf*, and articulation like *staccato* and *ritardando*. The percussion parts include specific techniques like *rimshot* and *triangle*.

Complex Personalities - (Mvt.3 - "Big Man") - Score

The score is for a symphonic band or orchestra, featuring a variety of instruments. The key signature is one flat (B-flat major or D minor), and the time signature is 4/4. The score is divided into measures 60 through 65. The instruments and their parts are as follows:

- Picc.**: Piccolo, mostly silent.
- Fl.**: Flute, playing a melodic line with some grace notes.
- Ob.**: Oboe, mostly silent.
- Bsn.**: Bassoon, mostly silent.
- B♭ Cl. 1**, **B♭ Cl. 2**, **B♭ Cl. 3**, **B. Cl.**: Clarinets, playing a rhythmic pattern of eighth notes.
- A. Sax. 1**, **A. Sax. 2**: Alto Saxophones, playing a rhythmic pattern of eighth notes.
- T. Sax.**: Tenor Saxophone, playing a rhythmic pattern of eighth notes.
- B. Sax.**: Baritone Saxophone, playing a rhythmic pattern of eighth notes.
- B♭ Tpt. 1**, **B♭ Tpt. 2**, **B♭ Tpt. 3**: Trumpets, playing a rhythmic pattern of eighth notes.
- Hn. 1**, **Hn. 2**: Horns, mostly silent.
- Tbn. 1**, **Tbn. 2**: Trombones, mostly silent.
- Euph.**: Euphonium, mostly silent.
- Tuba**: Tuba, mostly silent.
- Timp.**: Timpani, mostly silent.
- Bis.**: Bassoon, playing a rhythmic pattern of eighth notes.
- Xyl.**: Xylophone, mostly silent.
- Mrb.**: Maracas, playing a rhythmic pattern of eighth notes.
- Perc. 1**, **Perc. 2**: Percussion, mostly silent.

Complex Personalities - (Mvt.3 - "Big Man") - Score

71 *Spirito* ♩ = 146 (♩ = ♩)

Picc. Fl. Ob. Bsn. B♭ Cl. 1 B♭ Cl. 2 B♭ Cl. 3 B. Cl. A. Sx. 1 A. Sx. 2 T. Sx. B. Sx.

71 *Spirito* ♩ = 146 (♩ = ♩)
Open

B♭ Tpt. 1 B♭ Tpt. 2 B♭ Tpt. 3 Hn. 1 Hn. 2 Tbn. 1 Tbn. 2 Euph. Tuba

71 *Spirito* ♩ = 146 (♩ = ♩)

Timp. Bla. Xyl. Mrb. Perc. 1 Perc. 2

66 67 68 69 70 71

Complex Personalities - (Mvt.3 - "Big Man") - Score

This page of a musical score contains 28 staves for various instruments. The instruments listed on the left are: Picc., Fl., Ob., Bsn., B♭ Cl. 1, B♭ Cl. 2, B♭ Cl. 3, B. Cl., A. Sx. 1, A. Sx. 2, T. Sx., B. Sx., B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3, Hn. 1, Hn. 2, Tbn. 1, Tbn. 2, Euph., Tuba, Timp., Bk., Xyl., Mrb., Perc. 1, and Perc. 2. The score is written in 4/4 time and features a complex rhythmic pattern with many sixteenth and thirty-second notes. Dynamics such as *f* (forte) and *mf* (mezzo-forte) are indicated throughout. The page includes measure numbers 72 through 78 at the bottom.

Complex Personalities - (Mvt.3 - "Big Man") - Score

This page contains a musical score for a symphony orchestra. The score is arranged in a standard format with multiple staves for different instruments. The instruments listed on the left side of the page are: Picc., Fl., Ob., Bsn., B♭ Cl. 1, B♭ Cl. 2, B♭ Cl. 3, B. Cl., A. Sax. 1, A. Sax. 2, T. Sax., B. Sax., B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3, Hn. 1, Hn. 2, Tbn. 1, Tbn. 2, Euph., Tuba, Timp., Bk., Xyl., Mrb., Perc. 1, and Perc. 2. The score is written in a key signature of one sharp (F#) and a 4/4 time signature. It features various musical notations including notes, rests, dynamics (mp, f), and articulation marks. The percussion section includes a xylophone part with a 'to chimes' instruction and a maracas part. The woodwind and brass sections have complex melodic and harmonic lines. The string section (Perc. 1 and Perc. 2) provides a rhythmic foundation with patterns of eighth and sixteenth notes. The score is divided into measures, with measure numbers 79, 80, 81, 82, 83, 84, and 85 indicated at the bottom of the Perc. 2 staff.

Complex Personalities - (Mvt.3 - "Big Man") - Score

This page contains a musical score for a symphony orchestra, specifically for the third movement, "Big Man". The score is written for a variety of instruments, including woodwinds, brass, strings, and percussion. The key signature is one flat (B-flat major or D minor), and the time signature is 4/4. The score is divided into measures, with some measures containing dynamic markings such as *mf* (mezzo-forte) and *f* (forte). The percussion section includes a snare drum (Perc. 1) and a tom-tom (Perc. 2). The woodwind section includes Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), Clarinets in B-flat (Bb. Cl. 1, 2, 3), Clarinet in C (C. Cl.), Saxophones in A (A. Sax. 1, 2) and T (T. Sax.), Horns (Hn. 1, 2), Trumpets (Tbn. 1, 2), Trombones (Tbn. 1, 2), Euphonium (Euph.), and Tuba. The brass section includes B-flat Trumpets (Bb. Tpt. 1, 2, 3), Horns (Hn. 1, 2), Trombones (Tbn. 1, 2), Euphonium (Euph.), and Tuba. The string section includes Violins (A. Sax. 1, 2), Violas (T. Sax.), Cellos (B. Cl.), and Double Basses (B. Sax.). The percussion section includes Snare Drum (Perc. 1) and Tom-tom (Perc. 2). The score is written in a standard musical notation with a grand staff for each instrument. The page number 52 is located at the bottom center.

Complex Personalities - (Mvt.3 - "Big Man") - Score

This musical score is for the third movement, "Big Man", of the piece "Complex Personalities". It is a full orchestral score with the following instruments and parts:

- Picc.
- Fl.
- Ob.
- Bsn.
- B. Cl. 1
- B. Cl. 2
- B. Cl. 3
- B. Cl.
- A. Sax. 1
- A. Sax. 2
- T. Sax.
- B. Sax.
- B. Tpt. 1
- B. Tpt. 2
- B. Tpt. 3
- Hn. 1
- Hn. 2
- Tbn. 1
- Tbn. 2
- Euph.
- Tuba
- Timp.
- Chm.
- Xyl.
- Mrb.
- Perc. 1
- Perc. 2

The score includes various musical notations such as dynamics (e.g., *f*, *mf*), articulation (accents), and performance instructions like "no bells" for the chimes. The percussion parts are marked with measure numbers 92, 94, 95, 96, 97, 98, 99, and 100.

Complex Personalities - (Mvt.3 - "Big Man") - Score

104

Picc.

Fl.

Ob.

Bsn.

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl.

A. Sax. 1

A. Sax. 2

T. Sax.

B. Sax.

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1

Hn. 2

Tbn. 1

Tbn. 2

Euph.

Tuba

Timp.

Bk.

Xyl.

Mrb.

Perc. 1

Perc. 2

100

101

102

103

104

105

106

Complex Personalities - (Mvt.3 - "Big Man") - Score

The image displays a page of a musical score for the piece "Complex Personalities - (Mvt.3 - 'Big Man')". The score is arranged in a standard orchestral format with multiple staves for different instruments. The measures shown are numbered 107 through 112. The instruments listed on the left side of the score are:

- Picc.
- Fl.
- Ob.
- Bsn.
- B♭ Cl. 1
- B♭ Cl. 2
- B♭ Cl. 3
- B. Cl.
- A. Sax. 1
- A. Sax. 2
- T. Sax.
- B. Sax.
- B♭ Tpt. 1
- B♭ Tpt. 2
- B♭ Tpt. 3
- Hr. 1
- Hr. 2
- Tbn. 1
- Tbn. 2
- Euph.
- Tuba
- Timp.
- Bls.
- Xyl.
- Mrb.
- Perc. 1
- Perc. 2

Measure 112 is marked with a rehearsal sign and includes dynamic markings such as *mf* and *cresc. poco a poco*. The percussion parts (Perc. 1 and Perc. 2) are shown at the bottom of the page with their respective measures numbered 107 through 112.

Complex Personalities - (Mvt.3 - "Big Man") - Score

The score is arranged in a standard orchestral layout with the following parts from top to bottom:

- Picc.
- Fl.
- Ob.
- Bsn.
- B♭ Cl. 1
- B♭ Cl. 2
- B♭ Cl. 3
- B. Cl.
- A. Sx. 1
- A. Sx. 2
- T. Sx.
- B. Sx.
- B♭ Tpt. 1
- B♭ Tpt. 2
- B♭ Tpt. 3
- Hn. 1
- Hn. 2
- Tbn. 1
- Tbn. 2
- Euph.
- Tuba
- Timp.
- Bs.
- Xyl.
- Mrb.
- Perc. 1
- Perc. 2

The score includes various musical notations such as notes, rests, and dynamic markings. Measure numbers 111, 114, 115, 116, and 117 are indicated at the bottom of the page.

Complex Personalities - (Mvt.3 - "Big Man") - Score

This page of the musical score contains the following instruments and parts:

- Picc.
- Fl.
- Ob.
- Bsn.
- B. Cl. 1
- B. Cl. 2
- B. Cl. 3
- B. Cl.
- A. Sax. 1
- A. Sax. 2
- T. Sax.
- B. Sax.
- B. Tpt. 1
- B. Tpt. 2
- B. Tpt. 3
- Hn. 1
- Hn. 2
- Tbn. 1
- Tbn. 2
- Euph.
- Tuba
- Timp.
- Bls.
- Xyl.
- Mrb.
- Perc. 1
- Perc. 2

Measure numbers 118, 119, 120, 121, and 122 are indicated at the bottom of the page. A rehearsal mark [122] is present at the top right of the score.

Complex Personalities - (Mvt.3 - "Big Man") - Score

The score is a full orchestral score for the third movement, "Big Man", of the piece "Complex Personalities". It is written in 3/4 time and features a variety of instruments. The woodwinds include Piccolo, Flute, Oboe, Bassoon, B♭ Clarinet 1, B♭ Clarinet 2, B♭ Clarinet 3, B♭ Clarinet, Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone, and Baritone Saxophone. The brass section consists of B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, Horn 1, Horn 2, Trombone 1, Trombone 2, Euphonium, and Tuba. The percussion includes Timpani, Bass, Xylophone, Maracas, and two sets of Percussion (Perc. 1 and Perc. 2). The score is divided into measures, with measure numbers 123, 124, 125, 126, 127, and 128 indicated at the bottom of the page. Dynamics such as *fp* and *ff* are used throughout the score.

CHAPTER 3

Inspiration Of The Composition

I was motivated by a few different factors when approaching this thesis. First, I was inspired by other projects and how they had been prepared visually. Second, I wanted to create a piece of music that went beyond what others had done in the virtual band setting. I also wanted to use a standard ensemble instrumentation. Eric Whitacre's piece was a serious concert work for vocal ensemble that utilized a standard S.A.T.B. voicing. As I began research, I noticed that no one had done that for instrumental ensembles; either the ensembles were not standard, or the music was not a concert-style work. I saw a chance to further the music of the wind band and identify it with the virtual ensemble movement as well. This work serves all of these purposes and provides a new serious concert work for wind band.

When approaching the actual composition, I wanted to create a tonal work, but with a modern harmonic feel. I considered ways that I might frame the work as a multi-movement composition that would be appropriate for concert band literature. I first thought a character piece featuring my son was the way to go. He is often moody and swings back and forth between calm and very

strident (he is 13 years old). I felt that could be represented in interesting ways inside a composition.

As I formulated ways of implementing my idea, it occurred to me that I could make a larger concert work if I were to have a movement based on each one of my children. Their personalities fit nicely into a fast-slow-fast form for the suite. My oldest daughter's movement would be first, focusing on her bravery as she begins to step out into life for the first time (she's a 17-year old senior in high school). So much is happening in her life and the journey I went through in the movement imitates the path she has taken both in the past and now looking forward into the future. My youngest daughter's movement would occur second. She is a child that loves pretty things and cuddling with mom and dad (she's 8 years old). The innocence I wanted to create in the movement accurately describes her capacity to appreciate the world around her. Lastly would be my son's movement which was really the first one that I envisioned. The third movement captured his vacillating personality and was an exciting ending to the composition. I was happy to include my children in one of my professional endeavors because they are a large portion of my life.

Construction Of The Composition – Mvt. 3

I will be discussing the three movements of my composition in reverse order. They were composed in this manner and describing my thought processes in a linear way requires me to approach them in this order. I wanted the opening gesture of the third movement to be bold and exciting. It needed to make a statement about what was going to happen later in the movement and to set the mood. I started with a strongly syncopated rhythm that I knew could be moved by arpeggio throughout the ensemble. The tritone made a bold statement for the movement and about my son. It was bold, dissonant, and represented a more modern tonality (see Figure 1).

Figure 1: Mvt.3, m.1-3

The image shows a musical score for the first three measures of the third movement. The score is for four instruments: Piccolo, Flute, Oboe, and Bassoon. The tempo is marked 'Spirito' and the measure number is '146'. The key signature has one flat (B-flat). The Piccolo part starts with a strong dynamic 'f' and a tritone interval. The Flute, Oboe, and Bassoon parts also feature syncopated rhythms and tritone intervals, creating a dissonant and bold opening gesture.

The next technique I used was an asymmetrical division of the beat which helped to signify the uneasiness of my son's thought processes. He often had trouble focusing, and this was reflected in the pulse of the music.

The horns and marimba provided an ostinato figure that accented a 3+3+2 feel over the given 4/4 time signature. It is punctuated with bass drum and clave on the 3+3+2 feel as well. Over this rhythmic ostinato is an oboe melody which falls into the same metric divisions as the ostinato. This division gave an unsettled feel to the entire melody that was further altered by a 7/8 measure. The melody was punctuated by figures in the other winds and timpani. Measures 12 and 13 used an emphasis on the 3+3+2 division of the beat to transition into a repeated chordal figure at measure 14 that was made up of a tritone under a perfect fifth. These are all punctuations that continue to reinforce the restlessness of the pulse. It is repeated at later points in the movement.

The next compositional tool I used is an arpeggiation of a cluster chord (utilizing the tritone again) which builds tension that reflects my son's frustration with all the thoughts that he is processing, or possibly unable to process (See Figure 2).

Figure 2: Mvt.3, m.20-23

The image shows a musical score for four instruments: Tbn. 1, Tbn. 2, Euph., and Tuba, spanning measures 20 to 23. The score is written in bass clef with a 4/4 time signature. The key signature has one flat (B-flat). The instruments play a rhythmic ostinato pattern of eighth notes, with dynamic markings of *f*, *fp*, and *ff*. The Tuba part is mostly silent, with a *ff* marking in measure 23. The Euphonium part has a *f* marking in measure 20 and a *fp* marking in measure 21. The Tbn. 1 and 2 parts have *f* markings in measure 20 and *ff* markings in measure 21. The score is punctuated with accents and slurs, emphasizing the 3+3+2 feel.

The cluster ends with a figure that shows the great frustration being released in measure 22.

The next section is a representation of a moment of respite in my son's day. Measure 23 starts with the alto saxophones picking up the ostinato pattern (that underlies all surface thoughts) from the horns and at the end of the measure I start a "color wash" of upper woodwinds to create the background for a horn and euphonium melody. The "wash" is a representation of daydreaming, and his mind desperately seeking some rest.

In the next section the music is representative of my son's attempt to focus on a particular thought while being interrupted. He then tries to refocus only to be interrupted again. In measure 34 a melodic fragment from later in the movement makes its first statement. It is interrupted by a interjecting rhythmic figure from earlier in the movement (see Figure 3). The interrupting chord is built of two intervals -- a tritone and a perfect fifth (A, Eb, Bb). Following the interruption, the ostinato continues and in measure 39, the melodic fragment surfaces again to try and establish itself. Another interrupting figure (first seen in measure 22, see Figure 2) occurs in measure 40 followed by the ostinato in the saxophones.

In measure 43, my son finally achieves a measure of focus for an extended period of time. The first trumpet and bells present the entire melody against a continuing ostinato in the alto saxophones and marimba, and some

Figure 3: Mvt. 3, m.36

The image displays a musical score for measures 35-36 of the third movement. The score is arranged in a vertical stack of staves. From top to bottom, the parts are: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), Trumpet 1 (B+ Cl. 1), Trumpet 2 (B+ Cl. 2), Trumpet 3 (B+ Cl. 3), and Trombone (B. Cl.). Each staff begins with a treble clef (except for the Bassoon, which has a bass clef) and a key signature of one flat. The music is marked with a forte dynamic (*ff*) and features a melodic line with accents and slurs. The Piccolo, Flute, Oboe, and the three B+ Trumpets play a similar melodic line, while the Bassoon and Trombone play a lower, more rhythmic accompaniment.

additional harmonic support from the horns. The melody is built initially on an E-Lydian scale which gives it an ethereal sound. The next few measures (50-56) are a transition and slowing down of the tempo by using extended note values. It is designed to lead us to a slower middle section that represents his tiring from the continued focus he has maintained.

The following section is a representation of a relaxing point of the day. Clusters in the trumpets, however, show the relentless interruptions of his

thought process. This adagio section beginning in measure 57 features a flute solo supported by an undulating clarinet accompaniment, the saxophone section provides harmonic stability and the marimba cycles through a sixteenth-note pattern. The flute has a melody that is interrupted by the trumpet section when they play these small 3-note clusters (see Figure 4) which represent breaks in my son's concentration as he tries to relax.

Figure 4: Mvt.3, m.57-60

The image shows a musical score for three trumpets (B+ Tpt. 1, 2, 3) in measures 57-60. The score is in 3/4 time, marked 'Adagio' with a tempo of 73. The key signature has one flat. The first measure (m. 57) shows the trumpets with a 'St Mute' instruction. The second measure (m. 58) shows the trumpets playing a 3-note cluster (F4, G4, A4) marked 'f'. The third measure (m. 59) shows the trumpets playing a 3-note cluster (G4, A4, B4) marked 'f'. The fourth measure (m. 60) shows the trumpets playing a 3-note cluster (A4, B4, C5) marked 'f'.

At measure 71, my son's day begins again, representationally, as the movement returns to the original tempo. The melodic material during this section represents an attempt to focus while being interrupted again. The bass instruments establish another ostinato in a tonal center of G. Although the ostinato is serving the same function, it is different from the original stated in the beginning of the movement. Instead of the 3+3+2 grouping used earlier, it is now 3+2+3. The ostinato is passed around and is interrupted with figures in different meters to add some variety. The beginning of the E-Lydian melody from earlier

(m.43) tries to make a reappearance in the tonal center of G. It is introduced in several instruments, but each time it is interrupted by a different instrument group. Each one tries to establish the same melodic statement. This represents my son's desire to concentrate but failing due to other sources of distraction.

The piccolo comes in the next measure with a melodic fragment. It is repeated in a different octave in the trombones and horns in measure 79. By using the stretto effect, I introduce the same melodic fragment in smaller and smaller time intervals (showing my son's building tension). Subsequent measures are further examples of the interplay between my son's desire to focus and his inability to do so because of interrupting sources of distraction.

In measure 104, the music represents him finally able to achieve focus and process his thoughts. They are blended thoughts just like the blending of melody and countermelody in this section. The clarinets, oboe, and marimba begin the full statement of the melody in measure 104. Two beats later the alto saxophones, horns, and xylophone begin a "canon-like" variation that is offset from the main melody. This canon concludes on the downbeat of measure 111. The ostinato continues through the next measure which starts a grand statement of the melody in the trumpets, first clarinet, oboe, flute, piccolo, and xylophone. The melody, in measure 116, changes tonality and rises in pitch (showing my son's added excitement). It shifts tonality again at measure 118 and again in measure 120. It finally reaches measure 122 where the final statement of the

opening tritone figure is heard. This represents my son's decision to focus on the things that initially were trying to break his focus in the movement. Then there is a rhythmic pattern on D-flat (in octaves) in measure 124 followed by a transitional figure in 125. The D-flat is joined by a G for a tritone voiced throughout the band. The interval is repeated using a syncopated rhythmic figure over three measures (restating the interval that was set up as a basic representation of my son early in the movement), and as a final disrupting gesture, the last note shifts up a half-step and the movement ends.

Construction Of The Composition – Mvt. 2

This movement represents my youngest daughter and she is a very happy child that finds wonder in butterflies and sees bunnies in the clouds that pass by. I wrote music that captures that innocence in this second movement. One technique I used throughout a majority of the movement was light scoring. The instruments could perform this movement with one player on a part. It does not need the power possible from a 100-piece wind ensemble.

The movement opens with a triplet-thirty-second note flourish in the clarinet and flute parts but at a *piano* dynamic level. It is paired against a thirty-second-note quintuplet in the bells that gives a slight rhythmic clash and provides a “sparkle” for the opening of the movement. This “sparkle” represents my daughter's innocent wonder at the world around her. The marimba is also rolling

on long open chords as foundation for the entire movement. Again, to represent the innocence, I use the marimba instead of building thick chords of many different instruments. As the movement opens I represent my daughter's movements with bassoon and bass clarinet as they come in on some staccato eighth notes in the second measure and in the third measure add a bass note of F-sharp underneath the established chord (see Figure 5).

Figure 5: Mvt.2 m.1-4

The image displays a musical score for the first four measures of the second movement. The score is arranged in a system with seven staves, each labeled with an instrument: Flute, Oboe, Bassoon, Clarinet in B \flat 1, Clarinet in B \flat 2, Clarinet in B \flat 3, and Bass Clarinet. The key signature is one flat (B \flat) and the time signature is 4/4. The Flute part begins with a melodic line in the first measure, marked with a piano (*p*) dynamic and a triplet of eighth notes. The Oboe part is silent in the first measure. The Bassoon part enters in the second measure with staccato eighth notes, marked with a mezzo-piano (*mp*) dynamic. The Clarinet in B \flat 1, Clarinet in B \flat 2, and Clarinet in B \flat 3 parts all play a triplet of eighth notes in the first measure, marked with a piano (*p*) dynamic. The Bass Clarinet part enters in the second measure with staccato eighth notes, marked with a mezzo-piano (*mp*) dynamic. The score concludes in the fourth measure with a final chord, marked with a mezzo-piano (*mp*) dynamic.

Chordal choices are for aesthetic pleasure only and are used to propel the music forward, but do not have any significant meaning in and of themselves. The foundational harmony of the piece continues in the marimba and clarinet

parts while staccato notes in the 6th and 7th measure represent my daughter's footsteps as she moves. This section is an introduction and the component parts are representative of her innocence and playfulness. In measure six, the alto saxophones come in on beat two with staccato eighth notes and are quickly followed by a piccolo run up to a trill. The oboe and bassoon have an entrance in measure seven as the other instruments are getting softer and lead into a chord change in measure eight. The bass clarinet and bassoon enter again in the second beat of the bar with staccato eighth notes and then underpin the chord on beat three with a low G-sharp. That chord holds through the 2/4 time of measure 10 and completes the introductory section (see Figure 6).

The melody of this movement is representative of my daughter's frolicking dances that she will sometimes do when no one is looking. It is very unstructured and I incorporated that into the melody. I used varying meter throughout to try and remove the rigidity of normal 4/4 time. A preview of certain melodic fragments occurs at measure 11 through 14 followed by some staccato eighth notes as a transitional figure in the oboe and bassoon and answered in the baritone saxophone and tuba. The melody is fully realized in a soprano saxophone solo starting at measure 16. The unfolding melody is punctuated by the familiar staccato-eighth-note figures or melodic fragments (horns - m.21). A gong roll helps to complete the melody in measure 23 releasing into measure 24 where it rings through the measure with no additional voices. This pause in

Figure 6: Mvt. 2, m. 6-10

The image displays a musical score for measures 6 through 10 of the second movement. The score is arranged in a standard orchestral format with the following parts from top to bottom: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), three B-flat Trumpets (B♭ Cl. 1, 2, 3), one B-flat Trumpet (B. Cl.), and two Alto Saxophones (A. Sx. 1, 2). The music begins with a Piccolo part in measure 6, marked *mf*, featuring a staccato eighth-note pattern. The Flute part has a long, sustained note in measure 6. The Oboe and Bassoon parts enter in measure 7 with a melodic line, marked *mf*. The Brass and Saxophone parts enter in measure 8 with sustained chords, marked *mp*. The Alto Saxophones have a dynamic marking of *f* in measure 6. The score concludes in measure 10 with a final chord in the brass and saxophones, marked *mp*.

the music represents a quiet breath taken by my daughter before she resumes her movements.

Measures 24 through 33 feature transitional chords in the brass and saxophone choirs. These chords are first presented by brass in a strict 5/4 time and then repeated in the saxophones in a more “free” timing. The chords are punctuated by piccolo and flute with staccato eighth notes going to a half note.

This transition, while not representing any specific behavior of my daughter, does paint a more or less accurate picture of her general demeanor.

The full melody occurs now in the brass choir. This stronger statement represents the joy my daughter has as she continues to play and dance. This new section starts *poco piu mosso* in measure 34 with a melody in the first trumpet and a countermelody in the first horn. To add interest, the melody and countermelody move in a back and forth motion. The melody moves and then holds while the countermelody moves. This interplay personifies a conversation going on between the first trumpet and first horn (see Figure 7).

Figure 7: Mvt. 2, m. 36-39

The image shows a musical score for measures 36-39 of the second movement. The score is for four parts: B♭ Trumpet 1, B♭ Trumpet 2, B♭ Trumpet 3, and Horn 1. The tempo is marked 'Poco piu mosso'. The first trumpet part (B♭ Tpt. 1) has a melodic line that starts in measure 36 with a dynamic of *mp*, moves to *mf* in measure 37, and then *mf* in measure 38. The first horn part (Hn. 1) has a countermelodic line that starts in measure 36 with a dynamic of *mp* and moves to *mf* in measure 38. The other brass parts (B♭ Tpt. 2 and B♭ Tpt. 3) play sustained chords with dynamics of *pp* and *p*.

The melodic idea is supported by sustained chords in the brass choir and marimba. The next section features echoes of the melody which represent my daughter's happy memories. Fragmented pieces of the melody are stated around the ensemble creating a sense of forward motion.

Just as the melodic material begins to die away, a stretto arpeggiation of a chord in the entire ensemble represents a sudden feeling of dread on my daughter's part. The chord employs the tritone (foreshadowing the third movement) and a minor second (G, Ab, D) to create a feeling of anticipation moving toward measure 52.

In a change of feeling in measure 52, the final statement of the melody represents joy in my daughter. A full-ensemble treatment of the melody, countermelody and chordal structure starts at measure 52 minus battery percussion. The melody is stated in the piccolo, flute, oboe, 1st clarinet, 1st trumpet, and 1st trombone. The countermelody is in the 2nd and 3rd clarinets and the 1st horn. The remainder of the winds give the chordal accompaniment on accented beats.

The next measures represent an echo of my daughter's joy. In measure 60 the melodic voices repeat the last four notes of the melody and then the last two again. The flute, clarinets, alto saxophones, and euphonium echo back the last seven notes of the melody gently getting softer. In measure 62 there is a second echo of the last four notes. Then the flute, first alto saxophone, and first horn make an even quieter statement of the last seven notes of the melody signaling the movement's approaching end. Measure 64 has a few wind players bring back some of the staccato eighth notes to tie the current measures to earlier in the movement. Then in measure 65 the first and second horns restate

the last four notes of the melody echoed immediately by the oboe and muted trumpet. The marimba begins a triplet ostinato imitating the triplets from the melody. In measure 67 a final echo of the four notes is heard in a solo alto saxophone. The marimba continues to play for another two measures executing a diminuendo that is marked *niente* or “to nothing” (See Figure 8).

Figure 8: Mvt. 2, m. 65-69

The image shows a musical score for measures 65-69 of Movement 2. The score is arranged in a system with the following parts from top to bottom: Oboe (Ob.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Alto Saxophone 1 (A. Sax. 1), B♭ Trumpet 1 (B♭ Tpt. 1), Horn 1 (Hn. 1), Horn 2 (Hn. 2), and Marimba (Mrb.). The Oboe part begins in measure 65 with a triplet of eighth notes marked *p*. The B♭ Clarinets and Marimba also play triplets. The Alto Saxophone has a solo in measure 67, marked *p*. The Marimba part continues with a triplet ostinato, marked *mp*, and ends in measure 69 with a *niente* marking. The B♭ Trumpet 1 part has a *Chor solo* marking in measure 65. The Horns 1 and 2 parts play a triplet of eighth notes marked *mp*. The Marimba part is marked *mp* and ends with a *niente* marking.

Construction Of The Composition – Mvt. 1

The first movement was the last to be composed and I knew I needed an exciting and engaging opening to the suite of movements. My oldest daughter is 17 and a graduating senior from high school. She has been preparing herself for

the next step toward adulthood, and she is also a huge fan of comic book heroes, so I felt a grandiose style movement would represent her well.

The movement opens with a full statement of the theme in all wind voices. Everything is block-scored and is marked “heroic” (♩ = 128). This is a bold introduction to the first movement. The melodic content begins in a tonal center of C, but shifts in the fifth measure up a minor second and then works its way back down to set up a G-major chord, which is the dominant of the next section back in C. That shift up a minor second is designed to make the listener question if there is more behind this melodic material than meets the eye. During this opening statement the percussion is either providing rhythmic accompaniment (snare/bass/crash), highlighting melodic movement (bells/xylophone/timpani), or providing a rolling counter-melodic figure (marimba).

The next section begins with a melody fragment in the horns followed by another fragment in the trumpet section. This back-and-forth motion is used through the entire melody. This portion of the music (measures 9 through 17) representationally follows the heroic figure. The underlying trombones, euphoniums, and tubas provide a rhythmic accompaniment that outlines chordal structure and gives rhythmic counterpoint to the melodic fragments. The piccolo and flutes feature a triplet ostinato in accompaniment to the other figures of this section. Measure 17 is a transitional figure of triplet eighth notes that (along with

the bassoon, bass clarinet and tuba walking up in quarter notes) leads into the next section.

This section features a melody (in the flute, horn and bells) that is accompanied by a “walking” bassline (tuba, bass clarinet, and bassoon) which is reminiscent of a double bass using a pizzicato technique. The melodic material of this section represents the relaxation of the heroic façade and a look at my daughter’s more delicate side. Further supporting structure is established through sustained chords in the clarinet section and set of triplets in the snare drum played on the rim (which propels the melody forward).

Suddenly we are signaled that something is about to happen. This is achieved by using a stretto arpeggiation of a B-fully-diminished-seventh chord with the A-flat in the bass. As each instrument lands on its chord member, they strike it with a *forte piano* attack and *crescendo* all the way to measure 28. There is also a suspended cymbal *piano* to *forte crescendo* to lead into the next measure (see Figure 9).

In measure 28 the music goes through a series of figures which provide interest and chances for exploration of timbres. The section opens with the trumpet section in octaves and a melodic fragment that establishes control of the composition. It is underpinned by the tuba with a bass accompaniment to the trumpets. The snare also reenters with a rhythmic figure consisting primarily of triplets and played once again on the head.

Figure 9: Mvt. 1, m. 25-27

The image displays a musical score for measures 25-27 of the first movement. The score is arranged in a vertical stack of staves, each labeled with an instrument: B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3, Hn. 1, Hn. 2, Tbn. 1, Tbn. 2, Euph., and Tuba. The notation includes various musical symbols such as notes, rests, slurs, and dynamic markings like *f* and *fp*. The key signature is one flat (B-flat major or E-minor), and the time signature is 4/4. The score shows the entry of the trombones and euphonium/tuba in measure 30, as described in the text.

On beat three of measure 30 I explore the timbre of the trombones as they enter on a high G and E-flat respectively in the first and second parts. They are joined by the euphoniums and tubas in the next measure and come together to end the figure on an e-minor chord in measure 32.

The bells, piccolo, and flute (upper woodwind and percussion timbres) enter with a figure that complements the E-minor tonality outlining members of

the chord. The euphonium and horns enter on beat three of measure 33 with a simple figure that highlights a featured chord progression. This progression represents the idea that “something” is happening in the sonic story.

It starts with E-minor and then moves to a chord made up of a perfect fourth and a minor third. The chord then moves down by a half-step, and again moves up by a major third finally resolving down by a half-step (see Figure 10).

Figure 10: Mvt. 1, m. 33-36

The musical score for measures 33-36 is presented in a system with five staves. The staves are labeled as follows: Hn. 1 (Horn 1), Hn. 2 (Horn 2), Euph. (Euphonium), Cls. (Clarinet), and Mrb. (Mallets). The Hn. 1 and Hn. 2 staves are in treble clef, while the Euph. staff is in bass clef. The Cls. staff is in treble clef. The Mrb. staff is in bass clef. The music is in 4/4 time and features a dynamic marking of *mf* (mezzo-forte) in the first measure of each staff. The Hn. 1 and Hn. 2 parts play a simple figure consisting of quarter notes. The Euph. part plays a simple figure consisting of quarter notes. The Cls. part is silent. The Mrb. part plays a simple figure consisting of quarter notes. The chord progression is as follows: E-minor (measure 33), a chord made up of a perfect fourth and a minor third (measure 34), the chord moves down by a half-step (measure 35), and finally resolves down by a half-step (measure 36).

The chord progression is then repeated in the clarinet section for a different color effect.

Next, I present a motive in the trumpet section. This motive represents a heroic battle. After the main presentation in measures 39 through 41, it is

fragmented in the horns, then repeated in the trumpets again. Part of the motive is a triplet figure that has the middle 8th note replaced by a rest. This creates a very militaristic sound and becomes the basis for the next few bars in the brass (a sub-motive created from earlier material). This “sub-motive” is repeated, emphasizing an E-minor chord.

An abrupt shift to an A-flat major chord (m. 48, beat 3) signals a significant change. The woodwinds and the xylophone answer the heroic sub-motive with a motive of their own. This motive features a triplet figure as well, but a quarter-note triplet instead of an eighth-note triplet. Rhythmic augmentation also serves to draw the listener’s attention away from the brass motive. The entire segment is repeated a half-step higher to add to the feeling of tension.

The motives and melodies start to fragment and play around each other. This is a representation of a less-focused time for the hero. At measure 58, the clarinets (followed by the saxophones) use a part of the previous woodwind motive in diminution to add interest. The third statement of that motive is broken down even further to just the triplet and repeated in the trumpets.

The chord progression mentioned above and illustrated in figure eight makes a recurrence here to bridge the gaps between some of the relatively new melodic and motivic ideas back to previous material from the movement. In the next few measures, that progression is repeated sometimes in the foreground and sometimes as a foundational element.

The music moves into a quasi-recapitulation repeating a large segment of material in an effort to reinforce that material to the listener. It begins with the heroic theme from the trumpets in measure 39 through 41, only this time it starts in the woodwinds (clarinets at measure 71-73). This time, the accompanying figures presented earlier in the brass are repeated in the woodwinds and the features previously in the woodwinds are now in the high brass (see Figure 11).

Figure 11: Mvt. 1, m.71-78

The image displays a musical score for measures 71 through 78 of the first movement. The score is arranged in a standard orchestral format with multiple staves. The instruments listed on the left are Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Bassoon (Bsn.), B♭ Clarinet 1 (B♭ Cl. 1), B♭ Clarinet 2 (B♭ Cl. 2), B♭ Clarinet 3 (B♭ Cl. 3), Bass Clarinet (B. Cl.), Alto Saxophone 1 (A. Sax. 1), Alto Saxophone 2 (A. Sax. 2), Tenor Saxophone (T. Sax.), and Baritone Saxophone (B. Sax.). The woodwind parts (Fl., Ob., Bsn., B♭ Cl. 1-3, B. Cl., A. Sax. 1-2, T. Sax., B. Sax.) are the primary focus, showing a complex rhythmic and melodic texture. The brass parts (Bsn., B♭ Cl. 1-3, B. Cl., A. Sax. 1-2, T. Sax., B. Sax.) provide harmonic support and rhythmic accompaniment. The score includes various musical notations such as notes, rests, dynamics (e.g., *f*, *ff*), and articulation marks (accents, slurs).

The bridge material between two tonal centers from before (m.52 & 56) are used again in measures 84 and 85; this time in augmentation to signal the end of this

short recapitulation of material. Then there is a short transition of seven measures that leads to a repeat of the original theme.

The first heroic theme of this movement (from measure nine) is brought back here in measure 92 to provide closure to the movement and to represent my daughter's resoluteness after a chaotic time of her life. The theme is expanded into additional instruments for a fuller scoring.

At measure 100 the music presents one last deviation that brings back the triplet motives stated many times during the movement. They are emphasized at the eighth note, quarter note, and half note durational level. The last motivic material is from the middle section of the movement (m. 49) and is presented in the high voices (piccolo, oboe, clarinet, trumpet, and bells) to clearly announce the last statement. The movement ends with elongated chords moving upward in pitch to help amplify the final statement.

This movement provides a glimpse into my oldest daughter's final teenage years, and the movements taken as a whole provide a snapshot of my children's personalities.

CHAPTER 4

Creation Of The Video

The video project that resulted from this thesis study was inspired by Eric Whitacre's Virtual Choir. Since his project was the inspiration for this thesis, I used it as my primary model in deciding how to create and manage such an undertaking. Whitacre's premise was that he could get individuals from all around the globe to video themselves singing one of the individual parts of a selected piece and then combine the audio and video to produce a collective he called a "virtual choir." I wanted to basically use the same premise and achieve a finished product featuring a group of individuals playing their parts on their respective instruments as part of a wind band setting.

Preparation Of Score And Crowdsourcing

The first step was to produce a piece of music that could be utilized for this project. I began a three-movement piece based on personality characteristics of my own children (discussed in detail in the previous chapters). Once this was completed, I had to determine how to find players. One of the ways that Whitacre was able to crowdsource his ensemble was through the help of social media. I decided to use the same tools.

On Facebook, I am a part of the Band Director's Group, an international group of band directors that use the forum to discuss problems and practices common to the field of teaching wind band. This is where I began my search for players. Nearly all, if not all, of the members of this group are people who have played in a college wind ensemble and know how to play the difficulty level of the piece I had written (this piece falls into the hard grade four or grade five range). I made a simple post to the message board about working on my master's thesis and doing a project that included social media (see Figure 12).

Figure 12: Initial Facebook Post



I explained that participants would have to video themselves playing a piece that I had written and submit it to me via Dropbox to be combined with others' videos to make a product. I told them it would be like Whitacre's Virtual

Choir. Many of them watched the video and would understand the premise. I then waited to see the response. Within six hours I had over 50 replies asking to be involved, In just a few days, that number had grown to over 230 potential participants. I stopped looking for players at that point. I was afraid if I asked anywhere else that there would be so many respondents that I would have difficulty handling such a big group. This is in stark contrast to my initial concerns. I thought I would be scouring for players because I was unsure of my social media “reach.” This result eased my anxiety greatly.

The next part was labor intensive. I went through each of the 230 names and private-messaged them all one at a time requesting their current email addresses so we could communicate more easily. As they responded, I made an excel spreadsheet of the names, instrument part, and hometown. Many of the respondents were very cordial and interested in this educationally based opportunity. I told them if they submitted files they would be included in the credits for having been involved with the project.

My next task was to prepare the individual music parts for distribution, so I went through all three movements of my piece and tried to make them ready for use by an ensemble. Each part had to first be extracted from the score and then formatted in a way that would make it as easy as possible on the player to read (see Figure 13).

Figure 13: Example Page of Extracted Part

Clarinet in B \flat 2

Complex Personalities
(Mvt.3 - "Big Man")

Chris Kamerling

Spirito $\text{♩} = 146$

5

14

21

24

32

43

47

57 **Adagio** $\text{♩} = 73$
(♩-♩)

f *fp* *ff* *f < ff*

f *ff*

f *ff* *p*

f *ff*

f *ff*

mp

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There were over 25 parts that had to be extracted from three different scores (3 movements). This was close to ten minutes worth of music and took some time to edit.

Instructional And Participant Videos

The next task I had to complete was to prepare a “virtual director video” that explained how a participant should record the video and showed me conducting while a click and MIDI track played in the background.

I started the video with PowerPoint slides explaining the process and then gave a countdown in to the start of the piece. I made sure to include a “sync tone” for every video. Players were instructed to make sure their videos included the tone so that all videos could be synced together at a later date. Each player was directed to prepare the camera to record themselves, put on headphones, and following the countdown, play along with the accompaniment track and watch me directing. After recording, they were instructed to email me and I would send them a Dropbox link where they could upload videos.

After making all of the needed materials, I grouped players into their desired instruments in the excel spreadsheet. Parts were assigned randomly instead of a lengthy audition process. Some instruments did not split, but clarinet, alto saxophone, trumpet, horn, trombone and percussion all had multiple parts to be assigned. The most difficult to assign was the percussion (due to availability

of instruments for each player; for example, some players did not have access to a 5-octave marimba) and so I requested that the players give me a preference of assignments. After grouping everyone, I sent out emails with PDF copies of parts and links to the YouTube virtual-director videos for each movement. I told the potential participants that I needed their videos back in around six to eight weeks and assigned a particular day.

The week that the videos were due was very busy. I received many emails asking questions about formatting and (for some) the need for an extension on the due date. Several of the band directors in the northeast part of the United States were dealing with huge amounts of snowfall and were able to stay at home and get the videos done, but some were dealing with power outages at the same time which precluded them from being able to finish. I tried to adjust and cater to any problems. I made sure to remind myself that all of these participants were volunteers and I was very appreciative of their efforts, whether or not they actually were able to submit videos. By two weeks following the due date, I had almost all of the videos that were going to be submitted. I did, in certain cases, have to contact someone who had submitted on one instrument and ask if they could record another part that had not been submitted so that all parts were covered. It ended up being approximately 80 participants that were able to submit materials for use in the project. The instrumentation was slightly

unbalanced, but I was confident that I could fix that during the mix-down portion of the video project (see Figure 14).

Figure 14: Final Instrumentation Totals

Final Instrumentation for Virtual Band 1.0	
Piccolo	– 1
Flute	– 7
Oboe	– 1
Clarinet	– 8
Bass Clarinet	– 1
Bassoon	– 4
Alto Saxophone	– 5
Tenor Saxophone	– 2
Baritone Saxophone	– 3
Trumpet	– 8
French Horn	– 3
Trombone	– 11
Euphonium	– 7
Tuba	– 4
Percussion	– 12

Preparation Of Audio Track

The next portion of the video concerned preparing the audio track. This was one of the most important factors in my mind moving forward. If the audio sounded bad, the premise of my thesis might be in question. I started by lifting the audio track from each video and making it into an independent WAV file. I then imported each file into Adobe Audition starting with the piccolo and ending with percussion. I also imported the click track from the virtual conductor video

that I could use for sync points. I went through each audio file at the sample level and made sure that each note of the piece occurred at the approximate moment it should. I looked at the sample and moved the sound either back or forward in time so that it would fall correctly against the sync track. This was extremely difficult at times (especially when trying to align notes that do not fall on the beat). This work took a large amount of time; several weeks in fact. When I finished the alignment, I went back and ran each individual track through a real time “auto-tune” application that was set on a chromatic setting. I initially felt like this was necessary to counter-act the fact that all the players were unable to sit next to each other and tune as you would in a live setting. I proceeded to the next step of the process without really considering the full ramifications of this act (I look at this later in the chapter). Next, I used the balance feature for each track in Adobe Audition to place the instrument in the sound field so it gave the illusion of an ensemble with instruments seated in different places. I also adjusted the gain for each track to correspond generally with W. Francis McBeth’s balance pyramid which is a widely used pedagogical tool in the concert band world for balancing the instrument families.¹ The last thing I did was to feed each of the individual tracks into a master audio track that I then sent through a reverb application to add a depth of sound which could approximate a concert hall setting. This was

¹ Julia Reynolds, “in Memory of a Legend: Dr. William Francis Mcbeth,” PhiBetaMu.org, accessed June 6, 2018, https://phibetamu.org/outstanding-bandmasters/wp-content/uploads/2012/McBethWilliamF_memorial2012.pdf.

difficult to achieve because I was dealing with live recordings of instruments in different size rooms then mixed together and made to sound like all the instruments were in a concert hall. I did the best I could just listening, going back and adjusting, and then listening again until I arrived at an acceptable sound to my ear. Once the final product was there and I had a discussion with my thesis advisor, the question of whether autotune should have been used or not arose. I see both sides of this issue. On one hand the autotune affects the individual player's performance in a corrective way. I can see how this might be objectionable. Autotuning is a controversial tool in the creation of music. It's sometimes considered "cheating" because the player's sound is artificially corrected. The individual performance is "perfected" in a way that would not occur naturally. My argument in this instance is that nothing that has been done to the audio for this project could occur naturally in a live wind ensemble setting. I think in trying to hold to these practices that approximate the wind band, we try to compare them. They are not the same. The virtual wind ensemble and a live wind ensemble cannot and will never be the same thing or even on an equal footing. I'm not saying that one is better than the other. Virtual ensembles do not have the live setting which allows a wind band to become a single entity under the conductor's baton, however, live wind ensembles do not have the ability to edit the performance of individual parts the way that a virtual ensemble does. These differences will have to be left as an area for further study.

When I took each individual track and lined the notes up to the beat, I corrected something to a degree that could not be achieved live. If a live ensemble comes in a millisecond early, it happens, passes, and is just a part of the performance. I took the steps of aligning the individual notes to the beat to correct for the fact that this was not a live ensemble.

When I took each instrument and adjusted their balance in the mix, I corrected for the fact that it was not a live ensemble. When I adjusted the gain on each track to achieve a closer balance to the wind ensemble, I corrected for the fact it was not a live ensemble. Finally, I compared the two versions (one with and one without autotune) and there was definitely a difference, but not one that I think could have devastated the sound of the recording. Whether one thinks autotune should be used or not, the virtual wind ensemble cannot be compared to a live wind ensemble. The amount that you should correct a virtual ensemble therefore is a matter of degree and individual discretion.

Video Compilation

Next in the process was to begin to design the individual videos into some form that would be interesting visually and also feature each video that I received. The first task was to make all the videos the same resolution and aspect ratio. Most of the videos were already 1080p (1920 pixels by 1080 pixels),

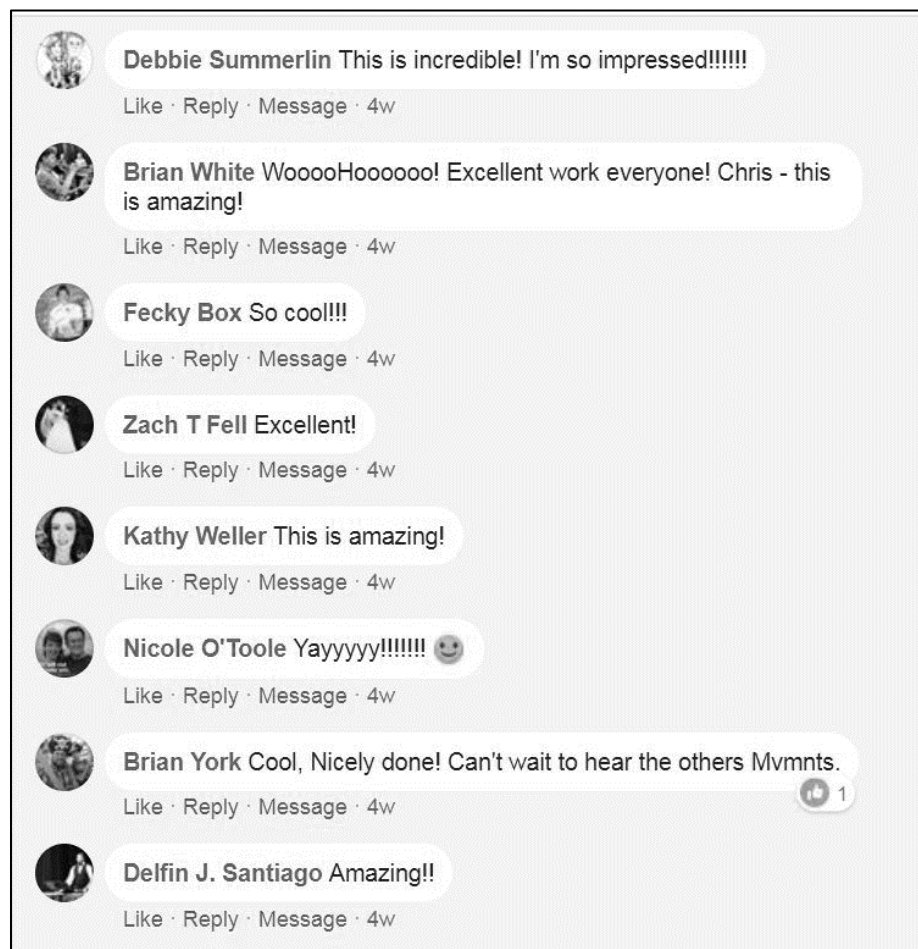
but some were not. I went into Adobe Premiere Pro and resampled the videos to the correct resolution and aspect ratio.

My first idea was to arrange all the videos on the screen like an ensemble might be seated in a concert setting, but after speaking with my thesis advisor, we determined that it might be more appropriate to not go that route. I was attempting to do something new and this would be trying to take that new thing and make it conform to an old paradigm. I decided that I would make the videos come up in a grid that would change at strategic points in the music. The grid made up a video wall that would be five videos wide and four videos deep. I was importing 1080p videos into a 1080p project, so I had to reduce the source files to approximately 15 percent of their original size. I decided to go through the musical score and decide where to change out the players in the video. For each grid, I showed the videos of the instruments that were being featured during that time in the music. I ended up having over 15 points at which the players would change in the video for the first movement. I also added a video of me conducting (from the virtual-conductor video) to the other instruments to add some variety. I ended up setting up each group that changed and creating a video of that group performing the entire movement. I then imported each of those videos into another project and edited the points where it changed from one group to another. After all the videos had been synced visually, I muted the original audio of the videos and replaced it with the complete recording that had

been mixed at a separate time. Next, I performed a final sync of the video to the new audio before rendering the final video. The final video was placed on YouTube and made available to the participants and the general public through Facebook.

The response was very positive from social media, both in the Band Director's Group and the newly formed Virtual Band 2018 group (see Figure 15).

Figure 15: Social Media Response



I will continue working on videos for the other movements and distribute them on social media as well. Although it is a significantly different way of approaching the performance of a piece of music, I believe the virtual band format can accomplish a very good recording and presentation of serious concert literature.

CHAPTER 5

Reflection

As I look back on my thesis project, I feel I accomplished the goals as I set them forth in the proposal. My initial premise was to see if I could create a new piece of music for wind ensemble and bring it to life via a virtual ensemble. On the composition side, I have, through diligent work advanced my composition skills considerably over two years. This particular composition has employed a much less restrictive harmonic palette than I would have used in previous years. I also use multiple meters and rhythmic patterns that I would have been uncomfortable with in the past. I do feel my compositions could use more development material. I often introduce themes or motives and too quickly move away from them (sometimes not coming back to them). I would like to see my compositions exemplify my in-depth understanding of a motive or melody and exploit the different aspects of it to a much greater detail. I think about Beethoven's "fate" motive from his 5th symphony. He was able to incorporate that motive in almost every aspect of that movement of the symphony and to some degree throughout the other movements as well. His level of excellence inspires my continued commitment to composition. If I have learned one thing through this two-year process, it is that there is no one right way to approach

composition. While there are many different tools to use, the question is what tools and methods should be used, and I have more “tools” in my “tool belt” as a composer now than I did when I first started my Graduate studies. Although I still have questions about the nature of composition, it is a study that begins anew every time we initiate the process

In looking at the video production process, I feel there are definite areas where I can improve, although the way this project proceeded worked very well. As I look at the way I prepared the composition for the players, I think it would help if I broke the composition down to smaller bites for them to play at a time. Each player wanted to perform their part to the best of their abilities, but I found many of them telling me that they got all the way to the end of the movement and then had a mistake, so they had to go and rerecord the entire thing. When looking at the process I used to compile the recordings in Adobe Audition, I could certainly cut up the movement into smaller, more manageable bites on the recording end. This process, however, prevents the player from gaining an overall sense of the work. In a wind ensemble that meets physically, a player may make a mistake, but it passes instantaneously and there is no ability to go back and fix it. With recorded media, the perfectionist in the player comes out and some may go back repeatedly to get the best possible take before going on. This can have positive or negative aspects. You certainly get a more exact product in the end, but the energy can be drained from a piece with repetition

after repetition. The idea of breaking it down into smaller bites for the players is a decision I would make based on the amount of work many of these players put into their submissions. A piece broken down, would allow more people confidence in their approach to the composition, and thus would result in a more successful player.

Another aspect of my project is the social media connections that occur during its process. I can say with absolute certainty that a person could be kept quite busy exploring all the possibilities with the social media aspect of this project. Promoting the composition, crowdsourcing, founding a social media group for players, answering questions and comments – it could certainly become a full-time job. Frequently, I would communicate with players at all hours. I equate it to being a music librarian for an active musical ensemble. A person needs to interact with all members of the ensemble and take care of any questions that arise in connection with the music. It certainly has proven to be a fruitful source in regards to getting the composition exposure with band directors. Through the crowdsourcing, I was able to compile 250 email addresses of directors working in all levels of music (novice to advanced). I hope to continue communicating with the directors throughout the completion of the project and the music's eventual publication.

In regards to the audio compilation, I feel the approach I took has worked out rather well. I have produced a good-sounding product using the format

chosen, and the product, although not sounding exactly like a live wind ensemble, does have similar characteristics. Both products result from a combined performance of individuals, but the process to achieve that is very different in each situation. Each one presents its own obstacles which must be overcome. I realize that this endeavor was never going to produce a live wind ensemble because of its inherent differences, but it is definitely a musical product that stands on its own merit.

I think the idea of breaking the composition down into more manageable bites, is something that could add some work for the audio aspect of the project. While it would take multiple clips to produce one line of individual music, that would be a more exact line with fewer mistakes. The process I chose for the video production, worked out well, but I think it could be much more involved and creative as I become more familiar with the Adobe Premiere Pro software. While there are certainly areas in which I could improve, I feel the video and audio of this project was a great success. As a composer in this modern period of technology, I know my newly-learned skill set in video editing will continue to prove important in future endeavors. Increasingly, art music utilizes a visual element, and I believe that trend will continue.

Finally, as I look back at the entire project, I am very proud of the product I was able to create. The idea of a virtual group had been done before, but not to this level of complexity for instrumental music. My study of this area of musical

interest has been a very enjoyable journey, and I hope to continue looking into social media and its connection with music. I have even been approached by some of the players to do another project. I look forward to the experience.

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VITA

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