

THE IMPORTANCE OF TIMPANI IN TODAY'S PERCUSSION EDUCATION AND AS A
SOLO INSTRUMENT

A Dissertation
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By

Nicholaus Shane Meyers

In Partial Fulfillment
for the Degree of
DOCTOR OF MUSICAL ARTS

Major Department:
Music

March 2014

Fargo, North Dakota

North Dakota State University
Graduate School

Title
THE IMPORTANCE OF TIMPANI IN TODAY'S PERCUSSION
EDUCATION AND AS A SOLO INSTRUMENT

By

Nicholaus Shane Meyers

The Supervisory Committee certifies that this *disquisition* complies with North Dakota State University's regulations and meets the accepted standards for the degree of

DOCTOR OF MUSICAL ARTS

SUPERVISORY COMMITTEE:

Dr. Sigurd Johnson

Chair

Dr. Warren Olfert

Dr. Robert Groves

Dr. Sherri Nordstrom Stastny

Approved:

August 8, 2014

Date

Dr. John Miller

Department Chair

ABSTRACT

This study investigated the attitudes and beliefs of college educators and professional percussionists about the importance of timpani instruction for percussion majors at the undergraduate level. The results of a survey, in addition to other sources, were analyzed and showed a need for more education in properly preparing percussion students in the area of timpani. The particular areas discussed further within this study consist of: timpani in terms of the different types of timpani and their place in percussion education; timpani set up; grips and strokes; the stool, mallet choice, and ear training. Additionally, part of this study was geared around developing a recommended list of timpani solos appropriate for instruction in technique.

ACKNOWLEDGEMENTS

I would like to thank all of the people who took part in the survey to aid in this research. These people represent a large number of professional educators and performers within the area of percussion and without them this dissertation would not be possible. I would also like to thank my former teachers for properly educating me in regards to the performance and history of the timpani and my advisor Dr. Sigurd Johnson for helping me in choosing a topic and assisting me throughout this journey which has been most enlightening and exciting.

DEDICATION

I would like to dedicate my dissertation to my loving son and best friend

Nicholaus Collin Meyers

PREFACE

As a professional percussionist for the past fifteen years, it is as a timpanist that I most readily identify. While I enjoy the work of performing and teaching, over the past decade I have seen a decline in timpani instruction and emphasis within college programs, as well as within percussion journals and conventions. As I believe that strong timpani pedagogy is crucial for percussion students in particular and music programs in general. Timpani are one of the oldest instruments in the orchestra (and in fact predate the orchestra). I hope that the results of the present study will help substantiate these instruments' prominence in the music world.

TABLE OF CONTENTS

ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	iv
DEDICATION.....	v
PREFACE	vi
LIST OF FIGURES.....	viii
CHAPTER 1. NEED FOR THE STUDY	1
CHAPTER 2. DIFFERENT TYPES OF TIMPANI AND THEIR PLACE IN PERCUSSION EDUCATION.....	4
CHAPTER 3. GRIPS AND STROKES.....	14
CHAPTER 4. THE STOOL AND Mallet CHOICE.....	20
CHAPTER 5. TIMPANI AND EAR TRAINING.....	25
CHAPTER 6. STANDARD SOLO REPERTOIRE AND METHOD BOOKS USED TODAY.....	33
REFERENCES.....	47
APPENDIX A. LIST OF SURVEY QUESTIONS DESIGNED SPECIFICALLY FOR THIS DISSERTATION.....	48
APPENDIX B. LIST OF SURVEY PARTICIPANTS.....	50
APPENDIX C. RESPONSES FROM SELECTED SURVEY QUESTIONS.....	51
APPENDIX D. PROFESSIONAL TIMPANISTS.....	65

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
2.1: Yamaha professional series hammered copper timpani with tuning gauge.....	5
2.2: Yamaha timpani with balanced action pedal.....	7
2.3: French setup.....	8
2.4: German setup.....	9
2.5: Example of early hand tuned timpani.....	10
2.6: Cambered and parabolic bowls.....	11
2.7: Regular collar timpani head diagram.....	13
2.8: Extended collar timpani head diagram.....	13
3.1: German grip.....	15
3.2: French grip.....	16
3.3: American grip.....	17
4.1: Various timpani mallets.....	22
4.2: Homemade timpani mallets.....	23
5.1: Scale exercise using two timpani.....	27
5.2: Example of a melody that can be performed on two timpani.....	28
5.3: Yamaha tuning key next to Adams tuning key.....	30
6.1: List of solo compositions.....	35

CHAPTER 1. NEED FOR THE STUDY

Among the oldest percussive instruments in use today, timpani are a mainstay within orchestras and concert bands as well as within jazz and pop groups. In his book, *Anatomy of the Orchestra*, Norman Del Mar makes the statement that “a good timpanist really does set the standard of the whole orchestra,”¹ which is evident in the professional and collegiate worlds as percussionists must be able to perform on all percussion instruments, including timpani. Because of their longstanding and widespread use, it could be assumed that knowledge of their importance and a strong pedagogical tradition would be widespread as well. Yet the basic knowledge for timpani has seemed to diminish over the past decade - possibly due to rising popularity of other percussion instruments such as the marimba or other newer instruments. Thus, the twofold intent of the present study was to 1) investigate how professional percussionists and educators view the current status of timpani performance preparation and to 2) derive a recommended list of solo repertoire for these instruments. The intent of the present study is to show the importance of the timpani to percussion students, professional percussion educators and to directors. The areas that will be discussed further within this study are: in different types of timpani and their place in percussion education, timpani set up, grips and strokes, the stool, mallets choice, and ear training.

Towards these efforts, during the summer of 2013 I created a survey of eighteen questions regarding undergraduate timpani pedagogy targeting two specific groups: 1) collegiate percussion teachers and 2) professional percussionists and timpanists performing with professional orchestral ensembles. The survey can be found in Appendix A on page 47. One of the first survey questions, which resulted in a revealing response, and in turn set the tone for this

¹ Norman Del Mar, *Anatomy of the Orchestra* (London: Faber and Faber Ltd, 1981), 339.

document, asked: “Do you think timpani have taken a backseat in percussion education due to the popularity of instruments such as the marimba?” Among the responses to this question was one given by Eric Willie, associate professor of percussion at Tennessee Tech University: “No, I think it has taken a backseat due to the lack of teacher’s knowledge.” This is a strong statement and one that helps to point for a need for research on this particular subject.² It is my hope that this research can help establish the universal importance of this instrument throughout the undergraduate curriculum.

While the majority of college percussion majors may not have a career as a timpanist, there is always a need to fully understand all of the main percussion instruments. Thus, another question from this survey asked: “Do you think timpani are important instruments that should be studied more during a percussion majors collegiate career?” A revealing response to this question came from Christian Berg, principal percussionist with the Oslo Philharmonic Orchestra who indicated that, “yes - timpani is [are] the most important percussion instrument in the symphony orchestra.” Even though this answer is geared toward the orchestra, it clearly shows that professionals see them as pivotal ensemble instruments. Moreover, the majority of responses to this question echo Berg, and emphasize the need for students having more knowledge and experience with timpani during their collegiate education.³

Another survey question that helped set the tone for the present study was open - ended - guiding respondents to think in broad terms, asking: “Is there anything else that you would like to add in regards to the timpani in education or as a solo instrument?” One of the survey participants to answer this question was Dr. Tracy Wiggins, director of percussion studies, University of North Carolina at Pembroke who indicated that, “I believe that this is one of the

² Other responses to this question may be viewed in Appendix C (page 51) of the present study.

³ Other responses to this question may be viewed in Appendix C (page 53) of the present study.

oldest and in some ways most misunderstood instrument we have. It has taken a back seat to other instruments in the emphasis placed on it while at the same time it is one of the instruments students most often perform on in the job scene. This has led to many students being unprepared for how to properly navigate their way through a timpani performance. I believe this is something that should be corrected in university percussion curricula.”⁴ Dr. Wiggins’s answer to this question helps to point toward the need for a stronger knowledge of this instrument. With the research presented herein from both surveys and journal articles it is evident that there is the need for the correct teaching at the collegiate level in regards to the timpani.

⁴ Other responses to this question may be viewed in the Appendix C (page 63) of the present study.

CHAPTER 2. DIFFERENT TYPES OF TIMPANI AND THEIR PLACE IN PERCUSSION EDUCATION

Timpani are made by several different manufacturers and within each manufacturer there are often several different models, all of which share a common physical construction that permits them to sound like timpani. However, variations in bowl construction, hammering, bowl composition, weight, pedal mechanism and physical support produce timpani with different acoustical characteristics, hence, different tone color.⁵ These elements help the various brands of timpani to stand out from one another. In a survey prepared to aid in this research, one of the questions asked was, “What type of timpani do you perform on and /or teach on? What type of pedals do they have?” which resulted in the following list (in no particular order) for the first part of the question.

Types of Timpani

1. Adams Philharmonic – Netherlands
2. Dresden – Style of timpani that developed in Dresden, Germany and has been remade by several companies of today.
3. Hinger Touch Tone – United States
4. Ludwig Symphonic – United States
5. Premiere – United Kingdom
6. Ringer – Style of timpani that developed in Germany and eventually was purchased by Ludwig and given to their top of the line timpani – United States
7. Walter Light (American Drum) – United States
8. Yamaha – Japan

⁵ Steven L. Schweizer, *TIMPANI TONE: and the interpretation of Baroque and Classical Music*. (Oxford: University Press, 2010), 3.

Figure 2.1: Yamaha professional series hammered copper timpani with tuning gauge



Each type of timpani listed above, contain various differing elements. These can be in the overall size of the timpani bowls, the shape of the bowl, the type of head required, the style of pedals, and position of gauges. Having the student research the varying manufacturers of timpani can lead to them understanding some of the major items associated with them.

Another question from a survey prepared for this research asked was, “Do you believe it would be beneficial for a student to have a basic knowledge of the various pedals used on timpani and preferably actually time playing on them?” A representative response to this question was that of Dr. Tracy Wiggins, director of percussion, University of North Carolina, Pembroke who stated that, “yes as the more comfortable they are with all of the variables the less chance there is of them being thrown out of their comfort zone in an audition or performance situation.”⁶ Because of the variety of timpani in use today it would only be a benefit to have experience regarding the proper operation of all pedals. It is also understood that most collegiate

⁶ Other responses to this question may be viewed in Appendix C (page 59) of this research.

institutions will usually have one or maybe even two models of timpani. With the understanding of this, it should be the students' major professors' jobs to find locations for the student to have time to investigate and use other types of timpani or to discuss with them the overall operation. Further information can be found on manufacturer websites and through searching the internet. By studying these items the student will further aid their education upon this instrument.

In response to the pedaling aspect of the survey question, the list of pedal types below were given (in no specific order).

Types of Pedals

Accelerator
Balanced Action
Mechanical with locks
Ratchet/Clutch Mechanism
Spring Tension
Standard Balanced Action
Standard Pedal

Depending on the manufacturer, the pedals for tuning are placed at the center of the drum or on the appropriate side - based around either the German or French style of configuration - and are categorized into five main styles: Berlin, Dresden, Ratchet, Balanced Action, and Clutch and Post. Each manufacturer will have similar styles of pedals.

Figure 2.2: Yamaha timpani with balanced action pedal



Setup

Like other instruments and ensembles, timpani can also have different set-ups when it comes to placing the drums. Most U.S. use consists of the timpani being setup in the French tradition (see figure 2.3) with the largest drum being on the performer's left and moving to the smallest on the performer's right. The German tradition (see figure 2.4) will be the opposite where the largest drum is on the performer's right side moving to the smallest on their left side. In response to the question, "which style of timpani setup do you and your students use?," most respondents indicated "French." The other answers consisted of "both" which if taught would only broaden the knowledge of the student. While compositions have been written with both set-ups in mind, students would do well to learn both systems to alleviate issues and because different teachers who come from various backgrounds are proponents of either system. Another item to understand with the setup is where the pedals and tuning gauges might be. Certain

timpani have tuning gauges developed around each setup. If there were certain models setup with the French design, issues would come up due to the gauges being most likely on the opposite side of the player, which would cause issues during performances. The same can be said with the pedal on specific timpani. Some models will have offset pedals. This again would cause an issue when performing depending on the setup. Neither set up is better than the other; it is just another aspect of playing timpani that should be known to all percussion students to aid them with knowledge of the instrument.

Figure 2.3: French setup



Figure 2.4: German setup



When performing on these setups the most important aspect of understanding the pedal systems is how they work. Early timpani did not use pedals and would have had some sort of mechanism using a chain or large T-handled tension rods (see figure 2.5) where the performer had to specifically tune the drum by hand for every pitch they would have needed. This would have taken much more time compared to the timpani of today. When playing early timpani parts in music found during the Baroque periods, most likely the timpanist would have seen the notes “D” and “A” for the majority of works, but over time composers started calling for more pitches and use of more drums. Eventually, this would lead to the invention of the pedal to aid in the changing of pitches on the timpani. Even today a few manufacturers produce period timpani sometimes referred to as “Baroque” timpani that rest in stands that look more like cradles and that are tuned by T-handle tuning rods. If a student wants the full experience of timpani this

would be a great chance to see what performers had to deal with in the past and hopefully will help in respecting what is available today in regarding timpani pedal mechanism and gauges.

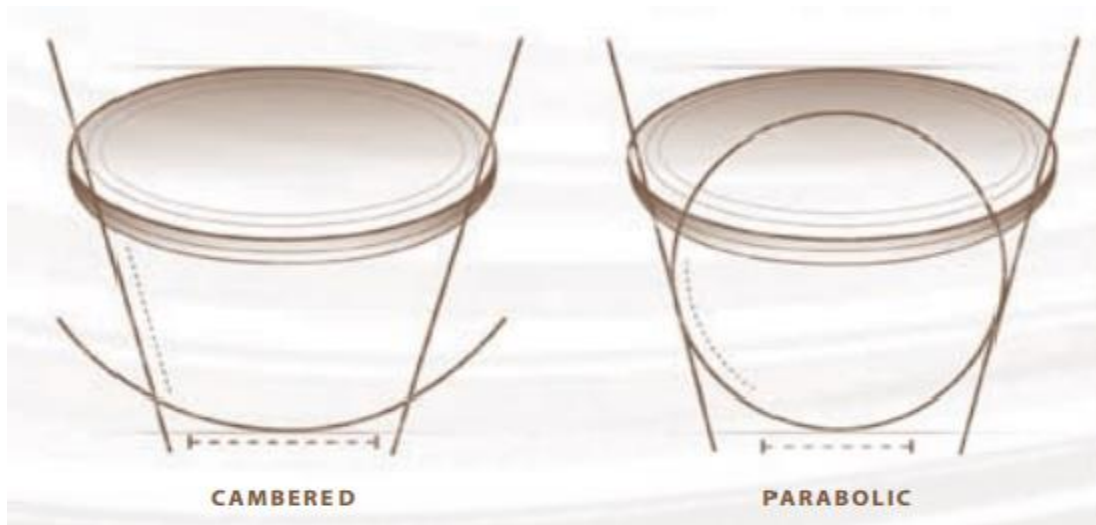
Figure 2.5: Example of early hand tuned timpani



Bowls are a primary factor in the overall sound of timpani with style and sound varying from one manufacturer to another. The shape of the timpani bowl has been the subject of conversation and is even part of the various schools of timpani playing. Two of the most commonly used terms with timpani bowls are “Parabolic,” which is more cylindrical with more curvature resulting in a bright overall sound with higher partials, while the “Cambered” bowl has less of a curvature and straighter sides to the bowl, resulting in a darker sound and more focused fundamental. It should also be known that the “Parabolic” bowl shape is also referred to by manufacturers as the “standard” shape (see figure 2.6). These two styles of bowls are produced by most timpani

manufacturers and provide another element to take into consideration when ordering timpani and performing on them.

Figure 2.6: Cambered and parabolic bowls



The “American Drum Manufacturing Co” produces the Walter Light Tympani that are considered by several professionals to be some of the finest timpani available today. They produce three types of bowls for their timpani:

Semi-Flat Bottom Bowl: popular because of its rich sound characteristics throughout the range. The sound is slightly dark, with excellent resonance, particularly when playing loud. Results with calf heads are both warm and open.

Flat Bottom Bowl: was modeled after the old European kettle shape where the hip is wide and the bottom made flat. The projection and clarity are good throughout the range, and the sound is quite dark. The sound decay is rather quick.

Parabolic Bowl: produces a very bright sound because of the bowl's extremely round bottom. The projection is good and the decay is fairly rapid.⁷

The examples given above from the American Drum Manufacturing Co. are meant to give a further idea of the variety of bowls for timpani from a company that manufactures top of the line professional instruments. There are also price-conscious instruments available in fiberglass or similar non-copper bowls for use in middle school situations or at the high school level where the music program does not have the funds to buy timpani with copper bowls. The tuning scheme and pedals are identical to models with copper bowls. The only drawback to these drums will be the quality of sound and of sustain.

One final item to have in mind with timpani construction is the difference between the “regular” and “extended” collar drumheads. This can be seen when measuring the distance between the edge of the bowl and the counter hoop. If the space between the edge of the bowl and counter hoop is less than an inch the head will be considered to be a “regular” collar drumhead (see figure 2.7). For the more common “extended” collar drumhead (see figure 2.8), the distance between the two will be over an inch in distance. The two main companies that produce plastic timpani heads in the United States, Remo and Evans, have charts or information to aid in the replacement of new heads for timpani. Additionally most retailers that sell timpani heads will also have charts and information to help in the purchasing of new heads.

⁷ “General Information,” American Drum Manufacturing Co., accessed March 2, 2014, <http://americandrum-w-light.com/home.html>.

Figure 2.7 Regular collar timpani head diagram

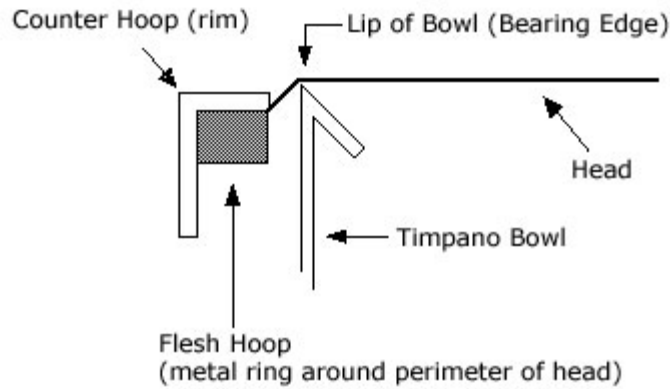
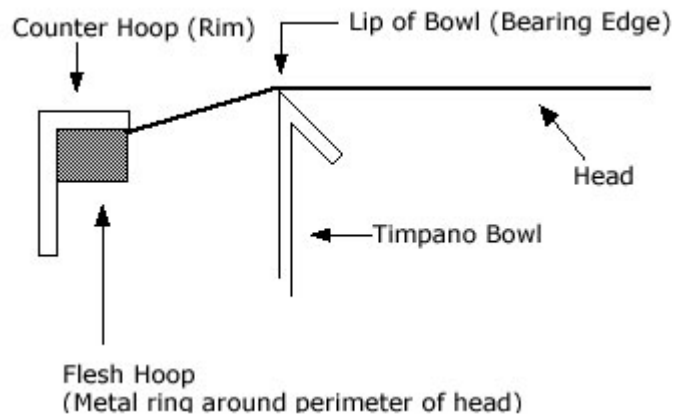


Figure 2.8 Extended collar timpani head diagram



It is important to have a broad knowledge pertaining to these instruments. Within this chapter the issues of different types of timpani have been discussed. This information is only a small part of what should be understood with an instrument as diverse as the timpani. From here on the student studying along with their teacher should strive toward understanding the overall nature of the timpani which will only further aid the student within their major profession.

CHAPTER 3. GRIPS AND STROKES

Three of the most important elements in producing a sound on timpani are the playing area of the drum, grip and stroke. A knowledge of each of these elements allows timpanists to adapt accurately to different styles of music.

Playing Area

When looking at the timpani head one will see a large drumhead in which to strike to produce a sound. Just like any other percussion instrument there is no one specific area to play the timpani. One can get a thinner sound close to the edge, while playing in the center will give a dead sound if needed. These two areas should be taken into consideration along with the distance between the two when determining the best area and method for a piece of music.

Grip

To glean grip information, the survey asked: “What type of grip do you and/or your students use?” Many names came from this question with “French” and “German” being the most popular with others being “American,” and “Amsterdam.” Moreover, several prominent timpanists have developed their own grip including “Hinger,” “hybrid from Cloyd Duff,” “Goodman,” and “Haas.”

Each grip has its own advantages and disadvantages. The German grip has the potential to produce larger darker sounds compared with the French grip, which gives potential for a lighter and more delicate sound. The American grip is a mixture of both grips and is thought to be a balance between the two. The Amsterdam grip, which developed out of the Royal

Concertgebouw Orchestra, is a slightly different grip than that of the German or French. Here the mallet rests within the second knuckle with the thumb resting on the side rather than on top like the both the German and French grips. The Hinger grip utilizes a pendulum motion from the wrist and mimics the bow arm found with playing the violin. The following paragraphs delve deeper into the elements of each grip.

German: This grip is akin to the basic standard snare drum grip where the sticks are held matched with the palms facing downward and at an angle close to that of a “V” (see figure 3.1). Consequently, this grip is the most common as it allows for an easy transition from one instrument to another. In general, the German grip has a darker more powerful sound compared with other grips, and is often described as “playing through the head” - a common element with other drums as well, including marching percussion where a darker more pronounced sound is desired.

Figure 3.1: German grip



French: As opposed to the German grip, the French grip calls for the sticks to be parallel with each other or very close to being parallel (see figure 3.2). Here the thumbs are facing

upwards and the majority of the motion comes from the fingers and turning of the wrist resulting in a lighter sound compared with the German grip. At times the sound from the grip is described as playing on top of the head where the tone is clearer and more definite than that of the German grip. While some grips work with the player standing or sitting, tradition calls for standing when using the French grip.

Figure 3.2: French grip



American: This grip combines both the French and German grip together (see figure 3.3) with the sticks being a little closer to parallel yet, form a small angle compared with that of the French grip and with the thumbs slightly turned upwards compared with the German grip. This grip has become popular over the years due to it combining aspects from both the French and German grips. This grip can allow for a darker sound when needed and a thinner sound all in one grip.

Figure 3.3: American grip



Amsterdam: This grip gets its name from the timpanists of the Royal Concertgebouw Orchestra who developed a grip more closely related to that of the American grip - yet with the thumbs laying on the side of the sticks rather than on top like with the other grips discussed. Here the thumb is on the side of the stick and does not act as a pendulum for motion. The stick itself also rests between the first and second knuckle of the hand.

Hinger: This grip is based around the German grip yet uses a position of the arm based off of the violin bow arm. Here two ideas are being used together to give yet another way of holding the timpani mallet. This grip was made popular by Fred Hinger, timpanist with the Philadelphia Orchestra and Metropolitan Opera Orchestra.

Stroke

After the grip or grips are chosen comes the challenge of executing the various strokes to get the desired sound. All strokes - staccato, legato, marcato, and bounce - produce a tone and

their own degree of articulation.⁸ These strokes can also be referred to as “dark” and “light,” and “thick” and “thin.” The following paragraphs delineate further.

Legato Stroke: A longer sounding stroke usually performed with a larger mallet in the general playing area. This stroke allows the mallet a longer contact point compared to that of the staccato stroke.

Staccato Stroke: A shorter sounding stroke usually performed with a harder mallet towards the rim—or slightly closer to the center of the drum to dry up the overall sound. As the stroke is quick, there is less time for the mallet to have contact on the timpani head.

Marcato stroke: A definitive sounding stroke that is usually performed with a medium hard or general mallet to give a full yet short emphatic sound. This stroke is similar to the staccato stroke where the mallet has a short time of contact yet still has a large sound.

Bounce or J-stroke: A stroke that gives the fullest amount of sound from the head. This stroke usually uses a heavier softer mallet with a longer amount of time on the timpani head. Many performers make the comment with this stroke saying that it is like actually dragging the mallet across the head for just a moment at contact hence the name J-stroke. In comparing the stroke to the letter “J,” the stroke starts to turn at the bottom of the “J” with the mallet slightly rubbing the head giving even more contact.

The four strokes coupled with element of grip and playing area together with the various mallets (discussed in chapter four) make for a large pallet of sound available to the timpanist. Other factors that can attribute to the overall sound of the stroke are: height, speed, weight of stroke (not based around the weight of mallet), and finally the weight of the mallet, which can be

⁸ Steven L. Schweizer, *TIMPANI TONE: and the interpretation of Baroque and Classical Music*. (Oxford: University Press, 2010), 28.

determined by many factors such as handle material and the composition of the actual head of the mallet.

CHAPTER 4. THE STOOL AND MALLET CHOICE

In addition to timpani brands, construction and set-up configuration, ear training, tuning, solo repertoire, method books, playing area of the drumhead, grip and stroke, other important physical aspects of playing timpani include the stool and when to use it and the choice of mallets.

Stool

Timpani stool use is dictated by the performing arena. A solo recital may call for standing and sitting depending on the pieces played and the required pedal changes. Ensemble performance may dictate much more sitting, simply because the timpanist is playing for a less proportion of the performance time. When performing however, the stool should be regarded as a tool for performance rather than simply as a seat. Depending on what is being performed the performer should note the difference between sitting on a stool versus leaning on it. There is a difference between the two that will aid in performing. The differences between the two should be discussed during the students lessons. Pitch changes are a large part of playing the timpani. If more than one pitch needs to be changed at one time or several in succession that stool must be used to accomplish this. It almost becomes similar to an organist playing the lower manual with their feet.

In response to the survey question, “what are your thoughts of the use of a stool when playing timpani?” simple answers were: “when needed; depends on height; and depends on type of composition.” Shaun Schuetz, instructor of percussion at Pellissippi Community College and Maryville College, in Tennessee indicated that “it makes quick pitch changes easier, and depending on the students height, it puts the drums at the correct playing position but I feel if it is

a fast moving part between drums I prefer to stand.” The stool makes it easier when there are several pitch changes and for those who are taller performers. Usually performers about 5’10” and taller would benefit from using the stool.

The type of stool itself is important and how to sit or lean against it makes a difference as well. Some performers use specially made timpani stools manufactured by timpani companies; others use a wooden stool that is sturdy. Comfort, durability, and appropriate height all need to be taken into consideration. Height is an issue necessitating the stool to be tall enough for performers to play the drums easily without having to change the angle of their stroke/grip.

Mallet Selection

Mallet type has changed over the years based on tradition, time period and the desired sound. Early orchestral music would typically call for more authentic or traditional sounds characteristic of the period, demanding timpani mallets made out of wood or even ivory. These mallets would have been designed or at least made for outdoor reasons due to the timpani initially being primarily a military instrument.⁹ During the Baroque period with the music of J. S. Bach, in comparison with today’s softer mallets, the timpanist would most likely use wooden mallets with no covering over the head. At other times during this period the timpanist might place some sort of material such as flannel over the head of the mallet to give it a darker sound with less attack - a technique often used in funeral music.

Along with the material used in the makeup of mallets, size and shape are also important aspects in mallet selection. Smaller harder mallets produce a thinner sound while a thick sound would come from a larger heavier mallet. As indicated earlier, the selected playing area as well as its size are important considerations depending on the desired sound. Eventually composers

⁹ Domenico E. Zarro, “Timpani: An Introspective Look,” *Percussive Notes* 36, no. 3 (June 1998): 59

dictated what mallets the timpanists should use. Amongst his other innovations for the instrument, Berlioz was the first composer to indicate in his scores a differentiation in the sticks he wanted used. He made a great point of the three types of sticks he recognized to be the outstanding alternatives: sponge-headed, leather-covered, and wooden.¹⁰

Figure 4.1: Various timpani mallets



Like anything else with music, choosing mallets can make a composition come to life. In today's world of percussion there are several different companies making all sorts of mallets ranging from about \$25.00 per pair up to around \$100.00 per pair. Exploring the different mallets available can make a world of difference in performing. The use of mallets will be different for each performer depending on their technique and overall body size. A student should have at least four different pairs of timpani mallets, which will allow them to play most of the standard repertoire.

A varied selection of mallets are offered by numerous percussion manufacturers and are available at better music stores. Also, many percussionists make their own - an idea that has

¹⁰ Norman Del Mar, *Anatomy of the Orchestra* (London: Faber and Faber Ltd, 1983), 359.

existed since the Baroque period, and one that is especially popular for marimba due to this instrument's current popularity. Making mallets is a great way for a student to broaden their knowledge of instruments - with timpanists being challenged to build sticks that will: 1) bring out the natural color of the timpani; 2) give them a palette of tone color that they can draw upon in shading their parts; and 3) provide the needed articulation.¹¹ Through performance practice, students can eventually find their own sound that will usually consist of making their own mallets (see figure 4.2). Making mallets, understanding the setup of the timpani, and knowing how to properly use the stool will further aid the student in understanding the overall workings of the timpani.

Figure 4.2: Homemade timpani mallets



The focus of the present study has been to see the importance of timpani brought back to the forefront of education in regards to undergraduate music programs. This issue can be addressed with students being properly educated on this instrument in terms of timpani brands,

¹¹ Steven L. Schweizer, *TIMPANI TONE: and the interpretation of Baroque and Classical Music*. (Oxford: University Press, 2010), 5.

construction and set-up configuration, ear training, tuning, solo repertoire, method books, playing area of the drumhead, grip, stroke and choice of mallets. For this to happen will require both educators at the collegiate level and professional performers to properly hand down this knowledge to their students will then intern continue on within the professional fields.

CHAPTER 5. TIMPANI AND EAR TRAINING

As percussion majors typically focus on non-pitched instruments like snare drums and cymbals or fixed-pitch instruments like marimbas or other keyboard instruments, constantly having to match pitch or tune an instrument is not part of their usual field of study and is typically relegated only to brief timpani encounters. However, as timpani are some of the most acoustically complex instruments in orchestras and bands,¹² and are the only orchestral drums with definite pitch,¹³ and are at the core of the classical tradition, it is paramount for percussionists to master tuning - as a soloist or as an ensemble member. However, as learning to tune timpani takes time - especially in terms of understanding overtones - and as many young percussionists do not own timpani, diligent practice on a school or studio's instruments is important.

Thus, along with learning proper style and technique through solo and ensemble literature, sufficient time should be included for tuning technique - solo and with an ensemble. This aspect of these instruments is crucial for performing. Christopher Deane, associate professor of percussion at the University of North Texas suggests that tuning timpani is an art that should be isolated from the other aspects of timpani performance in order to achieve the desired pitch accuracy and confidence.¹⁴ Percussionists in general have to think of their instrument much like any other wind, string, or brass player. Al Payson, retired percussionist with the Chicago Symphony Orchestra suggests that, acquiring a basic knowledge of timpani notation and of the instruments themselves includes: "1. Learning to read bass clef; 2. Learning key signatures and

¹² Melanie S. T. Sehman, "Acoustics of Timpani," *Percussive Notes* 45, no. 2 (April 2007): 44.

¹³ Del Mar, Norman. *Anatomy of the Orchestra*. (London: Faber and Faber Ltd, 1981), 341.

¹⁴ Christopher Deane, "Pitch Control for Timpani," *Percussive Notes* 42, no. 3 (June 2004): 47.

scales in all keys; 3. Learning the ranges of the drums; 4. Learning to determine the most appropriate drums to use for the pitches required.”¹⁵ The late Viennese timpanist Richard Hochrainer gives further advice by suggesting that students should “never practice with the timpani tuned incorrectly. This disturbs the ear. It is better to learn your technique by practicing on a table, rather than on falsely tuned timpani. Timpani that are consistently well-tuned sound much more beautiful than poorly tuned instruments.”¹⁶

A student can further develop his or her ear by using the methods learned in sight singing classes with the aid of a piano or keyboard percussion instrument such as the vibraphone or bells to help with pitch recognition. The best method is to practice on the actual drums and to work with different timpani if available since different types of drums will sound slightly different. Some of the best methods for learning pitches on timpani are to play scales on the drums. Many educators and students overlook this simple method of building pitch recognition, but by playing scales on timpani the student will be able to see what notes will apply to each of the drums. Additionally the range of pitches available on each drum will differ from one manufacturer to another and with the models available. This will alter the amount of intervals that can come from each drum. With playing exercises it is to the benefit of the student to understand what pitch - and how many pitches - can go on what drum.

For instance, drum “I”, the largest timpani, can have a comfortable range of a low D to B, a major 6th. While this range can fluctuate based on the manufacturer and model of timpani, it gives an idea of what should be known to a student. This idea of range along with intervals should be known for each of the drums. Also, playing pitches will allow the student to feel the

¹⁵ Al Payson, “*Timpani Tuning: Developing Aural Acuity*,” accessed February 20, 2014, <http://ws.connselmer.com/archives/keynotesmagazine/article/?uid=160>.

¹⁶ Richard Hochrainer, “The Viennese Timpani and Percussion *School*,” *PERCUSSIONIST 1*, no. 2 (Winter 1980): 93.

distance in the pedals between each pitch further helping them to become more efficient in both the placing of pitches and the use of pedals on the drums. Moreover, the drum numbering system will help with exercises and aid students in learning each drum's range. Exercises like the examples below can be found in several method books or can be developed by the individual teacher to aid the student (see figure 5.1). The goal with any of these tuning exercises is to be able to change the note quickly without a glissando sound to the note. The scale or melody below should sound like a low brass instrument playing the examples with slight separation between each of the pitches.

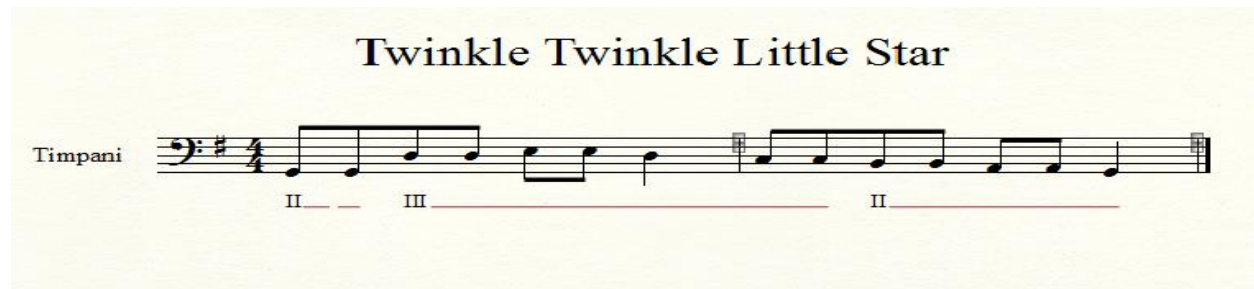
Figure 5.1: Scale exercise using two timpani

F Major Exercise for Two Timpani

Timpani

Performing melodies on timpani is another way of learning how to use both the pedals and to properly change pitches rapidly on each drum. While even in a professional situation the timpanist would not normally perform a moving melodic line, learning melodies can only benefit the timpanist in executing pitch changes at any level. Several timpani method books are dedicated or have portions based around performing melodies using two to four (II to IV) timpani (see figure 5.2). Playing melodies on timpani can help to further build pitch recognition and confidence around performing on the timpani.

Figure 5.2: Example of a melody that can be performed on two timpani



One tuning aid that was developed in the twentieth century was the timpani-tuning gauge, which, although controversial, has remained popular with many timpanists and instructors. The controversy with gauges comes with performers solely using them to find a pitch rather than using his or her ear. This can be a problem where the pitch can fluctuate throughout a performance. With this invention, composers started to write more developed and in-depth timpani parts that would take advantage of the gauges. There are those who believe that gauges should always be used, those who use them only in performance situations and those who do not believe in their use at all. Those that do not believe in their use, suggest that as violinists would not use a tuning mechanism, timpanists should not either, and should simply rely on their ear. The survey for the present study included a question about tuning and gauge use, asking: “Do you believe it is important for students to develop their ear with the playing of timpani since for percussionists it is the only instrument that we actually have to match pitch on? Do you also believe that students should be able to tune timpani without the assistance of tuning gauges and able to properly change and clear heads?” To this question, Peter Kates, associate professor of the Grieg Academy of Music, Bergen Norway and principle percussionist of the Bergen Filharmoniske Orkester indicated that, “yes, gauges are for assistance, but are not a substitute for proper training. Solfège should be started on the first timpani lesson and eartraining classes

should be taken seriously. Changing and clearing heads are part of being a timpanist and the study and practice of this should be part of the teachers lesson plan.”¹⁷

Even with the use of gauges there are other factors that come into play as gauges do not move and if the performer uses them will find from time to time that the tuning will not be consistent. Other times the pitch of the actual drumhead will change according to the same principles as spoken of before. Moreover, stage lights can cause the pitch to change rapidly causing issues with the gauges if followed. Thus, gauges at all times should be used as a general guide to locate the desired pitch - rather than as a constant. Overall the best way to identify a pitch on the timpani is to both know where the note is found on the drum and to use the ear to match pitch with the drums from a fixed source such as a set of bells or with that of an ensemble while they are performing. This ultimately will be the best way to locate the proper pitch during a performance. With correct instruction on timpani and correct study of pitch recognition, students free themselves from using gauges except under conditions where changing pitches repeatedly throughout a piece occurs.

Confident ear training is also crucial when replacing the timpani head, as being able to properly tune the drum will call for the use of the ear or some sort of tuner or fixed pitch instrument such as the bells/tuning fork. It is probably best to avoid using electronic tuners, as these devices are not able to pick up the pitch correctly due to overtones of the drum. As well, it is critical for the timpani head to be exactly in tune when clearing the head - where the tension and pitch around the drumhead is consistent. If one part of the drumhead is slightly higher or lower, the pitch will have a waver to it and not be able produce the sustained pitch that is needed from the drum. If the head is not properly cleared, the drum will never be able to produce a clear definite pitch. This process of clearing the head not only happens when the head is changed but

¹⁷ Additional answers to this question can be found in Appendix C on page (61) of this present study.

should also happen during routine practice sessions and before performing on the drums. As the single most important factor in producing a rich, sustained, beautiful tone on timpani is having heads that have a true pitch.¹⁸ Being able to properly change and clear a timpani head can mean a significant difference in the sound of the drum.

Another aspect that the timpanist needs to be aware of when changing heads is the timpani mechanism, which is made up of the various parts of the timpani, which in turn control the tension of the drumhead. These various parts consist of the pedal and linkage or spider mechanism that attaches to the tension rods. When loosening the timpani tension rods the mechanism for the pedal loosens and will move more freely, causing a greater chance of damage. Even the timpani tuning keys are different among manufacturers of timpani (see figure 5.3). An example would be that of the Adams company, which uses a larger tuning key than other companies such as Ludwig and Yamaha. Small items such as this can help to prevent errors when going to clear or change drumheads.

Figure 5.3: Yamaha tuning key next to Adams tuning key



¹⁸ Michael Rosen, “How To Clear Timpani Heads,” *Percussive Notes* 36, no. 3 (June 1998): 47.

Another important element in changing heads on timpani is to properly prepare the edge of the bowl where the head comes into contact - the one point where the timpani head will constantly be stretched when raising and lowering the pitch. This point should be wiped clean so that there is no dirt or residue, followed by an application of lubricant to help the timpani head to stretch over this point. Most professionals use a Teflon spray or Teflon tape. Others have used paraffin wax, lithium grease, or something very similar to these items that will not gum up or dry out quickly. Whatever is used should be used very lightly to avoid affecting the overall sound and sustain of the drumhead. Changing the head will take time and every student should have to perform this task before they are allowed to graduate. Even if they change and clear one head, a lot can be learned from this process.

While there have been several attempts to bring calfskin heads back into the market today, plastic heads are the ones typically used in schools and colleges - manufactured by companies such as Evans and Remo who make drumheads for many different types of drums. Plastic is easier to maintain, has a good sound, can last much longer than calf heads, and can be produced at a fraction of the cost of calfskin. Calfskin on the other hand produces a finer, warmer tone but takes more care - especially in terms of thickness (thicker or thinner), which can produce a less resonant tone.¹⁹ As well, these skin drumheads are greatly affected by both temperature and humidity, which the performer may counteract by using a sponge to moisten the drumheads due to the head drying out or maybe even a tool similar to a hair dryer to dry the head due to excess moisture. Moreover, calfskin has become harder to find today, is very expensive, and is only really used by prominent orchestras and music programs around the world.

¹⁹ Steven L. Schweitzer, *Timpani Tone: and the Interpretation of Baroque and Classical Music* (Oxford: University Press, 2010), 16.

One item of interest occurs when a drumhead needs to be taken off of an timpani to fix an internal item or to re-lubricate the contact point. Before you remove the old head, mark the underside of the flesh hoop and a corresponding spot on the bowl and the counterhoop so that, if it is necessary to put this same head back on the drum it will be replaced in exactly the same position. This is essential because plastic heads conform to the idiosyncrasies of the rim over time and must be put back on in the same position in order for the head to resettle properly.²⁰ An insert ring is designed to bring about a better seal between the drumhead and counter hoop. The process of head making has advanced greatly in recent years. These improvements have greatly helped in the overall sound of the timpani, longevity, and the pitch from the head. Steel or Aluminum insert rings or Regular or Low-profile insert rings are part of these new items that have come about in choosing timpani heads. Add this into the different types from each company and there are several options for timpani heads. With all these options available, there must be some basic knowledge when choosing and purchasing them. For example: certain Adams timpani cannot use a regular insert ring. If the incorrect head is placed on specific drums the gauges will not work appropriately and the tuning of the drum will be thrown off.

²⁰ Michael Rosen, "Mounting Plastic Heads on Balanced Action-type Timpani," *Percussive Notes* 35, no. 4 (August 1997): 62.

CHAPTER 6. STANDARD SOLO REPERTOIRE AND METHOD BOOKS USED TODAY

A major aspect of educating timpanists about instruments, equipment, tuning and placement is the important element of literature—including both solo repertoire and method books. In an effort to establish a list of solo repertoire, one of the present study’s survey questions asked: “Do you consider timpani soloistic instruments or are they regarded more as a part of an ensemble, or both?” Frank Shaffer, associate professor of percussion, University of Memphis responded by indicating that, “it is both, but its solo capabilities, as far as writing pieces of major length, is limited. In other words, less is more. It sounds much better in a chamber music setting with longer works or coupled with electronics.”²¹ While this question and response have a slant towards favoring timpani as ensemble instruments with limited solo capabilities, another survey question asked: “Would you attend a recital of just solo timpani literature?” The answer given to this question was “Yes” by all who took part in the survey including Jonathan Haas, director of the New York University percussion program and Juilliard pre-college percussion program who indicated, “YES. I presented the 1st timpani recital at Carnegie Recital Hall in 1979!!!”

Haas and other professional timpanists encourage performance of standard works as well as new pieces. Standard compositions are a must for students studying any instrument. By practicing these standard compositions and gleaning knowledge from their instructors, students develop their playing and are able to build their technique, which can be used with other solo and ensemble compositions as the student grows through their course of study.

²¹ Other responses to this question may be viewed in Appendix C. (page 55) of this present study.

In an effort to establish a list of standard solo repertoire, the survey asked respondents: “Please list 10 examples of solo timpani compositions that you would believe to be part of the standard repertoire. These pieces should be at least of a moderate level of difficulty and suitable for a recital.” Additionally, respondents were asked: “Are there older or newer pieces that you would like to see become part of the standard repertoire of solo timpani compositions?” In response to these questions, I have compiled the following two lists of compositions - the first list consisting of compositions respondents felt are important and the second list consisting of the ten most often used timpani solos - the standards. The compositions that are listed show both older and newer works for timpani that use several different types of techniques (see figure 6.1).

The list below is in alphabetical order by composer and does not present a numerical order of importance.

Figure 6.1: List of solo compositions

1. *Reverberations* – Daniel Adams
2. *Classic African* – Joseph Aiello
3. *Sonata for Timpani* – John Beck
4. *Three Episodes* – John Beck
5. *Four Pieces* – John Bergamo
6. *Domino I* – Philippe Boivine
7. *Tangents* – James Campbell
8. *Eight Pieces for 4 Timpani* – Elliott Carter.
9. *Partita for Timpani* – Carlos Chavez
10. *6 Concert Pieces for Solo Timpani* – William Cahn
11. *Raga #1* – William Cahn
12. *Prelude #1* – Christopher Deane
13. *Alcobaca Suite* – Kevin Erickson
14. *In the Valley of the Kings* – Kevin Erickson
15. *Mr. Saturday Night* – Roshanne Etezady
16. *7 Solo Dances* – George Frock
17. *Ballad for the Dance* – Saul Goodman
18. *Cortege* – Steve Grimo
19. *Three Etudes for Five Timpani* – Raymond Helble
20. *Four Verses for Timpani* – Murray Houloff
21. *Sonata for Timpani* – Daniel Jones
22. *Variations for King George* – William Kraft
23. *Images* – William Kraft
24. *Canticle* – Stanley Leonard
25. *Suite for Timpani* – Dave Mancini
26. *7 Pieces* – Frederic Marcarez
27. *Three Designs* – Robert Muczynski
28. *Rhapsody #2* – Alex Orfaly
29. *Primal Mood* – Gordon Peters
30. *The Final Precipice* – Jeffrey Peyton
31. *Steal The Thunder* – Jean Piche
32. *Sonatina for Timpani* – Alan Ridout
33. *An Argument or a Question* – David Skidmore
34. *Suite for Timpani* – Graham Whettam
35. *4 Grotesques* – David Williams
36. *Variations* – Jan Williams
37. *Cadenza* – Nebojsa Jovan Zivkovic

Ten most frequently used solos

The following compositions are considered the ten standards from the above list according to the survey respondents. Along with titles, composers and publication information, further pertinent information is given, such as: duration, number of drums, advanced techniques if any, and anything else that might stand out.

Eight Pieces for Four Timpani – Elliott Carter

This work is the number one solo composition based around those who participated in the survey. With everyone who took part in the survey to aid in this research, this work by Elliott Carter was one of the first works they gave as an answer. This particular work is so monumental in the realm of solo timpani literature that it has been part of numerous dissertations, journal articles, and recordings. This work is based around eight movements that can be performed individually or can be performed in various groups. Elliott Carter wrote six of these pieces in 1950 and added two in 1966. The notes found in the music states, “The group of eight is a collection of pieces from which not more than four are ever to be played as a suite in public.” These pieces were originally intended as compositional exercises to show modulations by rhythm and four note chords. The eight pieces are challenging and utilize several advanced techniques. These techniques include playing on different areas of the drum head; these are notated throughout the movements by letters as follows: the letter “R” indicates the performer should play “As close as possible to rim, still sounding pitch”, the letter “N” to play “Normal striking position,” and the letter “C” to play “Center of drum head.” These three different areas produce very different sounds, and along with the rhythms of the individual pieces provide challenges for the student. There are also instances in these pieces where the playing area

generally moves from one to another. Other techniques include how to strike the head with the timpani mallet. The majority of the pieces call for the use of the soft end of a basic timpani mallet. The word “Butt” appears in the piece titled “March” indicating that the performer should use the end of the stick. Carter also uses the letters “NS” to indicate playing a normal stroke and “DS” to indicate using a dead stroke. Carter also is very particular with dampening the drums and asks the performer to dampen at very specific points in the pieces by using an “x.” In the seventh piece titled “Canaries,” Carter indicates the use of snare drum sticks be used throughout. This piece includes beginning the movement with a rim shot. In the fourth piece titled “Recitative,” Carter asks for the use of “Cloth-covered Rattan Sticks.” In the notes for the composition he gives a diagram with specifics for what he wants, “single layer of cloth over tip of with two or three layers of cloth on sides of head.” Another technique used within the sixth piece titled “Canto” and other pieces calls for the use of a glissando. One example of this glissando can be found starting in measure two of the sixth piece titled “Canto.”

Two other advanced techniques are found within this work, the first being the creation of harmonics on the timpani. In his performance notes, Carter states “Harmonics sounding an octave above the tuned pitch of the drum may be produced by pressing one or two fingers on the head of the drum half-way between the rim and center, and striking the near the rim.” This technique is notated here by a diamond shaped symbol similar to a string instrument harmonic indicator. The second technique found within these pieces is the technique called “sympathetic resonance”. This sound is produced when one note is struck at a high dynamic level causing the neighboring timpani to vibrate producing a sustained pitch. Then Carter asks for the softer sustaining drum to produce a glissando.

Another question from the survey given to professionals asked “Are there older or newer pieces that you would like to see become part of the standard repertoire of solo timpani compositions?” The purpose of this question was to try to find new compositions that may not be familiar and can be useful for learning and to be performed on a solo recital.” One of the answers came from Dr. B. Michael Williams, Director of Percussion studies, Winthrop University. Dr. Williams answered this question with “Quite honestly, I have not heard a desent timpani solo in many years. I consider the Carter pieces to be the pinnacle of solo literature. I have been waiting for other composers to top that singular composition.”

Raga #1 – William Cahn

William Cahn is known for both being a member of the influential percussion ensemble, “Nexus,” and for his percussion compositions. His composition *Raga #1* for four timpani is an established work in the repertoire of solo timpani literature. The work was composed in 1968 and by its title was influenced by North Indian Classical music. A raga is a framework of notes that make up a composition within Indian Classical music. Cahn also uses the idea of tabla with its playing techniques that are also found in Indian Classical music. Together these ideas help bring about a work that is multi-cultural.

In *Raga #1* Cahn employs several different timpani techniques. Examples of this include indicating the performer to strike in the center of the drum—producing a sharp/dead sound. Another example is the direction to play the timpani with a mallet in the left hand while using the right hand to produce a tremolo on the smaller (23 inch) timpani. The last technique to be used within this work is glissando that is used during the section with the tremolo in the right hand. As the right hand plays a tremolo on the top the drum the left hand plays rhythms while the

glissandos take place. This work has been a popular solo work on student recitals. It provides a multi-cultural influence that can be passed on to both the student and audience.

Four Pieces – John Bergamo

During his lifetime John Bergamo was considered to be one of the most influential percussion teachers of the latter part of the twentieth century. *Four Pieces for Timpani* was composed in 1961. This work based around four timpani is very straight forward compared to the previous works already discussed. The four movements are brief yet provide four drastically sounding movements. This work does not come with any notes and only a few indicators for sounds exist in the actual music. The first movement is titled “Recitative” and is filled with dynamic markings from pianissimo to fortissimo. With this movement comes a large amount of fermatas where the student along with teacher will have to interpret them. The second movement is titled “Perpetual Motion” and is built around a driving eighth note pattern from start to finish. The only advanced technique called for in this movement is playing in the center of the drum. In the third movement “Elegia,” it calls for the use of four timpani mallets. The four timpani mallets are used together throughout the movement to play from one drum to all four drums at one time. The last movement is titled “Finale” and reads “As fast as possible; with barbaric ferocity.” This movement provides a powerful driving conclusion to the work. This work is a great solo composition for timpani and will continue to be used.

Sonata for Timpani – John Beck

John Beck taught at the Eastman School of Music for nearly fifty years. He has composed many compositions for percussion and several of his solo timpani works have come to be standards. His 1971 work, *Sonata for Timpani*, is based around three movements with several techniques that are used throughout the work.

The first movement asks the timpanist at times to play on the side of the timpani bowls. When he asks for the performer to play on the bowls he indicated this by an “X.” This movement is overall very slow and provides a great opening to the composition. The second movement is a little quicker with the words “Jazz-like” given. With this particular movement there has been an issue of how to interpret it. Some teachers teach this movement with the idea of swinging certain rhythms and other teachers will teach this movement with playing a more straight based rhythm throughout. Beck asks for three different performance methods within this movement, the first being a rim shot which he specifically asks for “right stick on left stick” much like an orchestral rim shot. The next two methods or techniques do not call for any mallet. He asks for the performer to clap and then immediately strike the drums with fingers. This comes about at the beginning of the second section and eventually the performer will go back to using two mallets to close out the piece. It may also be noted that this movement may be played with an additional performer playing a swing pattern using a snare drum and hi-hat with brushes. The final movement is fast with a tempo marking of quarter note = 138 – 152. In this movement comes several meter changes which helps to shift the emphasis of the beat. In this movement Beck asks the performer to perform glissandos across two timpani encompassing a range of an octave “E-E”. He also asks the performer to play a scale using the three lowest drums “E, F#, G#, A, G, C, D, E.” Toward the end of this movement he calls for the performer to play in the center of the head on the lowest pitch. Shortly after this section comes a repeat of the beginning material which closes out the movement.

Variations for King George – William Kraft

William Kraft is a very prolific composer with many compositions for percussion. Several of his solo multiple percussion works have become standard works. *Variations For King*

George is for four timpani and was composed in 1980. This piece consists of a main theme, presented in the opening three lines, with five distinct variations. . Even thou they are short Kraft asks for several different techniques and mallets that are asked for throughout the variations.

In the first and second variations the only advanced technique called for here is the use of glissandos. In the third variation Kraft starts asking the performer to play in the regular playing area and at the edge at times. When he asks for the edge the letter “E” will be used and when the performer is to play in the regular playing area he uses an “O” for ordinary. Throughout the variation the note heads are smaller for those notes he wants closer to the edge and leaves the regular note heads for the ordinary playing area. In the fifth variation Kraft asks the performer to hold a pair of medium marimba mallets in the right hand and a pair of medium timpani mallets in the left hand thus creating two entirely different sounds. During the final variation there will come note heads with an “X.” In his footnotes for this variation he says the “X” – “should be very light transparent sounds. Play very near the edge.” Even though the five variations are short, they contain several tempo changes, dynamic markings, and articulation markings which allow for the piece to further become a great solo work and piece for students to build up their overall playing technique.

6 Concert Pieces for Solo Timpani – William Cahn

William Cahn is known for both being a member of “Nexus” the most popular and influential percussion ensemble today and for his compositions for percussion. His *Six Concert Pieces for Solo Timpani* composed in 2001 use four to six timpani depending on the individual piece. Cahn says in his program notes found in this piece, “These solos for unaccompanied timpani are intended to be used primarily as concert pieces in percussion recitals. The six pieces

were composed to be complimentary, so that any number of them – from one to six – can be performed in any combination.”

The first piece, “Canzone,” and second piece, “Etude,” are straightforward and do not call for any advanced techniques. The third piece “Raga No. 2” has many similarities to his earlier work “Raga #1” described earlier. In this work Cahn asks for the performer at one point to execute a finger roll in the left hand while using the pointer finger at the “edge of head, not rim”. The use of the finger rolls and sounds from the pointer finger mimics that sound that would come from the table found in Indian Classical music. Later on within this piece Cahn asks for the performer to use a rim shot with the finger. This would be similar to a rim shot found with playing the bongos. In the third to last measure the performer is asked to play in the center of the drum then back to normal area in the final two measures where the ending of *Raga #1* is brought back. The next piece “Quatrill” is straightforward and does not call for any advanced techniques. In the fifth piece “Petite Sonata”, this work calls for the use of six timpani. Other than using six timpani, this piece is straightforward without any advanced techniques. The last piece in this set of six is “Afrodditty.” This piece is based on the snare drum solo of the same name. This is a very different work for timpani. The rudimental stickings are utilized from the snare drum solo. In the notes for this piece Cahn says that this work can be also performed along with a snare drum to produce a rhythmic duet. The original snare drum piece was influenced by West African music. Other than the rudimental stickings the only other item used in this piece is playing in the center of the drum which is notated by a “+” throughout the work. These six pieces by Cahn are fairly new to percussionists and will certainly be popular for years to come. The majority of these pieces are brief and could be placed on a recital to augment the recital or to add an additional timpani work without having to perform another work of extended time.

Sonata for Timpani – Daniel Jones

Daniel Jones was a British composer of classical music. His *Sonata for Timpani* for three unaccompanied kettledrums was composed in 1947. This composition is very popular in Europe and still finds its popularity today in the United States of America. This work is in four movements, and does not call for any advanced techniques; however, the four movements use many different time signatures that help to shift the emphasis of rhythms.

Canticle – Stanly Leonard

Stanley Leonard was the principal timpanist of the Pittsburgh Symphony for many years and also taught at Carnegie-Mellon University. His work *Canticle* for four timpani was composed in 1972. *Canticle* is in two movements. The first movement is marked “Freely-Slowly” section where the performer is given freedom with their expression. The slow introduction calls for the performer to use glissandos which will come back again throughout both of the movements. Eventually the first movement will be based around a specific tempo where the performer is asked to play in the center of the drum with the left hand while the right hand plays on the normal playing area in the right hand. As the movement continues Leonard asks for the performer to change the mallet in their right hand noting, “Right hand with snare drumstick or wood end of a timpani stick; left hand with timpani stick.” The second movement is straightforward with the performer only needing to execute glissandos throughout it.

Prelude #1 – Christopher Deane

Christopher Deane currently teaches at the University of North Texas. Deane’s works for percussion have become very popular over the last two decades. *Prelude #1* was composed in 1984 and uses four timpani. This work is in one movement and last approximately around three and a half minutes. The only advanced techniques used within this work are glissandos and

playing with the finger tips. The only other item in this piece that is not straight forward is a short section that asks the performer to use a wooden mallet in the right hand while the left hand stays with the regular mallet. This only lasts for a brief moment and the music lets the performer know when to move back to their regular timpani mallet.

Three Etudes for Five Timpani – Raymond Helble

Raymond Helble has composed many works ranging from percussion to orchestral music. Because these etudes use five timpani, they occupy a different position in the repertoire under discussion. All the previous solos except for one piece within the William Cahn “Six Concert Pieces for Solo Timpani” call for just four or three timpani.

The first etude calls for a slow tempo of quarter note equals seventy-two. This etude is built around two sounds, the normal playing area and the center of the timpani. Throughout the etude the performer will move back and forth between these two playing areas. Within the music Helble uses a “C” to designate playing in the center and “N” to designate playing in the normal area. The other items within this etude are the dynamics that are called for. Helble likes to have one hand play at a softer level while the opposite plays at a higher dynamic level. This can be very tricky to execute at times and is one of the items that will be found throughout the etudes.

The second etude calls for a slower tempo. Here the eighth note equals sixty-six. This middle etude is built around slow glissandos that make extensive use of the pedals and proper tuning essential. The use of these glissandos will help to further show the possibilities found with timpani and can be found in several of the solos that have formed this list of ten. Even the first composition by Elliott Carter makes use of the glissando within a movement of his monumental *Eight Pieces for Four Timpani*.

The third etude calls for a more brisk tempo of the dotted quarter note equaling seventy-six. In this movement Helble use fast pitch changes requiring the performer to change pitches very quickly using the pedals. He also brings back from the first etude the concept of using the center and normal playing areas. Yet, in this movement he adds an additional area for the performer to use, that of playing near the rim. Helble uses a “+” symbol to designate which notes he wants played at this area. The one other item that is needed within this movement is the extreme differentiation between dynamics. At times Helble will ask the performer to play two sixteenth notes at a pianissimo level followed by two sixteenth notes played at a fortissimo level. This style of playing is used throughout the last etude and is very difficult to play accurately. These three etudes by Raymond Helble help to make up this standard list of timpani solos. The three etudes could be performed together on a recital or could easily stand alone.

With the study of any instrument there will be some sort of method/technique book to aid in the development. In response to the survey question, “if you use a method book for teaching or self-practice which book do you use or suggest?” there were many responses without pointing to a clear favorite. The list of method books below were given in response to this question. Many of these method books were written by some of the most well known timpanists from the past hundred years - many of whom are listed in Appendix D on page 72. The list of method books are given in alphabetical order.

Method Books

Timpani tuning by Mervin Britton

Exercises, Etudes and Solos for the Timpani by Raynor Carroll

Well-Tempered Timpanist by Charles Dowd

Solo Timpanist by Vic Firth

Modern Method by Saul Goodman

Technique for the Virtuoso Timpanist by Fred Hinger

Etuden for Timpani Vol. 1 by Richard Hochrainer

The Tuneful Timpanist by Ronald Horner

32 Solos for Timpani by Alexander Lepak

Fundamental Method for Timpani by Gordon Peters

Each of the method books above present several different forms of exercises and etudes. The method books by Alexander Lepak, Vic Virth, and Richard Hochrainer provide more of an etude-based format. Other books by Charles Dowd and Ronald Horner provide melodies and short exercises that help timpanists build their technique around melodies and rhythmic patterns.

REFERENCES

- American Drum Manufacturing Co., "General Information." americandrum-w-light.com.
<http://americandrum-w-light.com/home.html> (accessed March 2, 2014).
- Breese, Terry, Keith Claeys, and Steve Kegler. "Interview with Salvatore Rabbio." *Percussive Notes* 45, no. 6 (December 2000)
- Deane, Christopher. "Pitch Control for Timpani." *Percussive Notes* 42, no. 3 (June 2004)
- Del Mar, Norman. *Anatomy of the Orchestra*. London: Faber and Faber Ltd, 1981.
- Haas, Jonathan. "Jonathan Hass Timpanist/Percussionist." [aboutjonathanhaas.com](http://www.aboutjonathanhaas.com).
<http://www.aboutjonathanhaas.com/bio.html> (accessed February 6, 2014).
- Hochrainer, Richard. "The Viennese Timpani and Percussion School," *PERCUSSIONIST* 1, no. 2 (Winter 1980)
- Payson, Al. "Timpani Tuning: Developing Aural Acuity." [Conn-selmer.com](http://ws.conn-selmer.com). <http://ws.conn-selmer.com/archives/keynotesmagazine/article/?uid=160> (accessed February 20, 2014).
- Rosen, Michael. "Mounting Plastic Heads on Balanced Action-type Timpani," *Percussive Notes* 35, no. 4 (August 1997)
- Rosen, Michael. "How To Clear Timpani Heads," *Percussive Notes* 36, no. 3 (June 1998)
- Schweizer, Steven L. *TIMPANI TONE: and the interpretation of Baroque and Classical Music*. Oxford: University Press, 2010.
- Sehman, Melanie S. T. "The Acoustics of Timpani," *Percussive Notes* 45, no. 2 (April 2007)
- Simco, Andrew, "Becoming a Successful Timpanist," *Percussive Notes* 42, no 4 (August 2004)
- Zarro, Domenico E. "Timpani: An Introspective Look," *Percussive Note* 36, no. 3 (June 1998)

APPENDIX A

LIST OF SURVEY QUESTIONS DESIGNED SPECIFICALLY FOR THIS DISSERTATION

1. Please list your education:
2. Please list your teaching and performing background:
3. Do you think the timpani has taken a backseat in percussion education due to the popularity of instruments such as the marimba?
4. Do you think the timpani is an important instrument that should be studied more during a percussion majors collegiate career?
5. Do you consider the timpani a soloistic instrument or more as part of an ensemble, or both?
6. Would you attend a recital of just solo timpani literature?
7. Which style of timpani setup do you and your students use? German/French
8. What type of grip do you and/or your students use? German/French
9. What are your thoughts of the use of a stool when playing timpani?
10. Please list 10 examples of solo timpani compositions that you would believe to be part of the standard repertoire. These pieces should be at least of a moderate level of difficulty and suitable for a recital.
11. Are there older or newer pieces that you would like to see become part of the standard repertoire of solo timpani compositions? This is to try to find new compositions that may not be familiar and can be useful for learning and to be performed on a solo recital.
12. What would you like to see in regards to timpani education in today's world of percussion? Example: more knowledge of the instrument, more performance or time on the instrument, etc.
13. If you use a method book for teaching or self-practice which book do you use or suggest?
14. Do you require or believe it to be important for students studying timpani to have an overall knowledge of the history of the instrument? Styles? Etc.
15. What type of timpani do you perform on and/or teach on? What type of pedals do they have?

16. Do you believe it would be beneficial for a student to have a basic knowledge of the various pedals used on timpani and preferably actually time playing on them?
17. Do you believe it is important for students to develop their ear with the playing of timpani since for percussionist it is the only instrument that we actually have to match pitch on? Do you also believe that students should be able to tune timpani without the assistance of tuning gauges and able to properly change and clear heads?
18. Is there anything else that you would like to add in regards to the timpani in education or as a solo instrument? Please feel free to use as much space as needed.

APPENDIX B

LIST OF SURVEY PARTICIPANTS

The people below gave permission for their answers to be used within this research. Many others participated in the survey yet did not want their answers or personal information included.

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College
Shaun.n.schuetz@gmail.com

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke
Tracy.wiggins@uncp.edu

B. Michael Williams – Professor of Music, Winthrop University
willamsm@winthrop.edu

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University
ericwillie@tntech.edu

APPENDIX C

RESPONSES FROM SELECTED SURVEY QUESTIONS

The questions below were included in the survey that was prepared to aid in the research for this current study. The participants who allowed their information to be used within this research are presented below with their responses to the question below

RESPONSES FROM QUESTION #3 OF SURVEY

“Do you think the timpani has taken a backseat in percussion education due to the popularity of instruments such as the marimba?”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no
Response: “Yes!”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu
Response: “Yes”

F. Michael Combs - Professor of Music, Emeritus, University of Tennessee
mcombs@utk.edu
Response: “No - it is far more important in ensembles, such as symphony orchestras, than any of the keyboard percussion”

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com
Response: “No”

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no
Response: “No, I believe that Timpani is the most used percussion instrument in the orchestra. Those who wish to pursue a career in the symphonic field take Timpani studies seriously. There are schools specializing in Orchestral Studies and have more focus on orchestral percussion in their programs. Instruments such as Marimba fall in the solo category and those wishing to follow that path choose the school and teacher known for that area of study.”

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College

Shaun.n.schuetz@gmail.com

Response: “I think it really depends on the school but for the majority I am saying NO.”

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Response: “Yes, absolutely”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: “Unfortunately yes in some areas. Not in schools that specialize in preparation for orchestral auditions on timpani, but in much of the general curriculum, yes.”

B. Michael Williams – Professor of Music, Winthrop University

willamsm@winthrop.edu

Response: “I believe the marimba has had the tendency among some education programs to drive the curriculum, but I disagree that timpani has taken a role of lesser importance. Not every student is as attracted to the instrument with the same zeal, but those who develop a passion for timpani should be served with a greater portion of emphasis on the instrument (perhaps at the expense of marimba).”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University

ericwillie@tntech.edu

Response: “No, I think it has taken a backseat due to the lack of the teacher’s knowledge.”

RESPONSES FROM QUESTION #4 OF SURVEY

“Do you think the timpani is an important instrument that should be studied more during a percussion majors collegiate career?”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Response: “Yes – timpani is the most important percussion instrument in the symphony orchestra.”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Response: “Yes”

F. Michael Combs - Professor of Music, Emeritus, University of Tennessee
mcombs@utk.edu

Response: “Definitely”

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com

Response: “Yes”

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Response: “I believe an undergraduate should have a well-rounded education in all the basic percussion instruments during his/hers first 3 years. On Timpani this includes symphonic studies and a variety of solo repertoire. The final year in preparation for graduate school should be based on the students desire for which “area” of percussion studies they wish to pursue. Orchestral, solo or chamber music.”

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College
Shaun.n.schuetz@gmail.com

Response: “Again, I believe it depends on the school and the students intended career. Overall I would say NO.”

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Response: “Yes”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: “I often tell my students that it is one of the most important instruments they will receive work on (along with drum set and accessories). So, yes!”

B. Michael Williams – Professor of Music, Winthrop University

willamsm@winthrop.edu

Response: “Yes, to put things in perspective, I have made exponentially more money playing timpani than marimba.”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University

ericwillie@tntech.edu

Response: “There is only one answer-yes. But, this is the case for everything. You must study timpani for at least one major purpose, to work on centering pitch.”

RESPONSES FROM QUESTION #5 OF SURVEY

“Do you consider the timpani a soloistic instrument or more as a part of an ensemble, or both?”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Response: “Of course the instrument is an interesting soloistic one but, the main task for a timpanist would be in the orchestra.”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Response: “Both, but more part of an ensemble (solos preparing students for orchestral performance).”

F. Michael Combs - Professor of Music, Emeritus, University of Tennessee
mcombs@utk.edu

Response: “Part of an ensemble although there is some interesting solo material and even concertos for timpani”

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com

Response: “Mostly ensemble, but excellent solo instrument”

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Response: “Timpani has been used as a solo instrument and as a solo instrument in concertos with orchestras and bands. I do like the idea of the instrument being used as a solo instrument. However, I do consider it primarily an instrument to be used in an ensemble.”

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College
Shaun.n.schuetz@gmail.com

Response: “BOTH”

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Response: “It is both, but its solo capabilities, as far as writing pieces of major length, is limited. In other words, less is more. It sounds much better in a chamber music setting with longer works or coupled with electronics.”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: “I believe that it can be both.”

B. Michael Williams – Professor of Music, Winthrop University

willamsm@winthrop.edu

Response: “I consider it primarily an ensemble instrument, although many solos have been written for principal orchestral timpanists in search of concerti.”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University

ericwillie@tntech.edu

Response: “Ensemble instrument”

RESPONSES FROM QUESTION #12 OF SURVEY

“What would you like to see in regards to timpani education in today’s world of percussion?
Example: more knowledge of the instrument, more performance or time on the instrument, etc.”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Response: “As much time as possible on the instruments in the orchestra. To get the right experience is the only way. One has to seek the opportunity to play in as many ensembles as possible during their studies.”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Response: “All of the above!”

F. Michael Combs - Professor of Music, Emeritus, University of Tennessee
mcombs@utk.edu

Response: “Focus on repertoire so the timpanist knows how the standard literature is performed.”

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com

Response: “I teach it all!”

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Response: “I would like to see timpani teachers take time to research other “schools” of timpani playing to incorporate into their own style and teaching. I find that timpanists are segregated in their own schools of playing. It is my experience that all schools have important factors in their individual style and the growth of the instrument would be to bring together different aspects in style.”

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College
Shaun.n.schuetz@gmail.com

Response: “More performance and time on the instrument with application in band and orchestra.”

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Response: “More time spend performing on the instrument, and studying literature, standard orchestral repertoire and solos as lessons.”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: “More of an emphasis to be placed on timpani in general but especially how to develop a good sound and good intonation.”

B. Michael Williams – Professor of Music, Winthrop University

willamsm@winthrop.edu

Response: “All percussionists need a firm grounding in the basic technical demands of playing timpani and the orchestral literature associated with it. Solos are an excellent way to explore a variety of techniques, tuning and sticking issues, expressive devices, etc.”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University

ericwillie@tntech.edu

Response: “A. Pitch center, B. Performance practice

RESPONSES FROM QUESTION #16 OF SURVEY

“Do you believe it would be beneficial for a student to have a basic knowledge of the various pedals used on timpani and preferably actually time playing on them?”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Response: “Absolutely, it’s of most importance.”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Response: “Yes”

F. Michael Combs - Professor of Music, Emeritus, University of Tennessee
mcombs@utk.edu

Response: “Yes, when taking auditions, the student timpanist never knows what type of drums he/she will need to perform on. Also, most professional groups provide the timpani and might not be the choice of the player.

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com

Response: “Yes”

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Response: “If Timpani is the major focus of study, then a knowledge of pedal systems is important. Also, for auditioning it is important to be proficient on various pedals systems.”

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College
Shaun.n.schuetz@gmail.com

Response: “They need to know the types of pedals and how they work but most schools do not have many types of pedals to try out.”

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Response: “Yes”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: “Yes as the more comfortable they are with all of the variables the less chance there is of the being thrown out of their comfort zone in an audition or performance situation.”

B. Michael Williams – Professor of Music, Winthrop University

willamsm@winthrop.edu

Response: “Any serious timpanist must be familiar with Dresden-style pedals with clutches.”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University

ericwillie@tntech.edu

Response: “Yes”

RESPONSES FROM QUESTION #17 OF SURVEY

“Do you believe it is important for students to develop their ear with the playing of timpani since for percussionist it is the only instrument that we actually have to match pitch on? Do you also believe that students should be able to tune timpani without the assistance of tuning gauges and able to properly change and clear heads?”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Response: “Absolutely! Also, with playing calf or goat you will always have to adjust during your playing. A good ear is crucial as a timpanist!”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Response: “Yes to all of the above!”

F. Michael Combs - Professor of Music, Emeritus, University of Tennessee
mcombs@utk.edu

Response: “Ear training is essential – knowledge of intervals, etc. I am for using anything – any device, electronic instrument, etc. that would help the timpanist with pitch accuracy. Gauges are fine.”

Jonathan Haas – Director, NYU Percussion Program, Juilliard Pre College percussion, Aspen Music Festival and School
jonahass@aol.com

Response: “Ear training is of primary importance, for all.”

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Response: “Yes, gauges are for assistance, but are not a substitute for proper tuning. Solfege should be started on the first timpani lesson and ear training classes should be taken seriously. Changing and clearing heads are part of being a timpanist and the study and practice of this should be part of the teachers lesson plan.”

Shaun Schuetz – Adjunct Instructor of Percussion, Pellissippi State Community College and Maryville College
Shaun.n.schuetz@gmail.com

Response: “YES and YES”

Frank Shaffer – Associate Professor, University of Memphis – Timpanist, Memphis Symphony
fshaffer@memphis.edu

Response: “Timpanists need to be singers and “Solfegggers” from the very beginning. Without the pitch in your head, it takes much to long fumbling around to get the pitches right. I personally put bags over the gauges so that students must use their ears to tune. Gauges should only be used in rehearsals and performances, and there, only as a guide. Changing and clearing heads are absolute essentials that a timpanist and percussion teacher must know.”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: “Yes, but this skill is also developed through singing their marimba repertoire etc.”

B. Michael Williams – Professor of Music, Winthrop University

willamsm@winthrop.edu

Response: “It is absolutely essential to develop the ear to the highest degree. While I do agree that timpanists should be able to tune without gauges, all professionals use them.”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University

ericwillie@tntech.edu

Response: “Yes and Yes”

RESPONSES FROM QUESTION #18 OF SURVEY

“Is there anything else that you would like to add in regards to the timpani in education or as a solo instrument?”

Christian Berg – Principal Percussionist, Oslo Philharmonic
lilletromme@online.no

Response: “I would hope that teachers would encourage their percussion students to listen more to the orchestra. This is for them to find inspiration in the huge repertoire, and hopefully by doing this they will become enthusiastic about the instrument.”

Kenneth Broadway – Professor of Percussion, University of Florida
kbroadway@arts.ufl.edu

Response: “You’ve covered things quite well here! It is hard to motivate students to spend the time necessary to develop as timpanists (technique, repertoire, excerpts), especially with so many orchestras ceasing operations in recent years.

Peter Kates – Principal Percussionist, Bergen Philharmonic Orchestra – Associate Professor at the Grieg Academy of Music, Bergen, Norway
pakates@online.no

Response: “In an orchestra there is a principal percussionist and a principal timpanist. The timpanist is one of the most important members of the orchestra and the instrument demands high respect. If one wished to be a timpanist, then the proper education covering all aspects of playing, maintenance, history and ear training must be taken seriously. An aspiring student will need a complete and proper education to reach his/her goals. I have always felt that there should be a main area of study for those wishing to be professional timpanists.”

Tracy Wiggins – Director of Percussion, University of North Carolina at Pembroke

Response: ““I believe that this is one of the oldest and in some ways most misunderstood instrument we have. It has taken a back seat to other instruments in the emphasis placed on it while at the same time it is one of the instruments students most often perform on in the job scene. This has led to many students being unprepared for how to properly navigate their way through a timpani performance. I believe this is something that should be corrected in university percussion curricula.”

B. Michael Williams – Professor of Music, Winthrop University

Response: “Clearing heads and properly replacing heads should be a regular part of timpani education (for players and music educators”. Also, proper mallet selection relative to musical circumstances should be frequently discussed.”

Eric Willie – Associate Professor, Associate Professor Tennessee Tech University
ericwillie@tntech.edu

Response: “A. Use la-based solfege, B. Work on pitch centering.”

APPENDIX D

PROFESSIONAL TIMPANISTS

With any instrument or area studied in music today there will always be specific names associated with them. These specific names refer to those who have excelled on their instrument or voice and exhibit a model for others to follow. Along with these names will come writings to help others understand how they have achieved such a high level of artistic integrity. These writings can help students in achieving their own personal goals as musicians. Here with timpani just like any other instrument knowing the names of the “Greats” will help in guiding the student in an understanding of the instrument. In the process of learning how to perform and understand music the teacher will suggest listening examples for the student to study as they learn their musical trade. These examples are to help the student in learning a piece, how to interpret it, and general items that pertain to the instrument overall. The examples that are chosen will most likely be performed by a well-known confident performer that displays a total control and awareness of their instrument. Usually a teacher will suggest a solo played by two different people so they can see the different interpretations. When listening to orchestral, solo, or chamber music the student, should work along with their teacher to learn how and what to listen for with these recordings. Knowing professional performers in music is vital for learning. That brings us to the timpani, that large instrument that sits in every ensemble and helps to support the group both harmonically and rhythmically. Most likely if you ask a student to name a well-known timpani player they will not be able to or will most likely come up with one name. Just like any other famous performer it is wise to know a little about them. This may be the ensemble they play with, recordings they are part of, school of thought when performing their instrument, articles they have written, or anything else that sets them apart from others. Below is a list of

great timpani players who have come to be known over time. It would be wise for a student to be familiar with a handful of these prominent performers and educators.

These timpanists will be presented in alphabetical order and represent a small number of elite performers. These performers will be associated with specific schools of thought concerning the timpani and their students have carried that idea into both their performing and teaching careers. Each of these timpanists has studied with a very knowledgeable teacher and each of these timpanists has a long list of students who have gone on to perform and teach at the highest level. Some of these performers have gone on to write their own method book, solo compositions, and are even credited with their own grip. All of the names below are of timpanists, who have retired, are deceased, or are currently performing.

However, students can still observe professional performers of this instrument with any major symphony orchestra. Most likely with any ensemble of a high caliber the timpanist will have studied with someone who was taught by one or more of the following people. When seeing an orchestra perform you can almost be guaranteed the timpanist will be a pivotal part of the ensemble.

Cloyd Duff (1915 – 2000), timpanist with the Cleveland Orchestra 1942 – 1981. Duff also taught at the Oberlin Conservatory of Music, Baldwin-Wallace College, Cleveland Institute of Music, and the Aspen Music Festival.

Vic Firth (1930 –), timpanist with the Boston Symphony 1950 – 2000. Vic Firth also taught at the New England Conservatory of Music.

Saul Goodman (1907 – 1996), timpanist with the New York Philharmonic 1926 – 1972.

Goodman also taught at the Juilliard School of Music for 41 years and is considered to be one of the most influential timpanists of modern history.

Jonathan Haas (1954 –), timpanist with the EOS Orchestra 1994 – 2004, American Symphony 1990 – present, Mostly Mozart Festival 1988 – present, Aspen Chamber Symphony & Festival Orchestra 1984 – present, New York Pops Orchestra 1982 – present, and the New York Chamber Symphony 1982 – 2000. Haas has also taught at The Peabody Institute of the Johns Hopkins University 1982 – 2008, Aspen Music Festival and School 1984 – present, Aspen, Colorado, New York University, Steinhardt School of Culture, Education, and Human Development 2002 – present, The Juilliard School, Pre-College Division 2005 – present, and The Bard College Conservatory of Music 2009 – present.

Mr. Haas has been a longtime advocate in the advancement of timpani literature. He has commissioned works for solo timpani as well as Phillip Glass's composition "Concerto Fantasy: for Two Timpanists and Orchestra. This work alone has been performed around the world with Jonathan Haas performing one of the solo parts. Haas' successful efforts to expand the timpani repertoire have led him to commission and premiere more than 25 works by composers in addition to Philip Glass such as Stephen Albert, Marius Constant, Irwin Bazelon, Eric Ewazen, Thomas Hamilton, Robert Hall Lewis, Jean Piche, Karlheinz Stockhausen, Andrew Thomas, and many others.²²

²² Jonathan Haas, "*Jonathan Haas Timpanist/Percussionist*," accessed February 6, 2014, <http://www.aboutjonathanhaas.com/bio.html>.

Fred Hinger (1920 – 2001), timpanist with the Philadelphia Orchestra 1951 – 1967 and timpanist with the Metropolitan Opera Orchestra in New York City 1967 – 1983. Fred Hinger also taught at the Curtis Institute of Music, Yale School of Music, and Manhattan School of Music.

Roland Kohloff (1935 – 2006), timpanist with the San Francisco Symphony 1956 – 1973, and the New York Philharmonic 1973 – 1995. Roland Kohloff also taught at The Julliard School.

Salvatore Rabbio (1934 –), timpanist with the Detroit Symphony Orchestra 1958 – 1998. Rabbio also taught at Wayne State University 1962 – 1986.

The names below are well known timpanists from Europe.

Richard Hochrainer (1904 – 1986), timpanist with the Vienna Philharmonic and Vienna State Opera Orchestras 1939 – 1970. Richard Hochrainer also taught at the Vienna Academy of Music.

Marinus Komst (1952 –), timpanist with the Royal Concertgebouw Orchestra since 1991 and with the orchestra of Friesland 1971 – 1991. Komst also teaches percussion at the Royal Academy of Music in London.

Jan Labordus (1895 – ?), timpanist with the Royal Concertgebouw Orchestra and taught several great future timpanists such as Marinus Komst.

Rainer Seegers (1952 –), timpanist with the Berlin Philharmonic since 1986, replacing his teacher Werner Thärichen. He currently teaches at the Berlin Orchestral Academy.

Werner Thärichen (1921 – 2008), timpanist with the Berlin Philharmonic 1948 – 1986. He was also a well-known composer of orchestral works.

Allan Cumberland (1946 –), timpanist with the London Philharmonic Orchestra for twenty years and professor of timpani at the Royal College of Music in London.

The names above are but a small number of great timpanists from the past one hundred years. Even today most students will most likely not become a professional timpanist. This however should never deter them from learning about this wonderful and important instrument that has been around for hundreds of years. Even though a student most likely will not be a professional timpanist, a large majority of their performing after graduation will still be on this instrument. What is to come from the future if the present population of percussion majors is not taught appropriately? If they are not taught properly and lose that knowledge and ability of this instrument then, there will be a continued decline in the realm of timpani. Even the great timpanist Salvatore Rabbio said that “there was a group of players from the past who produced a great deal of knowledge about timpani that I do not see being carried on. I think that also has to do with today’s philosophy of teaching.”²³ It is these players and their students from the past that must be studied and presented to students of today for this knowledge to continue on. The timpani is a complex yet fascinating instrument which still has a lot to present to the world and will only continue through the education of students. These students will carry this knowledge into their professional lives and into their students’ lives for future generations to use. Just like any area of study the teacher must find a way to engage the student and to show what can come from studying a specific area. If this does not come to be, the knowledge of this instrument will slowly cease to exist. Performing on any instrument is an art within its self.

²³ Terry Breese, Keith Claeys, and Steve Kegler, “Interview with Salvatore Rabbio,” *Percussive Notes* 45, no. 6 (December 2000): 50

When looking for answers in today's world of music it is always best to go directly to those who are considered to be pivotal figures. These figures would be performers of the top orchestras and teachers from institutions that are considered leaders in the field of music. That is where a large part of the information within this research will come from. Another question from the survey prepared to aid this research asked professionals "What would you like to see in regards to timpani education in today's world of percussion? Example: more knowledge of the instrument, more performances or time on the instrument, etc." This question was designed to be more open and to find several answers that could be used in this research. The majority of answers pointed to more training and knowledge of this instrument overall. One of the answers came from Dr. B. Michael Williams, Professor of Music, Winthrop University. Dr. B. Michael Williams answered this question with "All percussionists need a firm grounding in the basic technical demands of playing timpani and the orchestral literature associated with it. Solos are an excellent way to explore a variety of techniques, tuning and sticking issues, expressive devices, etc." This next answer is geared toward the various "Schools" of timpani playing which go along with the names that were given earlier. Another answer to the above question was given by Peter Kates, Principal Percussionist with the Bergen Filharmoniske Orkester, and Associate Professor at the Grieg Academy of Music, Bergen Norway. Professor Peter Kates answered this question with "I would like to see timpani teachers take time to research other "schools" of timpani playing to incorporate into their own style and teaching. I find that timpanists are segregated in their own schools of playing. It is my experience that all schools have important factors in their individual style and the growth of the instrument would be to bring together different aspects in style."²⁴ Peter Kates, Tracy Wiggings, B. Michael Williams, and Eric Willie all gave answers that point toward a need for more education and all

²⁴ Other responses to this question may be viewed in the Appendix C (page 57) of the present study.

around knowledge when it comes to teaching and performing on timpani. It is only through proper instruction that an instrument such as this will continue to sustain itself into the future. From the survey prepared to aid in this research the very last question that was previously discussed asked, “is there anything else that you would like to add in regards to the timpani in education or as a solo instrument?” One of the answers was given by Dr. Kenneth Broadway, Professor of Percussion, University of Florida who said that, “it is hard to motivate students to spend the time necessary to develop as timpanists (technique, repertoire, excerpts), especially with so many orchestras ceasing operations in recent years.”²⁵ Dr. Broadway’s answer here does bring up another concern. Percussionists and timpanists are not the only ones hurt by orchestras going out of business. All instruments of the orchestra are affected by the disappearance of orchestras. It would seem that with this action it would only make since to further have a strong knowledge and as much experience as possible playing instruments such as the timpani. This would only make it more important to have the proper knowledge and means to go out and be further ready for those jobs or opportunities that do exist. Just like any other area of professionalism the student must learn the means to properly excel in their field of study. For a percussionist or possible future timpanist this means being to leave an education program with as much knowledge and the means to further their self as much as possible. Serious students should seek instruction from a player who is well versed in the instrument and orchestral repertoire. Ideally, this should be someone who is associated on a day-to-day basis with the instrument, such as a current player of good reputation. It could also be who has retired from the field and has a broad base of experience with which to draw upon, inspire, and properly guide the

²⁵ Other responses to this question may be viewed in the Appendix C (page 63) of the present study.

student.²⁶ The research herein will help aid in bringing back the overall importance of the timpani within percussion education which will ultimately continue its importance as an instrument into the future.

²⁶ Andrew Simco, "Becoming a Successful Timpanist," *Percussive Notes* 42, no. 4 (August 2004): 57