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Considerations for Recording and Editing Classical Music in an Era of Popular Music Dominance

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Andrew Earl Riehle
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Background

As the structure of the music industry changes and arts programs steadily leave public school systems, we as musicians and technicians must collaborate and find a better way to share our craft with new audiences. In order to better market classical music and engender an appreciation by the next generation of audiences, we must better adapt to the on-demand world and develop new ways to capture and process music that, until recently, has been largely appreciated in a live concert setting. More and more, classical music is setting the mood as the anthem in major blockbuster films and being sampled and reused by more contemporary artists as the basis for new music. Recent examples include “Bittersweet Symphony” by The Verve, “Road to Joy” by Bright Eyes, “Ridin’ Solo” Jason DeRulo, and many more. New York Times journalist Alex Ross explains this complex relationship saying, “...some of the liveliest reactions to contemporary classical music have come from the pop arena, roughly defined. The microtonal tunics of Sonic Youth, the opulent harmonic designs of Radiohead... All these carry on the long-running conversation of classical and popular traditions” (Ross, 2008, pg. 590). Additionally, pop music contains elements of art song tradition made popular during the romantic era. The same stories being told during that time period are still being told today, just with updated instrumentation and modern language. However, when listening to classical radio in the car or at home, broadcast quality is often inferior to that of a commercial recording. Furthermore, young people are becoming more and more likely to listen to music on laptop speakers or cheap ear buds, neither of which is acceptable for enjoying a classical music recording. Much of this transition is
attributable to a shift in the view of ownership of music. Many college students own little or no music of their own and turn to streaming services such as Spotify or YouTube when looking to listen to their favorite music. These outlets, especially YouTube, offer a much lower resolution version of the original studio recording that much of the population has come to accept as the standard. Additionally, when music is transferred to mobile devices, quality is again compromised by compression software in an attempt to fit as many files as possible onto a limited amount of memory.

The question arises then, what does the label “classical music” mean in our society? What constitutes something as being part of popular music or classical music? James Parakilas explains this in the Journal of Musicology saying, “To be sure, “classical” music is different from “popular” music in crucial and obvious ways, most of it was composed long ago. Audiences, as a result, almost never hear it performed by its composer. Those who perform it and those who discuss it constantly refer to its score. Its audience is by and large elite” (Parakilas, 1984, p. 2). This statement brings to light a problem in our current society. Education of young people to appreciate and support classical music and art is dwindling, causing a rift in the cultural experiences afforded to the next generation. The first step in improving the situation is to make sure that the genre is readily available to anyone that should want to learn about it or experience it for themselves. Parakilas goes on to say:

The ways in which listeners become familiar with classical and popular music are likewise balanced. Beethoven’s most fervent devotees do not often listen to one symphony over and over without a break, the way teenagers typically listen to a new rock song. But
many people listen to the same Beethoven symphony over and over in
the course of their lives. The rock song has one kind of popularity
because it is current; the symphony has another kind because it is
classic, because it never becomes dated. (Parakilas, 1984, pg. 2)
The problem with Parakilas’s rationale is that he does not seem concerned with the
difficulty of continuing to have audiences interested in the classics. Classical
recordings are, at best, enjoyed by a niche audience of listeners, who also support
the music by attending live performances. These patrons of the arts will not be
around forever to continue financially supporting the genre and thus there needs to
be a heightened importance placed on continuing and revitalizing the history and
culture within classical music.

I have been in communication with Andrew Doe, COO of the Naxos Music
Group, a world leader in sales of classical music recordings and distribution. Mr.
Doe explained that his company is seeking new forms of audio compression
specifically for classical music in order to standardize the quality of their recordings.
Classical music has such a large dynamic and tonal range that it is very difficult to
make recordings ready for our mobile technological world without sacrificing some
quality in the product. The 16-bit compact disc has a theoretical dynamic range of
about 96 decibels (dB). Digital audio with 20-bit digitization is theoretically capable
of a 120 dB dynamic range; similarly, 24-bit digital audio calculates to 144 dB
dynamic range. Popular music typically has a dynamic range within this maximum
of level of 6 to 10 dB, with some forms of music having as little as 1 dB or with
classical 15 dB or more. The trouble with capturing classical music on a compact
disc is that many times an orchestra or similar performance will have a dynamic
range greater than 96 dB and thus must be processed in order for it to be transmitted properly upon playback. As an executive at a major classical music label, Doe is very concerned about what the next step is to attract a new generation of consumers to recordings with such great dynamic variation. Therefore, it is imperative to determine the ideal situation for capturing and reproducing a classical performance, which contains such intense emotion through extreme dynamics, rich tone colors, flowing melody, and great nuance and subtlety. Ultimately, the recording of a classical work must mirror the technological advancements of the past few decades, while still maintaining the organic sense of a live performer standing in front of a captive audience.

One recent success story has come from the Metropolitan Opera HD (High Definition) movie theater broadcast series, now in their fourth season. Although the opera company is not trying to replace the experience of being in the seats of a live performance in New York City, they are expanding the viewership of their productions and educating a broader audience for a fraction of the cost. The viewership for these broadcasts has grown steadily from 350,000 in its debut season of 2006, offering six transmissions, to 2.2 million viewers spread out over 9 transmissions last year. This turnout has surprised even the executives at "The Met," "It has been successful beyond what anyone imagined, including me," says Metropolitan Opera general manager, Peter Gelb. I personally have seen two broadcasts since the series began and have been blown away both times by the sheer quality and impact that the broadcasts have. An article in the journal Opera News speaks to the production aspects and logistics of the project, which turns out
to be of particular relevance to this study. The production managers were tasked with creating a product that was stunning to the movie theater audience as well as unobtrusive to the live audience physically at “The Met.” This was achieved by using 14 moving cameras and a host of pickup microphones all hidden from sight of the live audience. Although the product is nothing in comparison with the experience of being at a live performance in New York, it has opened up the opportunity for a whole new audience to appreciate opera.

Due to the increasing success of its broadcasts over the past few years, The Metropolitan Opera has been able to increase the number of theaters worldwide in which it can offer the HD service. Each season has brought in nearly $1 million in revenue, not sizable considering “The Met’s” $271 million dollar annual budget, but still a success nonetheless because of the amount of people who are now able to experience their award-winning performances. However, the advantages of the HD experience are not limited to the audience. Countless performers have attested to the positive attributes of being on camera in addition to being in front of the live crowd. Singers such as Reneé Fleming, Elina Garanca, and Anna Netrebko have all spoken very highly of the HD broadcasts. From their perspective, it allows them a chance to showcase the nuance of their performance and to be able to use more subtle motions to express their character. There is nothing like a front row seat at “The Met,” but a seat at one of the HD shows comes closer than anything else to giving the viewer the best possible recreation of live theater.

In addition to being a great technological achievement, these broadcasts may also help to increase the longevity of an art form that has otherwise become aged
and outdated in the eyes of today's society. An aging clientele getting dolled up to see a classical performance is hardly an attractive activity in the eyes of today's youth. However, catching a live broadcast in crystal clear HD, complete with subtitles and intermission interviews is definitely a step in the right direction to breathing new life into some of our most timeless stories.

For many years, classical recordings have remained almost untouched by the hands of engineers in terms of effects, post-recording processing, and editing in order to leave the recording uncolored from the original performance. The problem with this mindset is that it has left certain demographics of listeners disappointed by what they hear, especially younger audiences who have limited experience with the original live performance. Not everyone has a hi-fi playback system or a state of the art movie theater in which to enjoy the subtle nuances and booming finales of a string orchestra or opera performance in all of its glory. Even the highest quality classical recordings cannot be accurately represented if they are not played back on a system that can recreate all of the original frequencies and dynamic elements. A laptop speaker or low-end ear bud cannot possibly be able to vibrate with enough intensity for a double bass to sound as it is intended nor can the sharp attack of a crash cymbal be played at an acceptable amplitude without causing the speaker driver to distort from the effort. Furthermore, perhaps not everyone cares about quality when listening to recorded music. Part of the underlying issue here is a shift in the value of the musical performance in society's eyes. The quality of live performances by many artists today draws attention to the stark differences between the highly edited record album they have released and the performance
they can give in actuality without any help from studio engineers. In his book *Perfecting Sound Forever*, Greg Milner explains historically from where our affinity for studio production comes:

For genres like hip-hop and techno, “live” is a meaningless concept; what’s contained on the record is not a document of a real-time event because there never was a real-time event. An average radio pop song may have the structure of a self-contained performance, of musicians playing off one another but there is a good chance that none of these musicians were ever in the same room at the same time. (Milner, 2010, pg. 13)

In this way, Milner expresses the concern that today’s society perceives live performances as a representation of the recorded medium they are familiar with rather than the other way around. For many years after the emergence of recording technology at the turn of the 20th century, the goal of engineers had been to create a recording that sounded almost as good as the live performance. In the current era of recording techniques and consumption by the people, musicians are struggling to recreate the complexities of their own albums in front of fans who have fallen in love with their recorded material. I feel that through my research and the application of skills as both an emerging vocalist and recording engineer, I will reach a happy medium between the traditional performance practice and the modern digital age. It is imperative that classical music performance and recording move forward to meet the pace of modern culture and technology to attract new patrons of the classical art.
Method

For my research I sought to gauge the appreciation by college age respondents of a piece of German lieder in two recording environments. The chosen repertoire was “Das Lied von der Erde” written by Gustav Mahler in 1908. For the sake of the experiment I chose to utilize only movement three, Von der Jugend, and five, Der Trunkene im Frühling, as they are sung by the same voice and have varying musical styles. “Das Lied von der Erde” is based on settings of Chinese poetry translated into German for the sake of Mahler’s large-scale orchestration for two vocalists. This particular piece of music falls in the Romantic era of the classical repertory and features solo voice accompanied by piano. This piece was originally scored for full orchestra, but for the sake of simplifying the variables of the study, piano accompaniment works well to draw the ear to the details of the individual instruments rather than losing focus because there is an overwhelming amount taking place simultaneously. Traditional microphone configurations native to live and studio recording were used as follows:

Live – Eidson Duckwall Recital Hall at Butler University

Piano
9’ Steinway

Microphones
XY – Neumann KM184
-Placed 5 ft. above the stage surface and 5 feet in front of the performers just off the stage edge
Spaced Omni – M-Audio Solaris
-Placed 8 ft. from the floor in the fourth row of seats
Piano XY - Oktava MK-012
-Placed 12 in. above the hammers for attack presence

Recording Medium
Interface – Presonus Firestudio Project (Built in pre-amps)
DAW – Pro Tools 9
Studio – Aire Born Studios (Zionsville, IN)

Piano
Yamaha C-7

Microphones
Voice - Neumann U87
-Placed 2 ft. in front of the singer
Piano XY – Shure SM81
-Placed at the edge of the frame with lid on full stick
Piano Spaced Pair – Neumann KM84
-Placed at either edge of the music stand approx. 12 in. above the hammers

Recording Medium
Console – Neve V3-48 (Built in pre-amps)
Interface – Avid 192 I/O
DAW – Pro Tools 7

The live recording received very basic post-production to preserve the integrity of the original performance: each of the stereo pairs of microphones (Close XY, Spaced Omnidirectional, and Piano XY) were balanced proportionally to match the presence of the vocalist with the pianist and the stage sound with the hall sound picked up by the omnidirectional pair and then mixed down to a stereo master bus. All microphones received a fairly steep high-pass filter beginning at around 60 Hz to remove some unwanted air-conditioning rumble and general hall noise. Apart from balancing and adjusting equalization on the audio track, the only other processing the live recording received was a Waves L1 limiter on the master bus. This was also judiciously used and only attenuated 2 decibels at the climax of each lied. The studio recording, however, received considerably more processing to polish the performances and make the overall effect seem more like that of modern pop music. Drastic equalization on the vocalist was used to make the voice really “shimmer”
above the piano accompaniment, and light compression was utilized to lift the voice into the foreground of the mix. The piano sound was achieved by blending the 2 pairs of condenser microphones for a full but articulate sonic bed to sit under the solo vocalist. As a result of the close capture technique used, a rich sounding artificial reverb was needed to smooth transients and to create the illusion of a cohesive performance even though the musicians were in separate rooms when recording. Finally, a master bus limiter was used on this recording, attenuating as much as 6 decibels in some places. The edited recordings were then exported at CD resolution of 16-bit and 44.1 kHz sample rate.

From the final master recordings of each session a two-minute sample of both the third and fifth movements was assembled into another Pro Tools session for use with focus group discussions. Both the full length and sample length recordings are included on the enclosed CD (Ex. 1). The two focus groups used in this project consisted of two very different demographics of Butler University students. The first group consisted of 12 undergraduates of all class standings studying voice as a major or emphasis within their related music major. The other was a group of 16 underclassmen satisfying a university core credit requirement in a “Survey of the Recording Industry” seminar. Most of these students come from majors other than music or communication. A simple survey was used to obtain baseline information about these students such as age, hometown, undergraduate major, previous background or study in music, and the role that classical music currently plays in their everyday lives.
Additionally, a nine point ranking system was used to generalize the students’ preference of different genres of music. This technique has been used to great result in various studies around the world. Researchers in Europe (Schulten, 1987) and North America (LeBlanc, 1988) have found differences in attitudes toward, and preferences for, music attributable to age of the subjects. Most researchers report a decrease in favorable attitudes or preferences for classical music as students age, with attendant increase in attitude or preference for popular music, at least for those with limited or no musical training (Greer, Dorow, & Hanser, 1973). Upon examining the survey results in detail, some very interesting trends appear that were not originally expected. Although music majors favored classical music to more modern styles such as rap and hip-hop, their attitudes towards pop and rock music was also very favorable. These results are strengthened by a similar study performed in 1990 at Arizona State University where J.E. Palmquist found that there was no significant difference between music majors’ and non-music majors’ attitudes toward popular music. Interesting results appear from many of the music majors who often preferred to listen to pop and rock music as much as the classical music they are studying.

Following the brief introduction and survey completion, a listening test was performed in the control room located in the Fairbanks Building for Communication at Butler University. Playback was heard through the same pair of Mackie HR824 reference monitors to keep the tests consistent from group to group. Playback of the examples was also kept random as to which recording, live or studio, the students would hear first for each lied. A critical discussion of the recordings was
held following the listening session using scripted prompts predetermined to minimize bias in the phrasing of the questions. Students were asked to respond to such questions as their preference for either recording, rating of the quality of each recording, an aesthetic critique, and other questions relating to whether or not they would listen again or spend money on these examples. In both groups, discussion ended up being focused around the respondents' familiarity with the genre and the particular work being analyzed. In this case, many of the music students involved in the listening test had also been present at the original performance “Das Lied von der Erde” given at Butler University that was the basis for the live recording. This ended up encouraging a preference by those students to the live recording because they were familiar with the performance and could harken back to their previous memories of the stage presentation.

Analysis

The non-major group of students, however, was mixed in their reviews of the two recordings. There were strong feelings in favor of the studio recording sounding more “musical” in its presentation and the quality of the performance by the two musicians was also judged as being of higher quality. This brings up an interesting point because the other focus group and even the performers themselves have the opposite opinion. This dispute in opinion can be attributed directly to the amount of experience that each group of respondents has with the classical music genre and what is expected when it comes to its performance practice. Additionally this speaks to this particular group of students’ preference for the amount of production in the editing process of the recording. Upon discussion with the
vocalist and pianist at their first hearing of the recordings, both expressed the difficulty of giving a musical and inspired performance in a studio setting with no one to share the music with. The atmosphere is completely different and a musical performance is very heavily dependent on the mental state of the individuals giving the performance. Author Aaron Williamon speaks to the positive effect of performance anxiety saying:

Despite the debilitating nature of psychological, behavioral, and cognitive symptoms of anxiety, performers should be aware that arousal can, in fact, benefit a performance. The Yerkes-Dodson Law states that performance is best when arousal is at moderate levels—when the performer is neither too relaxed nor too anxious. Undeniably, many musicians do claim that the thrill or “buzz” of the performance situation fosters spontaneity in encourages new musical insight. (Williamon, 2004, pg. 12)

A large audience increases a musician’s adrenaline and heightens their connection with the piece of music so as to be able to express the intended emotion and text more effectively to those in attendance. McGill University professor Daniel Levitin explains this issue saying, “Each musical genre has its own set of rules and its own form. The more we listen, the more those rules become instantiated in memory. Unfamiliarity with the structure can lead to frustration or a lack of appreciation. Knowing a genre or style is to effectively have a category built around it” (Levitin, 2006, pg 107). It only makes sense that prior experience and knowledge of the classical performance genre would affect the criticism of its overall musicality.

One rather interesting comment from the group of non-majors came from an international studies major who had recently taken a music appreciation course at
Butler. He explained that, prior to the course, he had no previous experience with classical music other than in movies and public places. After taking the course however, he understood that his issue with classical music was that he simply was not exposed to and educated enough in it to adequately appreciate it. Daniel Levitin explains saying, “Many of us have a practical knowledge of things we like, and can communicate our preferences without possessing the technical knowledge of the true expert” (Levitin, 2006, pg 7). From the curriculum of this class, the student was able to identify with certain examples that intrigued him and formulate opinions on which composers or types of instrumentation he most preferred. As a result of this class, the student now regularly attends Butler University School of Music productions and supports the arts in the Indianapolis community. Without an appreciation for the classical music genre, one cannot properly judge the quality of the recording, regardless of which venue it was recorded, or the impact of the piece of music if they do not know how it was originally intended to be experienced.

Today music-appreciation classes are still flourishing, and it seems sometimes that there is more appreciative talk than music on the radio. But as more and more of it is broadcast, less and less of it even pretends to help listeners listen. The assumption that people need to be prepared to hear classical music is largely abandoned, undermined by the nature of radio itself. Classical music is no longer a ritual, which you must dress up and travel to a public building to hear. Now it comes out of your speakers and into your ears before you know what it is, sometimes before you are awake. Now the less hard you listen, the easier classical music is to like. (Parakilas, 1984, pg. 16)
One of the voice majors explained this phenomenon in a very interesting manner. He said, “Classical music to the masses is like drinking coffee, many people don’t like the taste but they use it to feel more cultured.”

There are countless studies on the immense positive effects of music on the growth of young minds and the correlation between a musically-oriented mind having strengths in other non-related areas of study. Therefore, it is puzzling as to why music education and appreciation courses in early education are always the first to be cut from the budget. We as humans have an inherent love and fascination with music and art in our society. Daniel Levitin expands on this historically, “Music is unusual among all human activities for both its ubiquity and its antiquity. No known human culture now or anytime in the recorded past lacked music. Some of the oldest physical artifacts found in human and protohuman excavation sites are musical instruments” (Levitin, 2006, pg 7). Music is embedded in our culture and we cannot go anywhere in our daily lives without being affected by music. The logical conclusion is that every person on earth should have knowledge of the history of music, much like we are forced to learn the political and social history of the world. “The familiarity of classical music comes not simply from hearing the same works many times, but from hearing them presented as tradition. Classical performances present music as tradition by making the past continuous with the present” (Parakilas, 1984, pg. 10). As much as pop music is engrained in western culture in present day, the same can be said about the influence that classical repertoire has had throughout its rich history spanning centuries of music history.
Despite the unfortunate situation facing music education, classical music record labels have been able to succeed and even grow in our tough economic position because of their willingness to embrace the industry shift to digital consumption and a great sense of marketing and developing artists worldwide. However, live performance venues and professional musicians are finding it difficult to fill the seats when audiences can simply stay at home and watch or listen to a seemingly comparable performance for a fraction of the cost. The record industry has been both a blessing and a curse for classical music. As stated by Greg Milner earlier, classical music is still a genre enjoyed best in its purest form, the live performance.

Classical music in the concert hall claims the full attention of its listeners; they have set other activities aside to hear it. But some of the listeners who go to concert halls to hear it and some of the musicians who perform it there put the same music on while they eat or read or talk or play. These listeners seem confident that they can listen less than one ear to the music, which they believe deserves their full attention in other circumstances. (Milner, 2010, pg. 84)

Many of the students in the non-major focus group admitted to using classical music as background when they are reading or studying.

Some listeners shun their favorite music for background. I have had college students interview their fellow students about how they use their record collections, and a few of the informants have reported that they prefer rock when they are listening intently to music, but put on Bach or Debussy when they need to concentrate on their math problems. (Parakilas, 1984, pg. 14)
Their intention is not to give their full intention to the music but rather to constant white noise to help them focus on something else. "Classical music is no longer itself when it is used as background music. It becomes like "easy-listening" popular music, valued more for it geniality than for its genius" (Parakilas, 1984, pg. 15). When my study's non-music major group of students did give their full intention to the music, they felt drawn to the recording that was more highly edited in terms of number of microphones and the amount of dedicated equalization used. However, it is plausible that this decision is also based on a familiarity with a higher lever of production in addition to the foreign nature of the genre. Through this preference the group chose the performance with less musicality because their ears were drawn to the clarity of the instruments and the perceived closeness of the performance inherent to many popular music recording techniques.

Even though a studio recording may be more aesthetically pleasing than a live recording from a technical standpoint, one must remember that this type of music was not originally intended to be recorded. Some purists of classical music would go as far as to say that it shouldn’t be recorded because the experience of the work is completely different and ruins the musical intention laid down by the composer. Alex Ross speaks to this idea in his essay *Infernal Machines*:

Classical music stands partly outside the technological realm, because most of its repertory is designed to resonate naturally within a room. By contrast, almost all pop music is written for microphones and speakers. In a totally mediated society, where some form of electronic sound saturates nearly every minute of our waking lives, the act of sitting down in a concert hall, joining the expectant silence in the moments before the music begins, and surrendering to the elemental
properties of sound can have an almost spiritual dimension. (Ross, 2010, pg. 66)

By and large classical music is valued for its intense nuance matched with forceful musical passion. Those elements are immensely difficult to capture in a recording regardless of the arena. When examining a popular music recording, the dynamic range is extremely limited due to the large amount of compression placed on the whole recording to make it sound acceptable on almost all playback systems. Classical music on the other hand has an extremely wide range in dynamics from the incredibly soft to unbearably loud all in the same piece of music. These are features of the music that must be preserved in order for the music to retain its character and appeal.

Microphone placement in a live setting is crucial to the success of a classical recording. The microphones must succeed in both picking up the principal performance as well as the natural ambience of the room acoustics. These two distinct sound sources must be blended seamlessly to give the listener of the recording the illusion that they are in the hall for the performance. Traditionally, the XY stereo configuration receives the most usage in situations like this due to its limited obstruction of sight lines and its narrow stereo image.

Most contemporary recordings are filled with another type of auditory illusion. Artificial reverberation makes vocalists and lead guitars sound like they're coming from the back of a concert hall, even when we're listening on headphones and sound is coming from an inch away from our ears. Our brains can estimate the size of an enclosed space on the basis of the reverberation and echo present in the signal that hits our ears. (Levitin, 2006, pg. 107)
To an untrained ear, a studio imitation of natural reverberation can pass as the real thing. Convolution (artificial) reverbs have become so sophisticated and can accurately represent a variety of different size spaces that they are often a favorable substitute to using an actual hall for recordings as well. The students in each of the focus groups could easily pick out the room noise in the live recording created by audience members, fan noise, creaky chairs, etc. However, there is much discussion about using different techniques to better make use of the stereo spectrum to enhance the capture of the performance on stage. Jürg Jecklin explains this in a paper presented at the Audio Engineering Society convention in London:

The situation is different in the field of classical music. The expectations of the consumers are formed by the concert hall sound. There is no specific recording technique for classical music. The sound of the recordings differs from recording company to recording company. To use (pop) music recording techniques to record natural music could not be the solution because the suppositions are too different. It is necessary to find a specific recording technique for classical music. (Jecklin, 1980, pg. 2)

Through his research, Jecklin came to the conclusion that the OSS technique is ideal for recording classical music. This configuration consists of two omnidirectional microphones spaced 165 mm apart and separated by an acoustically dampened disc. According to Jecklin, recordings using this technique sound much more accurate because the stereo image is more diverse and the sound is rich, full and clear. With the microphones separated by the disc, the perception is consistent with the spacing of the human ears and the separation that the skull offers between the ears. The issue with this method is that the sound source on the stage must be perfectly
balanced because this pair of microphones offers no chance for editing in post-production. Time-delayed spot microphones may be used to solve this issue and provide extra articulation to the instrumentation that might be lost in the distance between the performers and the audience. However, Jecklin does offer a clarification that this method of recording is then best represented to a listener through headphones because of the binaural nature of the microphone setup and how it is trying to technically recreate the audio capturing capabilities of the human ears.

**Conclusion**

Though education for the genre is lacking and attendance at live performances is causing venues to struggle, dissemination of classical music through recordings is still the best way to promote its importance and greatness. Daniel Levitin states, "The unnatural gap that has grown between musical performance and musical listening has been paralleled by a gap between those who love music and those who are discovering new things about how it works" (Levitin, 2006, pg. 10). What musicians and technicians have found is that technology and performance practice are constantly changing for popular music, but classical music is still attempting to remain consistent with the historical traditions that have held up for centuries. Who knows what the future may hold for the music business given the current struggle by major record companies, but only positive results can come from a heightened emphasis on music education to reach a greater amount of the population and help to pass on the legacy of classical music. The results of an Arizona State nine point musical genre ranking study suggests that performance
experience and attendance increases positive responses toward jazz, classical, and world music. Studies like this are invaluable to higher education institutions when they are planning course offerings on the liberal arts and to concert venues when they are trying to market their performances to younger audiences.

Classical recording are plentiful and easily accessible. The task is to get people to listen to them under their own power and truly understand the elements that make these pieces of music great. Perhaps the work of crossover artists such as Josh Groban, Michael Bublé, Sara Brightman, Andrea Bocelli, and countless others demonstrate that the public is moving more towards classical music with a pop spin. Many of these artists owe their success to a great deal of processing and production to create a genre that is appealing to all audiences. Effects and processing consistent with popular music are often used to draw the untrained ear into the music initially and, once they are there, they realize that they actually have an appreciation for the talent in the voice or the instrumentalist and can enjoy the classical art form. The next step is then to move into a purer, more historical interpretation of the classics. Ultimately, the future relationship between classical music and the recording industry depends on the effectiveness of music education and appreciation initiatives reaching the next generation of listeners. Both popular music and classical music can coexist together in our technology dependent society but first some compromises need to be made by listeners and performers in order to better understand what history lies behind the music.


Ross, Alex. *Listen to This*. New York: Picador. 2010.


Ex. 1

Track Listing
1. #3 Von der jugend (Live)
2. #3 Von der jugend (Studio)
3. #5 Der Trunkene im Frühling (Live)
4. #5 Der Trunkene im Frühling (Studio)