

SELECTED WORKS FOR TUBA AND ELECTRONIC MEDIA

by

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ABSTRACT

Electronic media permeate our everyday lives through email, social media, and the Internet; music is no exception. With their rise in popularity electronics have become commonplace in accompanying music of all genres, including classical music. We have embraced the potential of electronics to open new sonic boundaries that were previously inaccessible with traditional instruments. An expanded sound palate leads to the creation of new works, innovation, and growth in the art of music. One way classically trained musicians can make sure the art form remains relevant is through innovation using the media of our time. Humanity has a growing interest in and facility with electronics, and it is necessary to embrace and develop this genre of music. The first tuba and electronic media pieces were composed in the early 1970s and are relatively neglected when compared to more “traditional” repertoire. That is slowly changing as more pieces using electronic media are composed for the tuba. This genre is becoming more widely accepted as it continues to develop through the introduction of new compositions.

In the following material I discuss the importance and pedagogical value of tuba and electronic media compositions. I have chosen seven pieces that have influenced the genre or that are characteristic of it and explore them here in some detail. In this paper I have given suggestions on how to best prepare these pieces for public performance. This paper was written to accompany my fifth recital at the University of Alabama. All the pieces discussed here were performed on my recital March 22, 2017.

DEDICATION

Dedicated to my family, friends, and teachers. Thank you.

ACKNOWLEDGEMENTS

Thank you to Jeremy Crawford for all his help and guidance these past three years. The members of my committee, Charles Snead, Joanna Biermann, Faythe Freese, Kevin Shaughnessy, and Amir Zaheri, provided invaluable insight for my writing and editing of this document. None of this would have been possible without the composers of the pieces; to them goes my greatest thanks and admiration for advancing the art form of tuba and electronic media. I also must recognize Tyler Entelisano and J.R. Speake for running sound at the recital that accompanied this document. Finally, the generous support of The University of Alabama made pursuing my goals at the highest level a possibility, and I thank them for this opportunity.

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1. INTRODUCTION

I was a freshman in college when I first encountered works for the tuba and electronic media. While learning about Roger Bobo, an accomplished tuba soloist, I came across Henri Lazarof's *CADENCE VI for Tuba and Tape*. Initially I was less than impressed with what sounded more like a chaotic mess than actual music. Yet there was still something there that intrigued me; the jarring interplay between the tape and tuba was something I had not previously experienced. The difficulty I had in separating the individual parts in my first hearing piqued my interest. After a few times listening through the piece I began to realize how the parts fit together to create the whole. In doing so I gained a new admiration for this work and its complexity and began looking for more.

As people become more familiar with technology and the capabilities it provides begin composing we will see an increase in the number of works featuring electronic media. This means we must be knowledgeable about the genre and comfortable performing this repertoire. In my search I found that few works for tuba and electronic media existed in comparison to other genres in the tuba repertoire. The chapter on electronics is much shorter than the others, featuring slightly more than 60 pieces.¹ These compositions should be embraced as they are at the forefront of new music and help to advance the art, keeping it relevant in today's society. The following pieces were chosen

¹ Philip Sinder and Jeffery L. Funderburk, "Music for Tuba and Electronic Media," in *Guide to the Tuba Repertoire, Second Edition: The New Tuba Source Book*, ed. R. Winston Morris and Dan Perantoni (Bloomington: Indiana University Press, 2006) 249-56.

as examples of electronic music and the variety of challenges the genre presents. It should be noted that while I use the word tape in reference to the accompanying tracks, all electronics are either digital copies or CDs. All pieces discussed here were performed on my final DMA recital at the University of Alabama on March 22, 2017.

2. PEDAGOGICAL IMPORTANCE

As Jon Appleton writes, electronic music “poses new obstacles which need to be recognized by composers and listeners alike.”² There is an increased need to be comfortable playing, discussing, and engaging with electronics in music due to its growing presence in our lives. The younger generation is surrounded by electronics from birth, it is only natural they will be more comfortable using them in music. As teachers and performers we must be comfortable interacting with the same media as our students. Effective teaching is difficult if one is unfamiliar with the material that students present.

Electronic music provides a variety of pedagogical benefits. Compositions often force us to go outside of our comfort range with a variety of extended techniques. What began as simple multiphonics, or singing through the instrument while playing, has progressed to vocalizations and physical body movement. Playing with a pianist allows the performer to push and pull time in sections as they desire. This luxury does not exist with set recordings, as a pre-recorded tape cannot respond to changes in tempo. This will have a positive affect when playing in other situations due to proper time keeping being vital in music. Electronics also provide a ready opportunity for rehearsal, as you have an accompaniment that is always available. With the basic setup of a microphone, mixer, and speaker one can create harmonic and rhythmic tracks. These provide an excellent chance to practice improvisation, strengthening one’s knowledge of chords, keys, and

² Jon H. Appleton, “Reevaluating the Principal of Expectation in Electronic Music,” *Perspectives of New Music* vol. 8, no. 1 (Autumn 1969): 106.

harmonic structure. Composing for electronics also has its advantages; new media provide unparalleled opportunity for self-expression. Electronics provide a vast amount of new sounds, creating new possibilities. We must embrace electronic media in music.

3. *CADENCE VI FOR TUBA AND TAPE*

Henri Lazarof composed this piece in 1973 for Roger Bobo. It is one of the earliest compositions for tuba and electronic media. This piece is unique in that it requires the tuba player to pre-record a taped part, then play a solo part with the tape during the live performance. Lazarof makes use of extended techniques, mainly multiphonics, throughout the piece. He indicates the numerous tempo changes with metronome markings, and includes a brief section near the end where graphic notation is used for both the taped and solo parts.

This piece would have been difficult to prepare when it was originally written, as the recording equipment was rudimentary compared to today. The many tempo segments provide natural cuts, and an audio engineer should be able to edit the recording together with minimal effort. This means an easier time recording, as the piece naturally segments itself into short, easily managed sections. When preparing the tape I suggest using a click track to ensure the integrity of the tempo. Unsteady tempo on the tape leaves room for error when preparing a live performance, and the parts require precise timing to be effective. There are places where the tape has to be overlaid on itself to create chords, and this is extremely easy due to modern technology. I believe the taped part should be recorded on contrabass tuba and the solo part performed on bass tuba. This provides a natural contrast between the two parts, helping the audience to discern how they interact.

The piece begins with the solo tuba playing the opening phrase at a strict tempo of 50 bpm. Wide vibrato should be used as a way to combat the otherwise stagnant motion of the whole notes. There is a group of barred notes between the whole notes that indicates the performer should speed up when playing (Figure 1). In the third system we encounter the first tempo change and the first multiphonics of the piece (Figure 2). The performer sings and plays simultaneously for the first phrase, then plays an E3 while singing in a much higher register. One can easily approach the first phrase by separating playing and singing and starting in a lower register. In a comfortable octave, sing through the tuba to establish the feel of singing and playing. Then combine playing and multiphonics in the lower octave. After security in the phrase is established, play in the written octave.



Figure 1 CADENCE VI for Tuba and Tape 0:00



Figure 2 CADENCE VI for Tuba and Tape 0:34

The solo part is alone until the 4th system when the taped part begins. This should be roughly one minute after the start of the piece according to the marked tempos. Lazarof clearly aligns the rhythms on the page; rather than use bar lines he uses metronome markings and note durations to delineate how the parts combine. Fortunately,

technical demands are minimal. The slow tempo means clarity of articulation is paramount. The effect of the duet will not be fully realized if the parts are imprecise; following the metronome markings prevents this problem.

Another improvisatory technique is utilized on the final page of the piece (Figure 3). On the bottom of the page Lazarof writes that “The section...should be improvised freely in a fast tempo with strongly accentuated notes (written exactly in between of [sic] the figures) sounding at equal distance between tape and solo. The duration of this section is about 38-43 seconds.”³ Lazarof’s attention to detail leaves no doubt as to how he wants this section performed. I would approach realizing his intentions as follows: one could record the glissandi of both lines and just focus on playing the notes live. This method would be particularly useful if the performer is facing a taxing recital, as having nearly a minute of extreme glissandi will stress the embouchure. It would also be possible to record the taped part and the glissandi in the solo line, leaving just the notes of the solo to be played during performance. In my performance I considered these approaches to this section and decided to record the tape while performing the solo part live.

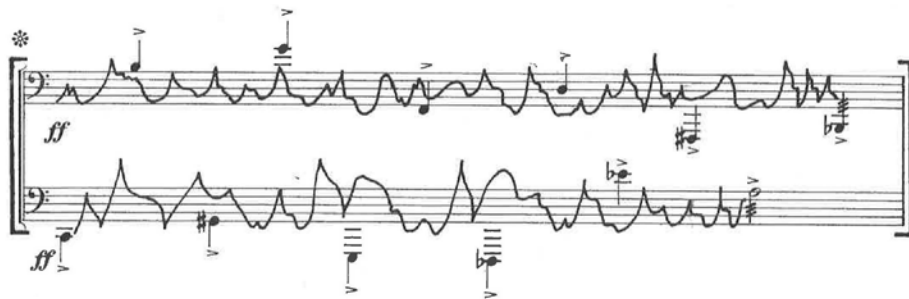


Figure 3 *CADENCE VI for Tuba and Tape* approx. 5:00

After the improvised glissandi section (Figure 3) the tape plays the chords mentioned earlier, then ends. The piece continues with the soloist playing a muted section

³ Henri Lazarof, *CADENCE VI for Tuba and Tape*, (Berlin: Bote & Bock, 1973), 4.

that functions as a coda. This closing section is muted and is the slowest in the piece. It features more of the same figures common in the piece, such as the glissandi, and ends with the opening theme an octave higher.

One further challenge is the extreme range called for in this piece. The solo line stays in the higher tessitura of the instrument throughout most of the composition, especially on page 3. The taped part is mostly in the low register, however it does reach A \flat_4 at one point. If range is a problem, then address it during daily routine. One exercise is playing slurred scales slowly and ascending chromatically. Playing slurred focuses on continued airflow while playing slowly gives the embouchure more time to adjust. Security in the high register is a necessary skill when playing modern tuba solos, as they tend to be set in the upper tessitura of the instrument. Fortunately, this piece is forgiving enough in its tempi selection that register should not be much of an issue. This piece is approachable by most graduate level students; multiphonics are common, but the glissandi section at the end can be challenging.

4. PILTDOWN FRAGMENTS

Piltdown Fragments draws inspiration from the Piltdown Man controversy, which occurred in 1912. Archeologists faked the discovery of “the missing link” between man and ape with a set of teeth, jawbone, and skull fragments. It was accepted as authentic until 1949, when it was revealed that discovery was a hoax.⁴ Composed by Walter Ross in 1975, this piece is a stereotypical “electronic” piece. There are just over two-dozen blips, beeps, sine waves, pops, and voices accompanying the solo line, which can be overwhelming to the audience. Ross’s piece features five distinct sections, or fragments, that combine to make the whole. The first four present original ideas in both the tape and solo parts, which are then juxtaposed in the fifth.⁵ In the solo part each idea focuses on a different aspect of playing using intervals of augmented 4^{ths}, minor 2^{nds}, and minor 3^{rds}.⁶

The tape is illustrated in graphic notation above the solo line (Figure 4), allowing the player to keep relative synchronization with the tape. While it is possible to line the solo and tape up exactly, I do not believe this is necessary. In an earlier tuba and tape composition, *Midnight Variations*, Ross scored vertical lines (Figure 5) that “indicate points of exact co-ordination with the tape.”⁷ No such lines are present in *Piltdown Fragments*, leading me to believe approximate timing is acceptable. The timings, in

⁴ Frank Spencer, *Piltdown: A Scientific Forgery*, (London: Oxford University Press, 1990).

⁵ Walter Ross, “Piltdown Fragments,” <http://walterross.com/compositions/brpiltdown.html>, (February 17, 2017).

⁶ *Ibid.*

⁷ Walter Ross, “Midnight Variations,” <http://walterross.com/compositions/brmidnt.html>, (February 17, 2017).

minutes, for each section are: Section 1- 2:00; Section 2- 1:40; Section 3- 2:05; Section 4- 1:10; Section 5- 2:45. The tape has a few seconds of dead time between sections allowing the performer time to adjust if needed.

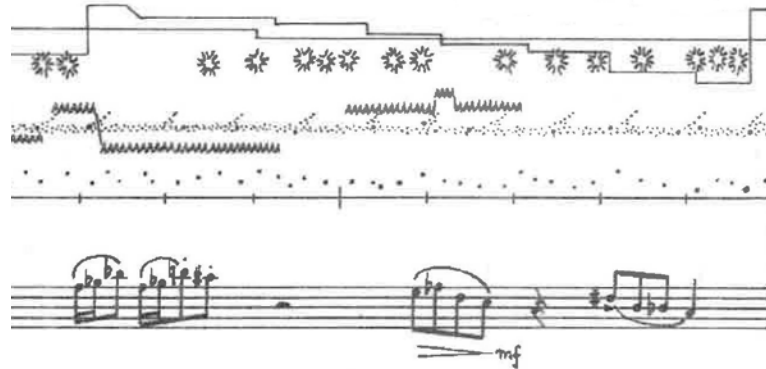


Figure 4 Piltdown Fragments 9:25



Figure 5 Midnight Variations 2:10

Each of the sections introduces unique melodic material and/or extended techniques. The first section focuses mainly on minor 2nd and tritone intervals played in repeated eighth note patterns (Figure 6). These notes are harmonically close and need a crisp articulation to emphasize the half steps, or they will aurally blur together and the phrases will become indistinguishable. Dynamics also play an important role; they are the easiest way to mold the piece. Ross is very active in his dynamic shaping, with a number of quick, consecutive swells occurring multiple times in the section (Figure 6).



Figure 6 Piltdown Fragments 0:22

In the second section, the tuba part is “designed...to make use of some of the innovative techniques of modern tuba performance.”⁸ Ross utilizes half-valving on a minor 3rd interval and vocalizations through the tuba (Figure 7). There is also one note with multiphonics. Half-valved parts will need to be played slightly louder than Ross has marked due to the valves not being completely open, softening sound projection. Likewise, the production of the vocalizations should be nasal for the voice to cut through the sound of the tape.



Figure 7 *Piltdown Fragments 2:20*

Section three uses the flutter tongue technique, where the soloist must roll their tongue to produce a rapid buzz in the tone (Figure 8). Ross combines this idea with slowly changing the valves, creating a quasi-glissando/half-valve flutter. The notes used are only a minor 2nd apart, leading to an opportunity to accentuate the technique. Once again dynamics play a large part in the effect, as Ross has placed *subito piano* and *forte* markings and hairpin crescendos on almost every phrase.



Figure 8 *Piltdown Fragments 4:25*

⁸ Walter Ross, “Piltdown Fragments,” <http://walterross.com/compositions/brpiltdown.html>, (February 17, 2017).

Section four is more traditional in nature as it implements no extended techniques, instead focusing on the relationship between compound and simple meter (Figure 9). It starts in compound meter but quickly goes back into simple, and continues to switch between the two. The performer must follow the accents Ross has laid out, as they provide guidance through the shifting meter.



Figure 9 *Piltdown Fragments 5:45*

The last section is simply a juxtaposition of all the previous themes and techniques implemented in the piece. Clearly stating each idea as it reoccurs is necessary to provide a sense of closure; the piece is a collection of independent ideas until the last section ties them all together. In order for this piece to be effective, paying attention to the unique themes in each section is paramount. If the techniques are not properly executed this piece can quickly become a collection of effects instead of a complete work.

5. THREE FOR ONE

Composed by Scott Wyatt in 1990, this piece acts as a bridge between earlier electronic compositions and newer ones. *Three for One* is a good example of a bridge because Wyatt used both electronic sounds and samples as well as traditional instruments when creating the background composite. The piece itself presents many challenges, most of which revolve around finding ways to keep time without aid from the score or tape. Wyatt marked tempos at the beginning of the movements but did not notate the correct note and rest durations; they are shorter or longer than indicated in the score (Figure 10). The range is also somewhat demanding as the piece sits in the high tessitura and quickly becomes taxing on the embouchure.

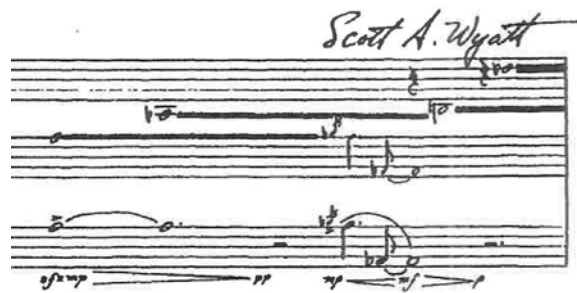


Figure 10 *Three for One* 0:18

The first movement is the most challenging when aligning the solo and the tape. It requires precise entrances throughout the movement but does not provide a constant, recognizable pulse to aid timing. This makes the movement an excellent tool for improving your sense of time. One should listen to the accompaniment while reading the

score to get a sense of the movement's timing. Subdividing through the sustained notes is necessary in staying synchronized with the tape. Once comfortable, begin singing the solo line along with the accompaniment. This should be done as many times as necessary for the piece to become second nature. Several large intervals jumps and quiet higher register playing are prominent in this movement. These can be addressed in daily routine by practicing the two octave slurs and interval studies found in the Wesley Jacobs edition of the Arban book.⁹

The second movement features an opening call and response between the tuba and the tape preceded by a 30 second introduction (Figure 11). Since the tape is one track and runs continuously, you must be aware of when the first movement ends. Upon listening to the tape one will notice a midi-xylophone sound that plays a series of notes that increase in speed and decrease in volume. This ends right at 30 seconds and cues the performer to begin playing. Sing through the part before attempting to play to obtain the proper timing of the phrase. After 52 seconds of call and response the tuba and tape synchronize for the duration of the movement. Wyatt has provided notation that lines up and guides the performer more clearly than the first movement. There are more obvious audio cues, several of which subdivide the beat for a more accurate arrival. This movement has the highest average tessitura and requires navigation through it, which presents challenges. Focus on continuous airflow and practice in a lower octave for security when performing the written octave.

⁹ Wesley Jacobs and Jerry Young, trans., *Arban Complete Method for the Tuba* (Maple City: Encore Music Publishers, 2000) 127.

$J = c. 98$
 30 sec.
 Tape part doubles tuba line with delay and echo effects. Approximate synchronization is necessary.
 mp \leftarrow mf \rightarrow pp

Figure 11 *Three for One* 3:54

The third movement differs from the first two by establishing a solid tempo and requiring minimal demands of range and sustain. It does have a run of 16th notes lasting for 16 beats at quarter note = 132 (Figure 12). It follows a pattern of halfstep up-wholestep down-halfstep up-halfstep up, turning the run into a broken chromatic scale. The phrase should be practiced with a metronome; separately work the valves and your air and articulation for maximum clarity before attempting to play. In the rest of this movement the tape and tuba are often in unison, which is notated in the score. Where they are not there are clear cues in both the score and the tape to keep time.

Figure 12 *Three for One* 8:10

6. *NEW ENGLAND REVERIES*

Composed by Dr. Neal Corwell in 1990, *New England Reveries* is meant to convey the beauty and variety of the New England landscape.¹⁰ Dr. Mark Nelson commissioned the piece while working at a college in Vermont; this was the inspiration for the subject. This piece is a functional introduction to the tuba and electronic media genre for both performer and audience. It requires minimal technical ability and range and is easy to coordinate with the tape. The range stays between B \flat 3 and F#1, with an optional D1 near the beginning. I recommend using a contrabass tuba, as the range is perfectly suited for that instrument. The actual accompaniment is visually laid out on the score in cues, aiding the performer in navigating the piece. The accompaniment also plays for several bars at transition points, easing the performer into the new section. The main theme of the piece is easily recognized and returns at the beginning of each section where it is slightly modified (Figure 13).

¹⁰ Neal Corwell, *New England Reveries* (Clear Spring: Nicolai Music, 1990), 1.

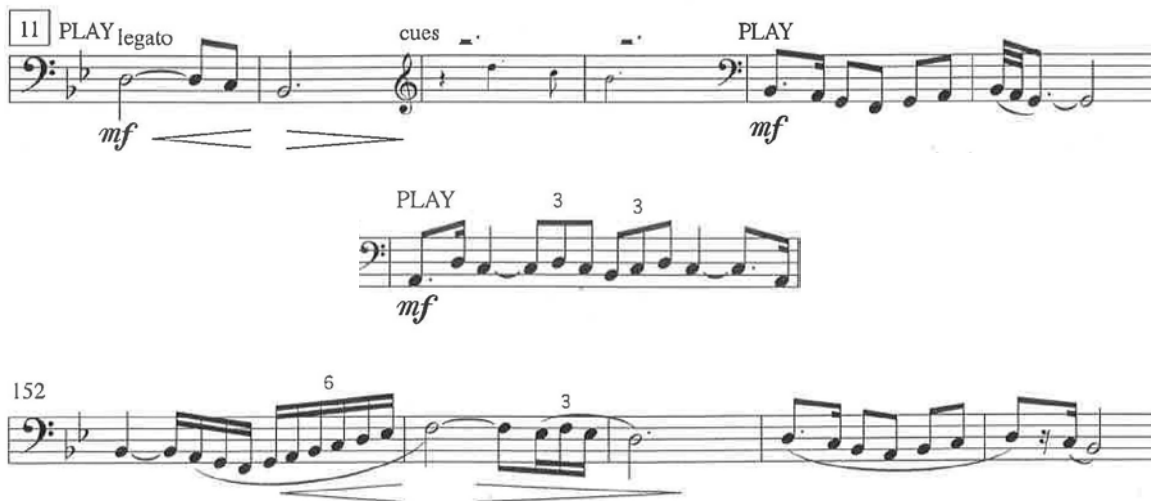


Figure 13 *New England Reveries* m. 11-16; 72; 152-56

The piece itself is laid out in an arch form: introduction/A/A'/B/C/B'/A''/coda.¹¹ Several phrase directions, such as *legato*, *suave*, *freely*, and *heavy*, are printed at the beginnings of each section. These should be followed as closely as possible to establish the individual characteristics of each section. The introduction is ten measures of the accompaniment before the tuba enters. There is a constant eighth note pulse that is clearly laid out in cues on the score, reducing the chance for error. At m. 11 the A section begins and the main melody is introduced. The slower tempo and preponderance of sustained melodic notes can cause the phrase to lose energy. This is addressed by giving a slight dynamic push through the sustained notes. The A section is quickly followed by A', which is the same melodic material transposed to a new key of F# minor. The B section is short, primarily features the tape, and acts mainly as a bridge between sections A and C. The piece almost doubles its tempo at the start of section C, which features the most technical part of the work. It also switches from simple to compound meter while subdividing the beat to create a more active baseline and keep the piece moving forward.

¹¹ Neal Corwell, *New England Reveries* (Clear Spring: Nicolai Music, 1990), 1.

One challenge a larger tuba presents is the notes becoming too broad. This obscures the melodic line, particularly in places like m. 89. The performer should focus on clarity in the fingers and in the articulation as well as stressing agogic accents to keep the melodic line clean. Approach the valve pattern and the air pattern separately at first, working each with a metronome. This allows for more focused development, resulting in a quicker time combining them into the musical line

After section C ends, Dr. Corwell uses the B' section to transition back to tempo I for the A" and coda sections. The B' acts as a bridge but is slightly more involved in the solo line than the original B section. The performer should aim for a more sustained legato when playing the notes to move from the active melody of section C to the relaxed melody of section A". In this final section the melody has undergone a synthesis of parts, adding the triplets that were prominent in section C. Work the valve pattern and make sure they are in time with the metronome. The activity in the line belies its overall legato nature and creates a great contrast between the two main styles present in the piece. A short coda takes place after section A" ends. The theme combines the melodies from the A and C sections, providing an appropriate resolution to the piece. I have heard recordings where the performer has chosen to play the coda an octave lower than written and feel this does a better job of concluding the piece than the written octave.

7. CAPRICCIO FOR TUBA AND MARIMBA

Composed by William Penn in 1992, this piece was originally composed for tuba and marimba. Penn added a synthesized tape version at the behest of R. Winston Morris who premiered it in 1993.¹² The synthesized tape version allowed Penn to enhance the accompanying part by adding in new instrumental timbres and effects. He has set quarter note =152 as the minimum tempo, but encourages the performer to go slightly faster if desired. The synthesized tape is set at quarter note =152. Preparing this piece provides an opportunity to work on a variety of articulations. *Tenuto*, *staccato*, and *marcato* are all used. The broad note lengths of *tenuto* are needed to provide contrast to the percussiveness of the tape. When the tuba and tape are in rhythmic unison *staccato* must be used to match the note articulations. The times where the tuba is *marcato* should be considered impact points and played with force.

The tape has a two-measure introduction to establish tempo and meter, with the solo part beginning the main theme at letter A (Figure 14). The main theme features all three articulation types and should be played accordingly. Two secondary themes are interspersed between the main themes. One, marked *legato e espressivo*, is full of long sustained phrases developed from the half notes in the main theme. The tape accompaniment switches from compound to simple meter and plays half notes instead of eighth note triplets. Penn stated he wants to keep the “general sense of drama in the

¹² William Penn, *Capriccio for Tuba and Marimba*, (Asbury Park: Keyboard Percussion Publications: 1998).

piece,”¹³ so the performer must move through the sustained notes. Two possibilities for this are slight crescendos, and agogic accents on strong beats. In the section that follows, the tuba imitates the percussive nature of the marimba. Eighth note triplet runs are common in this section and are either the B or E ♭major or Chromatic scales (Figure 15). There are also short upward glissandi that occur in this section. To achieve this effect rapidly half-valve through while rising in pitch.



Figure 14 *Capriccio for Tuba and Marimba* m. 3-5



Figure 15 *Capriccio for Tuba and Marimba* m. 113-4; 258-9

There are some challenges in lining up the tape and the solo parts. An audio monitor is suggested for the accompaniment, which can be incredibly quiet and difficult to hear. The accompaniment is *col legno* at times, which can cause the performer to become lost due to the timbre shift. Singing and reading the score with the tape is useful

¹³ Penn, *Capriccio*, (Asbury Park: Keyboard Percussion Publications: 1998).

since it allows you to see what is happening and practice appropriate timing before attempting to play. One thing that would be beneficial is including a slower practice track with the piece. One must instead rely on listening and singing to get the pace of the tape and then working up to speed with a metronome. Studying the score and marking points of transition provides needed structure when performing.

8. ABSURDITIES FOR TUBA AND DIGITAL MEDIA

Composed by Dr. Hunt in 2012 for Steven Maxwell, *Absurdities for Tuba and Digital Media* is a piece that blends a wide variety of digital media effects with the solo line. This includes vocalizations (both in the digital media and solo parts), pre-recorded instrument tracks, freely timed sections, and physical movement (Figure 16). Each of the seven movements deal with a different definition of absurd the composer found in various online dictionaries.¹⁴ The odd movements are associated with life events of Dr. Hunt's that he put to music. Movements 2, 4, and 6, which focus on the same subject, the Bob Bridge in Avon, Colorado, tie them together.

SAY

PLAY:

DARE TO WEAR

mf

DARE TO WEAR THE O-RIG-I-NAL MUL-TI COL-OR MOOD RING.

PET ROCK. SHOUT. STAND. FOLLOWING LEAD FROM TAPE, LOOK DIRECTLY AT AUDIENCE AND SAY (LINE UP WITH RECORDING):

AT-TACK

AT-TACK. AND

Figure 16 *Absurdities for Tuba and Digital Media* mvmt 3 m. 45; mvmt 5 m. 42-3

¹⁴ Paul Hunt, *Absurdities for Tuba and Digital Media*, (Manhattan: Paul Hunt, 2012).

The first movement, *Biorhythms*, is in 9/8 time with a 2+2+2+3 subdivision. The audio track begins with a brief introduction before the subdivision starts and a narrator begins speaking about biorhythms. The subdivision is present in most of the movement to aid in keeping time. Some phrases have less traditional note selection and voice leading, with m. 69 being a good example (Figure 17). The pitches are in close proximity and should be sung slowly to assist in gaining accuracy.



Figure 17 *Absurdities for Tuba and Digital Media* mvmt 1 m.69

The second movement, *THE*, features the first freely timed section. The tape has spoken lines and the player must fit their phrases in between. Tempo markings are provided as a guide but need not be strictly observed. 57 seconds into the movement the tape ends a sentence with “the bridge in 1992” and goes silent for eighteen seconds. While this section could be played in time, it is marked *con rubato e molto espressivo*. One needs to work out their phrasing as the tape’s spoken lines will cut the phrase ending off if time is lost. Singing this part will help with timing as well as pitch accuracy.

Movement three, *Mood Ring*, has some unique challenges not yet discussed in this paper. This movement opens with a voice on the tape speaking about a mood ring with a habanera rhythm in the background. The dialogue and the solo line are rhythmically congruent, with the soloist cheating rhythms to match the spoken line. This occurs at several points in the piece and the solo needs to rhythmically match the spoken words every time (Figure 18). There is a point where the tuba is set down and the performer walks across the stage to get a mute. Dr. Hunt gives suggestions on how to do this, which

include things like “*Seductively* walk to mute” and “Perhaps dance with it as you return.” Physically committing to these movements is important to avoid looking awkward. This section lasts for 28 seconds; a kookaburra call and the end of the habanera rhythm cue the next section. The tuba takes the habanera rhythm and has 26 seconds to play through this passage, then removes the mute and continues playing as before.

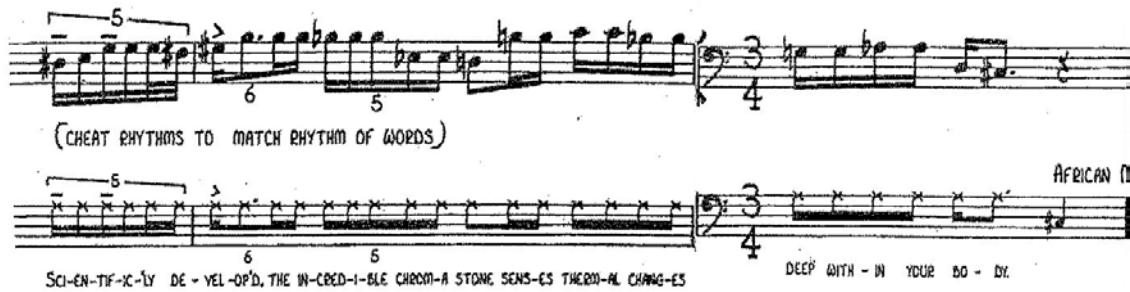


Figure 18 *Absurdities for Tuba and Digital Media* mvmt 3 m. 17-19

The fourth movement, *BOB*, features a fifteen second introduction before the solo line enters. The movement lasts for 1:10 and is freely timed throughout. The movement is imitating the *Prelude* of Bach’s *Cello Suite No. 1*. Notes should be broad and connected with a heavy emphasis on the downbeat of each measure. Use the sense of pace from Bach’s *Prelude* and the timing will be appropriate. While the pacing of Bach’s *Prelude* is stylistically appropriate, the pitch content is not traditional to Bach. Play slowly at first to get pitch accuracy. The most common intervals are a variety of sevenths and sixths, which can be difficult to hear when first playing, as they are surrounded by thirds and fifths.

The next movement, *Pet Rock*, features a metal rock/funk beat in the background. A heavy emphasis on the downbeat is needed to imitate a bass guitar and blend with the tape’s style. The technique required for the runs is minimal, except in measures 20-21. This figure combines a great deal of finger technique and rhythmic variation in quick

succession (Figure 19). Triple tonguing will be necessary for the 16th note triplets to project cleanly. Clarity is achieved through a light tongue and prioritizing movement of air through the phrase. At the end of the movement is a brief improvisational section. Dr. Hunt states the performer should imitate an aggressive rock guitar solo, and to do so in any way you see fit. He has provided a written solo for those uncomfortable with improvising, but the solo is highly technical for even the most advanced players. This is helpful as it forces the development of improvisation as a skill, which is often neglected by tubists.



Figure 19 *Absurdities for Tuba and Digital Media* mvmt 5 m. 20-1

The sixth movement is *BRIDGE*, the final part of *THE BOB BRIDGE* trio. Graphic notation and time, in seconds, are marked on the score to guide the performer through the movement (Figure 20). Some phrases begin at the end of spoken sentences and are notated as such on the score. Notes in this movement need to be full-value and slightly accented. Doing so cuts through the sound of the tape and provides a sense of direction and structure otherwise absent from the movement.



Figure 20 *Absurdities for Tuba and Digital Media* mvmt 6 seconds 54-59

The last movement, *Zip to Zap*, is a fast swing style intertwined with audio clips from the tape. The piece is set at quarter note =360; Dr. Hunt did this to make the notation less intimidating as the pulse is felt in one. When practicing simply set the metronome to 90 and put on sixteenth note subdivisions to get quarter note =360. The large number of meter changes and intermingled vocal measures can present a challenge. Listening to, and signing with, the accompaniment develops the timing needed for performance. There are some places where vocalizations and played notes occur in rapid succession. The performer should use diaphragm support and shout to project over the tape. Page turns also pose a challenge when performing this movement. Due to the entire piece being performed *attaca*, it is not feasible to arrange the pages so that turns are easy. Using an iPad and pedals is a good way to work around this problem. Dog-earring pages provides for an excellent chance to add to the feel of the piece, adding the possibility of throwing your pages off your stand. The piece ends with the performer rapidly exiting the stage while the tape states “and look at them go!” No time should be taken between your final note and leaving.

9. LAVENDER CIGARETTE

Lavender Cigarette is a piece commissioned from Amir Zaheri for this recital. I wanted to add to the repertoire and asked Dr. Zaheri to compose a piece, using whatever methods he felt appropriate. The resulting piece is unique in that it uses film as a medium in addition to sound, which means a projector will be needed along with the normal setup. *Lavender Cigarette* is based on the text “Don’t nuzzle me fucker-maker” from *Of Being Dispersed* by Simone White. When performing take into account that there is spoken profanity in the final movement in case this is inappropriate for the audience or venue. Each of the three movements lasts one and a half minutes and comes with an accompanying video. The composer stated the performer is to face the screen when playing, allowing coordination with the film. Visual cues are written on the tuba part for assistance. While the movements are *attacca*, the composer included some time for adjustments. When the Roman numeral flashes on the screen there are four seconds before the film begins, and there are six seconds of black screen between the movements.

The first movement opens with the solo line resting for four beats, then speaking words through the tuba. The words must be spoken forcefully to project through the instrument. In these measures clarity of text is less important than establishing an unsettling feeling. Dr. Zaheri has marked the entire movement at a *forte* dynamic, and has included several hairpins (marked as crescendos on the score). These hairpins “correspond with glissandi and indicate a rapid mutation of the tone towards a brassy

quality. The greater the distance of the glissando, the harsher the tone should become.”¹⁵ The hairpins should only change tone quality and not be any louder than the rest of the movement. There are four instances of multiphonics in the movement at intervals of a major 2nd, diminished 7th, and the tritone. Isolate the multiphonic before practicing through the phrase as there is a tendency for the voice to drift to more consonant intervals. There are several spots where extended techniques are used simultaneously (Figure 21). First practice each phrase without techniques for pitch accuracy. Then begin practicing each technique out of context before adding them in one by one to the phrase. Alternate fingerings are useful when required to simultaneously glissando and hairpins. For example, when playing an F tuba, 2 4 and 5 can be used in place of 2 3 to play the C#3 in Figure 21, facilitating the movement to C#2.



Figure 21 *Lavender Cigarette* mvmt 1 min 1:07-1:15

The second movement contains no extended techniques, instead focusing on variety of style. Five separate style markings accompany the beginnings of phrases: *sweetly*, *slightly irritated*, *tenderly*, *plaintively*, and *gently*. The performer must switch from *legato* to *marcato* articulations to change style from section to section. Staying actively aware of the time through the rests is important; otherwise performers will relax and lose time due to the relaxed nature of this movement.

The last movement is similar to the first as it features some extended techniques and is at *forte* dynamic for its duration. There are several spots where a flutter tongue and

¹⁵ Amir Zaheri, *Lavender Cigarette*, (Amir Zaheri, 2017).

glissando occur (Figure 22); practice them the same way as the first movement. The composer was very specific that care must be taken with the articulation markings. *Staccato* are as short and brittle as possible, *marcato* are over-emphasized accents, and *tenuto* have weight in addition to length. The articulations are combined at points and should be played accordingly. The tape's tempo is constantly speeding up and slowing down, meaning time must be kept independently. The ending clip must align with the end of the solo line for maximum effectiveness. The film goes blank at 0:16, 0:28, and 1:08 to provide guideposts when performing.



Figure 22 *Lavender Cigarette* mvmt 3 min 0:39-0:45

10. CONCLUSION

A well-rounded musician needs to be comfortable performing all kinds of solo material, including electronic works. Performing this music is important because the genre continues to grow within the tuba repertoire. The pieces in this paper provide insight into the unique challenges and demands seen in the genre. They are also indicative of the style of music at the time, demonstrating changes that occurred as the art progressed. In each section I have given advice on how to overcome the challenges each piece presents in preparation for a public performance. The goal of practice is to be as efficient as possible; playing the pieces without isolating sections can cause the formation of bad habits, which results in more work. Isolating the fingers and air, focusing on continued airflow, and singing and listening are the most basic practice methods. The extended techniques are approached with individual methods, dependent on what is required of the player. Isolated daily practice should occur for each of the extended techniques until one is comfortable playing them in the context they require. This method leads to quicker success when combining techniques with each other and the musical line, which achieves the goal of an efficient practice session. The information in this paper will provide assistance when researching these pieces and preparing them for performance. Tuba and electronic media is a genre that is growing in popularity; composers and performers both recognize the potential for variety in expression and style present in this genre. The experimentation with electronic media presents a new path for musical development, resulting in pieces that are welcome additions to the repertoire. As

the number of pieces continues to grow, so too will the performances featuring electronic media pieces.

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