MM percussion recital

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MM PERCUSSION RECITAL

An Abstract

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Master of Music

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May 2022
This Study By: Tyler Darnall

Entitled: MM Percussion Recital

has been approved as meeting the thesis requirement for the Degree of Master of Music

Date Dr. Daniel Swilley, Chair, Recital Committee

Date Dr. Jonathon Schwabe, Recital Committee Member

Date Dr. Melinda Boyd, Recital Committee Member

Date Dr. Kramer Milan, Recital Committee Member

Date Dr. Jennifer Waldron, Graduate College
This Recital Performance By: Tyler Darnall

Entitled: MM Percussion Recital

Date of Recital: April 15, 2022

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Degree of Master of Music

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ABSTRACT

MM Percussion Recital

This recital abstract serves as supplemental material to the Master of Music degree recital by Tyler Darnall. The recital will take place on April 15, 2022, at 6:00 p.m. Central Standard Time in Davis Hall at the University of Northern Iowa. This recital will feature works by Jeffrey Dennis Smith, Elliott Carter, J.S. Bach, Alyssa Weinberg, Nicolas Martynciow, John Cage, and Iannis Xenakis. Aiden Endres, Nicole Loftus, Xander Webb, and Matthew Kokotivich will be collaborating with Darnall for his recital. In addition to providing musical and historical context, this document will address specific considerations regarding performance practice for each piece.

Opening Remarks

The first piece on the recital is a marimba quartet written by American composer Jeffrey Dennis Smith. The Performers for this work are Aiden Endres (player 1), Tyler Darnall (player 2), Xander Webb (player 3), and Nicole Loftus (player 4). Smith’s marimba quartet uses four marimbas that play in different ranges of the instrument. Throughout the piece we see the use of ostinatos in which one or multiple players play the same rhythm over a period of time while one or more players play a melodic line either in unison or in hocket. We can see this in the introduction of the piece where player 1 plays a single rhythm on A-flat. As the introduction continues, players 2-4 play a three bar melody in hocket. This three-part melody is then interrupted with player 3 starting a new ostinato over that of player 1’s, and after two bars of player 3’s ostinato, player 2 starts a different ostinato while player-four continues creating short, fragmented, melodic
lines in the low register of the instrument. Player 2 and 3’s ostinatos are syncopated. Player 3’s ostinato uses groupings of three eighth-notes while player 1’s ostinato is a repeated one bar phrase. Player 2’s ostinato is in groupings of three sixteenth-notes. The first eight bars of the piece highlight the three ostinatos used throughout the piece which are developed further over the course of the work via the continued superimposition of polyrhythmic layering.

**Saeta**

Elliott Carter was a modernist composer of the twentieth century who is known for his works containing metric modulation or tempo modulation, as he would call it. Metric modulation is a compositional tool in which the tempo in a new passage is based on a subdivision or rhythm in the previous tempo. Carter, one of the first composers to write for solo timpani, is most known in the percussion community for his *Eight Pieces for Four Timpani* which includes *Saeta*, the first of the eight.

The traditional role of the timpani in the orchestra is largely supportive and is not often thought of as a melodic instrument. While most drums are non-pitched, the timpani can be tuned to a single pitch. Since a performer has, at most, four or five drums, it is very difficult to write complex melodies. Carter explored the boundaries of the timpani by writing his eight solos using different extended techniques. These techniques, in regard to *Saeta*, include playing with the butt of the stick, playing in the center of the drumhead, and using dead (muted) strokes.

Carter uses extended techniques to create a variety of different timbres produced with a single drum. The use of the butt end of the stick creates a more articulate sound
and brings out higher overtones that the felt end of the stick cannot. Carter also instructs the performer to play strokes in the very center of the head as opposed to off center. By hitting the center of the drum head, the performer is able to get a less resonant and quieter sound. Lastly, Carter instructs the performer to use a dead stroke by striking the head and leaving the stick touching the head of the drum. This muffles the drum creating a less resonant sound similar to hitting the center of the drum; however, this technique creates a much quieter sound.

While such techniques are commonplace today, when it was composed, Carter’s Eight Pieces would have been appropriately categorized as experimental. In an interview with Patrick Wilson, Carter states “The Eight Pieces, you see, were written to develop notions of metric modulation as a sort of experiment. Because I then wrote my big First Quartet which uses all the little metric modulations that you find here in the Eight Pieces on a simplified basis. So, this was a kind of sketch for a string quartet – if you can believe it!”1 As Carter states, these pieces can be viewed as a test run for his other compositions. While intended as sketches, these solos have withstood the test of time and are consistently performed for both recitals and auditions. In fact, the Eight Pieces are among the most requested repertoire from college auditions.

Saeta begins with an ad lib accelerando on a single drum. This accelerando comes back two other times in the piece: once to interrupt the opening motive before it starts again, and once more at the end of the piece before the coda. The opening motive has a

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tonic-dominant relationship in the melody that uses a combination of legato strokes on the 29” and the 26” drums on the pitches of A2 and a D3, while the 32” and the 23” drums, both tuned to the pitch of E (E2 and E3, respectively), are played softer in the center of the drums to create a staccato effect. This allows for the melody of the A and D to come out very smooth and connected. A similar technique is used from measures 53-62 where the performer must play a series of notes quietly while there are accented forte and fortissimo notes to create a foreground melody over the notes in the background. The key is to create a melodic line following dynamics while playing the staccato notes on the outer drums. The performer must be cognizant of the areas of the drums that they are playing on to create a tone on the timpani that would be pleasing to the audience’s ears and bring about the appropriate balance for melody and accompaniment.²

The term “Saeta” derives from a Spanish-Catholic ceremony performed during Holy Week that serves as a musical prayer of mourning.³ The word Saeta also translates to the English word “arrow” or “dart” which could be a reason why the Church adapted that word as the name of the ceremony. Edward F. Stanton states in an article, “The Origins of the Saeta”, that the Christians hypothesized “that the Saeta grew out of the liturgy of the Church and the religious drama of the Middle Ages.”⁴ Carter’s Saeta has influence from the Spanish-Catholic Saeta in the sense that there are many references to

⁴ Stanton, 386.
the highly dramatic ceremony of the Catholic church as well as the literal translation. The ad lib sections in the beginning of the piece represent the tension of a bow string while someone is drawing back an arrow. Just like how the person behind the bow lets go of the arrow to release the tension, the music moves out of fast, loud passages into a more peaceful area of the work. In this more peaceful section, the listener hears the interval of a perfect fourth from the middle drums – A and D. This represents the church bells that you would hear as you walk by a Catholic Church before a Catholic Mass. As the piece continues, and the performer changes to the butt end of their sticks. The listener can imagine the change in timbre to be representative of a light drizzle of rain that evolves into a large rainstorm. While this rainstorm is taking place, the listener continues to hear the single, but harsh, bell tone of A before the theoretical storm lets up and we go back to the melancholy sound of church bells. Once again, Carter is creating tension and release as if an arrow is being drawn back.

The constant shifting of tempi is all relative to rhythms played in the measure prior to the tempo change – metric modulation. In the figure below, the tempo changes from the half-note equaling 45 beats per minute to five eighth notes equaling 45 beats per minute. Carter is able to set this time-change up by using quintuplets in measure 51 which become the eighth note in measure 52.
Carter was not the first to compose using metric modulation; however, Carter’s intentional use of metric modulation is what makes his music unique from those that have used the technique prior to him. His use of metric modulation served a specific function that is similarly observed in a harmonic analysis of pieces using denser harmonies. Much like Bach’s use of different tonal centers to create a feeling of comfort and discomfort, Carter used metric modulation to invoke the same feeling – tension and release. In the figure above, Carter writes quintuplets that serve as a 5:4 polyrhythm in measure 51. This polyrhythm serves as a point of tension as we are straying away from the previously stated meter. The quintuplet serves the same function as a pivot chord before a modulation of keys. It creates a feeling of ambiguity before finding a new time signature to bring the listener into a feeling of stability.

_Cello Suite in C Minor_

The Cello Suite in C minor was Bach’s fifth cello suite of the six that he composed. Notably, there are two things about suite no. 5 that are different from all the others. First is that this cello suite is an exact copy of a lute suite that Bach had also written. The original manuscript for the Lute suite in Bach’s own handwriting has
survived to this day. Second is that this is the only suite that uses scordatura, or an alternative tuning of the strings. Bach notates that the A string should be tuned down a whole step, meaning everything on the staff above an A is to be played a whole step lower. The exact reason why Bach did this is unknown, but it is speculated that lowering the string facilitates an array of possible double stops and creates a darker timbre in the instrument.

The prelude to this suite is composed in the same form as a French overture consisting of a slow introduction followed by a faster fugue. In the faster section, it is important to note the use of different voices. Because the cello is only capable of playing one line at a time, creating an actual fugue for a single cello is impossible; however, Bach uses the different registers of the cello to create three distinct voices – compound melody.

When playing any of the Bach cello suites on marimba, the performer must consider using a type of stick that is able to create a sound that expresses the same amount of timbres that a cello would be able to make with a bow. A commonly used stick for Baroque transcriptions would be one with a harder plastic core covered in and wrapped in yarn. The different layers allow for the performer to get different subtle timbres based on the quickness of a stroke. A quicker stroke will transfer energy from the hard plastic core creating a brighter and more articulate sound while a slower stroke will transfer energy either through the yarn or the latex portion of the mallet creating a darker timbre.

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and more legato sound. This is a common way to mimic the different timbres created by
the different strings of a cello, without having to use three separate instruments.

In a typical Bach cello suite, there are two tonal centers and different transitional
passages in between, in this case, C minor and G minor. When performing the cello suite,
I think of the two different key centers and how I want them to sound. The key of C
minor conveys a feeling of comfort as it is the “home” tonal center; however, and as the
key goes farther and farther away from C minor, the listener would feel discomfort or
concern as their ears travel farther and farther away from its “home” of C minor.

The Sarabande of the C minor Suite is much shorter and contains significantly
slower and less complex rhythms than in the Prelude. In the Sarabande, the timbre is very
dark and brooding. Eric Siblin starts his chapter on the Sarabande with a quote from
Mstislav Rostropovich, “in its darkness of melodic design it is so unusual that it
resembles contemporary music.”6 A Sarabande is characterized as slow and stately in a
triple meter. The form of this Sarabande is that of a binary form. The A section contains
two shorter phrases. The first phrase is four bars total and ends with an imperfect
authentic cadence in C minor, and the second phrase ends with a perfect authentic
cadence in the key of E-flat major, the relative major of C minor. The B section contains
three four-bar phrases making it a total of 12 measures long. The first phrase begins with
an E-flat major chord with a low D-flat in the bass, which is the lowered seventh. The
first phrase ends with an imperfect authentic cadence in the key of F minor. The second

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6 Siblin, 200.
phrase ends with a half cadence in the key of G major, scale degree 5 while the final phrase ends with a perfect authentic cadence in C minor, the home key.

*Table Talk*

Alyssa Weinberg’s *Table Talk* is the first of two chamber pieces in the recital. This piece is scored for two players on different sides of a single prepared vibraphone. I am joined on stage by Matthew Kokotovich as player 2 while I play the player 1 part. The vibraphone is prepared by setting a number of different small percussion instruments and household items onto both the bars and resonators of the vibraphone. The score notates that everything placed onto the vibraphone should be placed in specific places. The figure below shows where everything is to be placed, as well as a list of the different items needed and a key for how the score is notated.
**Instrument list:**

- **Vibraphone**
- **Low Tom**
- **2 very thin sheets of wood**
- **1 soup can**
- **1 soda can**
- **3 miniature woodblocks**
- **1 thin metal plate**

- 2 crotale
- 2 temple bowls (with metal bottle caps loosely taped inside)
- 1 small plastic cup
- 2 small gongs
- 2 thin stacks of paper to place under the outer setups
- small cushion to prop up the bottom gong
*some items may need to be taped down

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Figure 2; *Table Talk*, Instrument List

In her dissertation, Weinberg states that “there is the consideration of infinite possibilities of objects and combinations of materials as musical instruments, naturally
encouraging the act of invention and discovery." In percussion music, it is very common to see the use of found objects that can be used as non-pitched sounds as well as prepared instruments, altering an instrument to change its sonic qualities. In the case of Table Talk, the vibraphone is prepared by setting a plethora of objects on top of it. John Cage, who will be discussed later in this abstract, was one of the first composers to use found sounds in music as well as one of the first composers to compose for prepared piano, a predecessor of Dr. Weinberg’s prepared vibraphone as seen in the image above. Along with the materials specified in the score, composers typically use items like glass bottles, wooden bowls, mason jars, metal pipes, and more.

*Table Talk* can be analyzed in four sections (ABCA). There are three sections that differ from each other at the beginning and the last section is a return of the opening section. Weinberg states that “sections A and B are concerned primarily with four-handed manipulations of the pure vibraphone sounds, attempting to exploit the full range of colors available on a single metal bar.”

The A section of the piece utilizes one player’s ability to mute a single bar while the other performer plays a series of accented and unaccented sixteenth notes that vary in dynamics. Player 2, who stands on the side of the vibraphone with the natural keys, is to play a single F while player 1, who stands on the opposite side, is to use their hands to dampen the single F being played. The score directs player 1 to apply pressure varying in intensity, as well as to release the pressure. Player 2 is to use a metered tremolo while

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8 Weinberg, 21.
they crescendo as the bar is dampened and decrescendo as the dampening is released. As player 2 gets louder, the pressure on the bar is to become more intense, and the opposite occurs when player 2 gets softer. This technique goes through both extremes of resonance in the bar. The audience gets to hear the pleasant pureness from the single note and within the timeframe of one measure of music, the audience also hears the tenseness of a hard stick on a choked piece of metal. This opening section is captivating as it pulls both extremes of resonance and dryness as well as everything in between.

In the B section, player 2 strikes the bars while player 1 applies pressure to bend the pitch of the struck bars. This is possible by taking a harder plastic mallet with a flexible rattan shaft and pressing it into the bar. As the performer presses down, they are to slide the mallet toward the middle of the bar to create a bend in the pitch being played. The bending technique can also be used when bowing the bar, producing a sustained sound. The bending of the pitch creates a feeling of discomfort as the listener hears the pureness of a sustained pitch become slightly higher and out of tune. Just like the A section, player 1’s job is to take the calmness of player 2’s part and subtly change it to create tension.

Section C begins at measure 109, and can be characterized by a changed in timbre. The two players, at this point, are to flip their mallets to the butt end and play with the thin shafts on the different objects placed on the vibraphone. This creates a quieter, more staccato sound as the performers use a very light stick to play the notes. As this section goes on, player 2 switches back to the mallet end of the stick to create a mix of both vibraphone notes struck with the mallet and the more staccato sounds produced
with the butt end of the sticks. The texture of this section also changes quite a bit as both players become quite active playing a larger volume of notes to create different polyrhythms. This section also constantly changes tempos between the initial tempo of the quarter note equaling 116 beats per minute to a slower tempo of the quarter note equaling 82 beats per minute. As the performers come to the end of the section, the rhythms turn into a metric ritardando that leads into a sustained roll on a single note. This sustained note goes from being tremolo into sixteenth notes as the A section returns for the end of the piece.

*Impressions pour Caisse Claire*

Nicolas Martynicow’s *Impressions pour caisse claire et deux toms*, also known simply as *Impressions*, is a piece for solo snare drum with two tom-toms. The French percussionist and composer wrote this three-movement work in 1990. While there are three movements, the first movement is performed most and most popularly used as pieces for snare drum competitions.

The first movement begins with a simple statement of the bolero rhythm, pictured below. Throughout the entire first page of the work, we hear a quiet bolero in the distance become louder and more present. While this bolero becomes louder, we begin to hear it evolve from its most basic pattern into subtle variations. As the theme of the bolero rhythm evolves, we stray farther and farther from the originally stated rhythm. We begin see not only triplets and eighth notes, but also quintuplets and sixteenth notes. Eventually the piece comes to a breaking point in the complexity of the rhythm and the dynamics take a dramatic shift from forte to piano. Once the dynamic comes down, we hear subtle
fragments of the bolero rhythm. Just like the opening of the piece, the texture and
dynamic begins to grow and develop again; however, instead of reaching a breaking point
and repeating material from earlier in the work, the piece continues with abandon into a
louder, faster, and more dense section of the piece. This process of growth and shrinkage
of the main pattern is an ongoing trend throughout the piece, not just with dynamics and
note density but also with time. The piece stays in a triple meter most of the time;
however, there are subtle instances of ritardando and accelerando as well as the
occasional bar with additional or subtracted beats. The piece closes with an extremely
reduced statement of the bolero pattern as slow, quiet buzzes as if the pattern has reached
its limit of expansion and contraction and is dying down only to leave the listener with
the sound of one quiet, sustained buzz roll.

Figure 3; *Impressions pour Caisse Claire et Deux Toms*, mm. 1-2 (Bolero Pattern)

The snare drum has generally been used as a supporting role during its time in
Western music. It was also used by militaries in the thirteenth century to communicate
with other troops over long distances. These two uses of the snare drum directly correlate
with the notion that there are two types of snare drum solos: orchestral and rudimental.\(^9\)

These categories are very broad and do not have much of a place in contemporary solo snare drum music. A composer can write whatever they want in a solo, including ideas from both rudimental and orchestral drumming, as well as any type of extended technique.

The primary difference between the two styles is the use of open or double-stroke, as opposed to closed or buzz rolls. Both styles are used in Impressions as well as specific stickings. In rudimental snare drum playing, you are given a letter, either “R” or “L”, underneath a note to indicate which hand, right or left, is to play the note. This allows the performer to show off a wide array of rudiments used on the snare drum. In an orchestral setting, the snare drum is supportive and rarely the center of attention, therefore the performer has the liberty of choosing whatever sticking they want to most efficiently convey the music given.

There are 40 rudiments that are considered essential for a snare drummer to know. Three of those rudiments are the double stroke roll, the single stroke roll, and the flam. All of the other 37 rudiments are varying combinations of these three. For example, the paradiddle is a rudiment that consists of four total notes, the first two being two notes of a single stroke roll and the last two notes being a double of the first hand that played in that set of four notes. If you were to play a paradiddle starting with your right hand, you

\(^9\) Joe Moscheck, “A Thematic Analysis of Nicolas Martynciow’s "Impressions Pour Caisse Claire Et Deux Toms" And A Dissection of the Extended Techniques Required For Performance” (DMA diss., The University of Western Ontario, 2021), 2, https://ir.lib.uwo.ca/etd/7684/.
would see the letters “RLRR” written underneath the rhythm on the staff. This would indicate that you must play that rhythm with the hands in the order of right-left-right-right. French rudimental style, however, uses a different notation to indicate hands. Above every note there is a small circle, either filled in or not filled in. The open circle indicates that the performer is to use their right hand while the closed circle indicates the use of the left hand. The figure below notates the sticking so that the performer knows to play one right and two lefts.

![Figure 4; Impressions; mm. 63](image)

While there are some portions of the work where Martynciow indicates the sticking of every rhythm, there are also sections where he leaves the stickings up to the performer’s interpretation. This allows for the performer to make a choice that will help themselves based on their knowledge of their own hands as well as their knowledge of what would be musically appropriate. One performer might have more confidence in their double strokes, but struggles playing quiet single strokes. That performer would opt to play any section of fast, quiet sixteenth notes as double strokes, while another player might be more confident in their ability to play soft delicate passages.
The composition explores the different timbres that you can get on a snare drum as well as using a high and low tom to increase the variety of sounds that the performer can get on stage. There are a total of seven different stroke types used which create the eleven timbres used in the first movement of *Impressions*. These timbres are made by striking the head, the rim, both the head and rim at the same time with a single stick (rim shot), both the head and the rim with the stick resting on the head of the drum (stick shot), a buzz with a single hand, a closed roll, and open roll.

*In a Landscape*

John Cage is a composer that is well known in the percussion community as the father of the modern percussion quartet, just as Joseph Haydn is known as the father of the string quartet. Cage was one of the first composers to write a piece for entirely non-pitched percussion instruments: *Third Construction*. The works of Cage span nearly 60 years starting in 1931 and continuing all the way until the early 90’s. Of Cage’s primary teachers, the most notable is Arnold Schoenberg who, at the time, was teaching at UCLA. When Cage approached Schoenberg, Schoenberg told Cage that he would not be able to afford his price to become one of his students. Cage responded saying that he knew he would not be able to afford Schoenberg’s tutelage as he had no money.\(^{10}\) Schoenberg ultimately agreed to teach Cage as long as he promised to devote his entire life to music; however, Schoenberg later told Cage to give up composition, as he had no feeling for harmony. We are fortunate that Cage chose to ignore such advice.

In a Landscape was commissioned by Louise Lippold in collaboration with her own choreography. The piece was premiered in 1948 with Lippold on stage dancing during the meditative sounds of Cage playing the piano. Cage also wrote other works with Lippold’s dancing in mind after this work, A Flower (1950) and Music for Piano 2 (1953).

Although the performance of this piece will be on marimba, it was originally composed with a solo harp or piano in mind. Due to this change of instrument, it is vital that the piece be performed at the written tempo. The marimba has limited resonance, meaning that the bars only resonate for as long as they can. The shorter decay in the marimba forces the performer to play at a tempo fast enough that the audience hears the harmonies in the higher register. Another consideration for playing this piece on the marimba is that the original work calls for a D1 which is beyond the range of the five-octave marimba. The common adjustment is to simply play that note an octave higher.

An analysis of the piece reveals the use of a limited collection of pitches in different patterns. The opening A section begins with a moving line in the left hand while the right hand plays an ostinato of an ascending B-flat Major 7th chord. This exact same phrase of 8 bars comes back later in the piece twice. There are a number of ostinati used throughout the piece that are presented similarly: one hand playing a repeated line and the other hand playing a moving line.

Cage also uses a series of sequences throughout the piece as transitions into different sections. The sequenced material is always ascending and uses a limited collection of pitches. The pitches used from lowest to highest, in the main collection are
D1, D2, B-flat2, D3, F3, G3, A3, B-flat3, C4, D4, F4, G4, A4, B4, D5, F5, G5, A5, and C6. Within this main collection we will see C4 or G4 omitted on occasion. Depending on which combination and ranges of pitches used, we find the patterns heard could be associated with either a quasi-whole tone scale or a pentatonic scale. For example, if we look of the five highest pitches in the collection, that series of notes all lie within the F major pentatonic scale.

*Psappha*

The closing piece on the recital is by the composer Iannis Xenakis. Xenakis was a Greek-French composer and architect who often used stochastic distributions and sieves as well as many other techniques. As a youth, Xenakis grew up in Greece where he studied mathematics, engineering, and architecture while also taking lessons in music theory.

Xenakis’s *Psappha* (1975) is widely regarded as a pivotal piece in the multi-percussion repertoire. Steve Schick, one of the most renowned percussion soloists of the twentieth century, remarks in his book of the historical context of the piece:

Composers who did write for the newly conceived medium of solo percussion naturally had a lot to say about its early development. That also meant that every new piece by a major composer added an important but potentially destabilizing weight to the rapidly growing sense of percussion definition. A new work like Iannis Xenakis’s Psappha (1975) increased the size of the percussion repertoire by nearly 20 percent. There was no question that every serious percussionist would immediately learn Psappha…many percussionists were looking for a new direction, but there was not much new percussion music to light the way. Psappha exerted extraordinary musical and historical impact in large part because it was born into a relative vacuum.\(^{11}\)

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Psappha’s score contains elements that were uncommon for the time but have since become common practice. These elements are the use of an open instrumentation and the use of a graphic notation. The instrumentation is open to the choice of the performer with some loose guidelines for how the performer should choose their instruments. The instruments required for the piece are split into two timbres each including three subsections, labeled A-F. The first three subsections, A-C, are categorized as wood or membranophone sounds. All three of these subsections are to contain 3 graduated sounds listed as 1-3 with 1 being the highest and 3 being the lowest. The A instruments are the highest pitch of the three groupings. In most performances, performers use wooden sounds as their A instruments; however, there are some instances where a performer uses higher pitched drums. There are a number of recordings that use high pitched roto-toms or three bongo drums as opposed to wooden sounds. The B grouping is specified as three single headed drums, typically 3 congas. The C grouping calls for three double headed drums, typically 2 tom-toms and a bass drum. In many recordings performers will use both a large concert bass drum on a stand and a smaller drumset bass drum operated by foot. Xenakis states in the score that the bass drum sound can be produced by foot. In some cases, performers only use a drum operated by a pedal, either a large concert bass drum or a drum set bass drum, but rarely ever both operated by foot. Xenakis specifies that the D-F sounds be metallophones. D and F are both supposed to be graduated resonant metal sounds while E is supposed to be a non-resonant single metal. There are many variations of these three groupings in different recordings. Xenakis gives some recommendations such as metal pipes or Sexxen bars. Performers
often use Zildjian Earth Plates for the D grouping of instruments; however, those have been discontinued, but a company in Colorado, Morfbeats, has created similar resonant metal plates that are similar in sound. These instruments can be suspended or placed onto egg carton foam to maximize resonance. The E group is to be a single non-resonant metallophone. The interpretation of this is different in most recordings. Performers have interpreted the E group by using a stack of cymbals, a dampened large metal pipe or plates, or tin cans.

The graphic notation of *Psappha* poses a new problem to the performer. The score itself is set up as a grid in which vertical lines represent units of time while horizontal lines represent the instrument being played. Each individual vertical line is numbered with the score showing numbers in increments of 10. As you read across the music, there are dots to indicate which instrument is struck and when it is to be struck. The tempo is given at the beginning of the piece and is clearly shown at the top of the staff when the tempo changes. The number given represents the beats per minute with the vertical line representing one beat.

Figure 5; *Psappha*, mm.1-21
Throughout the piece, different groups of instruments are introduced and taken away. The farther we get into the piece, the farther down the list of instruments (A-F) we get. The introduction of new instruments helps guide the audience through the form of the different sections of the piece. The density of these instruments grows and decreases as the piece moves onto different sections. There are several times throughout the piece where the audience gets used to hearing one or two groupings of instruments. This comfort is easily shattered by the interjection of a new group of instruments.

This can be seen in the introduction of the piece. We start with the B group of instruments playing a series of accented and unaccented notes creating a melodic line. This melodic line is then contrasted by the harshness of high-pitched wood blocks. As the passage continues, a timbre shift emerges from mainly B instruments to mainly A instruments with the B instruments interjecting. This exchange of timbre gradually decrescendos until it is eventually interrupted by a loud strike of C3, the lowest sounding of the drum sounds at the 519th vertical. In line 1238, the same technique is used. The listener has gotten used to hearing instruments from groups A-C only to be interrupted by the metal sounds of the D group. As the density builds throughout this second half of the piece we see a combination of instruments from all groups except from the F group.

Xenakis uses a new technique toward the end of the piece which indicates that the performer should strike each instrument two or three times per dot which increases the activity of the performer’s hands considerably. This notation is often interpreted as an unmetered tremolo on the specified instruments. Because a performer only has two
hands, it is necessary to use a drum struck by foot, so that both hands can move around
the instruments more freely.  

Figure 5; Psappha, mm. 2023-2030

As the performer approaches the closing section, C3 becomes steadier, creating an
underlying pulse. Once the rolling of notes on the other instrument stops, the final section
uses a continuous pulse in the kick drum to propel the piece toward the end. There are
both accented and unaccented notes for C3. In order to keep a steady beat while playing
the piece, a performer can use both the concert bass drum and kick drum so that the
accented notes can be played on the concert bass drum while your foot keeps a steady
tempo throughout the section. The piece ends with C3 and the F instrument group being
played together. The series of notes played with the F instrument grouping is a recall of

\[\text{\footnotesize 12} \]
\footnotesize Owen Phillip Rockwell, “Psappah by Iannis Xenakis: Developing Multiple
Percussion Literac” (DMA diss., University of Southern Mississippi, 2015), 58,
Dissertations, 48, https://aquila.usm.edu/dissertations/48/
material played in the A instrument grouping at the very beginning of the piece. 2175 to the end should be the loudest dynamic of the piece as this is the first time we see “ffff” as the dynamic. The return combined with this dynamic is a fitting ending as relentless and chaotic as Xenakis’ *Psappha*. 
BIBLIOGRAPHY


School of Music
University of Northern Iowa

presents

Tyler Darnall, Percussion
In a Graduate Recital

assisted by:
Matthew Kokotovich, Percussion
Aiden Endres, Percussion
Nicole Loftus, Percussion
Xander Webb, Percussion

In partial fulfillment of the requirement
for the Master of Music degree in Performance
From the Studio of Dr. Kramer Milan

Opening Remarks
Jeffery Dennis Smith

Saeta
Elliott Carter
(1908-2012)

Cello Suite in C Minor
Johann Sebastian Bach
Sarabande
(1685-1750)

Table Talk
Alyssa Weinberg
(b.1988)

Intermission

Impressions Pour Caisse Claire et Deux Toms
Nicolas Martynciow
(b. 1964)

In a Landscape
John Cage
(1912-1992)

Psappha
Iannis Xenakis
(1922-2001)