

“Classical Instruments in Modern Day Music”

An Honors Thesis

by

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We hereby approve the Honors Thesis of

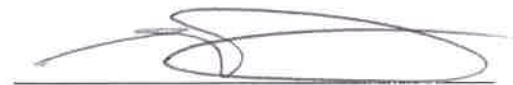
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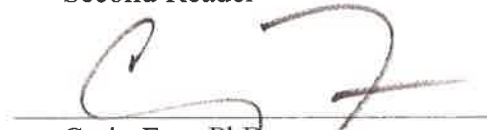
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Music has adapted and grown with the advancement of technology and the addition of new and improved instrumentation. Instruments are being used now in ways never thought possible before. Rules in music are meant to be broken, which is what makes it so unique. Musicians stretch the boundaries with not only what they play but how they play, their style as well. They are crossing genres, mixing techniques, and turning their sound into something entirely new. Artists stretch the boundaries everyday and one way they do is by performing songs in different genres, combining the two extremes, in doing so they create a whole new sound.

Most popular music today is played with an entire band, utilizing a drummer, bassist, pianist, guitarist, vocalist, and more. With all those different instruments there are a variety of sounds that can be created and utilized. There are even sounds that can be electronically produced to achieve a certain effect. When listening to remixes and covers of popular songs, artists recreate the original while putting their own spin on the song, whether that be adding parts, taking away notes, or changing the arrangement into something entirely different. One way to change the timbre of the song is to play all the parts of the song on one instrument.

1. The Solo Act

Taking a song, breaking down each part, and altering it into something that can be played on one instrument can completely change the sound of the song. First, you must break down each instrument's original part and make sure that each part is in the range of the instrument, changing any notes if needed. A tricky part can be figuring out how to get similar sounds of the various instruments like drums only on

one instrument. In order to achieve the desired sound the musician may need to play their instrument in an unconventional way. For instance, I have seen videos of street violinists playing every part to a song on their violin, which included hitting the strings or body of the instrument with their hand in order to achieve the drum-like sounds. Anything is possible as long as you are not damaging the instrument in any way. Playing on one instrument gives the song a whole new sound and appeals to a wider audience.

I decided to play the song “Viva la Vida” by Coldplay on one instrument because when the song came out in 2008 I listened to it all the time, it was easily a favorite of mine. I had bought a guitar book with the music and learned how to play the melody on my guitar. I have kept the book all these years and decided to relive the song’s glory and learn how to play it one more time but with a better understanding of music theory and history. Learning every part to a song and being able to put it together on only one instrument has its challenges. It takes time and rhythms that may have sounded good on the original song may not sound the same on this new version with only one instrument. On the other hand, different parts may need to be added to achieve a desired sound found on the original.

Playing one instrument also limits the number of musicians needed. It is easier to be a solo act than to have to schedule around multiple other musicians. It also gives solo acts another audience to appeal to; for violinists and string performers in general, classical style has been the music of choice. Playing modern songs opens up a whole new genre and audience. It broadens the horizon for performers and keeps them up to date on what’s popular today. More and more

artists are branching out and leaving their groups to become a solo act. They will continue to have some of the fan base they originally had but will gain a wider audience with this new sound of being a solo act.

Classical instruments are making a comeback with more and more artists using them in their songs. Country artists like Carrie Underwood, Rascal Flatts, and Keith Urban, to name a few, have used fiddle players in their recent songs. In February of 2016 I was able to attend the Carrie Underwood concert at PPG Paints Arena. During her performance she introduced each of her band members; one was a back-up singer and fiddler. I was unable to take my eyes off of the fiddle player all night. The fact that people can actually do that as a profession and make money is incredible. If I focused more on performing over the years I would have wanted to have that job, to be able to perform on stage and to experience it all. Watching that performance presented me with a new outlook on string instruments in popular music and pushed me even further to learn how to accomplish that. It helped me to take the leap and purchase an electric violin, pushing me one step further to being able to play that style of music.

2. Breaking the Boundaries

When starting out most string musicians are classically trained and from then on they can branch out and learn other styles of music. They are not usually taught to play popular songs. The style of music that one would expect violinists to perform is music that follows the rules found in music theory. This style helps

musicians to learn the different scales and note values that are there. Today's music is all about breaking boundaries and classically trained musicians are no strangers to the idea, they are using the technology at hand and performing songs outside of their comfort zone.

Several artists are using fiddlers in their songs and this is bringing traditionally classical instruments back into the spotlight and bringing a new audience along too. People who go and see these musicians perform live with fiddlers find a new appreciation for the sound and want to learn more. It is not only fiddle players but also stringed instruments in general; cellos are being used more often as well as the string bass. Infusing modern music with classical instruments is creating a new genre for the instruments to grow along with the help of modern technology.

Electric violins and cellos were not very common until recently and now they are used all over the world. The electric violin first came out in the 1930's and had a megaphone attached to the body of the instrument. In the 1940's-1950's the electric violin had a DeArmond attached to it, which was similar to attaching a microphone to the violin. It was not until the 1960's when the electric violin saw the rise of rock that the first solid body electric violin was produced (Prato, 2016). Today, people post videos daily of themselves playing on their electric violins. Making the instruments electric provides a whole new spectrum for playing. Now musicians can hook up to an amp to amplify their sound, they can alter it using pedals, thus creating a whole new sound.

An example of this phenomenon in action is the group 2Cellos, comprised of two young Croatian cellists Luka Sulic and Stjepan Hauser who have taken the world by storm with their vast repertoire and unique style of performance. They play anything from the classics like Bach and Vivaldi to AC/DC. I stumbled upon their version of Michael Jackson's "Smooth Criminal," which brought them to fame in 2011. They have since performed on several television series like Glee and the Ellen DeGeneres Show. Their main focus is on live performance and have sold out tours across the U.S. and more. Sulic and Hauser have won individual awards and have worked along side widely renowned musicians who have helped mold them into the duo they are. Over the years they have collaborated with numerous artists and have released a couple albums, which charted high on the classical and crossover charts (Biography). Their style of playing the cello has brought classical instruments and classical elements to the forefront of popular music today.

Popular music is changing; it is not what it used to be in the past nor is it today what it will be in the future. Music is constantly changing with new musicians being discovered, new sounds being created, and new technology emerging. Music adapts to the time and what is popular now will no longer be popular in ten years so it must adapt, it must change. The slightest change can make a huge difference. The popularity of different genres come and go but music remains on the forefront.

3. Crossover Music

Crossover music that has emerged with roots from a mix of two or more existing genres has become more prominent and is gaining a wider audience. Some examples of this genre are classical crossover, country crossover, Latin crossover, and Christian crossover. What qualifies music into the crossover genre is appealing to different types of audience by appearing on multiple record tracks of the different musical styles. "Crossover music is the elephant in classical music's narrow living room. It takes up an awful lot of space, nobody quite knows what to do with it, and most people see only a piece of the whole" (Midgett). Classical crossover occurs when a classically trained artist performs a modern song but may also refer to popular musicians performing pieces in a classical manner. The classical side may contain operatic elements or symphonic melodies while the popular side contains rock elements, Latin influences, pop, and so on.

Cover songs fall into this category of crossover music. By definition a cover song is, "a recording of a song by a singer, instrumentalist, or group other than the original performer or composer" (Cover version). For example, when a violinist makes a cover of a popular song that is considered part of the crossover genre. Also, when a popular artist creates a cover of an originally classical piece that is considered crossover. The crossover genre is made up of cover songs but there are songs that originate in this genre as well. The crossover genre is a mix of original music as well as cover songs. Classically trained artists may start to perform original work that falls under the category of popular music while they may also choose to perform cover songs. The same can be said for musicians in popular music, both are

forms of classical crossover. Cover songs fall under the genre of classical crossover but not all the songs considered to be classical crossover are cover songs.

This subgenre started gaining popularity in the 1990's and even acquired its own Billboard chart. Aiding in the popularity of this subgenre is the use of the music in films, advertisements, and even in sporting events. Classical artists that fall under this category perform popular music such as Broadway show tunes. Television shows like America's Got Talent or Britain's Got Talent have produced a wide variety of acts including crossover musicians and have helped gain the popularity in this certain style of music (Classical Crossover Music Genre Overview). From these shows we have gained musicians like Susan Boyle and Jackie Evancho who exemplify the crossover genre.

I became fascinated with music at a young age; I was always listening to music. When the opportunity arrived, I jumped at the chance to learn how to create music, and to learn how to play an instrument. I was only ten when I carefully chose the viola; I adored the sound of the strings including the thickness of the lower strings. I have always been fascinated with string instruments, not only the viola, but also the smooth sound of the cello and the high pitches found on the violin. In the past I would watch street performers and see them playing electric versions of these classical instruments. Watching these performances, along with how I was brought up in a musical household was what helped shape and mold me into the musician I am today. I decided to pursue music and try to make a living out of it because of the moments I was exposed to growing up, from singing in the church choir, to performing on stage, I wanted to continue this passion of mine. I have been

playing the viola for twelve years now, while taking private lessons and playing in local ensembles as well. The viola is my main instrument and my true passion in music and life.

Recently I have stumbled upon musicians like Lindsay Stirling and the group Pentatonix who utilize an electric violin and a cello respectively. I had seen multiple videos of musicians playing electric violins and this prompted me to buy my five string. Lindsey Stirling has made a lasting impact, while she is not only a musician but a dancer and composer as well. She plays popular music covers on her violin as she dances. She performs in live settings as well as in music videos on her YouTube channel. She plays a wide variety of genres including electronic, classical dub step, and crossover. She started gaining popularity in 2007 and has since performed with Pentatonix, Tyler Ward, Christina Perri, and more (About). Lindsey is breaking the boundaries of violinists everywhere; she is proving that the violin is a versatile instrument. It can play whatever genre of music the musician wishes to perform. Music is a form of expression and should not hold back the musician.

Making their debut on NBC's hit television show the Sing Off, winning that season, receiving the cash prize, and a recording contract with Sony Music is the group Pentatonix. They are an acapella group from Arlington, Texas. Ever since they won, they have had multiple television appearances and performed on several stages all over the U.S. They found their percussionist, Kevin Olusola, online from his beat boxing and cello videos. He would play a piece on the cello while simultaneously beat boxing. In some of their recent videos they utilize the cello playing and it sounds beautiful with their voices. The group is a mixture of hip-hop,

pop, classical, reggae, electro, and dub step giving them a wider range of an audience (Pentatonix Official Website). They not only dabble in classical crossover but several other genres as previously mentioned. Pentatonix shows how diverse a group can be and how all music is relatable.

After watching multiple videos online and seeing these musicians perform on television I decided to purchase a five string electric violin along with an amp. Seeing other musicians perform like this, I always wanted to give it a try but never had the right tools to execute it. I have never played the violin before but I only had to learn one string, the high E string. The difficult part was adjusting to the spacing between the strings. Adding one string from four to five makes a huge difference. The neck of the instrument is wider and the strings are not necessarily further apart but as a whole you have a wider range of motion to play. Now, with one instrument, I could play a greater range of music with all the high notes I have wanted to play while still maintaining the low end as well. As I started my journey of picking a song, dissecting it, and breaking down each part to then learn on the violin, I began to realize just how difficult this process was going to be.

After practicing a while on the violin I was comfortable enough to tackle the song, "Viva la Vida" by Coldplay. As I began to learn all the parts I ordered a basic loop pedal with the intent to loop each part on top of one another for the recording. I began with the piano music and learned the music in chunks, like any other piece of music. When it came time to learn the chords I used the loop pedal to play the melody over top of them. Looking through the entire piece I began to question how the loop pedal would be effective when the chord progression changed. Another

challenging aspect was getting the timing exact with the pedal and each individual part. I decided to not use the loop pedal and instead layer the tracks on top of each other in ProTools. Overall, this would be easier and would sound better than rushing and trying to hit the pedal at the exact moment while still keeping the piece going. After writing out the different parts, to make it easier to read while practicing, I recorded the song along with the help of Jacob Urbanek, a fellow Commercial Music Technology major.

The week prior to recording I listened to several different versions of the song, just to see the different paths people took. Trying to get the song better into my head, I listened to everything from a one-man band performing “Viva la Vida” to 2Cellos performing it live, as well as various other ensembles (DavidGarrettVEVO). Inspired by the choices others made, I was ready to start creating my own rendition of the song. When it came time to record I got my violin ready along with my viola, planning to try both and see which one worked best. The viola would have a fuller and deeper sound with the hollow body while the violin would rely on the amp. I had been practicing the music on both instruments in anticipation of the recording process. No longer using the loop pedal but layering the tracks in ProTools would only require us to record small sections and repeat them for the different sections of the song. ProTools is the industry standard software for recording and what is used in our studio in Gallagher Hall. It is a digital audio workstation software that allows users to record sound, edit, and manipulate it for production purposes. To get a well-balanced sound Jake set up two pencil microphones in an X/Y pattern to get the room noise as well as a closer microphone, a KSM32, pointed towards the f holes of

my viola. An X/Y pattern is when the microphones are placed one on top of the other, forming an X with their capsules placed as close as possible. The microphones are placed in the center facing the sound source panned left and right. Being more comfortable on the viola, I was able to play all the notes easily with just needing to shift into higher positions on the strings. Changing my instrument did not change my overall idea of performing a song, originally meant for a full band to one instrument. If I had more time to perfect using a loop pedal I would have preferred to go that route but I was pleasantly surprised at the quality I was able to get on my viola.

We recorded the song in sections, by breaking it up into the intro, verse, chorus, and interlude. Breaking it up made it easier to layer the sections; for instance the intro is a four-measure rhythm that is repeated and played throughout the majority of the song. We recorded those four measures and looped them to play throughout the entire song first. Then we moved to the first verse, took a few takes and went with the best version. The second and third verses are similar with the same notes and rhythms just with different lyrics. Therefore, I only needed to record that section once and just copy it for the third verse. I did the same with the chorus. I played it a few times, went with the best take and copied it wherever needed. To add more parts we decided to overlap the background rhythm with the section towards the end of the song, in the interlude, where the lyrics are repeated "oh" (Coldplay). Adding this counter-rhythm breaks up the constant background chords heard repeated throughout the song. The whole recording process took about two hours; Jake did the post-production work as well, he mixed and mastered the recording.

This project is the first cover song I have ever created. I have tried to turn poems into songs but that process is challenging. It is much easier to create a cover of a song, finding a song you enjoy and making your own rendition of the song is simple in comparison. Creating a cover song gives musicians a chance to take a song that has already been created and turn it into something new. For example if ten musicians would individually make a cover song using the same original song, all ten covers would turn out differently. It's surprising all the different opinions people have on the same thing. One musician may think to add a counter melody while another may want to add an instrumental section; it all depends on each person's point of view of the song.

4. Limitations

My original idea has changed multiple times throughout this whole process but my objective has remained the same. My plan to perform an entire song, originally meant for a full band, on one instrument was accomplished. I hit a few bumps in the road but have adapted and am satisfied with the outcome. One aspect I did not account for was the various sounds of the drums. To try and articulate every different type of sound a drum kit can make on another instrument is challenging. One must incorporate not only the snare and bass drum sound but also account for the high hats and cymbals. It was tricky to try and figure out how to achieve the necessary sounds for the song. If I were to do this all over I would have given myself more time to mess around and see how to produce the vast sounds of the drum set on a violin.

The next time I try something similar to this concept, of taking a song and playing each instrument's part on a single instrument, I'd like to add my own style to it as well. This time around I was more focused on getting the necessary notes and less focused on adding additional rhythms. The addition of new rhythms can make the song stand out in a way that it did not before. These new rhythms can accent a certain section or help bring a section to life. The more layers to a song the better. Taking apart each part to a song and playing it on one instrument can get tedious with similar sounds. Adding more layers helps break up the notes and gives the song intricate rhythms and different sounds to listen for. For instance, on the violin the musician can use their bow on the strings giving this broad sound. They could also pluck the strings with their finger and give a hard and distinct sound. Another way of getting noise out of a violin is to tap the neck or body of the instrument. If I had taken more time to figure out all the different methods of producing sound on a violin then my version of "Viva la Vida" would have been more unique.

In the future I plan to utilize my loop pedal more often and to get accustomed to performing with it. This was the first time I tried to perform with the loop pedal and I was not as accustomed to using it. Giving myself more time to practice using the pedal I hope to be comfortable performing with it in the near future. I hope to continue this process of breaking a song down and performing it on one instrument. I like the sound it gets and the fact that a single person can play an entire song by looping each part on top of the other amazes me. Overall this song was a great option to choose for this project. With music constantly changing and adapting to the times, musicians need to stay up to date with the latest trends in order to

maintain an audience. The crossover genre has made a huge impact on today's music and will continue to impact music in the future.

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