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Effective Effects

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Effective Effects: How to Introduce Music with Extended Techniques to Audiences

An Honors Thesis submitted in partial fulfillment of the requirements for Honors Studies in Music

By

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I would like to thank Dr. Ronda Mains for coaching me on my recital music, and I would also like to thank the entire music department staff for their continuous support and interest in this project.

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"Fostering the enjoyment of good music has long been an explicit goal of music education."[1]

When I was a sophomore at the University of Arkansas I decided that I despised all forms of extended flute techniques. I came to this conclusion when a fellow flute student performed a strange piece that contained some odd techniques; one of them involved the performer taking her flute apart and using the pieces to create percussive sounds. Even though the composition was performed well, I did not care for the music. In addition, the title was vague; this prevented me from forming any connection with the music. Also, the title did not indicate any extra-musical references that the extended techniques might represent.

For a while I refused to play any modern flute music that contained extended techniques; I instead focused on repertoire that is considered standard in flute pedagogy. However, my opinion eventually changed when I discovered the music of Ian Clarke. This British flute composer writes highly programmatic pieces, and almost all of them use extended techniques to enhance the musical experience of the audience and the performer. I soon began to extensively study extended techniques, and I gradually came to appreciate them. Eventually this appreciation led to enjoyment. However, I noticed that the extended technique music I liked had highly programmatic titles and themes. I began to wonder if others would be able to respect and enjoy extended techniques if they were introduced to them through programmatic music.

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[1] Warren F. Prince, "Effects of Guided Listening on Musical Enjoyment on Junior High School Students," *Journal of Research in Music Education* 22, no. 1 (Spring 1974): 45, Accessed January 23rd, 2014, http://jstor.org/stable/3344617.

For my thesis project, I decided to give a recital containing music that featured a variety of extended techniques. In order to give a performance appreciated by audiences, I needed to examine how to best introduce music with extended techniques to audiences. To achieve this goal I had to do several things. I first needed to explore extended techniques; where did they come from, what kind of extended techniques are available for flute, and how do you play them? What is it about these techniques that cause people to shy away from them? My next step was to select five programmatic pieces containing a variety of these techniques; this helped motivate me to learn how to execute the extended techniques. After learning the music, I performed these five selections for the recital.

However, an issue soon presented itself that helped to spark a secondary aspect for my project: what is the best way to present these pieces to an audience to help them appreciate and enjoy them? I needed to answer this question before giving my recital, so I designed a project to help me solve this challenge. I received permission to perform the first movement of *Hatching Aliens* by Ian Clarke for three different music lecture classes at the University of Arkansas. Before the performance, the three classes each received a different set of program notes; each one approached describing the piece differently. The students in each class were instructed to read the program notes, listen to the performance, and then fill out an anonymous survey that addressed their appreciation and enjoyment of the piece. I decided to treat enjoyment and appreciation as two separate ideas because I believe that it is possible for one to not enjoy the piece while still appreciating the composer's artistry and originality. The results showed that the most effective program notes either addressed the programmatic elements of the piece or

discussed how the extended techniques were used in programmatic ways. Also, the results showed that program notes may positively affect both enjoyment and appreciation, but it might affect the appreciation more.   In addition, they indicated that if program notes are provided, the majority of the audience will read them.

After playing for the music lecture classes and reviewing their surveys, I used the information to design effective program notes for my recital. Since the surveys shows that programmatic information about the pieces and their extended techniques were well-received, I made the programmatic elements of the music the focal point of my program notes. I clearly stated what the music was portraying within the opening sentences of the notes. When mentioning extended techniques, I related them back to the story of the piece.

The final step for this project was to perform the recital; it was given on November 16th, 2014 at the Stella Boyle Smith Concert Hall on the University of Arkansas campus. The pieces I chose to perform were: *Winter Spirits* by Katherine Hoover, *Beneath the Canopy* by Philip Parker, *The Great Train Race* by Ian Clarke, *L'oiseau blessè* by Denis Gougeon, and *Hatching Aliens* by Ian Clarke. I chose these pieces because they had programmatic titles, and I felt the composers did an excellent job of using the extended techniques to enhance the story of the composition.

As previously mentioned, the first step for this project involved an extensive study of extended flute techniques. In short, the term "extended techniques" refers to the

practice of playing a traditional instrument in a non-traditional way.[2] Some of these

unique techniques began appearing in music around the late 19th century. During this

time, music was drawing away from traditional methods of composition and was moving

towards a more non-traditional sound. Unusual harmonic progressions, unique

composition forms, and exploration of extreme registers were some of the many elements

in music that were changing during this time. It is only natural that the concept of

extended techniques would appear during this period in history.

One of the earliest extended techniques was flutter-tonguing, which first

appeared in Richard Strauss's *Don Quixote*.[3] Other composers gradually began to follow

his example by incorporating nontraditional ways of playing instruments into their music.

In the 1920s, Henry Cowell started to experiment with what he called "string piano;" this

involved the performer playing the strings on the inside of the instrument.[4] This was

done by scraping, strumming, or plucking the strings.[5] One of the first uses of Cowell's

string piano was in *The Banshee*, which was published in 1925.[6] Even though the odd

techniques were used to recreate the sound of this mythical creature, the audience was

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[2] Matthew Burtner, "Making Noise: Extended Techniques After Experimentalism," New Music Box, March 1, 2005, accessed November 6, 2013, http://www.newmusicbox.org/articles/Making-Noise-Extended-Techniques-after-Experimentalism/.

[3] Roberta Brokaw, "Performance of Extended Flute Techniques of the Twentieth Century Based on Aspects of Traditional Flute Technique" (PhD diss., Indiana University, 1980), 119.

[4] Mark Evan Bonds, *A History of Music in Western Culture*, vol. 2, *The Classical Era Through the Present*, 3rd ed. (Upper Saddle River, NJ: Pearson Education Inc., 2010), 538.

[5] Burtner, "Making Noise: Extended Techniques After Experimentalism."

[6] Bonds, *A History of Music in Western Culture*, 538.

still surprised by the non-traditional method of piano-playing; the music was described as giving off an "unearthly effect…unlike anything anyone had heard before this time."[7]

Even though audiences were still hesitant to accept extended techniques in classical music, composers continued to experiment and use them in their compositions. One of the earliest extended techniques written for the flute was the key click; this was first introduced in Edgard Varèse's piece, *Density 21.5,* which was published in 1936.[8] This effect involved the flutist aggressively depressing the keys of the flute to create a percussive effect. In 1953 the Brazilian composer Hector Villa-Lobos invented a technique that called for the flutist to cover the lip plate entirely while sending a blast of air through the instrument; he called this the jet whistle.[9]

Today there are many common extended techniques available for the flute. Flutter-tonguing, key clicks, and jet whistles are some of the most frequently utilized techniques, but there several others that are also popular. For example, multiphonics is the practice of creating more than one pitch at a time. This can be accomplished on the flute by singing and playing, covering portions of the keys, overblowing across the lip plate, or using alternative fingerings.[10] Other common extended techniques include harmonics, pitch bends, glissandi, whistle tones, and quarter tones.[11] It is important to note that there are more extended techniques available for the flute than listed here;

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[7] Bonds, *A History of Music in Western Culture*, 538.
[8] Brokaw, "Performance of Extended Flute Techniques of the Twentieth Century Based on Aspects of Traditional Flute Technique," 124.
[9] Brokaw, "Performance of Extended Flute Techniques of the Twentieth Century Based on Aspects of Traditional Flute Technique," 25.
[10] Burtner, "Making Noise: Extended Techniques After Experimentalism."
[11] Brokaw, "Performance of Extended Flute Techniques of the Twentieth Century Based on Aspects of Traditional Flute Technique," 3-4.

composers are constantly exploring and creating new sounds and effects to use in their music.

Even though literature featuring extended techniques is becoming more common, audiences and performers both tend to dislike music that uses them. "They don't make a piece better…instead they distract from other, more important musical parameters like melody and harmony. They're a crutch that composers fall back on when they are out of ideas."[12] There are several contributing factors to this negative opinion of extended techniques that is commonly shared among the music community. First, the techniques sound very strange when comparing them to traditional flute-playing. It can definitely shock the listener when the flutist growls into the instrument! Second, extended techniques are usually not included in traditional flute pedagogy; music in our society is more focused on the traditional Western style of playing, so extended techniques are often bypassed. They are usually not addressed unless a student is learning a piece that has extended techniques in it.[13] This leads to another problem; since extended techniques are not discussed, performers may form the assumption that such methods of playing are impossibly difficult. "The technique required of performers in executing this music often seems to be beyond the scope of possibility, both for the performer and his or her instrument or voice."[14]

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[12] Isaac Schankler, "In Defense of Extended Techniques," New Music Box, October 31, 2012, accessed November 6, 2013, http://www.newmusicbox.org/articles/in-defense-of-extended-techniques/.

[13] Christopher Leigh Davis, "Extended Techniques and Electronic Enhancements: A Study of Works by Ian Clarke" (PhD diss., University of Southern Mississippi, 2012), 5, accessed October 21, 2013, ProQuest Research Library.

[14] Brokaw, "Performance of Extended Flute Techniques of the Twentieth Century Based on Aspects of Traditional Flute Technique," 1.

Finally, performers may avoid music with extended techniques because there is no standard way of notating them; one technique may be written a certain way in one piece, but then the same technique might be notated in a completely different way in another piece. For example, Ian Clarke's *The Great Train Race* has an extensive singing and playing section where the voice line and the flute line were notated on the same staff.[15] However, Denis Gougeon notated this technique differently in *L'oiseau blessè*. He has the voice written on a separate staff that was placed directly below the flute line.[16] Sometimes composers include an explanation of how to read and execute the extended techniques in the back of the score; these are often helpful, but they can be very long and detailed. This can create the impression that such techniques are challenging to perform.

It is important to realize that not everyone has a negative attitude towards extended techniques. Some musicians embrace it, claiming that it improves their playing.

> "Some of the benefits that result from acquiring skill in the extended techniques are a greater awareness of timbral factors, an extended dynamic parameter, improved sense of pitch and intonation, stronger control and flexibility of one's technical equipment (diaphragm, lips, breath control), new recognition of the 'feel' and resistance of the flute, a memory for physical sensations, a greater imagination, a greater spectrum of coloristic devices to enhance interpretation and

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[15] Ian Clarke, *The Great Train Race*, 2nd ed. (Croydon, Surrey: Just Flutes 2010).
[16] Gougeon

heighten expression, and greater ease in simultaneously manipulating various parameters of performance."[17]

Extended techniques expand the types of sounds that can be made on an instrument, giving composers more colors. I believe that compositions can be enhanced through extended techniques, but they must be used in an appropriate manner to accomplish this.

So how does one encourage their audience to appreciate music with extended techniques?   Obviously, the musical selections should use the techniques in a manner that is approachable to the audience. I personally believe that extended techniques used in a programmatic manner would be the most effective way to help audiences appreciate and enjoy music containing them. This is because programmatic pieces can easily connect with the audience by providing a storyline or helping to create a concrete image that the listener can associate with the music. This connection helps them follow and relate to the piece more than just an abstract title would. Extended techniques used in programmatic pieces usually have a clear role, often highlighting or solidifying the programmatic elements of the composition. Since the audience is able to draw connections between the music with elements they are already familiar with, they are more likely to understand the piece and the role of the extended techniques. In fact, there have been several studies conducted in the music field that strongly indicate that audiences prefer music with familiar elements.

In 1986 Annette H. Zalanowski led a study that showed how programmatic elements in music enhanced the listener's enjoyment.[18] For the experiment, forty-eight

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[17] Brokaw, "Performance of Extended Flute Techniques of the Twentieth Century Based on Aspects of Traditional Flute Technique," 150-151.

test subjects were divided into four groups, and each group was told to listen to several different musical selections. After hearing the pieces, the subjects were told to rate their attention, understanding, and enjoyment of each selection.[19] The results indicated that programmatic music helped the listeners better understand the music, and they also showed that directing people to listen to music in a certain way can have an effect on their appreciation of the piece.[20]

There was another relevant study conducted in 1999 by Dennis J. Siebenaler; he looked at how familiarity affected the preference of music.[21] For the experiment he had students listen to selections he chose from a list compiled by the National Association for Music Education. Then the students were asked to rank the music on a five-point Likert scale that tested both familiarity and preference.[22] The results indicated that the test subjects strongly preferred the songs they were already familiar rather than the ones they were not familiar with.[23]

There was a more recent study done by Karla R. Hamlen and Thomas J. Schuell that was similar to Siebenaler's. While this experiment was more focused on how audiovisual stimulus affected the subjects' preference for classical music, Hamlen and

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[18] Annette H. Zalanowski, "The Effects of Listening Instructions and Cognitive Style on Musical Appreciation," Journal of Research in Music Education 34, no. 1 (Spring 1986): 44, accessed January 23rd, 2014, http://0-www.jstor.org.library.uark.edu/stable/3344797.
[19] Zalanowski, "The Effects of Listening Instructions and Cognitive Style on Musical Appreciation," 43.
[20] Zalanowski, "The Effects of Listening Instructions and Cognitive Style on Musical Appreciation," 49.
[21] Dennis J. Siebenaler, "Student Song Preference in the Elementary Music Class," Journal of Research in Music Education 47, no. 3 (Autumn 1999): 215, accessed November 6, 2013, http://www.jstor.org/stable/3345780.
[22] Siebenaler, "Student Song Preference in the Elementary Music Class," 215.
[23] Siebenaler, "Student Song Preference in the Elementary Music Class," 215.

Schuell first had to examine how familiarity with a classical piece affected the listener's enjoyment.[24] Like Siebenaler's conclusions, these results also showed a positive correlation between preference and familiarity. "Students who reported familiarity with the music also reported they liked the music, and students who reported they were unfamiliar with the music reported they disliked the music."[25]

With these results, it can be hypothesized that the best way to introduce audiences to extended techniques is to use programmatic compositions. Since this type of music is usually based on elements the audience is already familiar with, there is a higher chance that they will understand the purpose of the extended techniques within the composition. In addition, the extended techniques should obviously highlight the programmatic elements in the piece. For example, the flute is manipulated in Ian Clarke's *The Great Train Race* to sound like a train whistle.[26]

Since extended techniques sound so non-traditional, I decided that only providing the titles of the programmatic pieces would not be enough to positively impact the audience's opinion about the music. The compositions and their techniques are so non-traditional that the audience needs more information on the music and its techniques; the title alone would not suffice. Today, the most popular way to provide information about the music is for the audience to receive program notes.

[24] Karla R. Hamlen and Thomas J. Schuell, "The Effects of Familiarity and Audiovisual Stimuli on Preference for Classical Music," *Bulletin of the Council for Research in Music Education*, no. 168 (Spring 2006): 24, accessed October 29, 2013, http://www.jstor.org/stable/40319458.

[25] Hamlen and Schuell, "The Effects of Familiarity and Audiovisual Stimuli on Preference for Classical Music," 27..

[26] Ian Clarke, *The Great Train Race*, 2nd ed. (Croydon, Surrey: Just Flutes 2010).

While program notes are commonly used to distribute information at classical music concerts, it might not be the most effective way to increase the audience's enjoyment of the music. An experiment conducted by Elizabeth Hellmuth Margulis involved over 500 elementary-aged children watching an hour-long musical performance that explored the influences of immigrant music.[27] The students received either one of two program notes; the first contained information that was directly related to the musical performance, while the second only discussed the venue where the concert was given.[28] The results showed that the students who read the musical program notes paid more attention to the performance, but there was little to no effect on the children's enjoyment of the music.[29]

It has been suggested that program notes might even be hurtful to the audience's enjoyment. A second study conducted by Margulis looked at how the information in program notes affect the listener's enjoyment.[30] She had sixteen people listen to twenty-four excerpts in a randomized order, and each selection either had no description, a structured description, or a dramatic description.[31] The results indicated that the test

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[27] Elizabeth Hellmuth Margulis, Brian Kisida, and Jay P. Greene, "A Knowing Ear: The Effect of Explicit Information on Children's Experience of a Musical Performance," Psychology of Music, 5, November 20th, 2013, accessed November 21st, 2014, http://pom.sagepub.com/content/early/2013/11/20/0305735613510343.abstract.
[28] Margulis, Kisida, and Greene, "A Knowing Ear: The Effect of Explicit Information on Children's Experience of a Musical Performance," 6.
[29] Margulis, Kisida, and Greene, "A Knowing Ear: The Effect of Explicit Information on Children's Experience of a Musical Performance," 10.
[30] Elizabeth Hellmuth Margulis, "When Program Notes Don't Help: Music Descriptions and Enjoyment," Psychology of Music, 11, March 23rd, 2010, accessed November 21st, 2014, http://pom.sagepub.com/content/38/3/285.short.
[31] Margulis, "When Program Notes Don't Help: Music Descriptions and Enjoyment," 5-6.

subjects preferred the excerpts that had no description, and the pieces that had a description were not enjoyed as much.[32]

Even though her study concluded that program notes might be detrimental to the audience's opinion and enjoyment of the music, it is important to note that the excerpts chosen were from Beethoven String Quartets. These pieces contain elements that people associate with "typical classical music," so they featured nothing that the listeners would have considered odd or unusual; there are no extended techniques in the quartets. In the conclusion of her article, Margulis addressed the possible advantages of using program notes when playing unfamiliar music. "Or, it is possible that even descriptive notes could enhance enjoyment of repertoires less familiar than Beethoven String Quartets; listeners new to some contemporary works, for example, may benefit from the kind of basic orientation provided by a descriptive note."[33] Since music containing extended techniques is contemporary and more unfamiliar than Beethoven String Quartets, I hypothesized that program notes would be useful when presenting music with extended techniques.

In order to determine what information would be most helpful to include in the program notes for my recital, I had to see what would increase the listener's understanding and enjoyment. I decided to perform "Something is there!," the first movement of Ian Clarke's *Hatching Aliens*, for three different music lecture classes at the University of Arkansas. I chose this piece because it featured many extended flute techniques. The effects included in this movement are: jet whistles, tongue stops, key

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[32] Margulis, "When Program Notes Don't Help: Music Descriptions and Enjoyment," 11.
[33] Margulis, "When Program Notes Don't Help: Music Descriptions and Enjoyment," 16.

clicks, flutter-tonguing, singing while playing, timbral trills, pitch bends, quarter tones, growling into the instrument, and harmonics.[34] There is also a section with a special extended technique called Hannibal noises, where the player completely covers the lip plate and inhales while double tonguing.[35]

Since the goal of this was to determine what type of information enhances enjoyment and appreciation, I created three different sets of program notes. Each of the three music lecture classes received a different set. The only aspect all three program notes had in common was that they all contained the title, composer, and date of publication. The process was the same for each class; students came into the auditorium and received their designated program notes and a survey. The surveys were the same for each class. The students were instructed to find their seat and read the program notes. They then listened to the piece and filled out the anonymous survey. The surveys were then collected by the professor and returned to me afterwards.

As previously stated, the program notes were different for each class. The first set of program notes contained information directly relating *Hatching Aliens* to sounds commonly heard in science fiction films. It also mentioned that the piece was inspired by the film *Alien*, and they provided a clear, programmatic narration of the piece. The words "extended technique" were not used anywhere in the program notes; the sounds created from extended techniques were only presented in a programmatic manner (see Appendix A).

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[34] Ian Clarke, *Hatching Aliens* (Croydon, Surrey: Just Flutes, 2010), i.
[35] Ian Clarke, *Hatching Aliens* (Croydon, Surrey: Just Flutes, 2010), i.

The second set of program notes focused on the extended techniques presented in the music. The phrase "extended techniques" was utilized several times throughout the notes, and a few of the techniques were mentioned by name. The Hannibal noises were mentioned, and there was even a short description on how that sound was being achieved. While these notes were more focused on the extended techniques, they alluded to programmatic aspects of the composition; in some sections the notes explained how an extended technique was programmatic (see Appendix B).

The third set of program notes were similar to the second set, as these also focused on the extended techniques. However, this set was different because it did not address any programmatic elements in the piece; instead, it focused on how extended techniques are not necessarily a contemporary idea. The program notes name some of the techniques used in *Hatching Aliens,* and they provide a short explanation of where they came from (see Appendix C).

After the classes listened to the first movement of *Hatching Aliens*, the students were asked to complete the anonymous survey. The questionnaire had seven questions, and three of them addressed the musical background of the student. The next three questions involved the program notes and their enjoyment and appreciation of the piece. The final question asked students to mark which age group they belonged in. The questions addressing the appreciation and enjoyment of *Hatching Aliens* had students assign a rating on a five-point Likert scale (see Appendix D).

Out of all three classes, one hundred ninety students responded to the survey; seven of those surveys were disregarded because of compromising information written on

them by the student. For example, one student put their name on the survey, and another wrote out an explanation on why they gave the rating they did. After removing those seven surveys, one hundred eighty-three surveys remained. Out of these, one hundred eighty indicated that they belonged to the eighteen through twenty-five age group; two said they were over forty years old, and the remaining subject was between the ages of twenty-six and thirty-two.

When looking at the response of all the classes, twenty students indicated they did not read the program notes before the performance while one hundred sixty-three students did read the program notes; this means that approximately eighty-nine percent of the subjects read the program notes.
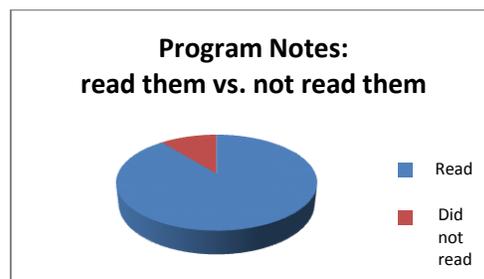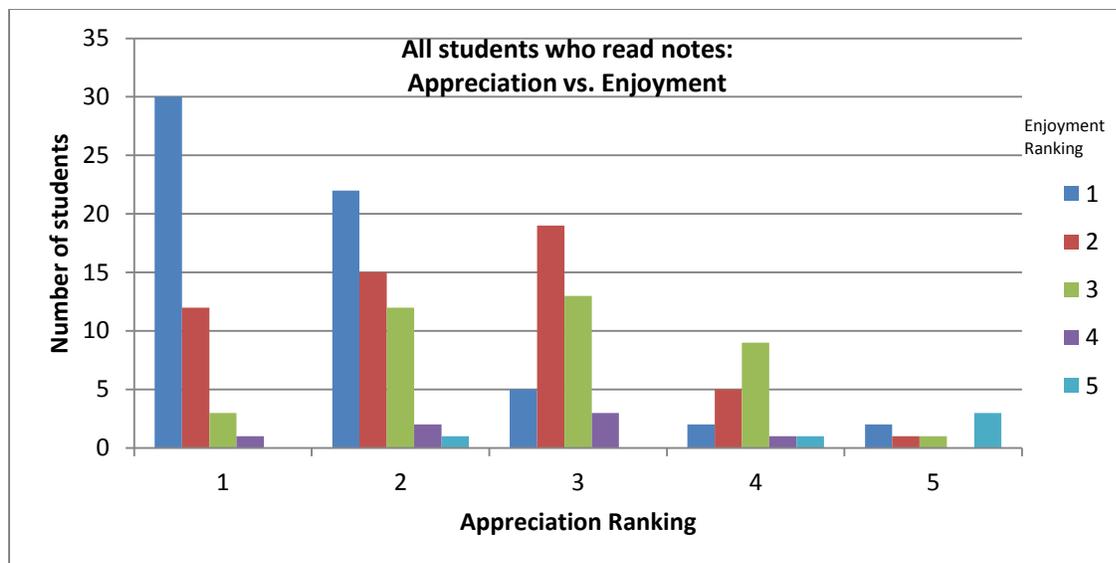

These results also show that program notes seem to affect both enjoyment and appreciation in a positive way. However, it seems that appreciation might have been more affected by the program notes. Out of the one hundred sixty-three students who read the program notes, sixty-one of them gave appreciation the highest ranking of one, and fifty-two students gave appreciation a two. Thirty-eight students gave appreciation a three, and the remaining students gave it a four or a five.

All students who read notes: Appreciation
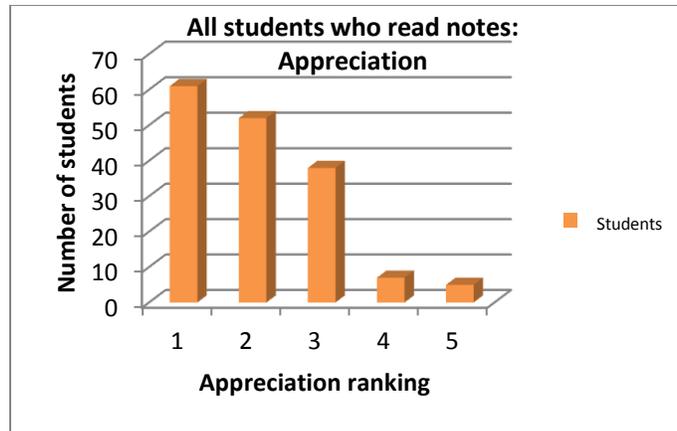
While enjoyment might have also been influenced by the program notes, the results show that it probably did not affect the audience's enjoyment as much. Forty-six ranked enjoyment at a one, while fifty-two ranked it at a two. Forty-five students gave enjoyment a three, eighteen students gave it a four, and the remaining seven gave enjoyment the lowest score of five.

All students who read notes: Enjoyment
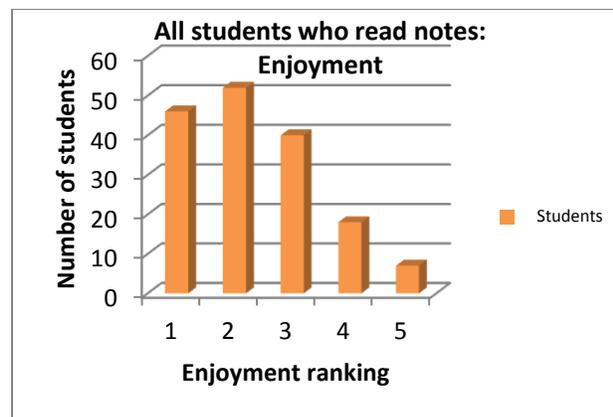
It is also important to look at the correlation between the appreciation and enjoyment of the students who read the program notes. The following graph shows this relationship; it suggests that they can influence each other, but it is still possible for the listener to dislike the piece and still appreciate it. However, it is more likely that the student will somewhat enjoy the piece if they appreciate it.

**All students who read notes:
Appreciation vs. Enjoyment**

Number of students

Appreciation Ranking

Enjoyment Ranking
- 1
- 2
- 3
- 4
- 5

It is also necessary to examine the enjoyment ratings of the students who did not read the program notes. These students did not appear to enjoy *Hatching Aliens* as much as the students who read the program notes. While some of those students did enjoy the music, the results indicate that reading the program notes is likely to increase enjoyment.

**All students who did not read notes:
Enjoyment**

Number of students

Enjoyment ranking
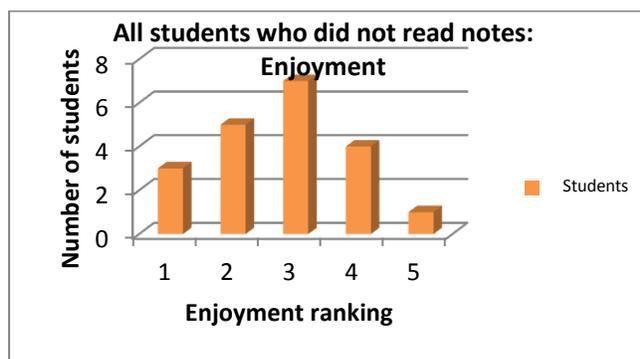
- Students

The first class received the highly programmatic program notes; there were seventy-two students who responded to the survey as instructed. Out of these, seven students did not read the program notes while sixty-five students did read them. Like the results of all the classes combined, these also indicate that program notes can affect appreciation more than enjoyment.

Class 1, read program notes
Appreciation
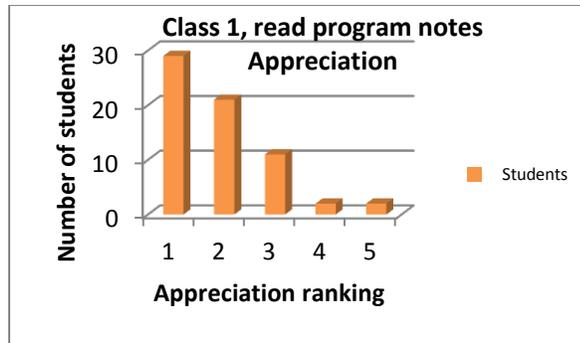
While enjoyment does not seem to be influenced by program notes as much as appreciation is, it is still positively affected.

Class 1, read program notes
Enjoyment
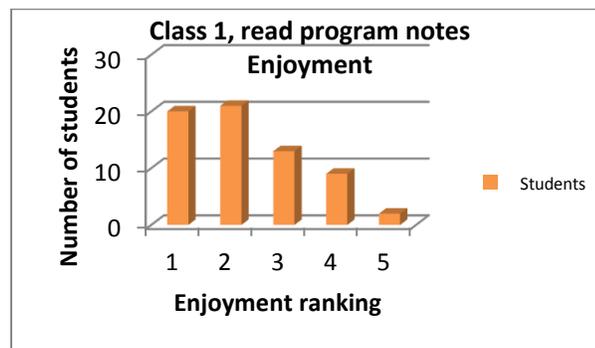
The second class received program notes that related the extended techniques to programmatic elements in the piece; they also described how to produce some of the techniques. There were seventy students in this class, and six of these students did not read the program notes. While appreciation seemed to be slightly affected in a positive way, these program notes did not appear to influence appreciation as much as the first set did.
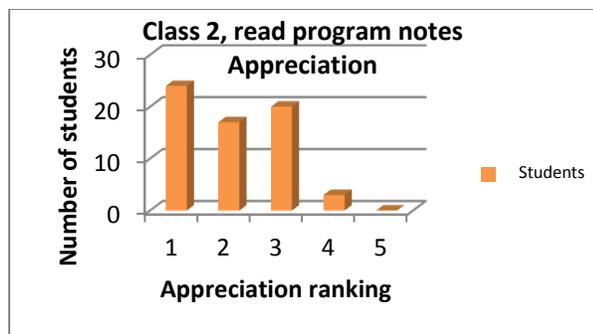
Enjoyment was affected much like it was in the first set of program notes.
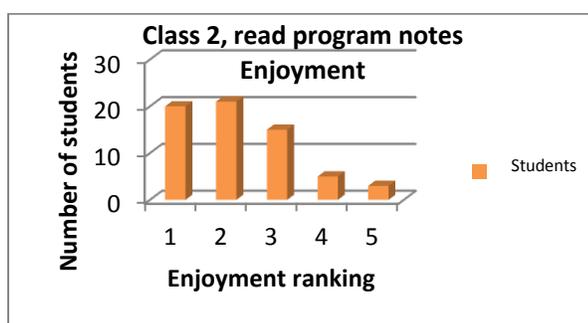
The last class received the program notes that contained no information about how the piece and its extended techniques were programmatic. There were forty-one students in this class, and seven did not read the program notes; thirty-four students did read them. These program notes did not appear to affect appreciation much, if at all. The responses were centered towards the middle ranking of three with a slight skew towards the left.
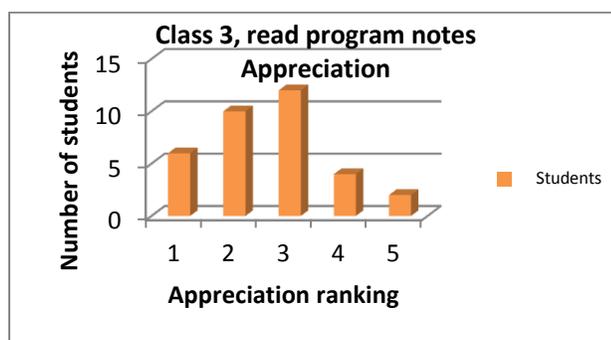
The effect on enjoyment seemed to be similar to the other classes, but the percentage of students who gave the piece a ranking of one was lower in this data set when compared to the other two classes.
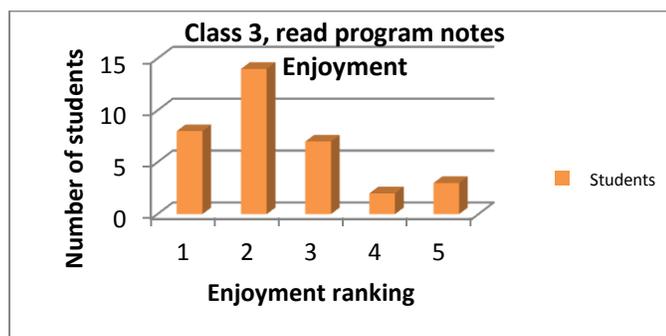
After looking at the graphs, several conclusions can be drawn. It is evident that if presented with program notes, the majority of the audience will more than likely read them. Using program notes to explain contemporary music seems to be an efficient way to distribute information about the piece. It is also evident that not reading the provided program notes can be detrimental to the audience's enjoyment, especially when listening to music containing extended techniques. Out of the twenty students who did not read the program notes, seven of these gave enjoyment the rating of three. While they did not despise the piece, they did not enjoy it either. It is important to note that a few students gave enjoyment a higher ranking than three, indicating that it is possible to enjoy the piece without receiving any descriptive information beforehand. However, the data collected indicates that program notes can probably increase the chance that audience members will appreciate contemporary music.

The results also suggest that the content of the program notes was a factor in the audience's appreciation of *Hatching Aliens*. They hint that the program notes that were

most effective in increasing the audience's appreciation were the ones the first class received; they were given the highly descriptive and programmatic notes that did not mention anything about extended techniques. This class had fifty students rank appreciation as a one or a two; this means that over seventy-five percent of those who read the program notes appreciated the music. It also suggests that the programmatic program notes are highly effective in increasing the listener's appreciation for contemporary music.

While the descriptive program notes were the most effective in increasing appreciation, the notes the second class received also seemed to have a slight influence. Even though the program notes mainly focused on programmatic uses of extended techniques used in *Hatching Aliens*, they seemed to be somewhat effective. Almost sixty percent of the students who read the program notes ranked appreciation as a one or a two. However, these notes are clearly not as effective as the programmatic ones. While the first class had twenty-three percent of students rank appreciation as a three or lower, the second class had approximately thirty-five percent give the same ranking.

The third class's appreciation was also slightly affected by the content in their program notes. These focused on the origins of some of the techniques found in *Hatching Aliens*. While they had a slightly positive effect, they were not as influential as the first class. Out of the thirty-four students who read the program notes, approximately sixty-five percent of them ranked appreciation as a one or a two.

While appreciation seemed to be affected by the content of the program notes more than enjoyment, the latter was also slightly affected. The first two classes'

enjoyment was positively affected by the content of their program notes. In the first class, sixty-three percent of the students who read the program notes ranked enjoyment as a two or higher. Sixty-four percent of the students in the second class ranked enjoyment as a two or a one. The third class's program notes had a slightly positive effect on their enjoyment. Only forty-seven percent of the students who read the program notes ranked enjoyment as a one or a two.

Since the first two sets of program notes clearly affected the listeners' enjoyment more than the third set did, it can be suggested that programmatic content in program notes can increase the audience's enjoyment of music containing extended techniques. Even though the first and second sets each presented different programmatic information, they both had a similar effect. It is also important to notice that both sets of program notes used descriptive words that related the programmatic elements of the piece to the music. For example, the first set uses words and phrases such as "otherworldly," "screeching," "alien skittering," and "chaotic alien babbling." The second set of program notes utilized a similar approach by using phrases such as "animalistic," "extraterrestrial effect," and "otherworldly experience." Using language such as this highlights the programmatic elements in the music and its extended techniques. Therefore, it assists the audience with better relating to the piece.

Once this information was collected, I used the data to help write the program notes for my recital. The first page of my program notes welcomed the audience to the performance and explained how the notes were written specifically to enhance the audience's enjoyment and appreciation. The second page contained the order of the program; this included the titles of the pieces, their composers, and the year the

composition was published. The next section was the actual program notes. Each composition had a unique description that told the story of the music; some of the extended techniques were mentioned, and they were presented in a programmatic way (see Appendix E).

The first piece on my program was *Winter Spirits* by Katherine Hoover; I decided to put this piece first because it contained the least extended techniques. I felt that this would be an accessible piece to use to get the audience interested in the program. In the program notes, I discussed how *Winter Spirits* imitates a Native American ritual where the flute is used to bring spirits back from the afterlife.[36] I also mentioned that timbral trills are used to depict the sound of a Native American flute and that they add to the improvisatory nature of the composition.

The second piece in my program was *Beneath the Canopy* by Philip Parker. Written for percussion and flute, the composition has five movements that each represents a different aspect of the rain forest. While this piece features more extended techniques than *Winter Spirits*, they are not the primary focus of the piece; the techniques used are fairly mild. In the program notes, I mention some of the techniques used throughout *Beneath the Canopy*. Timbral trills, flutter-tonguing, and pitch bends are the most commonly employed techniques, and I discussed how they enhance the character of each movement.

The next composition on the recital was *The Great Train Race* by Ian Clarke. I decided to put this piece third because it is mostly extended techniques, but it is still

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[36] Katherine Hoover, Winter Spirits, New York, NY: Papagena Press, 1997.

highly accessible to the audience. The program notes describe the story of a train

speeding down the tracks, and they also discuss how the extended techniques help the

flutist manipulate the instrument to sound like a real train.

After a brief intermission I performed *L'oiseau blessé* by Denis Gougeon. I chose

to put this composition fourth on my program because I felt that it was the least

accessible piece on my recital. Even though the composition and its extended techniques

are obviously depicting a dying bird, some of the techniques Gougeon used are extreme.

The piece contains a variety of extended techniques: multiphonics created through

singing and playing, tongue stops, key clicks, pitch bends, quarter tones, and timbral

trills. When put together, the amount of techniques can be overwhelming to the listener.

Therefore, I wrote highly descriptive program notes to help the audience become more

comfortable. The notes take the listener through the story of how the bird is slowly

dying, and they relate the extended techniques to the death of the bird.

I decided to close my recital with *Hatching Aliens* by Ian Clarke; not only was

this the most challenging piece on my program, but it contained the widest variety of

extended techniques. In the program notes, I stated how the piece was partially inspired

by the 1979 Ridley Scott film, *Alien*.[37] The notes tell the story of an alien invasion that

eventually leads to a final showdown where the aliens are obviously victorious. There

are extended techniques that are obviously imitating aliens skittering across a roof, UFO

engines, and alien battle cries.   Even though this piece uses many extended techniques,

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[37] Ian Clarke, *Hatching Aliens*, Croydon, Surrey: Just Flutes, 2010.

it is accessible to the audience because it sounds like the soundtrack to a science fiction film.

The goal of this project was to present information to help my recital audience better understand, appreciate, and enjoy contemporary flute music containing extended techniques. I would say that my project was successful because I believe that the program notes were useful to my audience. They were organized and concise while directly relating the music and its extended techniques to elements the audience could already relate to. In addition, this project also helped me grow as a musician. I was able to explore extended techniques at a deeper level, and I came to appreciate and enjoy contemporary music containing extended techniques. I am now also able to play, notate, read, and execute a variety of extended flute techniques. In addition, I am now an advocate for teaching extended techniques to music students; not only can they be fun, but they are quickly becoming a necessary skill to acquire in order to be able to play modern music. Even though they sound different than traditional flute-playing, extended techniques can truly be effective in music.

APPENDIX A

First set of program notes

Hatching Aliens
Movement 1: "Something is there!"

Ian Clarke

2010

Hatching Aliens is a modern flute composition that was partially inspired by the 1979 Ridley Scott film, *Alien*. The first movement of *Hatching Aliens* imitates many sounds heard in *Alien* and other science fiction films.

The opening of the piece features many unusual noises, including one imitating an alien skittering unseen across a rooftop. The quiet music creates a sense of unease, as if the listener knows something otherworldly is lurking in the dark. The music gradually builds up to an alien screeching, indicating that the creature has been spotted. Sounds imitating a warning siren are short to follow, creating a sense of chaos and panic.

 Eventually the quiet unease returns, giving the impression that the alien is temporarily out of sight. However, he soon returns with his screeching; this is accompanied once again by warning sirens and feelings of intense fear. The sirens grow in urgency but are eventually overpowered by chaotic alien babbling, indicating a temporary victory of the creature.

APPENDIX B

Second set of program notes

Hatching Aliens
Movement 1: "Something is there!"

Ian Clarke

2010

Hatching Aliens is a modern piece for flute and piano that features a wide variety of extended techniques for the flute. Clarke includes both traditional and original extended techniques throughout the first movement.

The beginning of the piece is made up of only extended techniques. Clarke uses some common ones like jet whistles, tongue stops, and key clicks. There is a section that calls for the flutist to growl into the instrument, creating an animalistic sound. Clarke also introduces a unique extended technique, which he calls "Hannibal noises." This involves the player covering the lip plate completely while inhaling and double-tonguing at the same time.

After the opening Clarke uses more common extended techniques throughout the piece, including quarter-tones, pitch bends, flutter-tonguing, and timbral trills. To create the alien theme heard several times throughout the movement, the player is instructed to flutter tongue while singing and playing, creating an extraterrestrial effect.

By using the combination of extended techniques that he does, Clarke was able to write a masterpiece that creates an other-worldly experience for both the audience and the performers.

APPENDIX C

Third set of program notes

Hatching Aliens
Movement 1: "Something is there!"

Ian Clarke

2010

Hatching Aliens is a piece for flute and piano that features a wide variety of extended techniques. While the sounds appear to be very modern, several of the techniques Clarke uses have been used in literature for several decades.

The oldest extended technique used in this piece is flutter-tonguing, which is employed many times throughout the composition. The player uses fast air to roll their tongue while blowing air into the flute to create a pitch. This effect was believed to first be used in Richard Strauss's *Don Quixote*, which was composed in 1897.

Another classic extended technique that Clarke uses is the key click; this effect is used in the opening of *Hatching Aliens*. The key click first appeared in Edgard Varése's piece *Density 21.5*, which was written to demonstrate the abilities of Georges Barrère's new platinum flute.

The jet whistle is used extensively in the opening of *Hatching Aliens*. This effect was created by the Brazilian composer Heitor Villa-Lobos, who first used this technique in his piece *Assobio a Játo* (*The Jet Whistle*). This three movement work was written for flute and cello.

By using a wide variety of extended techniques, Clarke was able to compose a piece of music that encompasses both new and old extended techniques in order to create his desired effect.

APPENDIX D

Survey distributed to all music lecture classes

This research project looks at how to best introduce music with extended techniques to audiences. Please read the program notes, listen to the performance, and then fill out this survey. Do not put your name on this sheet. Please be reminded that participating in this experiment is optional, and the decision to not participate will not negatively affect your relationship with the University of Arkansas, your music lecture professor, or the researchers involved in this project.

1. Did you participate in or study music after completing elementary school?
   ___yes   ___no

2. If you answered yes to question one, which of the following did you study?
   ___instrument   ___voice   ___instrument and voice   ___other
   ___N/A

3. Are you currently pursuing or have pursued an interest in music at the collegiate level?
   ___yes   ___no

4. Did you enjoy the performance of "Hatching Aliens?"
   Really enjoyed   Did not enjoy at all
   ___1   ___2   ___3   ___4   ___5

5. Did you read the program notes provided to you before the performance?
   ___yes   ___no

6. Did the program notes provided to you before the performance increase your appreciation of "Hatching Aliens?"
   Very much so   Not at all
   ___1   ___2   ___3   ___4   ___5

7. What is your age?
   ___ under 18 __18-25   ___26-32   ___33-39   ___40 or above

If you have questions or concerns about this study, you may contact Kristi Smylie (principal researcher) or Dr. Ronda Mains (faculty advisor) at (479) 575-4170 or by e-mail at ksmylie@email.uark.edu. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University's IRB Coordinator, at (479) 575-2208 or by e-mail at irb@uark.edu.

APPENDIX E

Program notes for the final recital

Winter Spirits (Hoover)

In this piece, the composer seeks to represent how the flute was used to draw spirits from the afterlife into the natural world. While it does not feature many extended techniques, Hoover does use timbral trills with unusual fingerings to create a wooden flute sound. In addition, the piece is written in free, unmetered time, giving it an improvisatory feel. The combination of these compositional techniques creates an enticing melody that captures the spirit of a Native American ritual.

Beneath the Canopy (Parker)

featuring Timothy Clifford on percussion

This five movement composition takes the audience on an auditory journey through the rain forest. It features multiple percussion instruments and several auxiliary flutes. Parker utilizes several extended flute techniques to help capture the many characters in this piece.

I. The Forest Beckons

This first movement depicts the animals of the rain forest awakening at dawn. The slow melodic lines at the beginning lead the listener into a trance-like state before jumping into a quick rhythmic section; the pitch bends and flutter-tonguing in the flute part gives off a primitive, animalistic feel. The music eventually returns to the relaxed state established in the beginning, leaving the audience tempted by the beauty of the rain forest.

II. Rivers Gently Flowing

Composed for bass flute and marimba, this movement takes the audience on a trip down the rainforest river. The moving marimba part represents the eternal flow of the river, and the stagnant bass flute depicts its gentle nature. The instruments eventually play in unison, illustrating the twists and turns in the river.

III. Exotic Birds of Paradise

This segment of *Beneath the Canopy* represents the calls of thousands of birds that make their home in the rain forest. The piccolo player and percussionist create a call and response dialogue throughout the movement, recreating the loud chattering of tropical birds. The piccolo part uses timbral trills and flutter-tonguing to imitate birdsong.

IV. Twilight Calmness/Song of the Orchid

Featuring the alto flute and the kalimba, this movement illustrates two ideas: the calmness that settles over the rainforest at dusk and the beauty of a blooming orchid. The twilight section starts and ends the movement, and the alto flute uses timbral trills and pitch bends while the percussionist answers with various instruments like the rainstick, temple bells, and log drums. The song of the orchid appears in the middle of the movement, and it is marked by long flowing lines in the alto flute followed by a quiet, dreamy melody on the kalimba.

V. Python Dance

This highly rhythmic finale featuring flute and drums represents the dangers to be found in the rain forest at night. The majority of the movement is extremely loud, creating a feeling of desperation to escape. The composition concludes with a short exclamation from both performers, showing that nothing can be free of the rain forest.

The Great Train Race (Clarke)

As its title suggests, this piece imitates a train racing down the railroad tracks. It opens with residual tones and harmonics, making it sound like the train is approaching from far away. As it gets closer, the flute begins to sound regular pitches. The melody builds until it reaches an explosive downwards scale, making it sound as if the train suddenly stopped right in front of you. Silence follows, and then a soft melody consisted of regular notes and multiphonics starts to gradually accelerate; it gives the impression that the train is slowly getting faster. After blasting its whistle, the flutist sings while playing to represent the train taking off at top speed. However, a repetitive timbral trill takes over, creating a sense of unease. It is like the train is traveling over a precarious bridge, but the quick return of the singing and playing melody indicates that it made it safely across. The residual tones eventually return, showing that the train is racing away. The final blast of the whistle concludes the piece.

L'oiseau blessé (Gougeon)

Translating to "Wounded Bird," this piece tells the story of a dying bird. To impose the bird's anguish on the audience, Gougeon uses many extended techniques throughout the piece.

The opening statement uses a pitch bend and timbral trills in the high register to produce a sound similar to a screech. The melodic line soon descends, and the use of microtones, singing and playing, and soft flutter-tonguing portrays a sense of pain and helplessness. The piece switches back and forth between the two registers, reflecting how the bird keeps trying to fly again.

Toward the end of the piece, pizzicato residual tones are used to depict the final attempts of the bird to recover. Gougeon then uses Mozart's "Merry Birdcatcher" theme from *The Magic Flute* to show how the bird is remembering a time when it could fly. Slowing pizzicato residual tones combined with tongue stops and a final key click indicates that the bird has finally died.

Hatching Aliens (Clarke)

Featuring Dr. Miroslava Panayotova on piano

This modern composition features a wide variety of extended techniques. It was partially inspired by the 1979 Ridley Scott film, *Alien*, and the piece imitates many sounds heard in *Alien* and other science fiction films.

Part I: Something is there!

The opening of this movement uses only extended techniques to create a sense of unease. One technique that Clarke calls "Hannibal noises" imitates an alien skittering across a rooftop. The flutist also growls into the instrument, creating an extraterrestrial noise. When the flutist begins playing in a more traditional manner, the music is very quiet. The use of pitch bends and quarter tones makes the listener feel as if something is lurking around unseen. The music gradually builds up before erupting into an alien screech, produced by flutter-tonguing while singing and playing. Eventually warning sirens are sounded; this is created by pitch bends in the upper register of the flute. The sirens soon dissolve, and the piece returns to the quiet melody heard in the beginning. However, the alien soon returns, shortly followed by more warning sirens. They grow in urgency, but the sirens are overcome by an alien babbling. The unsettling conclusion indicates a temporary victory of the creature.

Part II: Alien Chill Out/Blue Alien

This movement aims to portray the strange beauty of an alien song. The use of pitch bends and harmonics laid atop the jazzy piano part creates an eerie melody that instills a sense of wonder in the listener. In one section of the movement, the flutist is instructed to whistle into the instrument. This sound helps to inspire a dreamy state, as if one is floating through space. The theme heard at the beginning of the movement eventually returns, and the alien song builds until it resolves into a peaceful silence.

Part III: Fear Returns-Battle Tempo

The final movement begins with echoes of "Something is there!" It also features "alien whaling," which involves the flutist singing a glissando into the flute while trilling; this effect imitates the battle cry of the alien. The music then moves into an extensive singing and playing section; this combined with the frantic rhythmic drives makes it sound like

an outer space battle. The music eventually dies down and transitions into a slow section made up of multiphonics. The sound is reminiscent of the second movement, and it sounds like the aliens are communicating with one another. The battle eventually resumes, and the alien theme from the first movement briefly returns before the piece concludes with an explosive harmonic.

References

Brokaw, Roberta. "Performance of Extended Flute Techniques of the Twentieth Century

    Based on Aspects of Traditional Flute Technique." PhD diss., Indiana University,

    1980.

Bonds, Mark Evan. *A History of Music in Western Culture*. Vol. 2, *The Classical Era*

    Through the Present. 3rd ed. Upper Saddle River, NJ: Pearson Education Inc.,

    2010.

Burtner, Matthew. "Making Noise: Extended Techniques After Experimentalism." New

    Music Box. March 1, 2005. Accessed November 6, 2013.

    http://www.newmusicbox.org/articles/Making-Noise-Extended-Techniques-after-

    Experimentalism/.

Clarke, Ian. *The Great Train Race*. 2nd ed. Croydon, Surrey: Just Flutes, 2010.

Clarke, Ian. *Hatching Aliens*. Croydon, Surrey: Just Flutes, 2010.

Davis, Christopher Leigh. "Extended Techniques and Electronic Enhancements: A Study

    of Works by Ian Clarke." PhD diss., University of Southern Mississippi, 2012.

    Accessed October 21, 2013. ProQuest Research Library.

Gougeon, Denis. *"L'oiseau blessé."* Saint-Nicholas, Canada: Doberman-Yppan, 1988.

Hamlen, Karla R. and Thomas J. Shuell. "The Effects of Familiarity and Audiovisual

    Stimuli on Preference for Classical Music." *Bulletin of the Council for Research*

    in Music Education, no. 168 (Spring 2006): 21-34.

Hoover, Katherine. *Winter Spirits*. New York, NY: Papagena Press, 1997.

Margulis, Elizabeth Hellmuth, Brian Kisida, and Jay P. Greene. "A Knowing Ear: The
    Effect of Explicit Information on Children's Experience of a Musical
    Performance." Psychology of Music. November 20th, 2013. Accessed November
    21st, 2014.
    http://pom.sagepub.com/content/early/2013/11/20/0305735613510343.abstract.

Margulis, Elizabeth Hellmuth. "When Program Notes Don't Help: Music Descriptions
    and Enjoyment." Psychology of Music. March 24th, 2010. Accessed November
    21st, 2014. http://pom.sagepub.com/content/38/3/285.short.

Parker, Philip. *Beneath the Canopy*. Philip Parker: 1995.

Prince, Warren F. "Effects of Guided Listening on Musical Enjoyment on Junior High
    School Students." *Journal of Research in Music Education* 22, no. 1 (Spring
    1974): 45-51. Accessed January 23rd, 2014. http://jstor.org/stable/3344617.

Schankler, Isaac. "In Defense of Extended Techniques." New Music Box. October 31, 2
    2012. Accessed November 6, 2013, http://www.newmusicbox.org/articles/in-
    defense-of-extended-techniques/.

Siebenaler, Dennis J. "Student Song Preference in the Elementary Music Class." Jo*urnal
    of Research in Music Education* 47, no. 3 (Autumn 1999): 213-223. Accessed
    November 6, 2013. http://www.jstor.org/stable/3345780.

Zalanowski, Annette H. "The Effects of Listening Instructions and Cognitive Style on

    Music Appreciation." Jo*urnal of Research in Music Education* 34, no. 1 (Spring

    1986): 43-53. Accessed January 23rd, 2014.

    http://0-www.jstor.org.library.uark.edu/stable/3344797.