The Orchestral Percussion Method of Alan Abel: A General Analysis of Abel's Performance Practices Throughout his Tenure in the Philadelphia Orchestra

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THE ORCHESTRAL PERCUSSION METHOD OF ALAN ABEL: A GENERAL ANALYSIS OF ABEL’S PERFORMANCE PRACTICES THROUGHOUT HIS TENURE IN THE PHILADELPHIA ORCHESTRA

By

Thomas Bowden

A DOCTORAL ESSAY

Submitted to the Faculty of the University of Miami in partial fulfillment of the requirements for the degree of Doctor of Musical Arts

Coral Gables, Florida

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Alan Abel’s technical methods as well as the perspectives of his past and present colleagues and former students is provided in order to give students and teachers a strong reference regarding advanced orchestral percussion instrument techniques, ensemble playing considerations, and acoustical factors. The study began the documentation of these prominent percussionists’ methods, which was carried out through several interviews. The study includes transcripts of these interviews and includes a video recording of Alan Abel displaying his techniques.
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CHAPTER 1: BACKGROUND AND JUSTIFICATION

Obtaining a job as an orchestral percussionist is a career many college percussion students and young professionals strive for. As such, there are many fine colleges, universities, and conservatories a prospective student can audition for that will prepare him/her for a career in this field. When considering percussion teachers, there are many exceptional pedagogues whose successful methods in orchestral performance are worth studying. Arguably the most successful pedagogue in this field, in terms of placing students in jobs, is Alan Abel. Background information on Abel’s life will provide clarity as to how he came to prominence within the field of percussion.

Raised in Hobart, Indiana, Abel grew up in a musical family where he quickly developed an interest in drums and began taking lessons at the age of 7. His former teachers include Clarence Carlson at the Roy Knapp School, Haskell Harr, and William Street, with whom he worked towards his performance degree from 1947-1951 at the Eastman School of Music while also performing part time as a member of the Rochester Philharmonic Orchestra. After graduation, he played for two and a half years partly under Commander and Conductor Arnald Gabriel in the Empire Band of the United States Air Force at the Sampson Air Force Base in Geneva, New York. Following this, he became the principal percussionist of the Oklahoma City Symphony.  


3 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 67.

4 Alan Abel, phone interview by author, December 16, 2015, Appendix 108.
Alan Abel played in Oklahoma City from 1953-1959 where he gained acclaim from Philadelphia Orchestra guest conductor, Leopold Stokowski. Abel said, “Stokowski always made a point of singling out members of the orchestras he guest conducted and praising them in newspaper interviews…The piccolo player and I were the ones he picked during his visit.”

He then sent this newspaper clipping to Charlie Owen, the Philadelphia Orchestra’s principal percussionist at that time, who invited him to audition in 1959. He won the audition.

Abel spent 38 years as a full time percussionist in the Philadelphia Orchestra, including 25 as associate principal percussionist. His performances spanned the most famous orchestral repertoire as well as many world premieres. He played under conducting greats, Eugene Ormandy, Riccardo Muti, and Wolfgang Sawallisch. Abel said of his colleagues in the Philadelphia Orchestra percussion section,

I had wonderful mentors in Fred Hinger and Charles Owen. Michael Bookspan has been a great player for all of my 38 years—45 years for him….Gerry Carlyss graced our orchestra as timpanist from 1967 to 1989, and Tony Orlando started in 1972 and continues the Philadelphia traditions in a grand manner. In 1989, Don Liuzzi started his journey in the realm of Philadelphia sound and music making.

Alongside his performance career, Abel has remained focused on educating collegiate and high school percussionists at institutions including the University of Oklahoma, Oklahoma City University, Glassboro State College, Temple University, and Settlement Music School. His former students hold positions in many of the

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6 Ibid., 6.

professional orchestras across the world. Current Philadelphia Orchestra timpanist, Don Liuzzi, stated, “Nearly one third of all professional orchestral percussionists in the United States have been influenced by Alan Abel, either directly or as students of his students.”

To provide some specific perspective on this,

Many of his former students currently perform with symphony orchestras in Albany, Barcelona, Boston, Buffalo, Chautaqua, Charleston, Chicago, Columbus, Delaware, Detroit, Evansville, Fort Wayne, Harrisburg, Honolulu, Houston, Long Beach, Los Angeles, Malaysia, Melbourne (Australia), Metropolitan Opera (NYC), Mexico City Opera, Minnesota, Naples (Florida), New Orleans, New World (Miami), New Zealand, Norfolk, Oklahoma City, Perth (Australia), Philadelphia, Pittsburgh, Santa Fe Opera, Scranton, Tampa, Toledo, and Toronto. Abel’s former students have taught at Arizona State, University of Colorado, Curtis Institute, Indiana State, Juilliard, New England Conservatory, Oklahoma City, Rice, Temple, Delaware, Michigan, and the University of Toronto.

In addition to these pursuits, Abel is also known for having designed three different triangle models, being the first to create suspended concert bass drum stands in the U.S., and compiling and editing two books covering orchestral studies for percussion and timpani. He was inducted into the the Percussive Arts Society Hall of Fame in 1998.

Given that Alan Abel has achieved such great fame as a musician, teacher, and instrument maker, it would be natural to assume that there would be in depth literature describing his performance methods. However, an in depth search reveals no such

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10 Ibid., 7-8.

literature. Abel’s two books, *20th Century Orchestra Studies for Percussion* and *20th Century Orchestra Studies for Timpani*, provide some performance suggestions on percussion and timpani, but these rarely extend beyond a few lines. There is room for much greater discussion in regards to his techniques, musical ideas, sound concepts, and ensemble playing advice. Thus, the evident problem is that there is only limited written material regarding Abel’s technical and musical performance methods. Additionally, because Abel has such a successful record of helping students achieve percussion careers, the field needs a source describing his methods in greater detail. Toward this end, Alan Abel graciously allowed me to interview him at his summer home in Northfield, Massachusetts on August 12, 2015.

The purpose of this study is to begin to document Abel’s techniques, sound concepts, ensemble playing suggestions, and acoustical considerations in order to provide percussionists with a strong professional method to learn from in addressing these areas within orchestral performance. Three research questions will provide the focus for subsequent chapters to help fulfill this purpose. These research questions include:

1) What techniques and sounds does Alan Abel prefer on standard orchestral percussion instruments?

2) What are his recommendations on how to become a great ensemble player and section member?

3) How does he change his playing throughout various acoustical environments?
CHAPTER 2: LITERATURE REVIEW

A review of commercially available literature reveals that there is limited information regarding Alan Abel’s performance methods and sound concepts. Mr. Abel includes concepts regarding performance goals, ensemble musicianship, and technical considerations such as mallet and instrument choice in his two books, but details regarding the physical mechanics of his playing techniques are not evident. A review of existing literature from articles, interviews, and books will provide initial evidence of his methods. The first section of this chapter will address his techniques found in commercially available literature coupled with representative musical examples illustrating them. The section will be organized by instrument, focusing on snare drum, bass drum, timpani, cymbals, triangle, and tambourine. A discussion regarding ensemble playing and effects of acoustics on percussion performance will follow this.

SNARE DRUM

Commercially available literature reveals little insight into the specific mechanical techniques Abel utilizes when playing snare drum. His book, 20th Century Orchestra Studies for Percussion provides some goals for the performer to keep in mind when playing. He shares the following,

Some of the difficult problems encountered by the percussionist often involve a seemingly simple part for cymbals, bass drum, tambourine, etc., which demands a vivid musical imagination and/or sensitive control. There are excerpts that present these problems, although the majority of the passages are for keyboard instruments and snare drum, which generally require the most technical facility of the percussion instruments.12

The technical information that Abel does provide on his snare drum playing refers more

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to sticking patterns and maintaining good control when playing soft. He also often incorporates ensemble playing advice. For instance, when describing how best to execute the passage at rehearsal 25 from the fourth movement of Sergey Prokofiev’s *Romeo and Juliet Suite* No. 2, he shares, “Be careful to establish the correct tempo. Keep it steady but be ready to give if other instruments waver. The dynamic level is very low; the orchestra is thin. Stick control must be positive and very sensitive. Use alternate sticks or all right stick with left on accents.”\(^{13}\)

Additional contextual musical information he provides includes an example from the first movement of Shostakovich’s Seventh Symphony, where he describes how the repeated figure played by the snare drum at rehearsal 19, gradually builds in volume, eventually being joined by a second snare drum. The figure later closes the movement as a solo that repeats ten times starting at *pianissimo* and should gradually *diminuendo*, which aside from the *pianissimo* is not written to do in the part.\(^{14}\) Similar helpful tips are included throughout the book alerting the percussionist to what instruments he/she plays with and also what his suggested mallet choices are in specific moments.

William James, principal percussionist of the St. Louis Symphony, provides some more details regarding the mechanics of Abel’s snare drum playing. He describes Mr. Abel’s snare drum rolls in his book, *The Modern Concert Snare Drum Roll*:

> When playing a roll, the forearms travel straight up and down in relation to the drum and the elbow and shoulder act as hinges. The sticks are almost like an extension of the forearm. The upper arms will move slightly in reaction to the stroke but do not actually cause the stroke. This movement in the arms has been described by the legendary percussionist Alan Abel of the Philadelphia Orchestra.

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\(^{14}\) Ibid., 56.
as a “chicken wing” motion. The forearms generate the downward motion of the stick and all of that energy should go straight into the drum.\(^\text{15}\)

Mr. Abel’s first hand description of these techniques is referenced in chapter 4.

Regarding Mr. Abel’s mechanics of playing general strokes at all dynamic levels, no commercially available literature exists. The interview the writer held with Abel addressed these concepts and further detail will be described in subsequent chapters.

**BASS DRUM**

Continuing forward in the membranophone family, Alan Abel is perhaps the highest regarded bass drummer in the world. Famous Nexus percussionist Bob Becker performed his composition Mudra with him in November of 2014 during Mr. Abel’s 85\(^{th}\) Birthday Concert in Philadelphia at the Perelman Theater in the Kimmel Center. Becker said of Abel, “What could be better than playing that drum duet in ‘Mudra’ with Alan Abel, the god of the bass drum?…It was a fantasy that finally came true!”\(^\text{16}\)

Mr. Abel’s famous suspended bass drum stands, which help in “opening up” much of the bass drum’s sound, originated as somewhat of an accident. He and Fred Hinger were carrying a bass drum together in the early 1960s and struck it and and noticed how “free and full” the sound was.\(^\text{17}\) He soon developed a swiveling ring shaped stand utilizing rubber bands for suspension that would be paramount in matching the


Philadelphia Orchestra’s lush, voluminous sound.\textsuperscript{18,19} This illuminates an ideal bass drum sound concept that Mr. Abel and the Philadelphia Orchestra percussion section desire, but his techniques on producing these sounds are not commercially documented. These techniques will be discussed in chapter 4.

**TIMPANI**

Mr. Abel includes some of his techniques on timpani in his book, \textit{20\textsuperscript{th} Century Orchestra Orchestra Studies for Timpani}. He describes that when playing \textit{forte} and above, a firmer sound will be achieved when playing in the middle to upper range of each drum. Thus, “a fortissimo C sounds better on the 28” drum than on the 25.”\textsuperscript{20} Additionally, he recommends playing technical passages on drums that are closer together rather than far apart. For instance, if there are many rapid tuning changes, it is best to play them on the inside two drums and maintain “stationary” pitches on the outside two.\textsuperscript{21}

In Mr. Abel’s book, he does not recommend specific sticks to use aside from composer indications because “there are too many variables to make it possible to recommend a specific stick for a certain passage; individuality in each timpanist’s set of sticks, weather conditions, type and brand of timpani, individual taste, and conductor’s


\textsuperscript{20} Alan Abel, foreword to \textit{20\textsuperscript{th} Century Orchestra Studies for Timpani} (New York: G. Schirmer, Inc., 1970).

\textsuperscript{21} Ibid., foreword.
preference.” He does recommend owning a large variety of sticks, though, and to have a knowledgeable colleague listen out in the hall to help determine which sound best.

Mr. Abel’s musical suggestions in his book 20th Century Orchestra Studies for Timpani are limited aside from the composer markings. He does provide helpful ensemble cues and also indicates if parts are exposed, solo, or soli. For example, regarding rehearsal 9 from “The Masque” movement within Leonard Bernstein’s The Age of Anxiety (see Example 1), Abel states, “…the timpani part is very exposed. Timpani, percussion, harp, celeste, and string basses accompany the piano solo.” It can be inferred from this example, as well as from the other instances where he marks ensemble couplings, that studying what instruments play within the texture maintains an important role in Mr. Abel’s performance methods. Research from the interview Mr. Abel granted the writer will reveal information regarding how a timpanist’s role within ensemble texture affects the technical, musical, and sound choices he makes.

CYMBALS

Mr. Abel’s techniques, musical, and sound concepts on cymbals are also an area of research that will be discussed throughout the paper. In Abel’s book, 20th Century Orchestra Studies for Percussion, he provides suggestions regarding instrument choice and mallet choice for crash and suspended cymbals. These areas are well addressed throughout the percussion part he includes of Bernstein’s, Overture to “Candide” (see


23 Ibid., foreword.

Example 2). He specifies that a suspended cymbal should be used after rehearsal 30 on the staccato quarter notes on beats two and four and they should be played with a triangle beater. 18” crash cymbals should be used on the half notes two measures after rehearsal 132 and he later recommends 15” or 16” crash cymbals on the half notes one bar after rehearsal 160. Additional indications are provided suggesting where to use various sizes of crash cymbals throughout the overture as well as where to play suspended cymbal and its recommended beater. This example reveals insight into the variety of sounds Mr. Abel explores in his performances. Information obtained from the writer’s interview with Mr. Abel allowed a discussion of the mechanics of his cymbal techniques, which will be contextualized with relevant musical examples in subsequent chapters.

**TRIANGLE**

Mr. Abel’s preferred sounds on the triangle are directly influenced from the sounds he heard produced by his colleagues and predecessors in the Philadelphia Orchestra. Abel said, “My predecessor in the Philadelphia Orchestra, Jim Valerio, had the best triangle…He let us use it for a year or two. When he wanted it returned, I decided that we had to replace it.”\(^{25}\) Valerio’s triangle was originally a knitting mill spindle that was bent into a triangle by the Walberg Drum Company. In an effort to replicate this sound, Mr. Abel had an engineering company produce a dozen varying designs based off the dimensions of Valerio’s triangle and he chose “the one that sounded the best, and had a couple made.”\(^{26}\) Mr. Abel further elaborated in an earlier interview with Mr. Valerio and his colleague, Terry O’Mahoney, “Alan Abel,” *Percussive Notes* 36, no. 6 (December 1998): 7, accessed November 10, 2015, [http://publications.pas.org/archive/Dec98/Articles/98.12.06-9.pdf#search="alan%20abel"](http://publications.pas.org/archive/Dec98/Articles/98.12.06-9.pdf#search="alan%20abel").

\(^{25}\) Ibid., 7-8.
with James Moore in *Percussive Notes* that he believes a triangle should be higher in pitch, but non-definite in pitch. He added, “There tends to be less identity with pitch when it is in a higher register.” Information regarding his triangle techniques along with representative musical examples will be discussed in detail in subsequent chapters in an effort to define his methods more completely.

**TAMBOURINE**

Continuing with tambourine, Mr. Abel’s methods are not well documented in commercially available literature. An instance of where he includes instruction for tambourine in his book, *20th Century Orchestra Studies for Percussion*, occurs regarding the sixth movement from Sergey Prokofiev’s *Romeo and Juliet Suite No. 2*. Tambourine and maracas play back and forth creating a composite rhythm of “1&2&” throughout most of the movement at either *pianissimo* or *pianississimo*. Mr. Abel provides useful ensemble advice, cautioning the performers that, “the orchestration is very thin here – the dynamic level must be consistently low with a good balance between the two instruments. Playing several matched notes in a row is deceptively difficult.” It is worth noting that maintaining consistent control throughout soft and loud dynamic levels is an issue he stresses multiple times throughout this book. Thus, it can be inferred that this is an important attribute to Mr. Abel’s performance practices. Additional sound choices, technical suggestions, and musical examples on tambourine will be described in subsequent chapters in order to further define Mr. Abel’s methods.

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ENSEMBLE PLAYING

Successfully auditioning is a vital reality in gaining a full time career in an ensemble as an orchestral musician. Mr. Abel’s advice pertaining to auditions is not commercially documented beyond an interview he did in with James Moore that was published in Percussive Notes in 1978. In the interview he asserts that thorough preparation, memorization, and ensemble playing are important aspects in auditioning. He recommends that standard audition material be memorized and that referring to scores and recordings for musical context of the parts be done in order to gain a better understanding of the music. When asked what is specifically expected during an orchestral percussion audition he replied,

Obviously, the usual excerpts should be well prepared plus any extra dimensions you can add. For example, you may know that the person leaving was playing in a special area and you can give that extra attention….One may look for a particular style, or have an affinity for one school of percussion playing. Those things do have some influence although they are difficult to measure. The thing that really counts the most with me, assuming that the player has good technique, is the ability to play with a group, a quick timing sense, a really solid sense of rhythm, and generally a sensitivity that allows one to make the part fit. Even in a fine orchestra there are times when the group begins to pull apart rhythmically and you have to quickly try to determine the most stable elements in the group and play with them. At other times you can be technically right by exactly following a conductor’s down beat but very wrong if the orchestra actually plays with a delayed response.29

It is with this in mind that the researcher will examine Abel’s ensemble playing methods in order to provide percussionists with more details as to how to improve as a group performer. Abel’s experiences are particularly unique due to the fact that there were many existing technical and musical traditions practiced within the Philadelphia

Orchestra’s percussion section. Thus, an attempt will be made to document some of these traditions. Topics covered will include playing as a section and what to listen for within the entire ensemble. The writer’s interview with Mr. Abel addressed ensemble playing concepts, which will be discussed in subsequent chapters in an effort to continue to define Abel’s performance methods in more depth.

ACOUSTICS

Acoustics of concert halls are crucial factors to consider in regards to orchestral percussion sound. Books by acousticians, physicists, and architects on concert halls will be analyzed to provide evidence of how acoustics affect orchestral sound. Additionally, this research will provide contextual background information on the acoustics of the Academy of Music and Verizon Hall, the two homes of the Philadelphia Orchestra. The researcher’s interview with Alan Abel will address the acoustics within these two halls and how his and his past and present colleagues’ performance methods have been affected by them. The goal through this research will be to help percussionists gain a greater understanding of how to adjust their playing in various acoustical environments through examining Abel’s knowledge of adjusting in different performance halls in Philadelphia and on tour.

Leo Beranek, who is regarded as a top authority on acoustics, explains many attributes that contribute to good acoustics in halls.30 Two of these attributes will be discussed relating to the Philadelphia Orchestra’s two historic halls. One attribute he considers is reverberation, which he suggests should ideally be 1.8 to 2 seconds at mid

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frequencies (500 to 1,000 Hz) for classical and romantic repertoire. The Academy of Music in Philadelphia has a reverberation time of 1.2 seconds at mid-frequencies, which is a hall considered by many conductors to be “somewhat dry” or “not very live” for symphonic music. To clarify how this affected the Philadelphia Orchestra sound, Beranek shared,

At Philadelphia’s Academy of Music, both Leopold Stokowski (conductor from 1912 to 1936) and his successor, Eugene Ormandy (from 1936 to 1980), taught the players of the Philadelphia Orchestra to stretch out the endings of notes so as to simulate the effects of hall reverberation; the violinists even had to learn to bow out of unison. These techniques would seem to defy logic, but in fact both conductors knew the same thing: the Academy had “dry” acoustics, which robbed music of the usual fullness it would derive from a hall’s reverberation.

This more “expansive” playing style resulted in the orchestra’s famous lush and opulent sound, as the late Oregon Symphony Music Director, James De Preist described from having guest conducted there. In addition to the low reverberation time, Denis Vaughan shares in his article, *Orchestral Sound in Concert Halls*, that bass waves are broken up and absorbed in the Academy of Music. The Philadelphia Orchestra’s newer hall, Verizon Hall, has a reverberation time of up to 1.7 seconds at mid-frequencies. Additionally, Leo Beranek states that the

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33 Ibid., 4.

34 Ibid., 5-7.

bass/treble balance is now very good in the newer Verizon Hall.\textsuperscript{36} These acoustical issues will be addressed in subsequent chapters drawing from information obtained in the writer’s interview with Mr. Abel and will be vital in helping to explain the reasons for the mallet choices, techniques, and instrument preferences within the Philadelphia Orchestra percussion section traditions.

Another important acoustical attribute Beranek discusses is that hall width plays a major factor in the intimacy of sound in a concert hall, “implying that listeners hear the music as though they are near the performers.”\textsuperscript{37} He uses “initial-time-delay gap,” as a measurement of this quality.\textsuperscript{38} He defines this as, “…the time interval in msec between the arrival, at a seat in the hall, of the direct sound from a source on stage to the arrival of the first reflection.”\textsuperscript{39} He says that, “the most successful halls have initial-time-delay gaps, at mid-main floor, of approximately 20 milliseconds. In the poorest halls, the initial-time-delay gaps exceed 70 milliseconds.”\textsuperscript{40}

Additionally, J. Christopher Jaffe, another highly regarded acoustical consultant, asserts, “the hall must be narrow, with a width that does not exceed 90 feet wall-to-wall,


\textsuperscript{38} Ibid.


in order to provide the proper initial time delay gap of less than 20 to 30 milliseconds.\textsuperscript{41} This helps to “provide clarity, intimacy, transparency, and presence.”\textsuperscript{42} The Philadelphia Orchestra’s Academy of Music and Verizon Hall have widths of 58 and 84 feet and initial time delay gaps of 19 milliseconds and 28 milliseconds respectively.\textsuperscript{43} On the Academy of Music, Denis Vaughan shares in his article, \textit{Orchestral Sound in Concert Halls}, that, “although some find Philadelphia dry, its warm, soft, intimacy is generally a favourite with music-lovers.”\textsuperscript{44} Further research will reveal how the attribute of hall intimacy has affected the performance methods of Alan Abel and his past and present colleagues.

\textsuperscript{41} J. Christopher Jaffe, \textit{The Acoustics of Performance Halls: Spaces for Music from Carnegie Hall to the Hollywood Bowl} (New York: W.W. Norton & Company, Inc., 2010), 52.

\textsuperscript{42} Ibid., 53.


CHAPTER 3: METHODOLOGY

This study will strive to thoroughly answer three questions addressing Alan Abel’s orchestral percussion methods. The answers to these questions will provide a model percussionists can use to address appropriate techniques and sounds on standard percussion instruments, instrument selection, how to go about developing unique musical ideas, how to become better ensemble musicians, and how to take acoustics into account. The specific methods in which each of these questions will be answered will be discussed below.

The first question involves identifying what Mr. Abel’s recommended techniques and sounds are on standard percussion instruments. To answer this more fully, the writer interviewed Alan Abel, as well as his former students Chris Deviney (current Philadelphia Orchestra principal percussionist), Don Liuzzi (current Philadelphia Orchestra principal timpanist), Angela Zator Nelson (current Philadelphia Orchestra associate principal timpanist and section percussionist), Greg Zuber (current Metropolitan Opera Orchestra principal percussionist), and Matt Strauss (current Houston Symphony percussionist). Their responses on these topics were referenced and analyzed because limited literature exists on Mr. Abel’s methods and how they are utilized within various orchestras across the world today. Additionally, the included contextual musical examples, diagrams, and videos will help illustrate the practicality of these techniques within the orchestral repertoire.

The second question regarding how to become a great ensemble and section musician is also further addressed in subsequent chapters. Not only is becoming a great player individually important, but within the orchestra a percussionist must learn to
properly play within a group. This is a concept Mr. Abel stresses. Thus, a thorough
analysis of his responses to the researcher’s interview questions on this topic is provided.

The third research question regarding how acoustics fall into the performance
considerations of percussionists was addressed. Mr. Abel’s responses to the researcher’s
questions on the topic covered many of these issues. His experience performing and
adjusting his playing in many different concert halls throughout his career will provide
invaluable information to percussionists wishing to know how to properly approach
balance within the ensemble in various acoustical environments.

These questions all serve the overall purpose of providing percussionists with a
strong example of how to effectively address technique, sound, musicality, ensemble
playing, and varying acoustical environments within orchestral performance. Mr. Abel’s
decades of first hand experience as well as the interview responses from his students,
currently in professional orchestras, will provide unique information on how to address
these areas. The goal of this study is not to set a standard for others to follow, but it is to
provide examples on how to effectively approach many of the issues percussionists face
regularly within their careers.
CHAPTER 4 – SUMMARY OF INTERVIEW RESULTS

In an effort to define Mr. Abel’s percussion methods, the interviews the writer held with Abel and his former students in professional orchestras were geared towards revealing general technical and musical information regarding snare drum, bass drum, timpani, cymbals, tambourine, triangle, and castanets. The chapter is categorized by instrument and starts with more basic techniques and ends with more complex ones. Relevant orchestral excerpts were addressed in the interviews to help contextualize the techniques within musical settings. The content of this section will strive to summarize the discussed techniques on each of these instruments and will include diagrams, video references, and musical score examples to maximize the effort in documenting Abel’s techniques.

SNARE DRUM

Beginning with snare drum instrument preferences, Mr. Abel recommends owning a variety of sizes of drums and the choice depends on the performance context. In the past, 6 1/2” shells were the standard size for playing everything including auditions, but now the trends have favored towards smaller and smaller sizes from 5” to 4” to 3”.45 The smaller depth shells are necessary especially for pieces with soft moments such as those played throughout Prokofiev’s Lt. Kije, Rimsky-Korsakov’s Scheherazade, or Ravel’s Bolero. For years Mr. Abel used a Premier Drum in the Philadelphia Orchestra, but he eventually wore it out and now owns a 6 1/2” and 5” aluminum Pearl Philharmonic as well as a custom 3” Pearl Piccolo snare.46 He also owns

45 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 87-88.
46 Ibid., 89.
a 4” by 14” snare drum and a Hinger Space Tone snare drum. Setting up the drum just below the belt buckle level is ideal for all playing.

He prefers calf heads over plastic, and recommends tuning the top heads of both 5” and 3” drums to an A. Tuning up to a Bb can be desirable occasionally, but sometimes even tuning down to as low as a G is useful when a “fuller bodied” sound is necessary to match a thicker orchestral texture. He stresses that if the head is too tight it vibrates less, which in turn does not activate the snares especially if the snares are also tight. Muting of snare drums is more extreme in an audition than in the orchestra. He recommends his line of Reamer sticks for matching bigger sounds and recommends smaller headed sticks such as Tom Freer’s Light Orchestral Hornwood sticks for softer passages. It is clear that owning a variety of drums, sticks, and paying attention to the set up is an essential step whether in the orchestra or at the audition. Mr. Abel’s specific techniques on snare drum will be explored next.

Regarding basic forte and fortissimo strokes on snare drum, Mr. Abel described how he utilizes wrist on more fluid passages, more arm on passages that have more weight to the character, and that if there are quick dynamic changes such as crescendos and diminuendos, then he finds it easier to control such passages by having greater skin contact around the stick. These three subtleties were covered more in depth through

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47 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 72.
48 Ibid., 88.
49 Ibid., 95.
50 Ibid., 95-96.
51 Ibid., 71.
52 Ibid., 89.
examining relevant musical excerpts idiomatic to the techniques. In reference to using arm versus wrist in alternating single strokes, Mr. Abel clarified that he favors the use of arm in his strokes when playing music with a certain weighty characteristic such as in militaristic Russian music. The mechanics of this technique involve “pivoting” at the “middle of the forearm” or even “at the elbow.”\textsuperscript{53} If he is trying to achieve a “lighter” sound quality, he favors pivoting the wrist.\textsuperscript{54} Chris Deviney, Matt Strauss, Don Liuzzi, Angela Zator Nelson, and Greg Zuber elaborated on these techniques, all agreeing that faster and louder rhythms such as the 32\textsuperscript{nd} notes leading up to letter R in the fourth movement of \textit{Scheherazade}, necessitate the use of wrist. The arm pivot is helpful in guiding the execution of more isolated and/or slower rhythms such as the three stroke ruffs directly at letter P of the fourth movement of \textit{Scheherazade} or the rolls within rehearsal 98 to the end of the second movement of Shostakovich’s 10\textsuperscript{th} Symphony.\textsuperscript{55,56,57,58} Strokes within 98-end of the second movement of Shostakovich’s Symphony 10 will also be more intense than those such as in letter P-R in the fourth movement of \textit{Scheherazade} in order to reflect the much more intense nature of the excerpt.\textsuperscript{59} Don Liuzzi added that lifting too high in snare drum playing is not

\textsuperscript{53} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 88.

\textsuperscript{54} Ibid.

\textsuperscript{55} Chris Deviney, phone interview by author, February 3, 2016, Appendix 113.

\textsuperscript{56} Greg Zuber, phone interview by author, February 8, 2016, Appendix 136.

\textsuperscript{57} Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 128.

\textsuperscript{58} Matt Strauss, phone interview by author, February 21, 2016, Appendix 142.

\textsuperscript{59} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 94.
recommended adding that, “Alan is a real proponent of economical motion.” Rolls will be discussed more in depth later in this section.

Engaging more finger contact around the stick helps not only with control, but also with fullness and clarity of sound. Relevant musical passages that are best executed by wrapping more fingers around the stick include the ruffs at rehearsal letter P in the fourth movement of Scheherazade, the 32nd notes leading up to letter R in the same movement, and the 16th notes from rehearsal 98 to the end in the second movement of Shostakovich’s 10th Symphony. This technique serves the overall purpose of increasing control, fullness, and clarity of sound.

Mr. Abel’s preferred beating spots on the drum for louder dynamics also depend on the character of the music. He described how a darker sound is achieved by playing towards the center of the drum head and that higher partials can be brought out by playing in between the center and the edge of the head. He added, “So, I just don’t like the idea of ‘this is my spot for everything that’s mezzo forte.’ It depends on what the character is and what I’m after.” An example he discussed regarding this concept involves the fortissimo 16th note triplets that occur starting three measures after rehearsal 26 in Ravel’s Alborada del Gracioso. He stresses that the snare drummer should not automatically think to play on the center where the dynamic is marked fortissimo, which he supported by the fact that the texture does not include the full orchestra. The part is played with the trumpets and horns and to match their high partials, he recommends

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60 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 123.

61 Matt Strauss, phone interview by author, February 21, 2016, Appendix 142.

62 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 89.
playing half way to the edge from the center of the head. Abel added, “You can play loudly there. Who says you can’t? But when you do, you get more highs.”63 Thus, it is clear that a technical consideration percussionists should pay attention to involves thinking about how the sounds produced at different beating spots of the drum blend with the overall sound of the ensemble, no matter at what dynamic. As was shown from the above example, playing spots on snare drum can be adjusted outside of typical locations used in louder dynamics in order to better match the sound of the ensemble.

Mr. Abel’s soft snare drum techniques are typically executed at beating spots ranging from about a quarter of an inch away from the edge at pianissimo to three quarters of an inch away at mezzo piano.64 Determining the proper beating spot is dependent also on the response of the drum. For instance, a smaller drum will be softer in volume overall and so moving to the very edge of the head may not be necessary.65 He recommends setting the height of the drum just below belt buckle for soft playing. The mechanics of his technique range as well. To achieve a very “light” sound quality he uses a finger pivot and a wrist pivot.66 Similar to his louder playing, if the music is dense in orchestration, he incorporates more arm, which is also specifically carried out by utilizing a pivot point at the middle of the forearm or at the elbow.67 He recommends positioning the arms at more of a downward angle for soft playing. This helps produce a

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63 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 95.
64 Ibid., 87.
65 Ibid.
66 Ibid., 88.
67 Ibid.
softer sound because the bead of a stick striking the drum at an angle produces less sound than hitting the head with the bead of the stick more directly, which is a technique often used by Chris Deviney.\textsuperscript{68} Greg Zuber and Angela Zator Nelson added that using wrist and finger in softer dynamics is typically best suited for quicker rhythms, but that if the rhythms are slow enough such as those found throughout rehearsal 1-2 in the first movement of Prokofiev’s \textit{Lt. Kije} then incorporating arm within the stroke is helpful.\textsuperscript{69,70} Zator Nelson elaborated further describing the technique she utilizes when playing the strokes as, \textquote{dropping with the arm and then a lifting with the wrist and the fingers.}\textsuperscript{71} \textit{Piano} and \textit{pianissimo} snare drum playing should be reduced overall in volume during auditions as compared to how it would be done in the orchestra in order for the player to show that they have this ability to play in this range.\textsuperscript{72}

In general, deciding between using alternating or single hand sticking choices depends on the tempo. As long as the tempo is slow enough, Mr. Abel suggests using single hand sticking whenever possible in order to maintain more consistent sounding strokes.\textsuperscript{73} Another factor he considers in deciding sticking choice involves what is occurring in the ensemble. For instance, at letter F of the third movement of \textit{Scheherazade}, he recommends using a single hand sticking on the 16ths in order to better

\begin{flushright}
\textsuperscript{68} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 88.
\textsuperscript{69} Greg Zuber, phone interview by author, February 8, 2016, Appendix 136.
\textsuperscript{70} Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 127.
\textsuperscript{71} Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 127.
\textsuperscript{72} Alan Abel, phone interview by author, December 16, 2015, Appendix 108.
\textsuperscript{73} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 95.
\end{flushright}
match the staccato single tongued articulations played by the woodwinds. Mr. Abel’s preferred snare drum roll techniques will be described next.

Regarding snare drum rolls, Mr. Abel described that the sound he aims to achieve is a sustained continuous sound. The density of buzz strokes in his rolls is greater at lower dynamic levels and less dense at louder dynamics. He described the mechanics of his loud rolls similarly to William James. He utilizes an arm pivot motion between the shoulder and the middle of the forearm, but for mezzo forte and below he uses wrist or arm (but not with extreme pivot motion like when loud). He keeps his stick tips as low as possible in order to avoid a “beaty” sound. Benefits of the arm pivot motion technique include greater endurance levels, reduced risk of injury through long practice hours, greater power, consistency, and an increase in the potential of maintaining control during high stress performance situations. This is because the technique delegates the workload to more anxiety immune larger muscle groups.

Greg Zuber elaborated on this pivot point technique describing how it equates to utilizing your arm as a lever. The pivot point serves as the fulcrum of this lever, which is located closer to the elbow than the wrist. The origin of this motion stems from the shoulder and the angle of the elbow joint should remain the same throughout the movement. This technique generally requires a higher drum height so that the sticks are

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74 Alan Abel, phone interview by author, December 16, 2015, Appendix 92-93.
75 Ibid., 90.
76 Chris Deviney, phone interview by author, February 3, 2016, Appendix 112.
77 Greg Zuber, phone interview by author, February 8, 2016, Appendix 135.
78 Matt Strauss, phone interview by author, February 21, 2016, Appendix 141.
angled “…just below where the stick is parallel to the ground in the stroke.” The ratio of head contact time or the multiple bounce duration versus the lifting/re-striking time within the entire stroke should be $2/3$ to $1/3$. An overlap of multiple bounces should occur between the right and left hand in order to maintain a smooth sounding roll.

In order to master this rolling technique, Mr. Abel recommends practicing it first by making sure that a consistent track the arm will follow is established even though it can sound terrible. Once this track is thoroughly repeated until it is consistent, then he recommends trying to add various densities of buzzes ranging from 3 bounces to 6 on each hand. Once this is established well enough, both hands are put together. Different dynamics levels are achieved by adjusting stick height, stroke speed, and the density of the buzzes. These factors are further specified in the chart below. The final step is implementing a crescendo through the buzzes, which is executed by pushing the sticks forward slightly towards the rim during each hand’s set of multiple bounces. This “cushions the attack” creating for the smoothest possible roll. As a guide to this system, Mr. Abel’s roll chart is included below, which specifies eight different dynamic levels along with their recommended roll speeds, densities, and stick tip heights.

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79 Greg Zuber, phone interview by author, February 8, 2016, Appendix 135.

80 Ibid., 135-136.


82 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 90.
Finally, he adds, “You can use arm pivot all of the way. You can also use wrist $ppp – mf$, $arm \ pivot \ mf – fff$.”

For producing excellent double stroke rolls, Greg Zuber shared how Mr. Abel taught him to improve this rudiment. Mr. Abel told him to accent the second of the two bounces, which was an extreme that would make the end result of producing two even notes much easier. In soft double stroke rolls such as those most often played at letter D-E from the third movement of Scheherazade, Mr. Abel recommends that in mastering the technique involved that a player should be careful to maintain enough height in order for the sticks to bounce, but only as high as is necessary.

<table>
<thead>
<tr>
<th>Dynamic</th>
<th>$ppp$</th>
<th>$pp$</th>
<th>$p$</th>
<th>$mp$</th>
<th>$mf$</th>
<th>$f$</th>
<th>$ff$</th>
<th>$fff$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed - Four Sixteenth Notes per Quarter Note</td>
<td>$J = 108$</td>
<td>$J = 110$</td>
<td>$J = 116$</td>
<td>$J = 120$</td>
<td>$J = 130$</td>
<td>$J = 140$</td>
<td>$J = 150$</td>
<td>$J = 155-160$</td>
</tr>
<tr>
<td>Density - # of buzzes</td>
<td>6</td>
<td>6</td>
<td>5 or 6</td>
<td>5</td>
<td>4 or 5</td>
<td>4</td>
<td>4 or 3</td>
<td>3</td>
</tr>
<tr>
<td>Stick Tip Height</td>
<td>1/8”</td>
<td>1/4”</td>
<td>3/8”</td>
<td>1/2” - 1”</td>
<td>2”</td>
<td>3”</td>
<td>4” - 5”</td>
<td>5”</td>
</tr>
</tbody>
</table>

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84 Ibid.

85 Greg Zuber, phone interview by author, February 8, 2016, Appendix 135.

86 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 92.
Scheherazade are also well executed using the arm pivot technique.\textsuperscript{87,88,89,90,91} Don Liuzzi also recommends incorporating “a little bit of a snap in the fingers” to help in opening up these doubles.\textsuperscript{92}

Moving on to the techniques Mr. Abel recommends for playing ruffs on snare drum, it is evident that he implements a variety of styles. There are essentially two extremes of ruffs, very open and very closed. Playing open ruffs incorporates basically the same technique as executing rebound strokes utilized throughout double stroke rolls.\textsuperscript{93} In the orchestral repertoire, some of the most open ruffs are employed throughout the first movement of Lt. Kije as well as the second movement of Prokofiev’s 5\textsuperscript{th} Symphony from rehearsal number 37 to four bars after rehearsal 46. Mr. Abel implements ruffs that are a bit more closed in Prokofiev Symphony 5 than those in Lt. Kije and makes sure to keep the three stroke and four stroke ruffs proportionately the same in their degree of openness and clarity. Utilizing a French ruff (LRRL) for the four stroke ruffs in both works is Abel’s sticking of choice.\textsuperscript{94}

Mr. Abel uses closed ruffs during passages that have short articulations played by the ensemble and throughout syncopated passages. Such passages include the three

\textsuperscript{87} Greg Zuber, phone interview by author, February 8, 2016, Appendix 136.

\textsuperscript{88} Chris Deviney, phone interview by author, February 3, 2016, Appendix 113.

\textsuperscript{89} Matt Strauss, phone interview by author, February 21, 2016, Appendix 141.

\textsuperscript{90} Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 128.

\textsuperscript{91} Don Liuzzi, phone interview by author, March 7, 2016, Appendix 122.

\textsuperscript{92} Don Liuzzi, phone interview by author, March 7, 2016, Appendix 122.

\textsuperscript{93} Greg Zuber, phone interview by author, February 8, 2016, Appendix 136.

\textsuperscript{94} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 91.
stroke ruffs after letter F in the third movement of Scheherazade to match the woodwinds’ line, letter P in the fourth movement to match the short eighths and dotted eighths of the orchestra, and after rehearsal 9 in Ravel’s Alborada del Gracioso where the full orchestra plays short quarters and eighths. An extreme example of very closed ruffs occurs later in Alborada del Gracioso where the four stroke ruffs occur at rehearsal 24.\textsuperscript{95} The part is syncopated and is grouped with staccato marked eighth notes played by the flutes, oboes, clarinets, horns, and violins. Thus, these examples highlight the importance of paying attention to what is occurring in the ensemble as a determinant for how open or closed ornamented notes should be.

Another unusual example where Mr. Abel utilizes a special technique for ruffs involves the four stroke ruffs after rehearsal 39 and after rehearsal 84 in Shostakovich’s 11\textsuperscript{th} Symphony. Since these ruffs are so loud and the tempo is quick there is not enough time to play a clean four stroke ruff either alternating or using a French ruff sticking. Mr. Abel recommends implementing a “fake” four stroke ruff, which is executed by playing a three stroke ruff but with a crescendo through it.\textsuperscript{96} He recommends playing the ornaments with the dominant hand.\textsuperscript{97} These strategies help to invoke the perception of a longer sounding ruff and alleviate the short time duration sticking issue. Many of the aforementioned snare drum techniques are demonstrated within a technique video Mr. Abel graciously made in support of this paper.\textsuperscript{98}

\textsuperscript{95} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 93.
\textsuperscript{96} Ibid.
\textsuperscript{97} Ibid.
BASS DRUM

Mr. Abel’s bass drum techniques were thoroughly addressed in the writer’s interview as well. As was previously discussed, Abel’s development of the suspended bass drum stand aided in matching the lush, voluminous sounds of the Philadelphia Orchestra. To compliment this fuller sound of the suspended bass drum, Abel developed heavier bass drum beaters out of the same steel tubing his stands are made from and they are still used in the orchestra today.\(^9\)

The instrument he recommends is a Reamer 36” by 20” drum.\(^1\)

On striking the drum, Abel describes,

…I usually am thinking about getting the sound out and there are times when I’m coming from pretty far away for big notes, but much of the time I’m thinking about having my hand almost on the head before I play and the end of the handle almost on the head and then rolling it off. And then not doing the same thing every time, trying to get a good sound, but then finishing up in the follow through in a lot of different ways so it’s not exactly the same look every time.\(^0\)

He elaborated that he incorporates some wrist in the stroke, but mostly uses arm in order to avoid injury due to the heavy weight of his beaters.\(^2\) Using mostly arm for general bass drum strokes was agreed to be the technique of choice by Abel’s former students the

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\(^9\) Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 72.

\(^0\) Ibid., 96.

\(^1\) Ibid.

\(^2\) Ibid.
Angela Zator Nelson further described some of the nuances of following through that Mr. Abel utilizes. Some variations she described include starting the stroke from farther away, ending a stroke with an upwards or downwards motion, or ending with a stroke more into the drum. Furthermore, she described how a really short loud note could be achieved by beginning close to the head and ending several inches away or it could be done the opposite way by starting from further away and ending into the head. Utilizing a variety of stroke techniques and follow through motions when playing bass drum helps in achieving more musical and different tones. Don Liuzzi shared that Mr. Abel “…knows how to make the bass drum sing….it is hard to even describe how beautiful he can play the bass drum.”

In regards to beating spots, Mr. Abel said he generally plays three inches above the center of the head, which adjusts depending on the music. Matt Strauss elaborated on bass drum beating spots describing how playing closer to the center allows for sharper, more rhythmic pointed sounds and that playing further away from the center produces broader sounds. He cautions that playing too far from the center, though, can

103 Chris Deviney, phone interview by author, February 3, 2016, Appendix 115.
104 Greg Zuber, phone interview by author, February 8, 2016, Appendix 137.
105 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 128.
106 Matt Strauss, phone interview by author, February 21, 2016, Appendix 143.
107 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 125.
108 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 129.
109 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 126.
110 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 96.
produce an undesirable sound that lacks depth and sounds thin.\footnote{Matt Strauss, phone interview by author, February 21, 2016, Appendix 144.} A contextual musical passage where playing 3” off center works well is from measure 272 to the end of the fourth movement of Tchaikovsky’s 4th Symphony. Quick 8th notes are written throughout this excerpt, which necessitate thoroughly muffling the head with the right knee as well as with a lamb’s wool mitt in the left hand. This allows for the clearest articulated sounds in projecting these rhythms. A staccato or ultra-staccato mallet used in tandem with quick, very close to the head upstrokes also aid in producing clear sounds throughout this passage.\footnote{Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 97.} Thus, gaining thorough understanding of ideal beating spots, good muffling techniques, and proper stroke types is incredibly important in producing clear and rich tones out of the instrument. More on Mr. Abel’s recommended mallet choices will be discussed next.

Mr. Abel’s and his past and present colleagues’ use of a wide mallet selection has created a rich bass drum tradition in the Philadelphia Orchestra.\footnote{Chris Deviney, phone interview by author, February 3, 2016, Appendix 115.} The mallets he and the Philadelphia Orchestra section use include general, medium, staccato, ultra-staccato, and an ultra-ultra-staccato with different masking tape core sizes and felt thicknesses. For rolls, he uses roller shafts made by former student, Andy Reamer, who is the principal percussionist of the Pittsburgh Symphony Orchestra.\footnote{Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 72.} He recommends making specialty mallets for parts such as starting 3 measures before rehearsal 62 in Bartok’s *Miraculous Mandarin*, which calls for a wooden stick to be used on the notes
with the downward stems. He made a long rattan shaft for this particular passage.

Another part where he recommends specialty mallets is during the solo passage from the first movement of Mahler’s 3rd Symphony. It is useful to use a two-toned mallet where one side of the mallet is softer for the rolls, eighths, and quarter note triplets, and the other side is harder for the repeated 4 stroke ruffs.  

Another custom mallet Mr. Abel and his colleagues use are his ¾” aluminum tubing with rubber on the ends for playing the ending to the first part of The Rite of Spring. These are demonstrated in Mr. Abel’s technique video. Additionally, a diagram has been included on page 147 indicating the proper beating spots throughout the excerpt as well as how to mute the bass drum. He recommends striking the instrument with two beaters in unison for the last 4 or 5 notes of the excerpt, which produces a bigger and more dramatic sound. Always being resourceful in aiming to produce the most ideal sounds for special passages such as these is an important takeaway in learning from Mr. Abel’s methods.

Mr. Abel has achieved notoriety for his great bass drum rolls as well. For softer rolls, Mr. Abel recommends rolling slightly closer to the edge of the drum than the center. The solo passage from Mahler 3 is a prime example of where utilizing this beating spot location is necessary. This roll is demonstrated in his technique video.

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115 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 96.
117 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 99.
He makes sure to maintain a faster roll during the *pianissimo* roll in order to emulate the intense nature of the music. Louder rolls, such as those played later on during Mahler 3 are faster and closer to the center than soft rolls.119,120 Mr. Abel also suggests that sometimes rolls can be better achieved when the bass drum is flat. This works especially well for rolls within the first movement of Respighi’s *Feste Romane* (See Diagrams on p. 148-149).121

Don Liuzzi further elaborated on the mechanics of Mr. Abel’s louder rolling technique. He discussed how the rolls he teaches require relaxation and cushion in the arms. He added, “You are letting the mallet have some play in your hands, yet utilizing your arms to get the fullness and richness of the bass drum.”122 For softer rolls, in general, wrist motion can be used due to the lighter weight of the wooden shaft Reamer roller sticks Mr. Abel and his colleagues often use.123

In the pursuit to discover more of Abel’s musical ideas through this research, Abel graciously discussed many musical examples exhibiting his methods on bass drum. One example he discussed in his interview with the researcher was regarding a rhythmic motive from Ravel’s *La Valse*. He described the thematic motive (quarter note followed by an eighth note rest, eighth note, then quarter note in ¾ time) and how it is given to the bass drum at rehearsal 37 (see Example 3). He described his thought process of selecting

119 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 98.
120 Matt Strauss, phone interview by author, February 21, 2016, Appendix 143.
121 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 98-99.
122 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 125.
123 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 128-129.
an appropriate mallet for this motive and mentioned that a general stick would produce too much “flab,” that is, making a sound that is too soft and unclear. Furthermore, an ultra-staccato felt mallet does not have enough definition, but the elongated wooden Reamer produced mallet that he also suggests for the eleven notes on the 11/4 measure in *The Rite of Spring* works well if it is wrapped with two layers of moleskin. He added that this is one of the many examples of sticks he and the Philadelphia Orchestra percussion section use.

**TIMPANI**

Mr. Abel held responsibility as a timpanist within the Philadelphia Orchestra as well, occasionally playing assistant timpani to Mickey Bookspan (former Philadelphia Orchestra principal percussionist and associate timpanist) when the principal timpanist Gerry Carlyss was away. There were times where he had to play all timpani when both Bookspan and Carlyss were absent. His approach to timpani was significantly influenced by Fred Hinger and Gerry Carlyss.

General technical information Abel shared in his interview with the writer included specifics regarding his mallet grips and how to strike the drum. He stated that he uses several techniques including the Duff technique, which is generally executed with the thumbs on top of the mallets and playing quick strokes. The technique is also more

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124 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 72.
125 Ibid.
126 Ibid., 70.
127 Ibid., 100.
128 Ibid.
wrist oriented. He said this works well for rolls, but once it gets loud, it becomes too edgy in timbre. Due to this, he turns his hands over for loud playing because it allows more give. Using wrist, arm to the elbow, or using arm all the way to the shoulder all work within this technique. As far as striking the drum with either grip type, he generally thinks about “playing off the head” and not trying to play into it.

To build these techniques, Angela Nator Nelson described how Mr. Abel would have her play a wide variety of stroke types including full strokes, up strokes, and down strokes from many different heights. For example, he would take out a ruler and have her play from different stick heights ranging from as low as an inch to as high as a foot. Playing different strokes at every dynamic level are emphasized as well.

Don Liuzzi further elaborated that Mr. Abel was heavily influenced by Fred Hinger’s playing approach, which generally incorporated more use of the arm. Both Don Liuzzi and Angela Zator Nelson learned about both the Duff and Hinger styles of playing while studying with Mr. Abel. Use of the arm is especially helpful within louder rolls, which helps in cushioning the sound. Always cushioning sounds on

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129 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 120.
130 Alan Abel, phone interview by author, December 16, 2015, Appendix 109.
131 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 100.
132 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 130.
133 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 120.
134 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 120.
135 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 130.
136 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 120.
timpani is a concept Mr. Abel stresses in his teaching. Incorporating wrist, fingers, and arm all help in this respect. Also gaining sensitivity with how the head is reacting is important in mastering this concept. A musical example where combining wrist, fingers, and a little bit of arm involves the 32nd notes at letter S from the first movement of Beethoven’s 9th Symphony. But Don Liuzzi clarifies that the primary use of arm occurs in three instances. These include heavier passages in Wagner, late Brahms, and Tchaikovsky repertoire, beginnings of rolls and loud rolls in general, and “for single notes that have to have a depth in the romantic repertoire like the opening of Brahms’ First, or single notes in Tchaikovsky.” How to determine proper roll speed will be discussed more in depth next.

Don Liuzzi learned from Mr. Abel how roll speeds on timpani vary “according to the range that you are in, of course the size of the drum, and also the emotional content.” Slowing up the roll stroke speed too much was undesirable, though, especially in a dry hall such as the Academy of Music where Mr. Abel played throughout most of his career. Timpani mallet choice and how the traditions have evolved in the Philadelphia Orchestra will be discussed next.

The Philadelphia Orchestra timpani mallet choice traditions that Mr. Abel, Don Liuzzi, and Angela Zator Nelson follow have adjusted according to the acoustics of the two homes of the ensemble. The older tradition involves mallets that produce more

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137 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 130.
138 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 120-121.
139 Ibid., 120.
140 Ibid.
heavy and round sounds in comparison to a lighter Duff style mallet. These heavier and more layered mallets helped in making up for the lack of bass support within the Academy of Music. Now, the newer Verizon Hall’s better acoustical balance of high and low frequencies allows for use of lighter and harder mallets such as Duff sticks, Dave Woodhull mallets, and JG Percussion Joe Pereira line flannel mallets.  

The older style mallets are still used in Verizon Hall and sound great for big moments where a “round, really warm cushioned sound” is desirable such as in the opening of Robert Schumann’s First Symphony.

Regarding more time period specific sounds, Mr. Abel discussed techniques that are well suited for classical era repertoire such as Mozart symphonies and opera overtures. He discussed how a smaller orchestra is utilized in Mozart symphonies and advised that a timpanist should strive for a smaller pointed sound to match the style. To achieve this sound, he suggests for the timpanist to use harder sticks and play quicker upstrokes, which achieves a lighter quality in comparison to the “heavy duty” characteristic sound throughout the later Beethoven symphonies. Playing closer to the edge of the timpani also produces a “lighter” sound. Regarding Beethoven symphonies, he discussed how his first five symphonies will be lighter in sound than his later symphonies, which get closer to a heavier romantic era “Tchaikovsky-like”

141 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 130.
142 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 121.
143 Don Liuzzi, phone interview by author, March 7, 2016, Appendix 121.
144 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 100.
145 Ibid.
sound.\textsuperscript{146} It is evident that mastering many different technical concepts in regards to grip, strokes, rolls, and mallet choice all combine in making knowledgeable musical decisions according to the repertoire being played. Angela Zator Nelson described his approach well sharing how Mr. Abel is great at “…just really analyzing every single stroke that you’re getting from the drums so that nothing is a guess.”\textsuperscript{147}

**CYMBALS**

Mr. Abel describes his forte and fortissimo crash cymbal technique for longer note values as basically following the Podemski approach.\textsuperscript{148} (Benjamin Podemski was a former principal percussionist of the Philadelphia Orchestra, who played under Leopold Stokowski and Eugene Ormandy.\textsuperscript{149, 150}) Michael Bookspan, former principal percussionist and associate timpanist of the Philadelphia Orchestra and Abel’s former colleague, learned this technique directly from Podemski.\textsuperscript{151} Bookspan said,

In Philadelphia, the concept of cymbal sound has been passed along and maintained. The tone quality has been described as dark, which to me means that it is full and strong in the middle register and not merely brilliant highs laid on top of the orchestral texture, I believe that the cymbals can both fill out and reinforce the sound of the brass instruments and still have brilliance of their own.\textsuperscript{152}

\textsuperscript{146} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 100.
\textsuperscript{147} Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 130.
\textsuperscript{148} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 104.
\textsuperscript{152} Ibid., 42.
This technique further allows for a greater chance of not producing a sharp attack, but allows for a lusher “rich spread” of sounds on the attack.\textsuperscript{153} A discussion of the techniques involved in producing these sounds will be described.

In terms of grip, Mr. Abel instructs that the “1) Index finger should be tight to the cymbal under the strap. 2) The rest of the fingers wrap around the strap. 3) Thumb should be flat and pointing forward - not high into cymbal where it can begin to muffle the sound.”\textsuperscript{154} It is best if the player stands with his/her feet placed “shoulder width apart with one foot slightly forward. The hands should be chest high with the elbows bent enough so the cymbals just miss your nose.”\textsuperscript{155} The mechanics of this technique involve moving the cymbals together in a counter-clockwise circular or oval shaped trajectory. Both cymbals are set up with the tops slightly leaning to the left. The right hand makes 55\% of the combined motion and the left hand 45\% with another distinguishing factor being that the right hand follows a circle that is located higher in the air than the left. Another point to keep in mind is that, “The hands should maintain the same position all the way through the circle – like the chairs on a Ferris wheel always hanging in the same position as the wheel goes around.”\textsuperscript{156} The trajectory the hands should follow for \textit{forte} and \textit{fortissimo} single crashes is shown below.\textsuperscript{157}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{153} Matt Strauss, phone interview by author, February 21, 2016, Appendix 144.
\item \textsuperscript{154} Alan Abel, “Cymbals” (Document presented at the Alan Abel Summer Orchestral Percussion Seminar, Temple University, Philadelphia, June 27-27, 2009).
\item \textsuperscript{155} Ibid.
\item \textsuperscript{156} Ibid.
\item \textsuperscript{157} Ibid.
\end{enumerate}
\end{footnotesize}
In order to avoid air pockets, the cymbals should strike each other at an angle and flam and should also meet slightly offset. There are two tangential points that should be decided upon according to individual preference. Either the tops or the bottoms of the cymbals can meet first and it is recommended to experiment with various angles, which achieve different dynamic levels and qualities of sounds. A slightly more open flam is utilized in louder dynamic levels.\textsuperscript{158} Greg Zuber described that,

> At the point of contact with cymbals you want as little pressure or tension or any other influence on the cymbal as possible. As if they are completely unaffected, completely free floating in space, as if they are crashing into each other without being tethered to anything except crashing into each other in this very specific relationship.\textsuperscript{159}

Mr. Abel does not recommend straight up and down motions and also does not advise tipping one cymbal over too far because one would gain an advantage over the other.\textsuperscript{160} More qualities of sounds that can be achieved through varying this technique will be described next.

\textsuperscript{158} Alan Abel, “Cymbals” (Document presented at the Alan Abel Summer Orchestral Percussion Seminar, Temple University, Philadelphia, June 27-27, 2009).

\textsuperscript{159} Greg Zuber, phone interview by author, February 8, 2016, Appendix 138.

\textsuperscript{160} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 104.
Changing the speed of the circle motion also affects the overall articulation of the crash. Executing a slower circle motion and speeding up to the contact point achieves a more “hard, pointed, harsh” sounding crash.\(^{161}\) A faster circle, which then slows down to the contact point achieves a more “cushioned, freer, broader” sound.\(^{162}\) The shape of the circle also has an effect on the sound quality. A wider, more “horizontal oval motion with less flam” creates a “darker, crunchier, louder Germanic” sound.\(^{163}\) A “tall, vertical oval motion with more flam” produces a “brighter, airier, thinner French sound.”\(^{164}\)

Helpful demonstrations of these techniques occur in Mr. Abel’s technique video.\(^{165}\)

It is important to note that the circle technique is best suited for bigger crashes that are slower in rhythm or are just isolated notes.\(^{166,167,168}\) For quicker rhythmic passages such as the 8\(^{th}\) notes throughout 272-end of the fourth movement of Tchaikovsky’s 4\(^{th}\) Symphony, the quarter notes beginning at 8 measures before letter R in Dvořák’s Scherzo Capriccioso, and letter S in Mussorgsky’s Night on Bald Mountain a straight line trajectory is best.\(^{169}\) This technique is best achieved by “pulling the cymbals


\(^{162}\) Ibid.

\(^{163}\) Ibid.

\(^{164}\) Ibid.


\(^{166}\) Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 133.

\(^{167}\) Greg Zuber, phone interview by author, February 8, 2016, Appendix 138.

\(^{168}\) Matt Strauss, phone interview by author, February 21, 2016 Appendix 144.

\(^{169}\) Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 104-105.
apart quicker” in tandem with utilizing a “shock absorption system in your wrists where you almost collapse your wrists” so as to avoid undesirable air pockets.\textsuperscript{170} The circle technique can be useful in making crescendos as well.\textsuperscript{171} For instance, during the $8^{th}$ notes four bars from the end in Tchaikovsky’s $4^{th}$ Symphony (measure 290), Mr. Abel plays a crescendo utilizing circles that increase in size from one note to the next. This creates a “built in” crescendo.\textsuperscript{172} Generally, a greater distance of travel creates for louder dynamics.\textsuperscript{173} Additional musical interpretations are included on page 105 and 106 of the interview on these pieces. Selecting appropriate cymbals will be discussed next.

Choosing the appropriate cymbal for a passage of music is determinant upon a multitude of factors. These include matching and blending with the colors of the orchestra and deciding whether a dark or bright sound is desired. Additionally, individual preference, speed of notes, and how heavy the texture is all play roles in the decision. For instance, Mr. Abel shared that in Rimsky-Korsakov’s Capriccio Espagnol or Scheherazade smaller cymbals are well suited throughout parts where staying as a part of the rhythm is the main idea and he asserts that “you’re not trying to dominate.”\textsuperscript{174} For classical period works such as Mozart’s Overture from The Abduction from the Seraglio, the cymbal player should strive for a lighter sound. He achieves this by using 14”

\textsuperscript{170} Matt Strauss, phone interview by author, February 21, 2016, Appendix 144.

\textsuperscript{171} Greg Zuber, phone interview by author, February 8, 2016, Appendix 138.

\textsuperscript{172} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 105.

\textsuperscript{173} Greg Zuber, phone interview by author, February 8, 2016, Appendix 138.

\textsuperscript{174} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 106.
cymbals, but maintains light quick strokes to match the style of the music. Special techniques used throughout especially soft cymbal passages will be discussed next.

Soft crashes such as those at rehearsal 32 of Rachmaninoff’s 2\textsuperscript{nd} Piano Concerto involve several unique techniques. For a screened audition, Mr. Abel recommends playing this passage with cymbals that are different sizes. He instructs his students to use a 16” and 15” cymbal, but has them face the 16” cymbal towards the audition committee. The 15” cymbal executes the motion while the 16” cymbal remains stationary. This technique allows for very quiet crashes, which is a desirable goal in this passage. Mr. Abel also recommends making a very slight increase in the phrasing of this passage, which helps in achieving better sound consistency. Greg Zuber adds that, “…if you can set up every crash from the same position with the cymbals the same distance apart and at the same relative angle, one cymbal to the next, and you bring them together and apart at the same speed then you can be pretty good about being consistent.” Angela Zator Nelson also recommends drawing pencil marks on cymbals, which denote where the cymbals should meet together in order to sound and feel the best.

The path these soft crashes travel in is in the form of a straight line. Chris Deviney, Angela Zator Nelson, and Matt Strauss describe how this motion should be

\begin{footnotes}
\item[175] Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 106.
\item[176] Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 132.
\item[177] Greg Zuber, phone interview by author, February 8, 2016, Appendix 139.
\item[178] Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 132.
\end{footnotes}
quick, but not too intense.\textsuperscript{179,180,181} Matt Strauss adds that he executes these crashes by primarily using smaller muscles groups to pull the cymbals apart, but supports this motion with his arms and shoulders.\textsuperscript{182} These ideas show how thinking about techniques and sounds on cymbals or any instrument to the maximum degree plays a substantial role in Mr. Abel’s, his colleagues’, and former students’ methods. Utilizing a variety of cymbal techniques such as the Podemski technique, straight trajectory crashes, and exploring sounds most appropriate for the musical context are important aspects of these percussionists’ methods. Mr. Abel’s methods on triangle will be explored next.

**TRIANGLE**

In regards to triangle technique, Abel provided many suggestions for how to produce the best sounds on his triangles in his interview with the researcher. Some of his initial suggestions are to allow no more than half an inch of the tip of the triangle beater to come into contact with the instrument, and he recommends striking the instrument on the bottom leg at a twenty-degree angle (20 degrees off the vertical). If playing a roll when holding the triangle by hand, the aspect of gravity needs to be considered with the downward motion of the roll. Thus, it is best to hold the beater at an angle, which decreases the chance that the downwards striking overpowers the upwards motion. Utilizing a “nervous fast” roll speed is necessary for both soft and loud playing.\textsuperscript{183,184}

\textsuperscript{179} Chris Deviney, phone interview by author, February 3, 2016, Appendix 116.
\textsuperscript{180} Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 132.
\textsuperscript{181} Matt Strauss, phone interview by author, February 21, 2016, Appendix 144.
\textsuperscript{182} Matt Strauss, phone interview by author, February 21, 2016, Appendix 144.
\textsuperscript{183} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 104.
\textsuperscript{184} Alan Abel, phone interview by author, December 16, 2015, Appendix 109.
Ideally, he recommends mounting the triangle with clips to a slat of wood when playing rolls and fast rhythms as it allows the overtones to speak more freely than when playing on the inside of the triangle when it is hand held. The visual aspect of the performance is not lost because the triangle mount is also up high. Playing a mounted triangle with the beaters at a twenty degree angle also produces the best sounds from the instrument. If more note definition is needed, leaving the “beater on the triangle an instant” helps produce more clarity.\textsuperscript{185} This is achieved by playing severe down strokes into the instrument rather than coming off it by pulling the beater back away.\textsuperscript{186} Of his three models, his 6” symphonic model is for general purpose playing, his 4” model works well for more quiet passages such as at the end of the third movement of \textit{Scheherazade} (see Example 4), and the Wagner-Mahler model is louder than the six-inch model.\textsuperscript{187} Helpful demonstrations of many of these techniques are included in Mr. Abel’s technique video.\textsuperscript{188} Tambourine techniques will be discussed next.

**TAMBOURINE**

Further insight on Mr. Abel’s technical methods on tambourine was gathered in his interview with the researcher. His instrument preferences include the 10” Grover German Silver model (1\textsuperscript{st} choice), the 10” Black Swamp Chromium 25 model, and having a smaller sized tambourine for softer passages. When asked about his technique on shake rolls, he suggested using a combination of twisting the tambourine and moving

\textsuperscript{185} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 104.

\textsuperscript{186} Ibid.

\textsuperscript{187} Ibid., 103.


the whole hand back forth in order to achieve the fullest sounding result. He added that he enjoys using even two tambourines for this purpose on loud rolls.\footnote{Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 101.} The motion involved in playing this style of a roll involves allowing the tambourine to rotate in a small “circular fashion rather than only at an axis.”\footnote{Chris Deviney, phone interview by author, February 3, 2016, Appendix 119.} Chris Deviney also describes that the mechanics of this technique involve a very tense forearm, but a very relaxed grip.\footnote{Don Liuzzi, phone interview by author, March 7, 2016, Appendix 126.} Mr. Abel also discussed the merit of tambourine shake rolls that utilize mainly a twisting motion by the wrist. He says that this technique works well in softer dynamic levels but can end up sounding too rhythmic in louder dynamic levels. Matt Strauss recommends this motion for short duration rolls such as in the half note rolls in bars 4-6 of Dvořák’s \textit{Carnival Overture}. This is because the combination technique involves too much motion that can get in the way of comfortably playing the rhythms before and after these rolls. He mostly uses the combination roll technique for loud rolls, though.\footnote{Chris Deviney, phone interview by author, February 3, 2016, Appendix 118-119.}

On playing quicker rhythms, Mr. Abel notes that playing the tambourine up (holding the tambourine up in the air with the left hand and striking with the right) is less articulate than playing knee fist in the context of the full orchestra and in a hall that rings for a long period of time. He described how using knee fist technique (striking the tambourine back and forth between the knee and fist) creates two different timbres, which helps in distinguishing quick rhythms.\footnote{Matt Strauss, phone interview by author, February 21, 2016, Appendix 146.} The fist should strike more towards the edge of...
the head in order to better activate the jingles. However, for auditions he recommends that the jingles need to heard more than the head sound and so striking the tambourine at the head’s edge with the fingers and then hitting either the thigh or even the knee cap work best in matching the two sounds. Using fist on the head is not recommended for auditions because it produces too much head sound.195

Tempo is also a factor when deciding between the two techniques because if the piece is too fast playing up can become too difficult.196 Six measures before letter R in Dvořák’s *Carnival Overture* is a scenario of where the tambourine player can opt to play the rhythms up or choose to play them knee to fist (see Example 5). He referenced an experience where he played the part with the Philadelphia Orchestra at Tanglewood and knew the acoustics of the hall. “They couldn’t believe that I could go that fast, but I’m playing it up in the air because it’s not a resonant place and all the notes came through.”197 It is important to note that when playing a rhythmic passage in the air, the clearest articulations are achieved when the tambourine is held a few degrees off horizontal.198

Specific striking techniques Mr. Abel recommends when playing the tambourine up include playing with only the middle finger for very soft playing, middle finger with wrist pivot for slightly louder dynamics, thumb bracing the middle finger for louder than that, then adding thumb and two fingers for even louder, adding more fingers for louder

195 Alan Abel, phone interview by author, December 16, 2015, Appendix 110.

196 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 100-101.

197 Ibid., 101-102.

198 Matt Strauss, phone interview by author, February 21, 2016, Appendix 145.
still, then using the edge of the knuckles, and then finally for the loudest dynamic levels using the second joint of the fist.¹⁹⁹

Playing softer rhythmically quick passages such as those throughout Chabrier’s España are well executed through using a technique that Mr. Abel teaches where placing the tambourine on a flat surface upside down at an angle on a rolled up towel works well. Playing on the shell of the instrument this way produces clear articulation.²⁰⁰ Other techniques that work well include propping one leg up on a snare drum stand base and placing the inside of the tambourine head on the knee and playing the rhythms on the edge of the head (over the shell) making sure again that the tambourine is only a few degrees off horizontal.²⁰¹,²⁰²,²⁰³ For further reference, many of these techniques are demonstrated by Mr. Abel in his technique video.²⁰⁴

CASTANETS

The last instruments being discussed in the research of Mr. Abel’s performance methods are castanets. Mr. Abel prefers to play castanets utilizing two machines (machines are mounts that hold two castanets in place horizontally), which he strikes with fingers or when it is especially loud another two pairs of castanets or short handled soft rubber mallets. Mr. Abel further elaborated that when striking castanets with fingers it

¹⁹⁹ Alan Abel, phone interview by author, December 16, 2015, Appendix 110.

²⁰⁰ Chris Deviney, phone interview by author, February 3, 2016, Appendix CD 117-118.

²⁰¹ Matt Strauss, phone interview by author, February 21, 2016, Appendix 145.

²⁰² Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 133.


works well to “...form a U between the thumb and middle finger of each hand and play those four digits on the four castanets simultaneously (slightly ‘flammy’) — two per machine.” He uses this system because it avoids producing undesired thin singular tick attacks. Playing double stop flams with both hands is ideal, which emulate the lush attacks Flamenco castanet players achieve from Spain.

The fifth movement from Rimsky-Korsakov’s *Capriccio Espagnol* contains a busy castanet part. Mr. Abel describes two methods of playing the quarter note rolls into the eighth notes on beat two (see Example 6). He said one can play the rolls by flaring or “rolling” his/her fingers onto the castanets, which are mounted on machines. Also, he suggests that playing them mounted on machines with mallets works. Further helpful visual explanations of these techniques can be viewed in Mr. Abel’s technique video.

The second research question involving what Mr. Abel’s ensemble playing techniques are will be discussed next.

**ENSEMBLE PLAYING**

Mr. Abel stresses the importance of ensemble playing in maintaining a career as an orchestral percussionist. Thus, his methods and how he developed them will be

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205 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 107.

206 Ibid.

207 Ibid.

208 Ibid.

addressed below. The information discussed will provide a strong example for percussionists to learn from and perhaps apply to their own careers.

Mr. Abel credits the beginnings of his ensemble playing development towards his years playing in his very good high school championship band in Hobart, Indiana and having learned from William Street at the Eastman School of Music. Following his post Eastman, Empire Band of the United States Air Force position, he became the principal percussionist in the Oklahoma City Symphony in 1953, where he had to learn mostly on his own, which he did by always listening to other players throughout the ensemble. In Oklahoma City, he was able to choose the parts he wanted to play, which included mostly mallet keyboard instruments, snare drum, occasionally cymbals, but rarely bass drum. When he started playing in the Philadelphia Orchestra in 1959, he took over his predecessor’s role of covering predominantly bass drum, triangle, cymbal, and tambourine parts. This changed after his first 13 years in the orchestra, when he eventually played snare drum the most, followed by accessories, cymbals, mallets, and bass drum. He greatly credits learning from his mentors within the Philadelphia Orchestra percussion section, who included fellow section members Fred Hinger, Charlie Owen, and Michael Bookspan. He also learned from conductors, and added, “If you’re playing with a great orchestra and you’re paying attention, you will be learning a lot from the way the individuals in the orchestra and the soloists [play].”

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210 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 67.

211 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 69.


213 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 67.
One of the first adjustments Mr. Abel made upon entering into the Philadelphia Orchestra was realizing that in order to match the big voluminous sound of the strings, he would need a larger sized bass drum than the 32” diameter drum that was there. Thus, a 36” by 16” Ludwig drum was purchased and he later refurbished a 36” by 18” drum. This has evolved to an even more ideal size of 36” by 20” manufactured by William Reamer. His 6” Symphonic Triangle also was developed in his early years in the orchestra and he later developed a small 4” size and a thicker 6” Wagner-Mahler size that work well for thin softer passages to louder very dense orchestrations.

Another change he made to match the Philadelphia Orchestra’s overall sound included switching from smaller sticks to larger 1S field drum sticks on snare drum. Now Andy Reamer makes two models of Alan Abel snare drum sticks. One model is the “Abel Concert” and a slightly thicker model is the “Abel Bold”. Mr. Abel also utilizes various sized snare drums for soft less dense passages to louder more dense passages. These drums ranged from a quieter 3” by 13” drum to a very loud Hinger

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214 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 68.

215 Ibid., 96.


217 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 103.

218 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 71.

Space Tone drum. How the Philadelphia Orchestra percussion section approached musical adjustments will be described next.

While playing in the Philadelphia Orchestra percussion section, Mr. Abel described how the adjustments they discussed involved mainly balance, tone quality, timing, and how well the sounds project. He stated that phrasing ideas are derived from following other musicians’ phrases in the orchestra. If a part does not line up note by note with another player, he outlines their phrase and follows accordingly in the notes he does play with them. The section would also make a point to have someone go out into the hall during rehearsals as long as they were not playing and they would comment on mallet choice and projection.

The traditions in the Philadelphia Orchestra percussion section were also passed down. Mr. Abel described how Fred Hinger, who was the principal timpanist when he started, learned some of the traditions that were used by longtime timpanist Oscar Schwar and incorporated them into his own playing. (The present Philadelphia Orchestra was founded in 1900 and Oscar Schwar served as its timpanist from 1903-1943. Schwar also taught at the Curtis Institute and one of his notable students there was Cloyd Duff,

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220 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 72.

221 Ibid.

222 Ibid., 73.


who served as the timpanist at the Cleveland Orchestra from 1942-1981. Cloyd Duff had also previously played percussion and timpani during the summer seasons with the Philadelphia Orchestra at the Robin Hood Dell. The cymbal tradition again was passed down having originated from Benjamin Podemski. Mr. Abel’s contributions to this tradition include his bass drum mallets, bass drum stands, his triangles, and of course his teaching.

The three different music directors that were with the Philadelphia Orchestra during Mr. Abel’s career also influenced the way the percussion section played. For instance, Eugene Ormandy would often quiet the percussion section down, so they played rounder sounds, though they would often push the limits with him. However, whenever prominent cymbal crashes occurred Ormandy loved to have them brought out. Ormandy also allowed the timpani to be brought out more than percussion. On Riccardo Muti’s musical approach, Mr. Abel shared,

Riccardo Muti arrived in 1980. Most of his experience had been in opera. He seemed less concerned about the “Philadelphia sound” and tended to focus on what he thought the composer intended. Of course, he emphasized many dramatic moments and encouraged the orchestra and the percussion section to sometimes push the acoustical limits at fortissimo and pianissimo.

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227 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 72.

228 Ibid., 72-73.

229 Ibid., 73-74.
The warmth and roundness of sound returned under Sawallisch, but he did not cut back the percussion in volume as much as Ormandy did.\footnote{Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 77.} \footnote{Ibid., 74.}

Mr. Abel also shared some unique aspects of timing entrances within the Academy of Music and Verizon Hall. In the Academy of Music, the percussionists were sometimes set up 55 feet back from the front of the stage, which required them to anticipate their entrances to varying degrees depending on what instruments they were playing with. Essentially, the further away the section is that you are playing with, the more you have to anticipate or “push” ahead of the rest of the ensemble in order to compensate for the delay in which the sound has to travel to front of the stage.\footnote{Ibid., 81-82.} For example, he said,

If you’re playing with the horns right in front of you, you’re going to push them a little bit. If you’re playing with the woodwinds farther down, then you’re going to push more than the horns. And if you’re playing the castanet part to the \textit{Baccanale} and you’re with the cellos way up front, you have to push like crazy to be with them.\footnote{Ibid., 82.}

Regarding placing entrances within the orchestra, Abel stresses knowing the score and who you are “coupled” with.\footnote{Ibid.} For instance, he shares, “if you’re playing triangle and you’re trying to follow a melodic line then you’re going to play the triangle with the melody instruments.”\footnote{Ibid., 81.} An extreme example he shared came from a recording session.
where he played tambourine on Dvořák’s *Carnival Overture* regarding 6 bars before letter R (see Example 5) where the *tutti* instruments drop out after the downbeat. He described how he had to play with the first violins after the downbeat before they even dropped their bows to be in time for the recording. In the newer Verizon Hall, such a great degree of anticipation is not as necessary due to the fact that the stage layout is wider and thus the percussion section is not pushed as far back behind the rest of the ensemble.\(^{236}\)

Not only did the Philadelphia Orchestra percussion section have to possess keen anticipation awareness in order to stay together with the ensemble, but they had to also know that there would always be a very delayed attack with Ormandy at big downbeat gestures for loud moments coming out of a silence. Mr. Abel added, “And as soon as you heard something start then everybody came in.”\(^{237}\) Thus, the upstroke became an important technique within the percussion section because it better enabled them to enter in on time because the strokes were not starting very far away from the instruments. They were able to play every dynamic level by adjusting the “severity of the speed of the stroke.”\(^{238}\)

Yet another factor to deal with was how to play under different conductors. Mr. Abel described how ensemble attacks were “less instant” with Ormandy, but with Muti they were more on cue with the ictus of his baton, which consequently made attacks more staccato.\(^{239}\) Additionally, requests from conductors sometimes require quick thinking on

\(^{236}\) Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 82.

\(^{237}\) Ibid., 74.

\(^{238}\) Ibid.

\(^{239}\) Ibid., 75.
the player’s part. As an example, while playing cymbals on Tchaikovsky’s *Capriccio Italien*, Wolfgang Sawallisch looked to Mr. Abel and said, “like opening a soda can.”

Mr. Abel interpreted this to mean that he desired a cymbal sound with more high partials. He immediately went to a smaller and brighter sounding 16.5” pair, which Sawallisch loved.

Sawallisch also said in a rehearsal to Mr. Abel, “Mr. Abel, I can’t see you, or the triangle.” After this, Mr. Abel always kept his music stand as low as possible in order to be seen better no matter who was conducting. It also allows the sound to project better if there is not a stand in the way and creates for a better visual experience for the audience. Paying mind to the visual aspects of percussion performance are incredibly important. Such aspects include utilizing higher stick heights at times and moving your body forward and backwards in a natural way to support the visual expression of the music.

Angela Zator Nelson also emphasized this aspect of “showmanship” in her interview with the writer describing that greater sticks heights help achieve this aspect in performance. Mr. Abel’s approach towards recording sessions will be described next.

The Philadelphia Orchestra has been active in producing recordings since 1917. This of course continued to be the case throughout Mr. Abel’s career in the orchestra and

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240 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 77.

241 Ibid.

242 Ibid.

243 Ibid., 80.

244 Angela Zator Nelson, phone interview by author, February 6, 2016, Appendix 129.

thus he shared some suggestions regarding playing in recording sessions. When playing for a recording versus playing for an audience, he shared that at least in the old way of recording where 30 to 40 mics were set up in close proximity, playing for an audience required more projection. In recordings, the musicians tended to refrain from overplaying. Stick and mallet choices would also be treated differently for recordings. For example, when playing the bass drum part to Tchaikovsky’s *Romeo and Juliet*, a rubber ended stick worked really well for 5 bars before letter N (see example A), which did not sound good up close, but worked great for the recording. The percussionists were able to listen back to the recording to find out if timing and instrument adjustments were necessary. Today, most recordings are of live concerts and so in these cases playing as one would for an audience is the only choice. This serious approach to recording is one that can be learned from and shows a strong example of how better ensemble playing results can be achieved through utilizing this medium of technology. More of Mr. Abel’s specific suggestions for ensemble playing scenarios will be described next.

Mr. Abel described several scenarios where listening to certain sections over others is the best route in order to play together. For instance, regarding the snare drum part during the trumpet variation of Britten’s *Young Person’s Guide to the Orchestra*, he suggests setting up a second drum directly behind the trumpets and then he would play on his other drum for the rest of the piece. For the triangle part to Liszt’s *Piano Concerto No. 1*, he prefers to set up at the edge of the woodwind section, which also is helpful because it is closer to the piano. Another example involves playing snare drum in

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246 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 79.

247 Ibid.
Shostakovich’s 10th and 11th symphonies where he realized it is most helpful to set up between the bass drum and timpani, since so many passages are with timpani. Thus, paying attention to such details as proximity to other instruments most certainly would help percussionists achieve better ensemble playing results.

Another scenario involves how to handle exposed and solo parts as is often the case throughout the snare drum part in Nielsen’s Clarinet Concerto. Mr. Abel recommends moving the snare drum closer to the front of the ensemble in order to be closer to the clarinet, but advises backing off in dynamic level when the clarinet plays and playing out more when louder tutti sections occur that do not include the clarinet. Other general factors to keep in mind throughout all orchestral playing include being aware of the “role” of your part in the music. Parts that serve as rhythmic outline generally should not be brought out, but parts that lead the rhythm driving the orchestra should be brought out. These examples illustrate the importance of knowing the role a particular part serves within the music. This understanding helps in determining proper dynamic level adjustments and realizing where to emphasize leading rhythms. To conclude this section, Mr. Abel’s words of advice to those of his students who win orchestra jobs will be shared next.

Mr. Abel discussed that when one of his students wins an orchestral position, he instructs them to thoroughly prepare by listening to numerous recordings and studying scores being sure to mark down ensemble couplings. “And then, in some ways it’s

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248 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 80.

249 Ibid., 81.

250 Ibid., 80-81.
almost better to be a little bit too loud and get this (conductor motions to play less) than to be too soft and not know it.” He supported this by describing an experience he had listening to a particularly loud timpanist during a Philadelphia Orchestra substitute timpani audition. When some of the committee members pointed this out, Riccardo Muti said, “It’s always easier for me to take somebody who’s willing to play out and quiet them down than to get somebody who was so shy, I can’t ever get them to play loud enough.” It is evident that thorough score study, developing proper listening skills, good sound, thoughtful set up, listening to mentors, and adjusting well to different conductors all play a large role in becoming a great ensemble musician. These methods certainly serve as a great example for others to follow.

ACOUSTICS

To reiterate, the older Philadelphia Orchestra Hall, The Academy of Music, which is “the oldest continuously functioning opera house in the country” having opened in 1857, was known to be dry acoustically for symphonic music and did not provide sufficient bass support. Verizon Hall, which opened in 2001 is much improved in these respects. Thus, this section will include discussion of the information obtained

251 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 82.
252 Ibid.
255 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 70.
from the writer’s interview with Mr. Abel on how he and his colleagues dealt with the acoustical attributes of reverberation and intimacy within their two performance halls and abroad.

Due to the dry acoustics (low reverberation time) in the Academy of Music, players elongated note endings in order to simulate hall reverberation, which helped to create the Philadelphia Orchestra’s distinctive lush sound.256,257 When asked how the percussion section addressed these issues and if any conductors made specific requests or suggestions regarding creating a more lush sustained sound, Mr. Abel described that no one said much regarding the topic. He added that the percussionists figured out how to match the lush sounds on their own, which was achieved on timpani, bass drum, and snare drum for example, through the use of “bigger and heavier sticks” and larger drum heads.258,259 Conversely, higher ranged instruments such as smaller snare drums, glockenspiel, xylophone, triangle, and tambourine projected very well in the Academy and so smaller and softer sticks were used.260 Regarding letting notes resonate longer he said,

In general, we had a rule that ringing instruments should ring as long as possible, unless it gets in the way of whatever the orchestra is doing. So if it’s a short note, of course you’ve got to muffle it, but with bass drum long sounds, cymbal long sounds, timpani long sounds, we always let them ring as long as possible.


257 Ibid., 5-7.

258 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 84.

259 Ibid., 70.

260 Ibid., 81-84.
Sometimes we would muffle by gradually tapering down the sound, to match the decay time of the sound of the orchestra.\textsuperscript{261} Additionally, since the hall reverberation time was low in the Academy of Music, the percussionists could use slower motion strokes “to get a nice fat sound.”\textsuperscript{262} This characteristic could also be described acoustically as a warm sound where lower frequencies are brought out.\textsuperscript{263} Verizon has a longer reverberation time and so slower strokes can be lost. Therefore, the section plays more often utilizing quicker strokes in Verizon.\textsuperscript{264}

In Verizon Hall, bass support also vastly improved, which consequently can cover up some of the higher ranged instruments including triangle, tambourine, and glockenspiel. Mr. Abel stated, “…the highs have this wall of sound to get through, so now the triangle sometimes has to be played three times louder than you would in the Academy of Music. Three times louder!”\textsuperscript{265} Brass sticks are used more for glockenspiel.\textsuperscript{266} Additionally, the greater bass support now allows for use of lighter Duff style mallets on timpani.\textsuperscript{267}

Intimacy of sound or how close the sound seems to the audience is another attribute that acousticians consider an important factor in gauging the acoustical quality.

\textsuperscript{261} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 85.
\textsuperscript{262} Ibid., 87.
\textsuperscript{264} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 87.
\textsuperscript{265} Ibid., 81.
\textsuperscript{266} Ibid., 85.
\textsuperscript{267} Ibid., 71.
of performance halls. Acousticians maintain that the Academy of Music and Verizon Hall both possess good measures regarding intimacy.\textsuperscript{268} For instance, since higher register instruments project better in the Academy of Music, Mr. Abel could use medium sized triangle beaters in order to get by, but in Verizon Hall, he uses “almost the heaviest Japan Percussion Center triangle beater or sometimes I’m into the heavier Stoessels.”\textsuperscript{269} In general, though, if a hall is not intimate, projecting the sound maintains greater importance than when in an intimate acoustical environment. Mr. Abel’s experiences in differing acoustical environments on tours will be described next.

From his experiences touring and speaking with acousticians, Mr. Abel described some different shapes of halls and how they factor into the acoustics. He discussed how rounded surfaces, such as those within the Academy of Music tend to best project higher partials. Fan shaped halls, are the least desirable shape because sound waves go out, but never reflect back. According to his interactions with acousticians, he learned that the ideal concert hall shape should be that of the Vienna Philharmonic’s Grosser Musikvereinssaal shoe box shape, which achieves a 2 second reverberation time even at capacity.\textsuperscript{270,271} This shape allows for back and forth reflections, which are desirable because they create for greater warmth and resonance.\textsuperscript{272} Acoustician, Leo Beranek,

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\textsuperscript{269} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 86.
\textsuperscript{270} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 87.
\textsuperscript{272} Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 87.
\end{flushleft}
claims that the warmth of the Grosser Musikvereinssaal is also attributed to the irregularity of the surfaces within the hall. These include,

…statues, coffered ceiling, offset and indented doors and windows, irregular balcony fronts, and chandeliers….In a hall with sufficiently irregular surfaces, the high-frequency sounds are scattered as they reflect, and the resulting diffusion gives the music a soft, pleasant patina, rendering it less hard or glary than it would be in a hall with smooth walls and ceiling.273

Also, Mr. Abel discussed that flat surfaces are necessary in order for bass waves to project, which the Academy of Music lacked. The flat surfaces within Verizon Hall are part of the reason that bass waves project better there, in addition to the fact that the outside walls are 18” thick concrete, which keeps the sound in the hall.274

Another interesting piece of information Mr. Abel shared regarding concert hall shapes involved Carnegie Hall, where the stage has rounded corners, angled sides, and a flat back. These round corners immensely project sound, which he knew in advance while playing a tam tam part under Simon Rattle. He discussed this issue with Simon Rattle, who said he would think of him and let him know if the part became too loud.275

In conclusion, it is apparent that percussionists should be aware of the acoustical environments of performance settings in order to make proper decisions regarding balance, mallet choice, instrument choice, and technique. The examples Mr. Abel shared, provide percussionists a great model to learn from in addressing these variables.

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274 Alan Abel, interview by author, Northfield, MA, August 12, 2015, Appendix 71.

275 Ibid., 81.
CHAPTER 5: INTERPRETATION OF RESULTS

Throughout this study, I was able to more fully document Alan Abel’s, his past colleagues’, and his former students’ technical methods regarding snare drum, bass drum, timpani, cymbals, triangle, tambourine, castanets, ensemble playing, and their playing adjustments depending on acoustics. This study was needed because a strong document covering the aforementioned topics in a single cohesive source was basically non-existent. This need for the study was validated by the plethora of unique information graciously provided throughout various interviews I conducted with Mr. Abel, Chris Deviney, Don Liuzzi, Angela Zator Nelson, Greg Zuber, and Matt Strauss. The different perspectives each individual shared resulted in a greater representation of ideas contributing to the topic.

These interviews served as the primary sources for this essay and the information obtained amounted to a wealth of information that percussionists will be able to reference. Sources regarding acoustics were also used to support the information obtained during the interviews with Mr. Abel. The information gained certainly surpassed my expectations and will surely serve its purpose of educating percussionists about the diverse aspects involved within orchestral percussion performance. The proven techniques as well as real world examples within the study provide invaluable insight into the issues that arise in the career of a percussionist. Not only will the written information help educate percussionists about Mr. Abel’s, his past and present colleagues’, and his former students’ techniques, but the project also fortunately resulted in the making of a valuable video in which Mr. Abel demonstrated key components of these methods.
Lastly, I would like to thank Mr. Abel for being willing to grant me a lengthy interview at his summer home in Massachusetts, for answering dozens of phone calls, and for preparing a video to demonstrate his methods. I would also like to thank Mr. Abel’s well known former students Chris Deviney, Don Liuzzi, Angela Zator Nelson, Greg Zuber, and Matt Strauss for granting me telephone interviews in support of this paper. Without this help, this paper would not have been possible.
APPENDIX

Interview with Alan Abel

TB: Who were your major influences that shaped your playing?

AA: Going way back I played in a high school band that had terrific band directors. It was a championship high school band. A very good one and just being there helped a lot to give ideas about how to be an ensemble player etc. Then when I was at Eastman obviously William Street had major influences on my training. Then I was pretty much on my own when we were in Oklahoma City for six seasons, but you know I’m always paying attention to what’s going on around me so the influences are not just from percussionists. Then coming to Philadelphia clearly Fred Hinger and Charlie Owen were mentors and Mickey Bookspan who was of the same age range but had more years of experience there and so I learned from all of them. Then, if you look at the really big picture, good conductors have a lot to say about how you do things, how they conduct, what they do with the music. If you’re playing with a great orchestra and you’re paying attention, you will be learning a lot from the way the individuals in the orchestra and the soloists [play]. All of those things play into forming the kind of player you become.

TB: Could you provide some background information about where you grew up and where you went to college?

AA: So I mentioned briefly my high school band, which was in Hobart, Indiana. Maybe 7 or 8 miles southeast of Gary, Indiana and then went to college at the Eastman School of Music.

TB: What year did you graduate?

AA: 1951, and the Korean War started in ’50 and so I saw an opportunity to take an audition for the Empire Band of the United States Air Force in New York, which had just been put together in 1950. In the ‘40s it was a Navy Base. They closed it down, reopened it in 1950 as Sampson Air Force Base to take the pressure off Lackland Air Force Base for basic training. And so, when I got home after graduation, sure enough the draft papers were there, so I came back to Rochester and enlisted. I enlisted for four years, but when the war came to an end I had enlisted early enough before a specific date so I was able to get out early.

TB: When did you decide you wanted to pursue a career as an orchestral percussionist?

AA: I was sort of a B+, A- student in high school. My mom was a singer and pianist. My Dad was a carpenter interested in what I did, but not directly involved in the process of making music. By the time I was half way through high school I decided I wanted to be a musician. I didn’t want to be a band director, I wanted to be a performer. And my last year, 1947, our high school band went on tour and we performed at Juilliard and the
Eastman School of Music. I played a rudimental solo with band accompaniment that served as an audition and I could have gone to Juilliard or Eastman. I chose Eastman.

TB: Was that based on teacher preferences?

AA: I think for teachers I covered most of the most important ones. When I was in high school, early high school, I studied with the juniors and seniors in high school. Then my band director went every other week to Chicago to have instruments repaired and get music and whatever and I went with him and I studied with Haskell Harr for a short time and then I was in the Roy Knapp studio.

TB: Were there other musicians in your family growing up as well?

AA: My mother. So that was primarily it in the immediate family. Then I married a singer and a pianist. My brother became a baritone soloist and was in opera and after graduating from Juilliard went on a Fulbright to Stuttgart, Germany and was in an opera company there. For a short time, did recitals all over Europe and then taught at the school of music in Stuttgart for thirty plus years.

TB: Great, moving onto your time beginning with the Philadelphia Orchestra, what was it like to come there for the first time and to try to meet the expectations of a great conductor like Eugene Ormandy?

AA: It was a nice little orchestra in Oklahoma City, but it wasn’t the voluminous big sound that the Philadelphia Orchestra was [with] ninety plus players and Ormandy being a string player, he really pulled the biggest and fattest and warmest sound out of the string players. Therefore, I came in primarily as the bass drummer and because my predecessor wanted a smaller drum, I started with a 32” bass drum. Immediately, I talked to Charlie Owen and I said, “we gotta get a 36 at least,” so we got a 36 inch Ludwig. Then I found in the corner of a hallway an old single tension bass drum that was 36 by 18 instead of 36 by 16. Refurbished that and so this wonderful sound that was there I just didn’t want to go thud thud thud, so things [got] even better when I developed a suspended bass drum stand, which suspended the drum with rubber and was tiltable and so on and so forth.

TB: And you found that to better match the richness and fullness of the strings?

AA: Yes.

TB: What was your position there with the Oklahoma City Symphony?

AA: I was principal percussion with Oklahoma City. Stokowski who conducted the Philly Orchestra for quite a few years before Ormandy, guest conducted and did Shostakovich 10. He had a practice of whenever he was interviewed by the local newspaper that he would mention one or two people from the orchestra and because of the nature of Shostakovich 10 he mentioned snare drum and the piccolo. And so, I got a
really good review, I made copies and sent a general letter to the Philadelphia Orchestra, which was my favorite big orchestra saying that if there was ever an opening, please let me know and I included that newspaper write up. And so when the opening came, Charlie Owen looked through those things. He had heard about me somewhat from Bill Street already and there were only four people at that time that they elected to come to the orchestra to audition. Now, you know seventy people show up for one spot. But there were four. One was a local person, John Beck, and another person who was from Chicago and ended up being the main professor at the University of Miami for years, Fred Wickstrom.

TB: Oh yes, I’ve met him down there a few times. He’s a nice guy.

AA: So what was interesting, I got the letter of acceptance for the Philadelphia Orchestra and just as it arrived I heard from Rochester and they wanted me to come there to play in the percussion section and be an assistant to Bill Street teaching and I elected to go to Philadelphia and John Beck decided to do the Rochester thing and he was there 50 plus years.

TB: Oh wow, great. More specifically, what was it like musically to transition from playing at your position in the Oklahoma City Symphony to playing with the Philadelphia Orchestra? You mentioned there was the rich sound of the strings. Were there any other adjustments?

AA: Well, when I was in Oklahoma City, I played the xylophone parts, sometimes cymbals, the snare drum and those kinds of things, rarely bass drum, sometimes triangle and etc., but when I came to Philadelphia my predecessor did not go to college and he was somewhat limited in his abilities so he did most of the bass drumming, he did triangle, tambourine, some cymbals, never snare drum, never mallets, so that the ways things were at that time you were kind of locked into positions. So for the first 13 years I was sort of in that spot, although Charlie eased up on things and I got to do more and more things.

TB: Who made up the Philadelphia Orchestra percussion section throughout your career?

AA: It started with Fred Hinger on timpani and Charlie Owen principal percussion. Mickey Bookspan second percussion and assistant timpani and me. And Ormandy who was very budget conscious had a second violinist double as percussion and sometimes the assistant conductor came and played. Then when he retired, Ormandy had a cellist who had played in the Marine Band and had some experience and Charlie Owen knew him and he did it for a while. When Muti came in 1980, he said enough of that, I want regular percussionists to play percussion. Hinger left in 1966 or 1967, went to the Met and that’s when Gerry Carlyss came in to play timpani. When Charlie went to teach at Michigan in 1972, that’s when Tony Orlando came in and unlike today, Ormandy just moved Mickey Bookspan and me up so Mickey became principal percussion and kept assistant timpani. I was just sort of unnamed. Then I realized, “hey when he’s over there somebody needs to be assistant principal,” so I got the manager, as long as it didn’t cost them any more
money, to give me the title. One year later the titles of players were printed in the concert programs and I saw associate principals listed. Soon after I became associate principal! And so Mickey was principal and I was associate, Tony was percussion, and Carlyss was principal timpani. Carlyss left to teach in 1989, and Don Liuzzi came in as principal timpanist. When I left, Angie effectively took my place, but they created a different format, so she became assistant timpani, backing up Mickey who still was assistant timpani. She got some experience there so whenever Mickey left she would be the assistant timpanist.

TB: Did you ever fill that role yourself covering assistant timpani?

AA: I did, some, when Carlyss was there and he had a sore thumb or whatever. There were times when Mickey would play and then if it was possible I would play the concerto and then there were times when Mickey was completely away and Carlyss took off so I did all timpani playing, but that wasn’t very often.

TB: Back to when you first entered into the orchestra, were you accepted by the other percussionists when you first came—did they comment on your techniques and suggest changes?

AA: Well, I brought a Leedy triangle and of course they had the knitting mill spindle type triangles. We had three different ones. The Walberg drum company in Worcester, Mass., when the knitting mills were leaving the Northeast to go south they went in and bought some of the knitting mill spindles and formed them into triangles. They weren’t all the same size, slightly different configurations, so Charlie had one that sounded quite good, Mickey had one that sounded a little bit better, and my predecessor had the best sounding one and he let us use it for two years. Then he wanted it back. And that’s when I went to the engineering company and took that as a model and then started making the triangles. I started with eighteen at a time as people heard about it, then I went to forty, then eighty, now I do 400 at a time of the symphonic triangle size and then had the small triangle there along the way. The Wagner-Mahler wasn’t available until the ‘80s.

TB: Back to the timpanists within the orchestra. I wanted to talk about some unique aspects of each. What made Hinger’s playing stand out the most? What was unique about Gerry Carlyss and then how does Don Liuzzi does stand out from his predecessors?

AA: So, Hinger was always after a big sound. Hinger was always experimenting, made tons of sticks. When we were putting together the bass drum stand, he found a way to put the wheels on pads. Most of the time he used the Anheier cable drums on the outside and he suspended those. But then because the Academy of Music, being almost 3000 seats, we were on the stage house, the strings and the high instruments flew out. The triangle flew out. The bass instruments did not get much support because there were too many angles. There were no 50 foot lengths of anything. The bass drum has a 55 foot wavelength and to get the most big sound you need big flat surfaces. There weren’t any. So we had to do everything we could do. Heavier sticks, bigger heads, all kinds of things. And so Duff called Hinger sticks clubs, because Duff played with the Cleveland
Orchestra, which was a much more succinct playing orchestra in a much smaller hall that was very ringy. And so [Duff] never had to play very loud and the bass support was strong. So that had everything to do with it. So when Carlyss came, he came from Juilliard, got lessons from Vic Firth, came in with Vic Firth sticks that worked great in the shoebox shape Boston Symphony Orchestra Hall, but in our hall they didn’t work at all. And the principal cellist at that time had played in Boston so he was checking in with him often, finally got more comfortable with the percussion section and then we advised him to use bigger heavier sticks and so he came up with his own models, which he had made and then David Gross made them for him for a long time. So those were made to have weight and more padding on the ends.

(Regarding Don Liuzzi’s playing) And so I was out front as often as possible in the Academy of Music helping him choose good sticks, helping him with tone quality, helping him with timing, balance, all those different things. And then he was able to carry some of that to Verizon Hall. Verizon Hall is a shoebox shape, although it looks like a cello because of the woodwork inside and the outside walls are 18 inches thick concrete so the sound stays in the hall. And often time the lows can go out and not come back. So the lows stay in and then there are enough flat surfaces so now that the bass and mid range instruments really project. There are times when Don Liuzzi can use sticks that work in Severence Hall. So he can use the Duff sticks.

TB: So did that basically change the timpani tradition?

AA: Yes, I mean we still tried to maintain the same character that was there before, but we got it with different sticks and different stroke types.

TB: Similarly, what were some unique aspects regarding Charles Owen, Michael Bookspan, and Anthony Orlando’s playing?

AA: First of all, I brought a drum that worked really well with coil wire snares, which immediately didn’t make it and then at that time they had 6.5”, well Mickey had a Gladstone, but they had Ludwig and so on and so forth. So, I bought a Premier 6.5 and put special gut snares on it. And I used that for most of my 38 years. Then they had smaller drums which they used sometimes then and thought the smaller sticks that I brought didn’t make it so I went to 1S field drum sticks because of the big sound. And once Reamer started making sticks then all my sticks were based on that as a starting point. On the other hand, there were times now especially in the new hall when smaller headed sticks work really well and so the new...

TB: Kind of like some of the Chris Deviney glockenspiel and xylophone mallets?

AA: Yeah, but getting back with the snare drum, Tom Freer has made a whole bunch of sticks out of special wood from Europe and in the small category I use those and recommend them for auditions, etc.

TB: Those are the hornwood models.
AA: And then at some point I found in a music store pawnshop, a 4 by 14 drum hanging on the wall and I fixed that up and put guitar string snares on it. So that was my small drum and I also came upon a 3 by 13 that worked really well for exceedingly thin sounding [music]. Then Hinger made the space tone and so I had a space tone.

TB: Did you and your colleagues often discuss specific phrasing interpretations they wished to convey as a section or were you primarily listening to each other and adjusting as you played?

AA: Primarily what was talked about was balance, tone quality, you know the bigness of the sound, those things. A little bit of phrasing, but not so much phrasing. Most of the phrasing ideas came from the woodwind players and other people in the orchestra who would make phrases and then if you’re listening, which is the key to everything, if they’re making phrases you’re going to try to follow their phrases even if you only outline it. You got a triangle part that doesn’t play all the notes they’re playing, or a bass drum part or whatever, with your outline you’re going to try to find out where their line takes you and so I did more of that on my own, less of it with the other section [members].

TB: And how did you learn the Philadelphia playing tradition?

AA: Well there were traditions with Schwar having been here first and then others who followed him not carrying the tradition very well, but Hinger tried to find out what that tradition was and made it be a part of his playing. Then Podemski the cymbal player, he taught Charlie Owen cymbals, he taught Mickey Bookspan cymbals, and then I picked up on their system for playing cymbals.

TB: What parts did you develop and what are still being used within the orchestra section today?

AA: So my bass drum sticks are there, still used, and in trying to get more and more weight I found out that the tubing that I used for the bass drum stands, if it was cut to 17 inch length, made a terrific shaft in which to build the ends. And so there is a general, there’s a medium, there’s a staccato, there’s an ultra staccato, and there’s an ultra ultra staccato with different cores. Different tape cores and different numbers of layers of felt. And they’re still used there. And then Reamer made bass drum rollers blanks and we built the rollers based on that. And then he also made the elongated stick that is great on the 11 big strokes in The Rite of Spring and we used that for wood; we also put mole skin on that and there are times like for instance in La Valse where all of a sudden this Da—da da (quarter note followed by an eighth note rest, eighth note, then quarter note in ¾ time) pattern that’s going on throughout the orchestra and it’s given to the bass drum. Well, if you use a general bass drum stick it’s just going to be flab. And even if you go to the ultra ultra staccato it still doesn’t have the definition. And so that wooden stick with two layers of mole skin really even though up close it’s a little edgy, once you get away, it fits right in with the orchestra. So we have a lot of different sticks that we use.
TB: And how exactly did you come up with the design of your bass drum stands?

AA: It all started when Hinger and I were carrying a bass drum backstage and tapping it and it rang so freely and we decided, “gee what could we do.” Well at that time, speakers for sound systems had just come out with a rubber ring around the outside that helped the bass and I thought about that and decided, “hey rubber might be good.” So I had a plumbing place make a square frame with legs and then four points that were hooks and we used some of Mickey Bookspan’s trampoline rubbers and we put the bass drum on that. And we actually went to New York with it because we used to record in ball rooms because they want a lot of extra sound and we did Symphonie Fantastique and if you listen carefully you can hear that drum going up and down because it moved too much. So then I went from that to a guy that I found that could make rings. Then I started with a solid ring, and then with a pipe nipple so it could swivel. I cut bicycle inner tubes into rubber bands and stretched them over. Then we finally decided that if we used regular pipe and cut it in two places so that we didn’t have to go over the pipe nipple we could use regular rubber. So that’s what we used, gum rubber that would be on the stand which then reached out to the hooks on the drum. And so the first 40, I painted the stand. Then I got wise and started chrome plating everything.

TB: And you made all those in your garage?

AA: Well I did the assembly there, but I mean the rings and the other things and the triangles, all of that has to be done at specialty shops.

TB: Did the Philadelphia Orchestra percussion section meet regularly to discuss certain unique Philadelphia traditions that should be used?

AA: We didn’t really meet on a formal basis. We never got together to discuss things. It just came up as we were going. And then we’d try a stick and think okay, that’s okay, then without the orchestra there a couple of us would go to the front of the stage and see what it sounded like without the orchestra. Then when it was possible and not everybody was playing then we would have one person go out in the hall to listen as we were testing what sticks seemed to work best to project into the hall.

TB: Did conductors have a large role in shaping the sound preferences in the percussion section?

AA: Well, Ormandy didn’t want the brass and percussion interfering too much with his wonderful string sound. So we were usually getting the hand, less, so we tried to play a rounder sound. We also tried to push the envelope a little bit so that we could get more sound than he might expect, but he loved cymbals so any time there were big cymbal crashes he wanted to hear them. He loved the timpani more than the percussion and wanted that out, but then he wanted endings and whatever, he would add instruments sometimes: bass drum rolls. Riccardo Muti arrived in 1980. Most of his experience had been in opera. He seemed less concerned about the “Philadelphia sound” and tended to
focus on what he thought the composer intended. Of course, he emphasized many dramatic moments and encouraged the orchestra and the percussion section to sometimes push the acoustical limits at *fortissimo* and *pianissimo*.

TB: And were there traditions that one conductor preferred early on in your career that set a precedent that never changed no matter who conducted in subsequent years?

AA: I was always aware of the “Philadelphia sound” and I didn’t kind of work at not getting in the way of things. So when it was loud and things were out there, Muti rarely cut the percussion back, although when it was soft, there were times when he wanted it super super soft. Then Sawallisch didn’t let things go so loud that the tone quality started to have problems. But he didn’t quash the percussion particularly and it was very musical, but worked very hard at not going too far. He didn’t want to turn everything into melodrama.

TB: On Ormandy, Emeritus Professor of Temple University and Philadelphia Orchestra scholar Phyllis Rodriguez-Peralta shares,

...Ormandy was not the easiest conductor to follow because he was usually imprecise in his indications, preferring, instead, more general signals. He used a style of conducting which did not dictate a distinct and simultaneous beginning attack by all the instrumental sections, but one which, in the Academy of Music, would roll through the Orchestra and be heard as a cohesive sound in the hall. In addition, he was more interested in elongating a phrase than in precise rhythm.\(^{276}\)

Q: Could you comment on this information regarding entrances and how you had to time them out in the Academy of Music?

AA: I pretty much agree with that. Okay, there would be a big down beat gesture when it was loud and coming out of silence for that first attack it was always very delayed. And as soon as you heard something start then everybody came in. And that’s why the upstroke became such an important part of our playing because if you were too far away you couldn’t respond quickly enough, so we were able to get a great variety of dynamic levels using upstroke which you would think would not be very loud, but we could make it very loud with the severity of the speed of the stroke.

TB: In another book *The Philadelphia Orchestra: A Century of Music*, writer Herbert Kupferberg shares on Ormandy,

The big gesture, the spectacular “interpretation,” the creation of a charismatic podium “personality” were neither parts of his character nor among his goals. To him a successful concert was one that set forth a composer’s music with all the

intellectual integrity, musical insight, technical perfection and tonal beauty of which he and his players were capable.\textsuperscript{277}

Later on in the book, writer Barry Scherer describes Riccardo Muti saying,

Not only was the Italian conductor praised for his vigorous musicianship and theatrical flair, but he enjoyed the reputation of a matinee idol whose svelte, brooding looks added to his box-office appeal.\textsuperscript{278}

AA: Yeah, don’t forget his hair.
(laughs)

TB: How did this change in conducting style affect the percussion section’s playing?

AA: With Ormandy our attacks were less instant if you could put it that way. And with Muti, when he jabbed you really had to move fast and so our attacks were much more staccato with him. If there was space, if the time kept rolling, then that was not as important, but if there’s a slight pause and then bam, when that came in, it was violent.

TB: So right on queue with the ictus of his conducting.

AA: Yeah.

TB: Also said of Muti was that,

“When Muti first came, we were floundering,” a first-desk player already well established at the time confided not long ago under seal of the confessional. “One of the things he did, and very quickly, even as principal guest, was to restore discipline. Back then, discipline was only there during performances.”\textsuperscript{279}

Q: Do you agree with this comment and if so, what new benefits did this disciplinary leadership style provide?

AA: Ormandy didn’t put up with a lot. He could give you dirty looks. He could give you all kinds of trouble if he wanted to. But with Ormandy, the most important people were his principal players and he coddled them. He was really with them and then the rest of the orchestra was just there. And [with] Ormandy, if someone was going to be making phrases he’d let them do it. He didn’t try to shape those things unless it was big ensemble stuff. But with Muti, if he didn’t like the style of your phrase he’d change it.


\textsuperscript{278}Barry Scherer, “The Sawallisch Era,” in Ardoin, 193.

\textsuperscript{279}Matthew Gurewitsch, “The Muti Era,” in Ardoin, 130.
TB: Additionally on Muti, author Phyllis Rodriguez-Peralta shares,

The Academy of Music, with its dry acoustics and incessant subway rumblings, plus its tendency to obscure subtleties, was not suitable for the precision and clarity that Muti sought. He pointed to the contrasting splendor of sound when the Orchestra played in Carnegie Hall. To record, the Orchestra was forced to use the broken-down Metropolitan Opera House on North Broad Street, sometimes in winter with the snow falling on the musicians while they played; or the gymnasium of Memorial Hall in Fairmount Park, where the loud heating system needed to be turned off during the recording session, leaving the musicians to shiver in the cold.280

Q: Did you find that the ensemble played together more precisely under Muti than under Ormandy? Do you find that the recordings under his directorship exhibit clearer sounds than those under Ormandy?

AA: He was more incisive in what he wanted and again the operatic flair; he didn’t want super big round sounds particularly, he wanted the drama to always be there. And what happened, she didn’t necessarily know when we were in the old Met, EMI had to spend a lot of money fixing the ceiling so it didn’t fall down on us and the heating system didn’t work at all so they had kerosene heaters that they would turn on and heat up the place so it was really hot. They’d shut them off and then we’d record for 45 minutes to an hour and in that length of time then it would be pretty chilly by the end and of course that played havoc with the instruments for staying in tune.

TB: Interesting. And regarding the transition to conductor Wolfgang Sawallisch, Barry Scherer shares,

...exaggerated richness in the strings may in part have been Ormandy’s way of compensating for the Academy’s notorious acoustical aridity. While Sawallisch is credited with reviving much of the warmth that Riccardo Muti had eschewed in pursuit of a leaner, more objective musical utterance, Sawallisch himself sees his aural contribution from a perspective unexpected from a German. “The preferred repertoire of Ormandy was Tchaikovsky and Mussorgsky, Shostakovich and Rachmaninoff,” he observes. “This is all very schwer [i.e., weighty] music. I tried to bring a little bit more elegance and brilliancy to the playing. A little more of Haydn’s piquance.” 281

Q: Did you find that Sawallisch revived some of the sound preferences that Ormandy developed? Did the percussion section revive certain traditions that were used under Ormandy and not under Muti?


AA: Yes, I think I said that earlier that he was trying to get that same warm sound but he wasn’t trying to revel in it. He wanted it to be rich and warm and round, but he still wanted the music phrasing to be closer to what he thought the composer intended.

TB: And were there any specific percussion things you can recall that might have been revived under him that were used under Ormandy or was it more sound related?

AA: He had problems with the K Zildjian cymbals and my observation is that with so much 2nd World War bombing in Europe that many of the instruments that were stored there and whatever like the K Zildjian cymbals were just done in. And they wanted once the war was over to get their musical and cultural things back together as soon as possible. And so with cymbals they went to Avedis Zildjian of Boston, which tended to favor drum set players and there are many more highs and thinner sounds from them. But once they got to Munich where he conducted that opera for years and years, he got so used to that sound that he didn’t like the old K’s so much. And so as an example, we were rehearsing Capriccio Italien and near the beginning there’s a big fanfare section where the brass [play] with outline by big cymbals. So it’s not the full orchestra, it’s primarily brass, so I brought out Charlie’s K’s which are really loud and I used those and we got through it and then I see him talking to the front row of musicians and then he looks back at me and says, “like opening a soda can.” Which means he wanted highs out. I had Charlie’s which are dark and loud, Mickey’s which are in between, I had another pair of 17’s that were mine that were brighter, but I had my 16 and a halves there that were very bright and I immediately went to them and he loved it. He used to give Mickey a hard time because he could hear da-dum. He could hear the flame, which is easier to hear with old K’s than with contemporary instruments.

TB: Additionally, On Sawallisch, former Philadelphia Orchestra assistant conductor, Andre Raphel Smith, is quoted by writer Scherer stating,

“I listened to the Orchestra a great deal during my Curtis days,” he says, “but when I came back under Sawallisch I felt I was hearing for the first time just how sensitive this Orchestra is. With Sawallisch the Orchestra seems to listen to itself more closely than ever before. The range of attacks, of dynamics, of balances between the choirs is infinite. This Orchestra’s pianissimos are just incredible—you don’t get that everywhere.”

Q: Does this statement resonate with you regarding Sawallisch and what other changes did you observe when he stepped in?

AA: Clearly he stated it very well. And he wasn’t just after the dramatic and things could be a little bit loose or out of balance, or different choirs covered up as such in the moment. At one point I was playing triangle and had the music stand pretty high, and he stopped the orchestra and then said, “Mr. Abel, I can’t see you, or the triangle.” From

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then on, my music stand, no matter who’s conducting, is as low as I can get it and still play so that not only is the sound not reflected back and stopped from going out, because if I’m playing right into the music stand it’s not projecting, but also people want to see what you’re doing.

TB: Also, tell me about special equipment that you used to produce special sounds for conductors or particular pieces of music.

AA: I can remember we had like a 24” tam tam that could go wah! very easily and we used it for something with Ormandy and Ormandy says I never want to hear that gong again. Although we did use it beautifully for the Hindemith Symphonic Metamorphosis when you have that gong with the cymbal. And if it’s played quietly it’s still a nice sound. He didn’t want it loud. So we already talked about the cymbal stuff with Sawallisch. Not too much of that sort of thing ever with Muti, although I have to say that when Muti first came he did Scheherazade and of course the clarinet can play softer than any other instrument and so when he got to letter D in the 3rd movement of Scheherazade he wanted it so soft that I could never play it soft enough. I started with my 4” snare drum and I loosened the snares. I went to really light sticks. I did everything possible ‘til I could hardly move the sticks and I had Carlyss telling me because I couldn’t even look at him because I had to look at what I was doing. “What is he saying?”

“Less.”

And so it got so soft you couldn’t even hear it. He could hear it but not many other people could hear it. So we get to the recording session and I played it up a little tiny bit, and he says, “Too Loud.” And the A and R guy in the recording booth said I can’t hear the snare drum at all. So then I got to play it a little bit. But if you compare that with the Ormandy recordings of Scheherazade and Muti’s recording, the snare drum is way way way back. You can hardly hear it in that movement. Movement IV was better.

TB: Interesting. Tell me about interactions with conductors--did you ever have trouble pleasing a conductor with your sound in any other ways that you haven’t mentioned?

AA: Charlie’s general purpose is don’t see the conductor unless he sees you. I mean don’t go out of your way to be talking to him. And especially with Ormandy, I pretty much followed that rule. But what’s interesting is we were playing in Hartford, Connecticut and Jan’s father went to the concert and afterwards went up to Ormandy to say hello and then he told him how he was related to me and then on the train going home he comes up to me and said, “Oh, Mr. Abel, I met your father-in-law.”

He would never come up to me and say anything except he’d talk to his principal players. (Laughs)

TB: That’s a great story. Are there any particular performance disasters that you recall or care to share about?
AA: Yeah, the worst one was the day the Nightingale died twice. You’ve probably heard that one. We were in Saratoga and Carlyss was off, Mickey was playing timpani, and I was to do the bird and we had an electric reel to reel tape recorder and in a rehearsal it failed right when the bird was supposed to sound and the person who did the recording said, “I have another one.” And so I went to Ormandy and said, “Borkow said that they have another unit and it’ll be there tonight.” So then it failed a second time because I think somebody pulled the plug and he’s up there and there’s no sound and then he walks off stage and is ready to kill me. And it was being recorded for radio, to be played later and so I had to go back to Philadelphia and go to a recording studio and insert it into that recording. So, I came home that night, just not knowing what to do. But two times in the same day, the Nightingale failed and so from that time on we went to a cassette and we went to a battery powered cassette and we had another one under the chair in case that one failed, so the whole percussion section learned from that experience. So at that time, shortly after there were always two cassette recorders that were all ready to play.

(Laughs)

TB: And what are your performance triumphs that you are particularly proud of?

AA: I like a recording with Muti of The Rite of Spring and performances playing bass drum. I had a good time playing cymbals in Mahler 1 with Muti and others. The snare drum part to Shostakovich 10 and 11 were special and they were both recorded by Jansons and I think they’re both high water marks for me.

TB: Great. How do you play when recording versus performing for an audience? Does expressivity and dynamic levels change?

AA: Yes, when you’re playing for the audience then you’re trying to project and when you’re recording at least in the old way, where you had recording sessions with up to 30 or 40 mics out there and there’s a mic right by you, you tend to underdo things somewhat and play with different sticks and whatever the things that you think will record better. For instance, playing bass drum in Romeo and Juliet, there’s this place with the brass that goes (He sings the part. See Example A) and a regular stick absolutely doesn’t make it. Even a felt stick doesn’t make it. So in the recording session I used a rubber ended stick, which sounded awful up close, but sounded terrific in the recording. Now you can’t do that these days because most of the recordings that are done are from concerts. So you just have to play the concert for the people who are out there listening.

TB: Have you gotten chances to listen back before they made the final edit?

AA: Oh yeah, all the time. So we go in and listen and find out if it should be more or it should be earlier or it should be a different instrument and all those things. A good instance is playing the tambourine part with Sawallisch after I was retired, but with Water Lily where they had two mics, sort of like the old Mercury system behind the conductor and in the Academy of Music of all places. So we’re 50 feet back and I know that I have to anticipate the tambourine part. When I’m playing with the brass and it’s tutti then as
long as I’m on the front edge I was fine. But there’s a place where it goes (He sings the part. See example 5 in Appendix) your tendency is to slow down. I knew that, so I pushed and I listened back and I was behind. And because the violins are like 10 feet from the mic and I’m 50 feet from the mic, I had to play before they even dropped their bows for it to be in time. That’s severe. That’s really severe.

TB: Could you discuss some other orchestrations, where you would listen to some sections in the orchestra over others in order to achieve the best ensemble playing?

AA: There were times like the trumpet variation in Young Person’s Guide where the snare drum is right there with the (He sings the part. See Example B) and so I took my 4” snare drum and I put it right behind the trumpets and then I went back to my other snare drum to play the rest of it. And with the Liszt’s Piano Concerto No. 1 with the big triangle part I would move the triangle and the stand and everything right to the edge of the woodwinds so that I’m closer to the piano and other things. There are other times when one would have done that sort of thing. When we, in concert, were going to be playing Shostakovich 11. It’s either 10 or 11 and I was set up where the snare drum usually is and there was a vacant space before the harps and the sound bounced off the risers right in the conductor’s ear and he’s like this (motions for less). So, immediately I figured that out and I pushed the bass drum over and I put the snare drum on both Symphony 10 and 11 between the bass drum and the timpani because there are so many rhythmic figures that are with the timpani, so you’re right there. And then the sound doesn’t bounce off an empty riser right into the conductor’s ears; had to go through the bodies in front.

TB: Interesting. And could you describe how visual aspects in performance play a role in the percussionist’s job?

AA: My wife saw an orchestra percussion section play one time. Actually they were doing a sectional kind of thing for PAS and she said, “The way they played they could have been sitting at a desk paying bills.” And so especially with percussion, you need to move with what’s going on and if it’s exciting music you need to move. That doesn’t mean you’re going to be bobbing up and down and that doesn’t mean you’re going to be moving sideways much. You’re going to be moving in and out, forward and back and then you’re going to be having your sticks go higher and do various things that represent the character of the music.

TB: How do you play when your part is written in a softer dynamic, but it is exposed or solo as is often the case throughout Nielsen’s Clarinet Concerto?

AA: Number one with the Clarinet Concerto, because of the soloistic nature, the first thing you do (it’s a smaller orchestra) is to move the snare drum much closer to the front where the clarinet is. When the clarinet plays you have to lower your normal volume level. When there are tutti sections where it’s loud and the clarinet is not playing you can be more normal. That’s just one example. But there are a lot of other times when it says piano, what’s the character and what’s the message of your part? Sometimes you’re
doing a rhythmic outline and you’re not going to be trying to overdo it. There are other times when you’re the rhythm that is leading the orchestra. Then you need to lead. And so you need to know your role and that determines what the dynamic level’s really going to be.

TB: How do you adjust playing technique in a new hall? For example, you often went to Carnegie Hall and how did you adjust on tours?

AA: Well, when I could I would go out front and listen. And what’s interesting about Carnegie Hall, the stage has slightly angled sides, it has a flat back, but then the corners are rounded and they’re hot. That’s one of the things that helped make Goodman’s great reputation. Goodman was in the hot corner up on a riser behind the percussion and his sound was always round and beautiful in that hall. So, just as an example, we were playing a somewhat modern German piece with Simon Rattle and I was playing tam tams and I was in the hot corner. I knew that and I had to figure out just how loud to play because if I played normally it would have been way too loud and so I went up to Simon Rattle in the middle of the rehearsal intermission and we talked about that hot corner and he said, “Yeah I know about that hot corner.” Because with his orchestra from Birmingham they came there and the trumpets were sitting in that corner and blew everybody away, so he knows a lot about that hot corner and he said, “I’ll tell you, because I know all about that, so if it’s a little too much, I’m going to be thinking about you.” And so it worked.

TB: How did the Academy of Music affect your playing and shape the “Philly sound?” You already mentioned how it ate up a lot of bass.

AA: We really worked hard to get bass sounds projected. The smaller snare drums, the triangle, the glockenspiel, tambourine, those things always shot out. So you’re actually holding back somewhat or using lighter beaters or whatever. Now in Verizon where there’s so much bass support you have plenty of sound from the bass and mid-range instruments, now the highs have this wall of sound to get through, so now the triangle sometimes has to be played three times louder than you would in the Academy of Music. Three times louder!

TB: Wow. And what advice do you have for younger players regarding timing percussion within the orchestra? How to anticipate the beat, watch the conductor/watch the concertmaster? What influences your placement?

AA: So first of all you need to know the score well enough so that you know what instruments with which you’re coupled and whatever that group is, whether it’s a rhythmic thing or if you’re playing triangle and you’re trying to follow a melodic line then you’re going to play the triangle with the melody instruments. But if you’re playing a tambourine part and it’s with the woodwinds then you’re going to play with the woodwinds. It was hard in the Academy of Music because it has a narrow proscenium and sometimes we were fifty-five feet back from the front of the stage. So that meant you had to anticipate much more, but you can’t just have one anticipation timing. If
you’re going to be playing with a piano soloist or the concertmaster you really have to push. If you’re playing with the horns right in front of you, you’re going to push them a little bit. If you’re playing with the woodwinds farther down, then you’re going to push more than the horns. And if you’re playing the castanet part to the Baccanale and you’re with the cellos way up front you have to push like crazy to be with them. And you’re going to push a lot more in the Academy than you do in Verizon Hall. Verizon Hall doesn’t have the narrow proscenium so the orchestra is much wider in its positioning and so we’re at most thirty-five feet back from the front of the orchestra. You don’t have to anticipate as much there as in the Academy of Music.

TB: What is some advice you give to your students once they win a job?

AA: To listen to a number of recordings before they go to the first rehearsal. To look at the score and find out who they’re coupled with, what’s going on, what can they be doing about that. And then, in some ways it’s almost better to be a little bit too loud and get this (conductor motions to play less) than to be too soft and not know it. And one of the things I remember from a timpani audition that Muti was in on. It was for a substitute and somebody came in and they really played loudly and a couple of us mentioned that and Muti said, “It’s always easier for me to take somebody who’s willing to play out and quiet them down than to get somebody who was so shy, I can’t ever get them to play loud enough.”

TB: You have become a legend in the percussion world--when were you first aware of that and did that change your relationship with the percussion section and conductors?

AA: If I was part of a legend, it would have been with the four horsemen. And the four horsemen were Hinger, Owen, Bookspan, and me. That happened between ’59 and ’67 and that’s when we were known as a really good percussion section. Then things just sort of went from there, but I’ve never wanted to pay any attention to that. I mean if you want to do well in whatever you do, don’t read your PR and believe it. (laughs)

TB: What are some differences you’ve noticed between the Philadelphia percussion sound, in comparison to New York, Cleveland, Boston, and Chicago’s sounds?

AA: I think that with New York because Saul Goodman taught most of those people, although maybe not in great detail, there was a camaraderie and a working together kind of thing that happened in New York and they did some different things in Carnegie Hall. When they went to the new hall, it was I think much harder for them to play than it was when they were in Carnegie Hall. With Cleveland, because of their hall, because percussion tends to really boom out, they’ve always had to play very, very quietly and so my theory is that if you’re able to play out your emotional shape can be bigger. As soon as you have to hold back and hold back, your emotional shape is much smaller. And I think that’s more typical of Cleveland where they tend to play a little straighter, but that’s what they have to do in that hall. I don’t feel that I have enough first hand information on Chicago and Boston to make a well informed opinion.
TB: Okay and did other orchestras ever try to recruit you after you joined the Philadelphia Orchestra?

AA: Directly, no.

TB: You have invented a wealth of percussion instruments and gear. Do you have recommendations as to what areas could improve in terms of gear or instruments currently?

AA: Well, my bass drum stands started the whole business of a swivel and suspended bass drum. It got copied, but never got copied very well. Initially Ludwig did a swivel. Then they tried to get into suspension and they used one size fits all for a big forty inch drum with a thirty two drum bouncing around in an uncontrolled manner. Then they changed from that to some kind of a C shape unit and built it so it worked really well, but they didn’t build it with the player very much in mind. You can’t wrap yourself around the drum. And with the swivel, sometimes they use a very small screw with a very fine thread and within months the thread is stripped and it doesn’t work anymore. The stand that comes closest is the Pearl Philharmonic Bass Drum stand, but it still doesn’t have a foot rest. It rings fine, but for the player it’s not easy to play. So with my bass drum stand, if you want to, you can wrap yourself right around the bass drum, but none of the others allow this.

TB: And Andy Reamer is currently making those?

AA: So I’ve done close to 120, which is a lot of hands on work for me even though I have had parts made someplace else. Andy Reamer is the person to contact if you want to obtain an Abel Swivel-Suspension Bass Drum Stand.

TB: Expert acoustician and former MIT professor, Leo Beranek, wrote in his textbook Concert Halls and Opera Houses: Music, Acoustics, and Architecture, that,

At Philadelphia’s Academy of Music, both Leopold Stokowski (conductor from 1912 to 1936) and his successor, Eugene Ormandy (from 1936 to 1980), taught the players of the Philadelphia Orchestra to stretch out the endings of notes so as to simulate the effects of hall reverberation; the violinists even had to learn to bow out of unison. These techniques would seem to defy logic, but in fact both conductors knew the same thing: the Academy had “dry” acoustics, which robbed music of the usual fullness it would derive from a hall’s reverberation. 283

Beranek claims through his research that ideal reverberation times should be between 1.7 and 2.1 seconds at mid frequencies for classical and romantic repertoire. (mid

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frequencies being between 350-1400 Hz\textsuperscript{284} He measured that the reverberation time in the Academy of Music is 1.2 seconds at mid-frequencies. \textsuperscript{285}

Further on he shares an interview response from James De Preist, Music Director of the Oregon Symphony, who guest conducted the Philadelphia Orchestra at the Academy of Music. De Preist shared,

The Academy of Music, with its dry acoustics [short reverberation time] that absorbs and even chokes sound, impedes leisurely tempi and long soaring lines. In response, the orchestra’s conductors have required endless bow arms of the players and directed them to attack and sustain notes in order to make the music “sing.” That effort to compensate for the dryness of the hall, of course, had produced the orchestra’s trademark opulence--its rich blending sonorities....As with every orchestra, the Philadelphia developed its sound in response to the acoustics of its home, and although some might view the blanketing effect of the Academy as a drawback, it has in fact demanded of its musicians, lushness, a distinctive expansiveness, that would never have been realized in a more forgiving hall. \textsuperscript{286}

My question in response to these statements: How was the acoustical issue of dryness or low reverberation time addressed within the percussion section when playing in the Academy of Music? Did conductors request certain changes in the way the percussionists played in order to achieve more sustain and lushness of timbre? Is this part of the Philadelphia percussion section tradition and is it still practiced today?

AA: It’s interesting. Nobody that I remember has said very much about what can you do to make a more lush sound. We had to figure that out ourselves. Now, maybe we figured it out well enough that they didn’t have to ask the question. But, very definitely on glockenspiel we didn’t use the hardest sticks in the Academy. We tried to use slightly softer sticks that would have a nicer sound and wouldn’t have so many highs and edginess. Even xylophone sticks weren’t the hardest ones. Just across the board we talked about the timpani sticks, the bass drum sticks, and the snare drum sticks. When I came in I couldn’t use light sticks to play general music. I had to have bigger, heavier sticks to match that opulent sound.

TB: Did you ever have to let the timpani, bass drum, or cymbals resonate longer than you might think would be necessary?

AA: In general, we had a rule that ringing instruments should ring as long as possible, unless it gets in the way of whatever the orchestra is doing. So if it’s a short note, of


\textsuperscript{285}Ibid., 2.

\textsuperscript{286}Ibid., 5-7.
course you’ve got to muffle it, but with bass drum long sounds, cymbal long sounds, timpani long sounds, we always let them ring as long as possible. Sometimes we would muffle by gradually tapering down the sound, to match the decay time of the sound of the orchestra.


Ormandy’s sound, rich but not brilliant, solid rather than showy, was once analyzed by one of his violinists this way: “We simply dig in and play harder than other orchestras do. Ormandy is a string player himself and knows how to get this sound. Our sound is essentially a string sound. Ormandy insists on depth, fullness and richness, and we give it to him.”

Q: How did this sound concept play a role in how the percussion section played and blended into the ensemble?

AA: I’ve already kind of covered that. We try to fit in and we don’t try to play super short sounds if you don’t have to.

TB: Leo Beranek shares that the Philadelphia Orchestra’s newer hall, Verizon Hall, has a reverberation time of up to 1.7 seconds at mid-frequencies. He states that the bass/treble balance is very good in the newer hall as well. You’ve mentioned a lot of the adjustments as well.

AA: So just to carry that through, you have to play the tambourine louder. There are times when you shake two tambourines in order to get enough density in the sound of the rolls. On glockenspiel you play with brass sticks much more. Practically never in the Academy of Music, but you play them a lot in the new hall in order to get the edge and the sound to cut through. And much harder sticks on vibraphone.

TB: You mentioned the example in Bartok *Concerto for Orchestra*, how in the Academy of Music you used a snare drum stick wrapped with moleskin. Is that the same tradition in Verizon?

AA: Don’t do it now.

TB: And also, another acoustical attribute Beranek considers in measuring hall acoustics, is intimacy of sound or presence. He says, “…a hall can have ‘acoustical intimacy’ if

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sounds seem to originate from nearby surfaces.” He uses “initial-time-delay gap,” as a measurement of this quality. He defines this as, “…the time of arrival at a listener’s ear of the first reflection minus the time of arrival of the direct sound…” He says that, “The most successful halls have initial-time-delay gaps, at mid-main floor, of approximately 20 milliseconds. In the poorest halls, the initial-time-delay gaps exceed 70 milliseconds.”

Additionally, J. Christopher Jaffe, another highly regarded acoustical consultant, asserts, “The hall must be narrow, with a width that does not exceed 90 feet wall-to-wall, in order to provide the proper initial time delay gap of less than 20 to 30 milliseconds.” This helps to “provide clarity, intimacy, transparency, and presence.” The Philadelphia Orchestra’s Academy of Music and Verizon Hall have widths of 58 and 84 feet respectively.

What adjustments are made in the playing of the Philadelphia Orchestra percussion section when considering the aspect of intimacy?

AA: Okay, so where we could get by with medium size sticks in order to get a nice light flavor in the Academy of Music, I never ever when I’m playing triangle go there. I’m either using almost the heaviest Japan Percussion Center triangle beater or sometimes I’m into the heavier Stoessels.

TB: Say if a hall is not very clear or intimate, how would your playing change?

AA: Well, if it’s not intimate then you’re thinking while you’re playing that you’re trying to project the sound. And if it’s more intimate you don’t have to think of projecting so much. That has to do with volume levels and so on and so forth.

TB: How are mallet choice and technique taken into account depending on the reverberation time or liveliness of a hall?

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291 Ibid.

292 Ibid., 30-31.


294 Ibid., 53.

AA: In the Academy, often times you try to play as slow motion as possible to get a nice fat sound. And if you do that in Verizon, then it’s too washy so you have to play with much quicker strokes in Verizon.

TB: How do you adjust decay times of instruments such as timpani, cymbals, and triangle depending on how resonant a hall is?

AA: The only thing you can do is play the biggest sound if that’s what you’re after and then with the decay sound, just taper it down.

TB: How do you achieve more warmth (lower frequencies brought out) of sound in the Philadelphia tradition?

AA: Again, slower strokes and softer sticks.

TB: How would you play differently with a sound reflecting shell than without?

AA: That was one of the problems of the Academy of Music because all the surfaces were rounded, which projects the highs. We talked about the wave length of a bass drum being fifty feet long. With Verizon Hall, I dealt with acousticians and they say that the ideal shape is sort of like the Vereinssaal in Vienna. That’s smaller than Boston Symphony Hall for instance, but ideally it’s a shoebox shape, because the sound as it goes out hits one side and then bounces to the other side. And then hits this side and bounces, so as those bouncings hit your ears it adds a kind of warmth and resonance to the sound. Now if you have a fan shaped hall, which a lot of theaters are, that’s the worst thing for acoustics because it just goes out and that’s it. But with this, if it bounces back and forth that gives you resonance and warmth. So you can put that in your little epistle, it came from high end acousticians.

(Laughs)

SNARE DRUM

TB: Great. Okay, so we can move on to the instruments themselves. We can start with snare drum. So, in general, where on the head do you prefer to play when playing pp, p, and mp?

AA: So in general, for pianissimo, you’re going to be one quarter to one half an inch away from the edge. Piano maybe an inch or three quarters of an inch. Mezzo piano, it depends on the response of the drum, the size of the drum, so if it’s a 13, everything is going to be reduced and if it’s basically a soft drum to start with you’re rarely going to be moving in. Now if you’re going to be playing in the orchestra with a 6 and a half, because you have so many things that are going on and not much chance to change drums easily, then you’re going to try to do all of this on a 6 and a half, which is the way it used to be. Everybody played everything on a 6 and a half. More and more we’ve gone to smaller sizes to 5, to 4, to 3 for different situations. But then, if you’re playing an
audition, everything is going to be reduced in overall volume and you’re going to be playing really soft stuff on a 3 or a 4 inch drum. And you’re not going to have to go to an audition with one drum and play all the soft stuff on a 6 and a half, which is the way it used to be.

TB: And could you describe your soft playing technique and what muscles you think about using?

AA: It depends. Now if I’m trying to get a really light quality, then I’ll be using a finger pivot and a wrist pivot. If I’m trying to play softly, but it’s a heavy duty piece with heavy orchestration and a certain big characteristic, Russian military music or whatever, then I’m going to start using arm. And then if it’s not rolls, it can be a pivot at the elbow.

TB: So more forearm in that situation then.

AA: Right, sometimes you’ll pivot middle of the forearm. Sometimes you’ll pivot at the elbow, but if it’s going to be rolls, you can’t pivot at the elbow.

TB: Okay, and what do you think the ideal height of the drum should be in relation to the player’s torso or waist?

AA: Just below belt buckle. You want it high enough.

TB: And you want your arms pretty much level (to the drum)?

AA: Yes, if it’s too low then you’re going to straight arm and you don’t have a bend, so you have to have a bent arm.

TB: So what angle, if we’re talking even more specifically off the ground.

AA: Well, Chris Deviney sometimes likes to have his hands high and the stick tips low if you’ve got to play quietly and play it at an angle. So when the stick hits at an angle it’s not as loud as if it hits directly. So that’s an element too that you’re going to use more for auditions, although occasionally in the orchestra.

TB: Okay, and you mentioned your instrument preferences for snare drum, such as the sizes. More specifically, what brands do you recommend to players nowadays, or what brands have worked well for you?

AA: Well what was interesting, when I was at Oberlin (summer 2015), Mike Rosen has a huge collection of snare drums and he has Charlie Owen’s Black Beauty, a Ludwig Black Beauty. And so, when I did my snare drum clinic, I had a whole bunch of them out and I played different things on all of them so the kids could hear the differences. He has a Lang Percussion, he had a couple of Leedy’s there, he had other brands that were around for years and the drums of really important older players, now retired, many have passed. But, once my Premier, I stopped playing it towards the end of my time at the orchestra,
partly because it had been knocked over enough times and was beginning to get out of round and I put at least four different snare strainers on it because I kept wearing them out with so much use. So, I just automatically at that point went to the Pearl Philharmonic. So I own a 6 and a half and a 5.

TB: What kind of shells do they have?

AA: They’re both aluminum.

TB: Oh okay.

AA: And I’ve sort of stayed away from wood. I don’t think it’s that important. Basically, all the drums that I’ve played over the years have had metal shells. All of them. And then some people, you know, they prefer cherry, they prefer maple, they prefer this, whatever. I don’t necessarily hear all the differences and the differences that are there, to me are not that important.

TB: And could you describe the technique you generally use to play strokes at forte and fortissimo and where on the head.

AA: If it’s going to be a very free flowing kind of pattern that you’re playing, then I’m going to be using much more wrist. If it’s something that needs to have weight and character, then I’m going to use more arm. And if I need to be doing dynamic changes quickly, crescendo, diminuendos, sudden changes, whatever, it’s far easier to control with more skin on the stick and not loose and then some arm.

TB: And where is your ideal forte, fortissimo, beating spot on the head, if there is one.

AA: It depends on what I want, if I’m looking for a darker sound, I play more towards the center. If I want to play loud, but I want to get more highs, I play in between. So, I just don’t like the idea of “this is my spot for everything that’s mezzo forte.” It depends on what the character is and what I’m after.

TB: Could you describe the sound of your snare drum roll?

AA: The whole idea of my roll is to get a long sound. And it’s not that I’m playing a snare drum and I’m trying to play three per hand or whatever, I’m trying to play if depending upon the speed and the density and all those different things, I’m trying to play a sound that’s a continuous sound. And if it’s soft, I’m going to be playing slower and with more density. If it’s loud, I’m going to be playing faster with less density.

TB: Could you describe your snare drum roll technique as far as the mechanics of it?

AA: The mechanics of it is, if I’m playing soft to mezzo piano maybe even mezzo forte I can play a soft roll using my wrist. But as soon as I try to get louder then it’s “beaty” and does not work and at that point now you have to have the pivot point between the
shoulder and the middle of the forearm, which means you do this (Demonstrates the pivot motion). So then when you’re learning to get the track established you exaggerate, you don’t sound good, you’re just trying to get the track. Then once you got the track, when I’m playing a really loud roll, you can see this is going, but it’s not going like this (it’s not exaggerated anymore). So there are times if I’m going to be playing a really soft roll crescendo to a loud roll, then I’m going to use this track even when it’s quiet. And there are other times when I’ll use the track even when it’s quiet because it’s got just a little bit more meat on it than the wrist.

TB: And as far as stick heights are you keeping that in your thought process?

AA: I should have a tape loop that I should use for almost every student, that I’ve used for almost every student, “Your sticks are too high!” So you want to roll with your sticks tips as low as it’s possible to roll and then you’re going to get further away from having “beatiness”.

TB: Are there situations where you would play a more dense roll at fortissimo and a more open roll at that same dynamic?

AA: There may be some very unusual ones, I just tend to play a roll.

TB: How does one go about practicing a good roll? What exercises are helpful?

AA: Well like I’ve mentioned you work really hard at establishing the track even though things sound bad. Then once that’s established then you reduce it. And then you’re going to take one stick and you’re going to try to do three, four, five six, in density. And then you’re going to do the other one and change the densities and then sometimes that changes the dynamic levels as well, then you put them together. Then if you pull the sticks to you, then it tends to be more “beaty” than if they’re going straight up and down. Then it’s less “beaty” if you’re pushing forward slightly, where you’re trying to cushion the attack and make it crescendo.

TB: There are many pieces where the snare drummer must play at p and pp, but the orchestration varies greatly. Two pieces that are both written at the soft end of the dynamic spectrum are the first movement of Prokofiev’s Lt. Kije and the second movement at rehearsal #37 from his 5th Symphony. Could you describe how you would play these two parts differently within the orchestra?

AA: So basically you are going to play an audition and you're going to have your smallest drum there. A few years ago I was at Tanglewood and the conductor insisted that this be played on a field drum (for Lt. Kije) and that's with a small orchestra of Tanglewood fellows. And so that's the complete opposite of what you would tend to do trying to play an audition. So, I also remember Charlie playing this and recording it, Mickey playing it and the grace notes were closed and the trends that are out there if you get feedback from various auditions, so on so forth is that the grace notes need to be open. So I try to send people in playing the grace notes open.
TB: As far as playing ruffs in say *Lt. Kije* at rehearsal 1 for instance, versus his 5th Symphony, at number 37 where the 3/4 ruffs are where there is more dense orchestration with the violas, could you describe how you play these differently?

AA: Once you start the spacing, which could be closed and I've played it closed years ago, but then more recently I'm thinking of playing it a little more open but it's not as open as *Kije*. And then what so often happens is you play the four stroke ruff neatly open and then you get to the three stroke ruff and everybody crushes it and that should be proportionate, so that shouldn't be crushed. Then it gets louder especially in the orchestra, but then you know once it's at *mezzo piano* then all of a sudden here you are at *mezzo forte* with no *crescendo*, so I recommend that before you get there you make a *crescendo* into that. You add it, it's not written.

TB: So from the get go in here where it's marked *pianissimo* at 37 you would play that basically…

AA: With a French ruff and somewhat open.

TB: And louder than say the *pianissimo* in *Lt. Kije* because of the different orchestration?

AA: Yes.

TB: How, as far as soft playing in extreme cases such as *Bolero*, what has been your experience as far as playing dynamic levels? Would it be much much softer than playing *Kije* in the orchestra?

AA: Yes, but then for an audition you're going to play it so soft they have to strain to hear it. But playing in the orchestra hall, depending upon the size of the hall and all of that and where you put the drum, we in the Academy, we put the drum forward into the bass clarinet area. In Verizon, we don't have to put the drum forward because you're far enough forward already. Some people would do this on a smaller drum and then when the other drum comes in then you change drums. Definitely that's the case with Shostakovich 7. So we did it a couple years ago and Chris used his 3 by 13 to start, then when I came in with a second drum, which was a Septembre drum, then he played on his Septembre drum. So I played on Tony’s Septembre drum, he played on his Septembre drum, and then when Dave Nelson came in, he played on Angie’s Septembre drum. So we had all three drums the same. And the conductor wanted us separated and he could tell immediately it wasn't going to work because he made as fast of an *accelerando* with this thing as I’ve ever heard. It started (He sings the rhythm from movement I at quarter=128. See Example C). By the time we finished it was (he sings the same rhythm at quarter=193). That’s a big *accelerando*. And so Dave and I had to hang onto whatever Chris was going to do depending upon he was trying to follow the increase that the conductor was doing. We weren't paying any attention to that, we were just paying attention to what he's doing in order to stay together.
TB: Could you describe the Philadelphia Orchestra percussion section’s phrasing traditions throughout the third movement of Scheherazade?

AA: The traditions here have been to play it straight. So you play the first measure (at letter D) with a little dip at the end. The second measure with a little dip at the end. Then the next four here (ppp). Then the fifth slightly up. Six, seven, eight (each progressively louder). Now Buster Bailey, got the idea playing (sings a seven stroke roll with a crescendo peaking at beat four then doing a decrescendo back down on the eighth notes on beats 5 and 6) and it’s out there and some places when you go to play an audition you better play it that way. So if it’s possible when people go out to do this, if they have a chance to say something to the monitor, “Do you want the Buster Bailey approach or do you [want it phrased straight] ...?” Right away. I still prefer straight, because I get seasick with the Buster Bailey [phrasing] (he sings the hairpin phrasing a couple of times), over and over again. Also, if you have a strong clarinet player who is now on 5, 6 (sings a crescendo through beats 5 and 6) you’re making a phrase crescendo on 5, 6 right? What does Buster Bailey do? He’s making a diminuendo on 5, 6.

TB: What sticks and instrument would you use in the third movement?

AA: So, for this I would’ve been playing it on my 4 inch drum. It’s possible in the orchestra, I think that’s maybe best, although you could play a 3 [inch drum]. I played this with Pittsburgh several years ago and Andy played with small sticks on a 12 inch drum (12 inch diameter). It might have been even smaller than 12, which was deep but small this way and that’s a pretty live hall and it was fine.

TB: And as far as sticks you would probably go with a smaller bead?

AA: For sticks, you know the small orchestral of Freer and the next one works for some things and I like the next one when you’re playing Delécluse etudes.

TB: Many players have a difficult time playing soft and consistently accurate double strokes from letter D-E. What do you suggest to students in order to improve their soft double strokes?

AA: Okay, first of all, don’t start part way in and then work your way over to the edge. At the very beginning, you’re at the very edge. Then in order to get the doubles to work you have to have a certain height or they’re not going to bounce. So you lift them as high as you can to get the bounce, but no higher than necessary.

TB: Could you describe the length and density you desire for the ruffs after letter F?

AA: They’re very short. Why? Because all the woodwinds are playing very staccato (Sings the woodwind line). So you want to know what sticking? You want to do a double paradiddle? The reason I wouldn’t do a double paradiddle is because it has a
certain lilt and what are the woodwinds doing? They’re single tonguing, so you single
tongue. If anybody asks you why, that’s why you’re doing it.

TB: At letter P in the 4th movement of *Scheherazade*, some players prefer to open their
ruffs and some like to close their ruffs.

AA: So you need to be able to do it in case that’s what somebody wants to hear. But
what I hear in the orchestra, I don’t hear any Russian military that would indicate a rough
cut military. So I’m playing closed ruffs; the ones that I would think fit in with what the
orchestra sounds like.

TB: In a major difference here, back to ruffs, for instance the loud ruffs in Shostakovich
Symphony 11 after rehearsal number 39 and at rehearsal 84 in the second movement,
how would you describe those as being different?

AA: Because the spacing of the notes are so close together, there is no time to get
alternate four stroke ruffs in there. It may technically be possible if you’ve got great
technique, but why do it? So, you’re going to play a three stroke ruff, but you’re going to
try to make a crescendo, so that it’s not (sings a flatly phrased ruff), but it’s (sings the
pattern at rehearsal 39 implementing a crescendo within the ornamented notes leading to
the main note). And the same thing on those eighty bars at 84 (he sings the part). Those
are fake ruffs. Fake four strokes.

TB: And you play those with your dominant hand?

AA: I play the grace notes with my dominant.

TB: In music written by French composers, such as Ravel’s *Alborada del Gracioso*, how
do you play ruffs differently as compared to the preceding examples?

AA: It all depends on the space of it. So this is all flams here (referring to the 9/8
passage after rehearsal number 3 in Ravel’s *Alborada del Gracioso*). Now this (sings
passage after rehearsal 9), because everything is so staccato here, I don’t want to hear a
“ba-da-bum” (meaning he does not want to hear every stroke very open in the three
stroke ruffs), so those are closed because of what’s going on around you. Then these
(referring to four stroke ruffs at rehearsal number 24), because they are syncopated (sings
them), those have to be super closed, super super closed.

TB: Do you automatically think that for French composers’ music? More closed in
general?

AA: *Petrushka* is another. That’s not French. So it’s where it is, if it’s syncopated and
it’s got to be (sings quick syncopated example in 3/8 with an eighth note on the first beat
and then a quick ruff on the second eighth note), it can’t be making a rhythm. It’s
completely out of context with everybody else.
TB: How does your technique change from playing *forte* and *fortissimo* in works such as Shostakovich’s 10th and 11th Symphonies as compared to how you would play in Rimsky-Korsakov’s *Capriccio Espagnol* or *Scheherazade*?

AA: Okay, well number one, if you’re thinking about the second movement (of Shostakovich’s 10th Symphony. He sings the ending snare drum part beginning at rehearsal number 98) it’s intense. At the very end it’s loud and it says *forte*, but you’ve got the whole orchestra playing the first eighth note and the last eighth note in the measure. It’s going to be out there. So then once you’re at this dynamic level, as far as your kinesthetic motion, it needs to reflect what’s going on. So now you play this far and you go (sings the ruff one bar after rehearsal number 99 in the second movement) and then you put your sticks down at rest, and then you’ve got to get them back up to play (sings starting at four bars after rehearsal 99), you put them down. You lose the whole spell. You’ll lose the whole character because of what you do in between. So now you’re going to play (sings the ruff 1 bar after rehearsal 99) and you’re going to keep your sticks right up there, and then (sings starting at four bars after rehearsal 99) you’re going to keep them up there. Does that make sense?

TB: Yeah. So generally, heavier than say a Rimsky-Korsakov snare drum part.

AA: Yeah, yeah.

TB: What would be your instrument preferences in these works such as in the fourth movement of *Scheherazade* or Shostakovich’s 10th or 11th Symphonies?

AA: Okay, if you’re playing for an audition, you could use a five (inch depth), but you’re better off with a six and a half for Shostakovich. Then for the *Scheherazade* you could use a five in an audition, but when you go to play it with the orchestra with all the thick orchestration and whatever, six and a half is way way better. So I mean that happened this year, and I went to the dress rehearsal and this person had a five inch drum and I guess didn’t own a six and a half. So I got my six and a half inch drum to him, my own, for the concert.

TB: How would you describe the differences in the characters between the two types of loud playing in *Scheherazade* versus Shostakovich 10?

AA: The intensity of the Shostakovich is really really heavy duty, and you’re much more soloistic and when you’re playing this part in *Scheherazade*, you’re a part of the group, much more part of the group.

TB: How does the character of playing Ravel’s *Alborada* or *La Valse* compare to the fourth movement of *Scheherazade*?

AA: *La Valse* is (sings the main quarter, eighth rest, eighth note to a quarter rhythm in 3/8) getting off the drum. *Scheherazade* is not getting off the drum as much. Where’s the *Alborada* again, so (sings rhythm two bars after rehearsal 3) pretty normal. Then this
(five measures after rehearsal 9), very soft and very closed. Okay, then this (rehearsal 21), big drum, definitely. You could play this on a five (rehearsal 4 up to rehearsal 17), definitely that on a six and a half (rehearsal 21). Then when you get to this part that’s with the trumpets and horns (3 bars after rehearsal 26), it says fortissimo but it’s not full orchestra so you take it down a little bit. Then in order to get more highs to match, you get away from the center. It says two f’s, “yeah gotta play near the center.” No, you play half way over to the edge. You can play loudly there. Who says you can’t? But when you do, you get more highs.

TB: And what are you thinking about as far as intensity of stroke there?

AA: I’m not trying to think of accents the way they’ve been put in there. It’s just (sings the rhythm at three bars after 26 without accents). And so what are the brass players doing there? They’re triple tonguing. They’re not knocking themselves out to play accents. They’re just trying to get all the triple tongues in.

TB: When do you decide on single hand sticking versus alternating sticking? For instance, at letter N in the fourth movement of Scheherazade…

AA: Right, if the tempo is slow enough, you’re not going to try to play that with two hands. If it’s going at 210 (bpm to the eighth note), then you have to play it with two hands. But if it’s closer to 170 to 180, you can do it [with] one hand and why do one hand? Because it’s not tick-tock tick-tock. It’s all tick-tick-tick-tick-tick-tick-tick-tick. So whenever you can in orchestral music, you’re going to play one-handed as often as possible, for me.

TB: Okay, and some more technical stuff. Do you prefer calf or plastic heads?

AA: I prefer a great calf head. But now that I’m not playing on a regular basis on snare drum, I’m not going to go through the routine that you have to go through with calf where you loosen the head, you have to tighten it back up, so on so forth.

TB: And what’s your tuning preference say for a five inch Pearl Philharmonic?

AA: Okay, so some people turn it up to a B. To me, that’s way too tight. So what’s actually physically going on? You’ve got a head that’s vibrating. The tighter it is, the less the vibration. And what do those vibrations do? They activate the snares, so if you have the head really tight and the snares really tight, it’s not going to be anything. So you’re better off to shoot for an A, maybe once in a while you’ll go for a Bb. There are times when I go for a G when I’m playing in a big orchestra piece and I want a big full bodied sound. I don’t want a higher thing cutting through. I want a fuller bodied sound, so I go for a G. Whoever heard of that in playing auditions? So too many people come into lessons cranked up to a B and the snares too tight.

TB: And in the orchestra do you use the same amount of muting as you would, say for an audition scenario?
AA: No you don’t have to do as much muting in the orchestra because it’s absorbed by the overall sound. Doesn’t ring free, you still have it muted some, but you don’t do it as much as you do for an audition.

TB: And say for a three inch piccolo drum, what would be your tuning note for the head?

AA: That again, as close to an A.

BASS DRUM

TB: Okay, well that wraps up snare drum. Could you describe your general approach to playing bass drum? For example, where on the head do you generally play? What’s a good set of mallets? And your techniques and so forth?

AA: Okay, so the most general playing spot is three inches above the center and then you can go higher than that depending upon what you need to do if your bass drum is vertical. And then we talked about the mallets before like the steel shaft and all of those things, plus some specialized ones. The long rattan shaft that you use where it says wood stick in the Miraculous Mandarin and the two tone sticks that Freer makes and others for Mahler 3 and other things; plus some really hard staccato sticks that would be like rollers, but with just one layer of felt on them besides the generals; plus using a lamb’s wool muffler in your left hand. And I usually am thinking about getting the sound out and there are times when I’m coming from pretty far away for big notes, but much of the time I’m thinking about having my hand almost on the head before I play and the end of the handle almost on the head and then rolling it off. And then not doing the same thing every time, trying to get a good sound, but then finishing up in the follow through in a lot of different ways so it’s not exactly the same look every every every time.

TB: And is that primarily all arm or is wrist incorporated?

AA: There is some wrist, but there is a lot of arm. And especially with these heavy sticks, you don’t want to sprain your wrist because of trying to do too much there, you’re going to use a lot of arm motion.

TB: And what is your recommended instrument for bass drum and its measurements?

AA: I like the Reamer drum, which is 36 by 20. There are a couple of orchestras that have 36 by 22, which is great if you can afford it, but then when you turn it flat, it puts the drum up quite a bit higher when you want to play flat. But the typical Ludwig would have been 36 by 16 and 20 is much better; 22 you could possibly go to. And my stand.

TB: What do you look for when tuning a bass drum?

AA: First of all, it’s best if you can, to have at least a skin head on one side and you’ll have it low enough so that it’s just sort of uncontrollable loose, then you’ll tighten it up
so that it’s at a controllable tightness and if it’s too tight, then you start to get pitch. And the other head is slightly less tight than the playing head.

TB: Are there times where it is necessary to tune it lower or higher than you normally would in different halls?

AA: Based on the different halls, I don’t really go there for that because it’s not about pitch.

TB: Could you describe your beating spot preferences for the fourth movement of Tchaikovsky’s 4th symphony from 272-end?

AA: So the beating spot doesn’t really change, but the stroke speed does. So these even though, they’re some distance away and you can count on the tempo being the same, I still don’t go too far away for those first three (Starting at 272).

TB: So you’re talking about three inches above center.

AA: Yes. So the beating spot is going to remain the same. Then for this, I would use a staccato stick. Staccato or ultra-staccato depending upon what the humidity is in the air and so on and so forth. But then, I’m going to be really close. I’m always coming off, but it’s going to be a very short stroke (starting at measure 275). All of them. Very quick, short, and starting close and coming away, and not coming in like this (motions coming in from farther away). It’s always upstroke.

TB: And how would you handle the muffling throughout?

AA: Knee on, mitt on, then when you get here (measure 290), I take the muffler off all the way, little by little (sings how the quarter notes become less and less dampened as you take the muffler off).

TB: Could you describe ideal bass drum roll beating spots as well as roll stroke speed for softer passages such as at rehearsal 1 of Mahler’s Symphony No. 3?

AA: So usually stroke speed is really too slow and so it needs to be a faster roll than most people think it needs to be in order to get the intensity that should be there. And I don’t like to play, when I’m playing the roll, too close to the center. So, if you can imagine that this is the bass drum, I’m not going to be playing here, I’m going to be playing a roll more here (demonstrated in Mr. Abel’s technique video).

TB: Okay, so mirroring each other from the center.

AA: From center to the edge, just a slight bit closer to the rim than towards the center. Some people play it flat and then put a towel down and lift it off and that’s complicated. Just did this in Houston with Matt Strauss playing bass drum, and he wanted to do these one hand; the conductor wanted them quicker and then sort of pushed the quicker early
on and then as the orchestra came in it relaxed and was almost possible to do it one hand, but once he had already started that way he didn’t want to have the conductor see him change. So the roll here for the first part (rehearsal no. 1) would be like here. Then this is where you’re going to play right in the dead center with the white (solo passage with four eighth notes and a quarter note triplet using two toned bass drum mallets. White half of mallet is softer and the green half is harder in this context), then roll again.

TB: Then you move your mallets back out to those same spots (as before).

AA: Yep and then you come back for the end to here and then you turn the sticks over to the green or the harder for the (sings grace notes into main note). And for auditions, if you can get by with it, it’s easier to do this with one hand than to try to do it with two, and make sure that you’re so close to the center that it really works.

TB: And how would you phrase this (the bass drum solo passage with the eighths and quarter note triplet)?

AA: So it’s just pretty straight (He sings it phrased straight continued into the roll). Then this one is a little different because you have to stop that roll and then (sings grace notes).

TB: Where on the head would you play for louder roll passages? Is it the same further into the piece (looking at 7 measures before rehearsal number 29)?

AA: And so you start at the edge and the louder you get the more you move towards the center, but you don’t really get to the center.

TB: And how does your stroke speed change when you get louder?

AA: You’re slower when it’s soft, but fast enough so that you don’t hear beats and then you get faster as you get louder.

TB: But at the beginning you said you maintain a quick roll speed for this soft one (roll) though, in this instance?

AA: Just quick enough so that it doesn’t sound nervous, but it doesn’t sound (sings a roll speed that is too slow and sounds “beaty”).

TB: How would the rolls in Mahler 3 differ from those in the first movement of Respighi’s Feste Romane?

AA: Big, big difference. So because of the loud rolls in this (first movement of Feste Romane), the drum is flat. Then these rolls, you start at the edge and move in and you’re closer to the middle. So your rolls now are going to be here when it’s loud. Actually make them straight across, more centered. So then, stick choices, you’re going to go to the ultra-ultra staccato for that part after the Andante (sings the figures with the first two
partials of the 16th note triplets). And more of the same through them (before and after rehearsal number 4). Then those are regular roll sticks there (forte rolls after the *Piu mosso*). Then at 5 the really hard one layer rollers (Sings the 16th note triplet figure. Uses one layer of felt on Reamer rollers). Then you get a second player to play these loud rolls (at rehearsal 6) so that that player can muffle right before the (sings the eighth note triplets 3 bars before rehearsal 7) starts and then the first player then plays that with the single layered roll sticks (sings the eighth note triplets 3 measures before rehearsal 7) and plays it all through while the other person muffles. So that gets away completely from having one guy struggle, which I did when this got recorded. We got five or six other people sitting there, so you bring one up and have them play the loud rolls and muffle.

TB: Could you discuss your mallet preference for the end of the first part of *The Rite of Spring*?

AA: Some people use light wood, some people use the Gaugers, and I like rubber tubing that’s on ¾” aluminum tube.

TB: Would you use the same mallet for an audition that you would for performance in the orchestra?

AA: Yes.

TB: Where on the head do you play for this excerpt and how do you handle the muffling throughout?

AA: Okay, so the muffling is you have it right in front of you so the muffler is going to be here (see diagram) and then when you get to the very end of this, then you’re going to lift it off (sings the quarter notes two after rehearsal 78). Then you use two sticks for the last four or five notes.

TB: What is the role of the bass drummer when playing in unison with timpani in passages such as the endings of Shostakovich’s Symphony 5, Tchaikovsky’s Symphony 4, and Berlioz’s *Symphonie Fantastique*? (What balance should be maintained at these moments and does the bass drummer need to worry about overpowering the timpanist’s sound? Is it always important to hear the timpanist’s pitch over the sound of the bass drum?)

AA: Okay, you stay out of the way somewhat so that you can hear some pitch, but then when it gets dramatic enough, the heck with the timpani player, you just have to boom it out there. (Laughs) So it’s important to hear the timpanist’s pitch over the sound of the bass drum, but not always.
TIMPANI

TB: Okay. That wraps that up for bass drum. What general technique do you prefer for timpani?

AA: Several. You’ve got the Duff, which is thumbs up and quick strokes up and including rolls and whatever and it works. Once it gets really loud, though it gets really edgy. And then Severance Hall, you never have to play so loudly that that edginess comes through. But in other places that’s when I turn the hands over and do this because there’s more give. This is more rigid (Duff). This has more give (turning hands over). And then you’re thinking about off the head, you’re not trying to play in, you’re playing off the head.

TB: Did Fred Hinger and Gerry Carlyss influence your timpani playing?

AA: Yes, definitely.

TB: And are their techniques and sound concepts continued today?

AA: Yes, they are. Don Liuzzi carries them on plus his own ideas and so there’s a wide spectrum of sounds characters, stick choices, so on.

TB: What sounds does the timpanist convey within classical period works such as Mozart Opera Overtures or Symphonies?

AA: I mean some people, who are very severe, have people [playing works] from the Baroque era still use wooden sticks, which bothers me because you get these goat skin small headed drums with wooden sticks that sound pretty terrible, but you’re using modern instruments from the clarinets, all the woodwinds, and of course the strings are ancient instruments to start with from the 1700s (Chuckles). So even so, I would say for Mozart it’s a smaller orchestra, so you need a much more pointed sound so you’re going to use harder sticks even if they’re felt and you’re going to play with quicker upstrokes than you would for heavy duty Beethoven. Quicker upstrokes. Then also you’re going to play closer to the edge of the drum to get a lighter sound.

TB: So in Philadelphia have they used smaller sized drums to match the era?

AA: No.

TB: How would fortés and fortissimos in a Tchaikovsky Symphony compare to those written in a Beethoven Symphony?

AA: Okay in the 9th, what you’re going to do there is much closer to what Tchaikovsky sounds would be. But definitely not at all in 1, 3, 4, even 5 has a lighter quality. 6 is just lots of rolls. 7, you’re getting closer to what happens here and 8 before you’re really almost Tchaikovsky-like in this.
TB: Do you have exercises that have helped students improve pedaling technique on timpani for pieces such as Bartok’s *Concerto for Orchestra* or the suite from Strauss’ *Der Rosenkavalier*?

AA: Stan Leonard has a couple of books out on pedaling. He’s got a lot of books and compositions so you should go on his website. He’s got things where you’re actually playing string bass parts, where you just pretty much learn to know where to go for the note.

**TAMBOURINE**

TB: Okay, so that wraps up timpani. Moving onto tambourine. Could you describe the technique of your tambourine shake rolls?

AA: So you can do a twist and then you can move the whole hand. Some people like, because they’re faster, they kind of made this as their major part (twist motion). If you get too loud it tends to go too slow and then you hear beats. So if you can combine the two, that’s the fullest and I’m into the idea now that if you have big tambourine rolls. Two of them.

TB: Both using the combined motions?

AA: Yep. Then if you have to end it, together, carefully or you can end it on a padded table.

TB: When do you use hand to knee technique vs. playing quick rhythms up?

AA: You play quick rhythms up, up to a point, then if you’re going to be playing with a conductor who might have had too much coffee before the concert and goes faster and you’ve done this and you can’t make it, then you get stuck. So if they’re pretty fast rhythms already and you’re not sure, then you should be able to do it either way and then sensing what the conductor’s going to do. If he’s, you know, too caffeinated, then you’re going to do this (hand to knee).

TB: Like in *Carnival Overture* at the recap of the beginning. Maybe you prefer that?

AA: So now if you’re in a real ringy hall, then playing all one hand tends to blur because there’s so much ring they blur. Now if you get a slightly different sound between knee fist, that helps to get the rhythm to come through, so in a really ringy hall, that’s what you’re going to do. So that’s what Boston Symphony does and they’re in a ringy hall. One time we played at Tanglewood with the orchestra, bunch of years ago. I think one time we were there, I’m playing tambourine and I’m playing it up in the air. They couldn’t believe that I could go that fast, but I’m playing it up in the air because it’s not a resonant place and all the notes came through.
TB: Which sounds have conductors preferred in your experience as far as hand to knee or up for quicker passages? Has that come up ever?

AA: Nobody’s ever said anything.

TB: Could you describe the techniques you use for playing quicker rhythms up?

AA: You can do this. Part of little finger, thumb, little finger thumb. That approach and then you do most of the moving with the tambourine and then your fist just comes up to beat it. So you’re not trying to hit it with your fist, you’re just pushing the tambourine into the fist going this way and into the fist going that way.

TB: So there is kind of a like a very slight rotation of the other hand too, but not nearly as much as the tambourine?

AA: But you’re not doing an outside rotation with your hand. It’s inside.

TB: What technique do you use from letter T to the end (in Carnival Overture)?

AA: Okay, be able to play it either way. Now the recording that we have used for the tambourine CD is Bernstein at 152 (to the half note), which is really fast. Most people don’t go that fast. So if you control the tempo yourself, go for 140. Then you could do it one hand, but then when you get to W, now that’s fist right in the middle. Solo different kind of a thing.

TB: Could you describe some phrasing suggestions from letter T to the end?

AA: Okay, well when you get to this (sings part from 8 bars before letter U), then you want to get the hemiola quality with the first eighth note brought out, which isn’t what you do otherwise. Then when you get here (Letter U), if you’re with the orchestra you just play them all the same. If you’re by yourself, that gets old, so then you make a slight diminuendo for three bars and a crescendo for three. Then the key to getting this to work (11 bars before the end), is not your hand; it’s all about the after beat. So now you just do the after beat with very very short stroke (sings consecutive short strokes that would be played into the knee as half notes, then sings quarter notes alternating from hand to knee, then as written hand to knee). Then once you’ve got that established then you just throw this in. But you’re leading with the after beat, you’re not leading with the eighth note with your hand.

TB: Say at the end (last two bars) are you just playing one dynamic?

AA: Yes, yes, because you can’t make a crescendo because you’re the soloist suddenly. You’re not going to crescendo into your solo. It’s going to be right there.

TB: With such a large selection of tambourines in today’s market, do you have an ideal model or sound that you look for in a good tambourine?
AA: My first choice would be German silver on the Grover.

TB: How many tambourines do you think a percussionist should have in their audition bag?

AA: You should have the chromium 25 (Black Swamp), which also rolls loud. You should have the other one. You might want to have a small one for little things and possibly two for, not the chromium, but two other Grover types.

TB: Is there anything else you wanted to add about tambourine?

AA: Well, if you’re a sweater then you use bass rosin. If you’re dry when you play then you use wax. Play beginning snare drum books on tambourine. Triangle the same.

TRIANGLE

TB: You had discussed where the design of your triangles evolved from. You mentioned the spindle from one of the former percussionists. At what angle do you strike the triangle for general strokes?

AA: So with the striker, the beater, you’re not going to use more than half an inch of the tip and you get more overtones if you’re [at a] twenty degree angle. This is zero. Twenty degrees (more vertical than horizontal). On the bottom leg (for striking). And I’m pushing the whole idea of a slat, where you hang the triangle and suspend it so that you can play in that same twenty degree angle and with rolls and fast rhythms you still get the overtones that you don’t get when you’re playing inside the triangle.

TB: And what repertoire would you use your four-inch triangle for?

AA: Oh, there’s some notes in the William Tell Overture. There’s a nice quiet passage that it works. Anitra’s Dance, it works and Capriccio Espagnol with the oboe solo playing to the harp. Those are some. Also, the end of the third movement of Scheherazade.

TB: What kinds of repertoire would the 6” symphonic model be most appropriate for?

AA: Just most everything. It’s general purpose. And the Wagner-Mahler is thicker metal and slightly bigger and if you’re looking for a different tone color that’s fine. If you want to have a louder triangle than the regular symphonic, then you go to that.

TB: And you’d already talked about the sounds for playing up versus mount. Are there times when visually you’d prefer something to be played up?

AA: Well, I mean if you’re going to mount it, it’s going to be up high, so it’s seen anyhow. Then most of the time you’re going to have your music stand down low.
TB: What technique do you use to play triangle rolls?

AA: So triangles rolls inside, you’re going to try to hit the bottom leg at more of an angle than you do the side leg because it’ll be too loud otherwise because of gravity. And then you need to make sure it’s a nervous fast roll and not too slow.

TB: And is there anything else you’d like to add before we move onto cymbals?

AA: Actually, if you’re trying to play rhythm and then trying to play (see Example D), you actually leave the beater on the triangle an instant. So instead of coming off, severe down strokes. And that’s on the suspended one.

TB: And that provides a little bit more definition?

AA: Yes.

**CYMBALS**

TB: So for cymbals could you describe your preferred *forte* and *fortissimo* technique used in longer note value crashes?

AA: Well I mean, I kind of use the Podemski approach. That system, where you’re going to do circles or you could do ovals this way or ovals this way. And then some flam, hardly any flam, how much flam should there be? Do you think about them meeting at any particular angle? It’s fine to have angle. Straight up and down is not as good, although if you’re playing, well whatever, there’s going to be some angle. If you get tipped over too far that’s a problem because this cymbal has all the advantage and that one doesn’t.

TB: And you have the bottom edge meeting first?

AA: You can do either way. The bottom edge can meet first or the top edge can meet first.

TB: Technically, how do you execute loud passages that have quicker rhythms such as the ending of Dvorak’s *Scherzo Capriccioso* or the ending of Tchaikovsky’s 4th Symphony?

AA: Okay, so you’re going to be using this great big motion in order to play big loud crashes. And then the quicker the rhythm, the less you want to be so loud that you’re going to cover the whole orchestra. So now it’s going to be smaller circles or it’s just an arc. It’s a part of a circle. Occasionally you play straight in, but not very often. So if you’re playing (sings the quick quarter notes at letter R, *Presto*, at the end of *Scherzo Capriccioso*) then it’s straight in. Then (sings the quick cymbal excerpt from Mussorgsky’s *Night on Bald Mountain*), that one is straight in. But if it’s (sings a
repeating half note-quarter note pattern in 3/4 at 120=dotted half note), there should be a little feeling of arc in there.

TB: Then for these quicker strokes (in Scherzo Capriccioso) you’re just kind of playing straight (8 measures before letter R)?

AA: Yeah, now some people people enlarge those and I think that could be a problem for auditions. So I mean you can slow down a little bit in the audition, but I’d keep making them short. So these are just going to touch (sings starting at 8 measures before letter R), those are straight in. Then R, those are straight in. Then as you get louder, you’re going to try to get this crescendo to be made here (starting at the 10th bar of R up to the 15th bar), that’s going to continue to make a crescendo through those. Then (sings into the following ff crashes), those have to be quick; they can’t be slow motion ones (the dotted half note ff crashes on the 18th and 22nd bar of R). Then these are (sings the next 5 ff quarter note crashes as all being short and dampened on beat 2. The following bar with the two quarter notes is played long-short. Continuing from the bar after that to the end, all the crashes in order are short, short, long, long, long, long, short, short, short, short).

TB: And these short crashes (crashes starting at the 9th bar from the end) would be pretty much direct, straight in?

AA: Just a little bit of arc in them. Not just straight, but a little bit of arc.

TB: And if you want to refer to Tchaikovsky’s Symphony 4 (the ending), that would be kind of a similar straight in technique?

AA: So what makes this easier is that you’re going to try to instead of playing (sings the 8th-8th-quarter rhythm at measure 277 phrased straight), you’re going to make a crescendo (sings the same rhythm with a crescendo) then that’s muffled (the quarter rest). (Sings through the remainder of the passage with muffling through all the quarter rests) Then maybe you want to come down a little bit, go back up (phrased down through measure 283 and back up in 284). Same here (sings 285 coming down a bit in dynamic level and going back up at 286). It could be the same shape both times. (Sings through the following 8ths at 287) Then we talked about this, little circles, right, in the past (the nine 8th notes from 290-292)?

TB: Yes.

AA: So 1, 2, 3, 4, 5, 6, 7, 8, 9 (increasingly larger circles). I did that all with one hand. Now do it with the other one. 1, 2, 3, 4, 5, 6, 7, 8, 9. Then you do them together. 1, 2, 3, 4, 5, 6, 7, 8, 9. And that makes the crescendo built in.

TB: How do you execute soft crashes in Rachmaninoff’s 2nd Piano Concerto? Straight off? How much contact time is there between the cymbals? Immediately off each other or do you leave them together for a short time?
AA: You put them together then you have to take them apart carefully before you start to play. You have a 15” (cymbal) so you play that against the 16. But if the committee’s over there you’re not going to point it this way, you’re going to point it this way (16” facing the committee). So that almost guarantees that it’s going to be softer. Then if you’re thinking about playing every one exactly the same, that’s a killer. So just (sings the first three bars of the part starting at rehearsal 32), you can make the slightest increase there. Then (sings the next four bars), so just the slightest increase takes the onus off of having to play the first one perfectly and everyone the exact same thing.

TB: The old K Zildjians that the Philadelphia Orchestra owns are legendary by themselves. How did the orchestra come into possession of these wonderful instruments and how did they influence your technique?

AA: Yeah, so I don’t know. They’ve been around the orchestra probably from way back. They’re probably at least a hundred years old. The 15’s.

TB: How do you choose your cymbals for a piece? Do you always match and blend with the colors of the orchestra (dark vs. bright), or what variables help you decide on the right cymbal?

AA: I mean that plays into it too. It depends on what kind of speed you’re playing and what you’re after. So it could be that you’re trying to insert your own little character there or you’re trying to do exactly what you hear the orchestra might want to do. And some of that has to do with how quickly you play your notes.

TB: So kind of on the individual player even.

AA: Yes. Now when you’re going to be playing parts like Capriccio or Scheherazade or whatever where you're keeping rhythm a lot of the time, then you’re going to use smaller cymbals so you’re trying to stay as a part of a rhythm, but you're not trying to dominate.

TB: Okay, and say for classical period works such as the Overture from The Abduction from the Seraglio? What would be your choice of cymbals in this piece?

AA: If you can get 14 inch cymbals, great.

TB: Oh, okay. And how does your technique and sound change? Does it change much?

AA: No. You might want just lighter, but quicker strokes.
CASTANETS

TB: If there isn’t anything else you want to add about cymbals we could finish up with castanets. How do you prefer to play castanets within the orchestra?

AA: I like two machines for some things. I’ve got four soft rubber sticks with shortened handles and then play that way. Some people prefer the Epstein or the Black Swamp castanets, but at all times you have to keep remembering that it’s not tick, tick, tick, tick. Castanets came from Spain and the Flamenco dancers held them like this, and they never play tick, tick, tick. It’s always (sings more lush, dense attacks). So you always want the flam feel. So if you have this pattern (see Example E), you’re going to play flam. You form a U between the thumb and middle finger of each hand and play those four digits on the four castanets simultaneously (slightly “flammy”) – two per machine.

TB: So playing double stops a lot.

AA: Yes.

TB: And how do you play the fifth movement of Capriccio Espagnol?

AA: At the last Abel orchestral percussion seminar people played it with the Epstein type castanets. So you get it set up so that you can actually get a roll thing with your finger out there for rebounds. But I would prefer to play on the machines with the sticks.

TB: My last question of the interview is what do you view as the two or three most important achievements throughout your career?

AA: Achievements.

TB: Or attributes.

AA: Well it was an achievement to get the job. It was an achievement to move up and it was an achievement to retire and still be able to play and I’m lucky that still at eighty-six I played the snare drum, the tambourine, the triangle, and the bass drum clinics that I’ve done before at Oberlin. I played them also with the help of Tony on a couple things at the seminar this year. And I’m still able to be with it, my ensemble playing according to Jan is right on. Some people by this time, can’t stay with it, they miss it, whatever, so I’m lucky. My ensemble abilities are still there (laughs). So it was a nice achievement to be able to do the cymbal clinic in Orlando in ’98 and get the hall of fame award. And it was nice that Sabian gave me a lifetime achievement award. And that I got similar things from Philadelphia Orchestra and from Temple. And it was great that Don and Chris primarily and Bob Becker were able to put together my 85th birthday concert.
Follow up Phone Interview with Alan Abel

TB: One of my committee members, Dale Underwood, asked if William D. Revelli was your high school band director as he said he had been the director in Hobart.

AA: No he wasn’t. Revelli was there before I was old enough. Bertram Francis, who ended up in northeast Pennsylvania at a university was there when I started. Then Fred Ebbs was the main guy who went, after he left the high school, back to Baldwin Wallace and then to University of Iowa and then was director of bands at Indiana University, for fifteen years or more.

TB: He was also wondering if Arnald Gabriel was your conductor while you were in the Air Force band at the Sampson Air Force Base.

AA: He was. He wasn’t the one who was there when I first got there but soon after, he became the commanding officer.

Clarifications from the earlier interview

SNARE DRUM

TB: How much softer should one play Scheherazade movement III or Bolero or anything else marked pianissimo or below in an audition vs. in the orchestra?

AA: You’re going to play softer in the audition because they want to test how much control you have at very low dynamic levels. Then depending upon the hall size and the acoustics of the hall, you obviously can play a little bit louder in the orchestra. But that’s all controlled by what the conductor wants.

TB: You had mentioned in the interview that in an audition you would play Bolero so soft that the committee has to strain to hear it. Is this the case for most soft excerpts in auditions or is it just a special case for Bolero?

AA: No, Bolero should be super soft but then if you play it too softly in a concert, people are not going to know that the piece starts.

TB: On snare drum, are there general stick heights you keep in mind when playing ff, f, mf, mp, and p?

AA: That’s too much by case, but generally, if you let your sticks go too high, you can sometimes get behind because they have to move so far from top to bottom, so your rhythm can be slowed down. Also, if you do that all the time then your sound is always the same. There are times when you want more intensity so you have a lower height, but then you move with more speed and energy.
TIMPANI

TB: You had mentioned you sometimes use the Duff technique on timpani and then you prefer mostly to turn your hands over and play.

AA: Not mostly, just sometimes. Sometimes you do that because you want a certain kind of definition, other times you do that because you want more skin on the sticks so that you get a broader sound.

TB: When you turn over, do you play with mostly a wrist stroke? Are there fingers involved?

AA: It’s all of them. It can be wrist, it can be arm to the elbow, if it’s huge it can be arm all the way to the shoulder pivot.

TRIANGLE

TB: I wanted to clarify what angle you strike the triangle at. You said in the interview, “So with the striker, the beater, you’re not going to use more than half an inch of the tip and you get more overtones if you’re [at a] twenty degree angle…”

AA: That’s if your triangle beater is perfectly 90 degrees vertical to start. Then if you move it 20 degrees you get more overtones. The triangle itself is vertical and then if you are going to play 90 degrees you are going to play straight down on it. So now instead of going to 90 you are going to go to 20. You are almost vertical. So, some people think it’s 45 degrees. You get more overtones if it is 20.

TB: You had mentioned that your triangle roll speeds are fast.

AA: Yes it needs to be fast enough so that it sounds like one long sound, just not da-gah, da-gah, da-gah, da-gah.

TB: Are they significantly slower at softer dynamics than at louder dynamics?

AA: Not significantly. It could be a little bit but not much.

TAMBOURINE

TB: When holding the tambourine up to play rhythms, what angle do you keep the tambourine at?

AA: Okay if it’s perfectly horizontal, in line with the floor, then the jingles are going to keep moving. You turn it on somewhat of an angle so that the jingles stop after you’ve played. Now if you turn them even further over all the way, so it’s vertical then they are going to just clang together. But there are times, when you want it to be softer, you run the risk of just being a little bit more legato because it’s built in softer.
TB: Could you describe your knee fist technique for sections like at letter T in Carnival Overture? Where does your hand strike the head and where on the leg do you hit?

AA: For auditions, where you don't want a lot of head sound because they are going to want to hear the jingle sound, then you can play on the wood of the tambourine hitting your leg and then your fingers playing at the edge. And then whatever sound you get from the knee you are going to try to match that with your hands, rather than the other way around. When you are playing with the orchestra where you can use fist, then you may be playing less on the wood and you may actually be striking the head of the tambourine on your knee. But if that’s going to be in the middle then your hand doesn't go into the middle because you don’t get enough jingle sound, so that is still going to be nearer the edge.

TB: When you are striking it against the knee do you strike it right on the bone of the knee or is mostly on the thigh?

AA: Sometimes you can play right on the knee cap. Other times you can play on the softer part of your musculature beyond the knee cap. So more often it’s going to be there rather than right on your knee cap itself.

TB: How do you strike the tambourine with your hand throughout different dynamic levels starting from pp forward?

AA: Okay, if you want to be super super soft, then you are just going to let your middle finger itself strike. Then if you want to be a little bit louder you will use the middle finger but your pivot point will be at the wrist. As you get louder, you take your thumb and you put it into the first joint of the middle finger. If you want to get louder, then you join with the first finger. If you want to get louder, you join with more fingers. And when you are using fist sometimes, you’ll use just the very edge of the knuckles. Sometimes you’ll use the first joint and other times you’ll use the second joint when it’s really loud.

TB: Your beating spot, it probably just changes throughout more to the edge?

AA: Yes, if you’re playing in the orchestra you can get closer to the center. If you’re playing an audition, you hardly ever get in the center.

CYMBALS

TB: For cymbal playing, you had mentioned that it is fine for them to meet at a particular angle. I was wondering if you had a preference for what angle your loud crashes meet at.

AA: It depends. If you want the fullest sound they are going to almost not have an angle. If you are going to be playing in a more vertical oval, then your cymbals are going to be much shallower in the way they come together. If you are looking for a big crunchy
Germanic sound, then you are going to be coming in more from the sides. When you come in from the sides, then you can just kind of hit all of them. But if you do that when you are using the French thin sound, you are going to get a pocket unless you have a little bit more flam.

**GENERAL**

TB: Overall, what is the Philly percussion sound in your mind?

AA: It depends on the character of the music. Sometimes you want incisive things. Other times you want a really broad sound. I can say that we worked more for the broad approach when we were in the Academy of Music where the highs were emphasized and we were looking for a bigger darker sound. Now at Verizon Hall which has much better bass support, now we are focusing more on getting more highs out. It is really dangerous to say this is what you do for everything. It depends on the orchestra you are playing with, the acoustics of the hall, where you are on the stage, and then of course, what the conductor wants you to do.
Interview with Chris Deviney

SNARE DRUM

TB: I want to focus on the percussion techniques you learned from Mr. Abel that you use in your musical career as support for my dissertation on his methods. In my interview with Mr. Abel this past summer, he described how he can play soft snare drum rolls utilizing his wrist up to mp and even mf, but once he gets louder he uses the pivot point between the shoulder and the middle of the forearm technique. He added that he also uses the latter technique when soft to provide a bit more “meat” than the wrist allows. Could you describe your take on these techniques for snare drum rolls?

Chris: He pretty much stressed the arm pivot from the shoulder with me for all of my rolling and all of my snare drum playing really. So, I didn’t necessarily only see it as a loud or soft thing. I saw it as trying to utilize it at all dynamic levels. So basically it’s just a more exaggerated motion due to the increased stick height when you’re in louder dynamics and a more subdued motion when you’re at softer dynamics. But I do feel like that the benefit of that pivot motion has helped me tremendously, because what it does, essentially, is it pushes the workload into the bigger muscles of the arm instead of relying on the smaller wrist and finger muscles, which are more delicate and more subject to injury when you’re talking about practicing long hours.

TB: Right. And is there anyway that you’ve further adapted these techniques?

CD: Well that was not a technique that I was familiar with at all before I came to Temple, so it took me actually quite a long time to feel like I had figured it out. You know, I teach it to my students. Generally, there is a slow learning curve at the beginning. It took me about, I want to say it took me a good ten weeks going in lesson after lesson and you know, asking, “Is this it?” And him saying, “No.” (laughs) You know, it was very frustrating. It was slow. The pace was slow in learning it, but once I got it, it definitely did click and I feel like it’s a huge tool when it comes to endurance and power generally.

TB: And it helps with consistency?

CD: Yes.

TB: Okay. Let’s move onto the second question. Mr. Abel describes the mechanics of his soft playing technique as utilizing a finger and wrist pivot when he’s striving for a really light quality. He says if the music is heavier in orchestration with a big characteristic such as in Russian military music, he will use more pivoting from the middle of the forearm and sometimes pivoting from the elbow to provide more weight. Could you describe how you utilize these techniques when playing soft strokes from mp and below, such as in passages of the 3rd and 4th movement of Scheherazade or Lt. Kije?
CD: Like I said, I didn’t see it as a separation of only the pivot primarily when I’m loud and not a shoulder pivot when I’m soft. I think I basically kind of incorporated it into a pivot that generally works soft or loud. It’s just a matter of to what degree is the motion exaggerated or not.

TB: Okay. So even on just regular strokes you use that technique is what I was wondering.

CD: Yes, because specifically, if you think about something like the fourth movement of Scheherazade, the mezzo forte roll that goes loud then all of a sudden down to really really soft for 18 measures. I’m definitely using mostly the arm pivot during that because I feel more comfortable giving the work load to the big muscles rather than relying on small wrist muscles that I’ve found can easily can give out or can spaz out or can really cause some technical problems with consistency, and I’ve found it to be much more reliable using big muscles with a full arm pivot. So in other words, it sounded like he was saying “well you know when I’m soft I don’t use the full arm pivot, I use a wrist and finger pivot” and I’m actually not saying that.

TB: Okay. And on playing general forte and fortissimo strokes, Mr. Abel said,

If it’s going to be a very free flowing kind of pattern that you’re playing, then I’m going to be using much more wrist. If it’s something that needs to have weight and character, then I’m going to use more arm. And if I need to be doing dynamic changes quickly, crescendo, diminuendos, sudden changes, whatever, it’s far easier to control with more skin on the stick and not loose and then some arm.

Could you describe your technique preferences when playing forte and fortissimo strokes in different situations such as from letter P-R from Scheherazade?

CD: Well, to me, as far as more skin on the stick, I know what he’s talking about. I agree with that, but mostly that refers more to, for me, whether I’m doing a multiple bounce or single stroke. If it’s single stroke, I’m generally putting more fingers, if not all the fingers, on the stick and utilizing that full arm pivot. When it comes to multiple bounce, you can’t have more fingers on the stick or else you’re going to inhibit rebound. So I agree with him that it is kind of a back and forth depending on the part for the control you need and obviously more skin on the stick, he means more fingers wrapped around the stick, you’re going to have more control. But there’s a tipping point where someone’s control actually inhibits rebound versus more rebound inhibits control. So I think finding that right balance was one of the harder things of getting used to his technique and, like I said, it took me a long time to feel like I was comfortable with it. Of course, I wouldn’t consider myself to be someone who picks things up at a rapid pace. I’ve seen other people learn things faster than I usually did.

TB: Okay. And you tend to use both a combination of wrist and arm like he was saying as well?
CD: Yes.

**BASS DRUM**

TB: When playing soft bass drum rolls from the solo passage from Mahler’s 3rd Symphony, Mr. Abel described how he plays a faster roll in order to get the intensity that needs to be there. His beating spots are closer to the edge than the center. What is your technique for soft bass drum strokes and rolls such as in the solo passage from Mahler's 3rd Symphony?

CD: Well, I’ve utilized different things over the years including some things that were not traditionally done here in the orchestra. For instance, I’ve used the Freer dampening system and when I first brought that in, I got more than a couple of looks as to why I was doing that, but you know I wanted to try it out. I thought it was an effective tool. As far as strokes go, yes I agree with him about just because it’s soft doesn’t mean that it’s not intense. So it depends on the character of the music. Like if it’s kind of a sinister nature, then yes I agree with him that even though it might be a soft dynamic, increasing the roll speed can give a certain amount of intensity without it necessarily being any louder. So I definitely utilize that. I would say other than the Freer system, everything I do is basically what’s traditionally been done here in Philly, which is basically an extension of what Abel did because, you know, I think for maybe his first ten years of his career here in Philly, basically all he played was bass drum and triangle. So it makes sense that why he developed the triangle was because he wasn’t happy with what he was using, and why he developed the suspended bass drum stand because he wasn’t happy with the stands that were being made back then. I’m sure you know the story about him and Hinger carrying a bass drum across the stage, right?

TB: Yes.

CD: You know those kind of “aha” moments sometimes lead to interesting devices such as that stand or a different way of doing things. A different way of thinking about it. A different way of hearing things, and so anyway, what I’m getting at, is that what I play bass drum wise is not going to be that far off from what Abel did because he had so many years of doing it and trying different methods and different ideas that what he came up with was something I don’t really think I need to reinvent.

TB: Could you describe the soft bass drum stroke as far as the speed of it and where exactly on the head you strive for?

CD: Yes, it basically is about from the exact center of the head to the rim, I would say it’s about a third of the way from the rim in. And I also play on the top side from the center of the head. But sometimes I’ll actually move my lower mallet, my right hand mallet, down to, I would say more of a—that’s if you’re standing looking down at the drum—it ends up being upper mallet, left hand being somewhere around 8 o’clock and my right hand being somewhere around 4 o’clock. So I will widen that, depending on
whether I’m rolling for longer periods of time, which I think is easier if my hands are spread out like that to roll for longer periods of time than it is to bunch them up at the top of the head and roll like he’s talking about, but I do both.

TB: Say for louder rolls, such as those throughout Mahler’s 3rd Symphony, he said he moves more towards the center than when playing softer rolls. His stroke speed is generally faster in louder dynamics than soft.

You pretty much agree with that I’m sure, but is there any other take you have on that?

CD: No, I agree with all of that.

TB: When playing louder bass drum notes Mr. Abel said he generally plays about 3 inches above the center and then goes higher depending on different situations. He uses a lot of arm. Additionally, he said,

And I usually am thinking about getting the sound out and there are times when I’m coming from pretty far away for big notes, but much of the time I’m thinking about having my hand almost on the head before I play and the end of the handle almost on the head and then rolling it off. And then not doing the same thing every time, trying to get a good sound, but then finishing up in the follow through in a lot of different ways so it’s not exactly the same look every every every time.

What technique do you use for single mf and above bass drum notes?

CD: Well we always have our lamb’s wool mitt on our non-playing hand. Generally, we have the extension so we can put our foot on it and then prop it up with our knee against the drum so we’ve got all aspects of muffling covered if we need to. Not that we would always necessarily use our knee for muffling, but that if for some reason it’s advantageous to do so quickly, then we’re already prepared and set up to assume that. Basically our single notes are more importantly characterized by our mallet choice. We’ve got a lot of mallets. We’ve got a lot of mallets that are double ended with different degrees of hardness on either end and pairs of those too. So sometimes you’ll see whoever is playing bass drum and they might have eight or ten different mallets out there. So that’s pretty much what I think is going to give the biggest difference in the sound characteristic of single notes is mallet choice, in addition to muffling. There’s a lot of arm with single strokes, obviously. Single strokes with Philadelphia bass drum mallets, those mallets are chrome tubing that’s very very heavy and you really cannot use a lot of wrist with a mallet that’s that heavy. You won’t be able to control it and it’ll just flop around uncontrollably, so there really needs to be a concerted effort to incorporate a lot of single arm motion, like if the mallet were one piece of the forearm, like a cast.
CYMBALS

TB: Moving onto cymbals. Mr. Abel described how when he plays softer crashes such as in Rachmaninoff’s 2nd Piano Concerto that he thinks about making very slight increases in the phrasing in order to take the onus off of having to play every note exactly the same, which he said is a killer. What technique do you generally use for soft cymbal crashes in pieces such as Rachmaninoff's 2nd Piano Concerto?

CD: Yes, basically what he is saying is true, that trying to make every note exactly the same is more difficult, and any note that is not exactly the same will obviously stick out more than if you were doing it within some kind of a hair pin type of phrasing. For me, I don’t know that I necessarily deliberately try to make a dynamic phrase in that part, perse, but what I definitely try to do is play softly within what I know is my comfort zone. In other words, I never try to tell myself this has to be as soft as I can play because that’s just a big mind game. I just tell myself to play as comfortably as I can control it and for extremely soft passages like that, we use two different cymbals. We use a suspended 14” that we call a Debussy cymbal and one cymbal of a pair of 14” K’s. So we have kind of a thick cymbal being struck by a very very thin cymbal and just the combination of that is actually pretty wispy, or kind of washy almost, and I think that actually helps with the consistency. The one thing that I do that Abel didn’t talk about there is what he taught me, and also what Charlie Owen always said, which is to look through the cymbals. So you’re holding them only vertically. I never hold them at an angle when I’m playing something that soft or that hard. I literallty hold them directly up and down and look directly through the cymbals. As long as I can see daylight then I know that they’re not touching and I basically use that as a guide to how my stroke will be as far as the dynamic I want. The last thing I feel like is worth saying is that there’s really no substitute for familiarity of cymbals. You know, obviously it’s way harder to play with a pair of cymbals you’ve never picked up before, as in at an audition, than it is a pair of cymbals that you use every week.

TB: Could you describe the contact between the two cymbals?

CD: You know, if I had to describe it somehow that would possibly have any kind of meaning, I think I would say it’s kind of like I’m touching something that’s hot. Maybe like an electric coil burner. I can touch that very quickly and not get burned, but I’m also not just touching it as fast as I possibly can. I’m trying to make some contact and stay on it as long as I can because that’s what’s really going to give me some nice sound that I can control. Otherwise, if I’m just trying to make a really really quick motion and then, like touching a burner as fast I can, then it’s probably going to be louder than the dynamic for the part that I want.

TB: Mr. Abel describes his loud cymbal technique as following the Podemski approach involving circles. Could you describe how you interpret this technique for loud cymbal crashes such as those in Tchaikovsky's 4th Symphony or his Romeo and Juliet Fantasy Overture?
CD: That, to me, that technique is mostly valuable when you’re first really trying to get someone to think about their cymbal technique and maybe even revamp it from the very beginning. I mean it’s a starting point. It’s not necessarily what people end up doing once they get more and more familiar with cymbals. As a matter of fact, Abel does not use that technique. He uses the backwards question mark, which was always kind of funny to me, because it wasn’t until my second year of school when I asked him about even though he’s teaching the circles technique, I said, “Well do you use that?”. And he said, “No.” And I said, “Well, why are you teaching me that?” And he said, “Because it’s a lot easier to explain than a backwards question mark.”

(Laughs)

So in other words he’s teaching something that’s, fundamentally, I think a good technique, but it ultimately is not necessarily going to fit with everyone’s body type with what they feel comfortable slinging these eight pound plates around. It’s going to vary from person to person. In fact, I would say with cymbals, more than any other instrument, cymbals are probably the one instrument that varies more from person to person than any other that I’ve seen. So the Podemski technique is a starting point. It’s a solid starting point. The fundamentals that should be at least looked at and tried, to then eventually decide what you’re going to keep and what you might alter to fit your own personality or what feels comfortable.

TB: For the backwards question mark technique, are both hands doing a backwards question mark?

CD: So, the left hand is actually doing a counterclockwise circle and the right hand is actually doing a clockwise circle. In other words, if you were to start both hands in motion at the same time, it almost would form a heart. If that makes sense. Like a heart that’s kind of sideways.

TB: Okay, that’s great information. Then we can move onto tambourine.

TAMBOURINE

TB: For quick soft tambourine parts such as those found in Chabrier's España, where on the head do you strike and how do you position the tambourine?

CD: For me, Chabrier, I roll up a towel and put it on a flat surface, usually a carpet table. And that basically frees my hands up and keeps me from having to hold the tambourine. But it, in some ways, is a very helpful technique. In one way, it actually makes it harder because I play with the head down and that means that I’ve got a very very quick change at the end to grab it and to be able to then shake it. That’s got to be practiced probably more than any other thing about the excerpt because once you get all the softness down of being able to start it and all that, that still doesn’t solve the problem of how are you going to end up shaking it at the end because you can’t obviously shake it when it’s tilted on a
towel. So, that was to me the hardest part about that technique but I mean he’s the one who told me that. That’s why I did it that way.

TB: Yes, I was taught that as well. Mr. Abel describes how being able to play louder quicker rhythms up is a useful skill, but it can be more blurry rhythmically especially in livelier halls than the slightly different sounds achieved using knee to fist technique. He uses either technique depending on a hall’s clarity throughout quicker passages in a piece such as Carnival Overture. What techniques do you prefer to use when playing louder rhythmically quick passages such as those found throughout Carnival Overture?

CD: I also use the fist technique but I actually keep my tambourine head up most of the time and I don’t turn it over to play knee fist. I keep it upright. The head up. And then I always try to make sure that where I’m playing on my knee is the exact opposite side that I’m striking with my fist so I don’t get two different sounds.

TB: Oh okay. And have you ever found that conductors have a preference in those types of parts?

CD: Not really. Not generally. I mean he has a technique also where he can hold it up in the air and just rotate it back and forth and play on one hand with his knuckles. Do you know what I’m talking about?

TB: Yes.

CD: That is really great for some conductor who really has a thing about visually being able to see the tambourine. He might have run into that at one point. I think that’s why he decided to make sure he has that technique. But honestly that’s never really been an issue over my career. What I usually will do though to just avoid that situation in general is make sure that what I’m playing knee to fist, that I can make that as visual as I possibly can. So I put my stand up really high. I make sure that there is nothing in front of me. No tables, no other stands or equipment that are going to be blocking my view so the conductor can see the tambourine moving around instead of it just being hidden behind a wall. And that generally suffices their need to see something.

TB: And the final question is for tambourine shake rolls, do you use Mr. Abel’s preferred combination technique of twisting the wrist and moving the arm back and forth?

CD: Yes. That also took a while to be able to get. It’s a combination of holding the tambourine and rotating it only side to side, back and forth, and then also holding it at the wrist and moving it up and down. Then it’s kind of a combination of those, but essentially the tambourine does not rotate on a true axis. If I just move the tambourine back and forth on an axis, only some of the jingles are going to be fully active, mainly the ones that are at twelve and six o’clock. In other words, if I’m holding the tambourine at nine o’clock and rotating it back and forth, the jingles at twelve and six o’clock are going
to be moving the most because they’re the ones farthest from the axis. But the jingles closest to the axis are going to get less and less action and so, because there’s the disparity between some jingles getting more action and some getting less action, you get almost kind of a double stroke sound. A double stroke snare drum roll sound. And so to avoid that, essentially you’re kind of rotating the whole tambourine with what to me is actually a very tense forearm, but a very loose grip finger wise. So if I was rolling this way that you were talking about with Abel, if I were to pause and freeze and I were to say grab my forearm and see what the tension of my muscles is, you would see that my forearm is incredibly tense. However, you could yank the tambourine out of my fingers because of how loose my grip is. And that allows the tambourine to rotate in a circular fashion rather than only at an axis.

TB: Okay great. And that concludes the interview. If there isn’t anything else you’d like to add about any of the instruments that’s all the questions I have for you. Thank you so much again!

CD: Yes, sure. I just think the one thing worth noting as far as Abel goes is that he had such a great career but he specialized on bass drum and triangle for a long time. That was primarily what he played when he came into the orchestra. And then the personnel changed. He became kind of the snare drummer. I mean that became mostly what he did, so all of his knowledge and wisdom for bass drum and cymbals now had to be converted to more of a use in the snare drum field. And so I think it’s interesting. His techniques have proven over time to be absolutely solid and I use them. I teach them to my students. I believe in them firmly and I couldn’t be any more proud to have studied with him and how he translated those to his students, too.

TB: Yes, I agree. Thank you so much again! I really appreciate it Chris!
Interview with Don Liuzzi

TIMPANI

TB: In my interview with Mr. Abel over the summer, he described several techniques he uses on timpani which include the Duff technique, turning the hands over to allow more give, and always thinking about coming off the head and not playing into it. What timpani techniques do you keep in your tool set that you learned in your lessons with Mr. Abel?

DL: A couple of things. One practical issue is that even though, definitely, he comes with a portion of the Duff world in his approach, he also has a real affinity, in fact I think even more so, with the Hinger school--a little more arm oriented and not always just wrist oriented that the Duff school is. That being said, he mixes both styles in his playing and kind of a thumbs-up, yes, get the stick off the head, which I have always enjoyed myself. So I enjoyed that about him. One of the biggest things that we spent time on doing was improving timpani rolls. He was really helpful with that in the sense of, especially loud rolls, and the low register of the bigger drums where he would have me using my arms to cushion. And I would still be using both wrist and arm and a mixture of wrist, arm, and fingers but using the arms to cushion roll beginnings and the sensitivity of being in touch with what the head is giving. I think that aspect of my timpani study with him was invaluable.

TB: Could you discuss roll speed and how you determine it.

DL: He is pretty much in the school of Duff and also someone like Sal Rabbio, where, I know even though they didn't study with the same people, he and Sal Rabbio were very simpatico on their approach to how to create a beautiful timpani roll. And the roll speeds would vary, according to the range that you are in, of course the size of the drum, and also the emotional content. Alan kind of helped me develop that even further. I think that roll speed can have emotional content and really reflect what is going on both emotionally and orally in the writing of the other instruments.

TB: As an example, maybe you could describe how you would treat the low G roll before the Più allegro at the end of Brahms’ 1st symphony.

DL: The three hairpins that happens there. I mean some of this is stuff I have gained on my own, but Alan certainly wanted rolls to open up when you crescendo, and if you rolled too fast, you are going to crush the sound. But if you slow up the roll too much, this is where he differed from Duff's approach. Duff did really a lot of slowing up of the roll, but since the Academy of Music, where Alan did most of his professional playing, was so dry, his roll speed would be a little faster, but incorporating the idea of slowing the roll speed up during the crescendo.

TB: Mr. Abel described how bigger and heavier timpani mallets work really well in the Academy of Music due to the hall's lack of support for bass-ranged instruments. Furthermore, he discussed how in Verizon Hall smaller Duff style sticks work now because the bass and mid-range instruments project much better. What are your preferred mallets that sound best in the Philadelphia Orchestra?
DL: I had a whole bunch of sticks made for me by Dave Woodhull that I saved for the new hall because I knew they were going to work better than at the Academy. That being said, I still, with the conceptual idea of heavier sticks for more advanced German repertoire, romantic repertoire that still holds true, it's just not quite as fat or cushiony as far as the ball of the head is concerned, and maybe not so many layers or something like that. Whereas, when I would play a Brahms symphony in the Academy, I used a big fat stick with lots of layers almost all the time. I remember we were playing *Ruslan and Lyudmila* once in the new hall and I was thinking, oh, I can play with lighter sticks now, and Alan came up to me and said, you know, even though this hall is better with the bass response, you still need to have a sense of, especially when the timpani are by themselves, a sense of the depth and the richness that a slightly heavier stick will have. I mean there is a lot of give and take on this issue. It is just that the Academy, with its extremes of lack of bass response, that was the ultimate on big fat heavy sticks. And now it is mitigated by a hall that has better bass response, so we, accordingly, are playing with lighter sticks. But I wouldn't say all the time. It depends on the repertoire. We just did a Schumann symphony, Schumann's First, and I used a lot of my new, kind of Duff like mallets that Dave Woodhull makes, and they were great, but there were a couple of moments where I did break out a kind of modified version of my Academy sticks that still get a round, really warm cushioned sound for the big moments in the opening and the introduction as well as the opening of the last movement.

TB: Do you use the Duff technique yourself?

DL: I consider myself in some ways a Duff follower and disciple but it fuses some of these Hinger arm techniques for the bigger repertoire and more romantic repertoire that I really got from Alan and a little bit with Hinger. I studied a little bit with Hinger just before he stopped. A lot of that came from Alan. Alan and Hinger were extremely close, musically and philosophically.

TB: As an example, I had Beethoven Symphony 9’s first movement coda, I was interested in seeing how you treat going from the soft portions of that to the louder 32nds and if you change up your technique at all?

DL: I am still essentially using a wrist technique. But I might, at letter S, when things are getting big, I may allow a little bit of use of the forearm, a little bit, but I don't want to lose the clarity of the 32nd notes. If I go primarily to arm, that wouldn't work for me. I really do try to keep my *modus operandi* as being the Duff wrist motion. There are three cases that I mitigate that. One is based on the heavy, Wagner, late Brahms repertoire, Tchaikovsky included, or, rolls, like we talked about. How to approach rolls, cushioning the rolls, and then, thirdly, for single notes that have to have a depth in the romantic repertoire like the opening of Brahms’ First, or single notes in Tchaikovsky. Even big single notes on the high F on Tchaikovsky, where if I just used my wrists, like Duff wrists, it is going to be a little bit thinner and a little bit more gun-like rather than the depth of the sound that I want for Tchaikovsky. So that is where I utilize the arm more. Those three things. The kind of big, heavy moments in Mahler or Wagner or Brahms. And then the rolls, the beginning of rolls, especially louder rolls utilizing the arms. And thirdly, those individual notes where just a wrist motion is going to be a little thin, a little
slappy. In general, when the rhythms get active, when rhythms get regular and active, I really go back to Duff.

**SNARE DRUM**

TB: Moving on to snare drum. In my interview with Mr. Abel this past summer, he described how he can play soft snare drum rolls utilizing his wrists up to *mp* and *mf* but once he gets louder he uses the pivot point technique between the shoulder and the middle of the forearm. He added that he uses the latter technique when soft to provide a bit more meat than the wrist allows. Could you describe your take on these techniques for snare drum rolls and have you further adapted any roll techniques Mr. Abel taught you?

DL: I studied a little bit as a freshman with John Soroka who got much of his technique from Alan Abel studying with him in high school and junior high and even elementary school so I think, that's what I base now my, as soon as I hit my freshman year and undergrad, I really went toward that pivot, arm pivot which is, again, about this cushioning of the down motion and to try to crescendo the up motion, utilizing both finger and that forearm. And to a certain degree, a small degree, the double bounce, that utilizing that snapping of the double bounce with the fingers and the wrists to kind of help the crescendo happen with the buzz. It cushions the buzz and elongates the buzz, so I got that from Alan's system and I utilize it to this day. Now I did do some of my study with Charlie Owen and, related to John Soroka, because he studied with both those guys, I did work pretty hard for awhile working on developing this three beat roll because I finished my last three years of undergrad with Charlie Owen and we worked a lot on the three beat bounce, a roll which is a little bit more open. Alan incorporates more of a denser buzz. Maybe that is an overstatement but I think it is true he leans toward a denser buzz than most snare drummers. But the problem is and this is the interesting part, I think, is that people who study with him sometimes can confuse denser buzz with tension. And that is not true with Alan. His buzz, even though it is dense, is very, in some ways, I wouldn't say relaxed--that's the wrong word, it's just very efficient in how he elongates the buzz. And also Alan, along with Charlie Owen, Alan opens his buzz as the roll gets louder. I am a real believer in that. I do it even more than Alan does. That is definitely a part of his tutelage. The louder you play, the faster the rhythmic background of the roll and also, you can experiment with slightly less number of bounces to each hand.

TB: Great. Moving on to his soft playing, he describes the mechanics of his soft playing technique as using a finger and wrist pivot when he is striving for a really light quality. He says if the music is heavier in orchestration with a big characteristic such as in Russian military music, he will use more pivoting from the middle of the forearm and sometimes pivoting from the elbow to provide more weight. Could you describe how you utilize these techniques when playing soft strokes from *mp* and below such as, for example, the third movement of *Scheherazade* or *Lt. Kije*?

DL: In the big movement of *Scheherazade*, I like to include both the arm pivot and that slight little effort to have an open roll that includes a little bit of a snap in the fingers. Part of studying with Alan is just seeing him do it, because when you see him do it you go,
"oh my God, wow that’s great" because he’s got at 86 or 87 now, whatever his age is, he still has some of the most amazing hands on the planet. Sometimes, for me, studying with Alan was both fascinating to hear his descriptions of how we shouldn’t do stuff and trying to fix how you do it, plus just seeing him was half the, you know, when he would take the sticks and play a passage or play an excerpt or play an etude, it was like, "wow." So a lot of my learning from him was to try to imitate what he did. But the beauty of his teaching is that he can verbalize what he does, too.

TB: And on playing general forte and fortissimo strokes, Mr. Abel said,

If it’s going to be a very free flowing kind of pattern that you’re playing, then I’m going to be using much more wrist. If it’s something that needs to have weight and character, then I’m going to use more arm. And if I need to be doing dynamic changes quickly, crescendo, diminuendos, sudden changes, whatever, it’s far easier to control with more skin on the stick and not loose and then some arm.

Could you describe your technique preferences when playing forte and fortissimo strokes in different situations such as from letter P to R from Scheherazade or passages such as in Shostakovich's 10th Symphony, for instance?

DL: Yes, Alan was very helpful for me to that, and I incorporated that, using the arm to stabilize rhythm and to stabilize sound. So I became a real disciple of that approach to stabilizing the sound you are creating by using the arm, and also by not lifting as high. Alan is a real proponent of economical motion. And definitely, he is not a show-offy guy. I wouldn't say his flair is about self-aggrandizement. His flair is just about musical flair, that's all.

CYMBALS

TB: Moving on to cymbals, Mr. Abel described how his loud cymbal technique follows the Podemski approach involving circles. Could you describe how you interpret this technique for loud cymbal crashes such as those found in Tchaikovsky’s 4th Symphony or his Romeo and Juliet Fantasy Overture and then can you describe when you use the circle technique versus using a more direct path crash?

DL: I studied with both Alan and Charlie Owen so I really followed that Podemski, and still do ovals. Ovals that have two points of interjection or tangency. If there is only one tangent of two ovals then you are going to, then the cymbals are going to skim each other, but if these ovals overlap, they kind of meet, in a way, as long as you have the angle of the cymbals at some kind of a "V," either an upside down V if the tops are going to hit first or a regular V if the bottoms are going to hit first. Alan has given thought to all that. He practices and makes all of his students practice ovals. So I am totally in agreement with how he plays. This is another interesting fact about Alan. He adapts his teaching to the needs of the students of the time, which is pretty cool, actually. But he did do a very interesting preparation for a crash called a question mark with the upward cymbal on top and the sense of fluidity of those circles, as you move, to make a sound
That is beautiful. That question mark preparation for the top cymbal was a big help to my cymbal playing.

TB: Mr. Abel described how when he plays softer crashes such as those in Rachmaninoff’s 2nd Piano Concerto that he thinks about making very slight increases in the phrasing to take the onus off of having to play every note exactly the same which he said is a killer.

DL: Yes, that is one of the beauties of Alan and the whole Philly style, but definitely Alan has lived that his whole life. Melodic phrasing. Another thing he taught me about phrasing is something called rhythmic phrasing, where he would click along a long passage of, if you were playing, especially something slow that needed a sense of shape and beauty, he would click a metronome in a way that was adding the ups and downs of a phrase, making you aware that time needs to still be served in that shaping of the phrase, in a kind of fluid rubato sense, but not rubato in the sense like huge changes of time, but that your awareness of the clicking of time in phrases has a natural, horizontal flow. If that makes any sense. The first time he told me about that, in fact, it was my audition and he had me play a passage from the concerto that I was working on, the slow movement, and my gosh, when he talked about rhythmic phrasing and clicked along with me with his sticks the way the phrase should be shaped in time, oh my God it brought a whole new sense of discipline to what a musical phrase is and how time can serve that and shape it.

**BASS DRUM**

TB: The last two instruments I have to discuss are bass drum and tambourine. When playing soft bass drum rolls such as in the solo passage from Mahler's 3rd Symphony, Mr. Abel described how he plays a faster roll in order to get the intensity that needs to be there. His beating spots are closer to the edge than the center. I was wondering if you could describe your take on this technique of soft bass drum rolls.

DL: I mean the guy played bass drum constantly for like twelve years in the Philadelphia Orchestra so I consider him to be the master bass drummer on the planet. He was such an artist on the bass drum. Different roll speeds. Different beating spots for rolls. Of course the development of the bass drum stand which allows the bass drum to lie flat, yet still be suspended. All of this was a part of his incredible legacy on how to make a beautiful sound on bass drum. Again, I have been really fortunate, even in recent years when he played, three or four years ago we did La Mer and someone was missing and so Chris brought him in and it was just, oh, it was...Debussy, Prokofiev... that guy knows how to make the bass drum sing. And not only sing, in his touch, but also how to tune it, the bass drum, the beating spot that is going to get just the right kind of either resonance or kind of bottom that is needed for the moment. So, it is hard to even describe how beautiful he can play the bass drum.

TB: For louder rolls, such as those throughout Mahler's 3rd Symphony, he said he moves towards the center more than when he plays softer rolls. His stroke speed is generally faster in louder dynamics than soft and I was wondering if you could describe your take on this technique on loud bass drum rolls.
DL: The sense of relaxation in his arms, and not just relaxation, kind of a cushion. He treats the bass drum, you know, like a huge timpani where you are just cushioning your arm motions. You are letting the mallet have some play in your hands, yet utilizing your arms to get the fullness and richness of the bass drum. And that includes the choice of sticks that he made. The rolling sticks that he has created over the years for various Philly Orchestra bass drums…it is just priceless what he has left us as far as that legacy.

**TAMBOURINE**

TB: Great. Moving onto tambourine. For quick soft tambourine parts such as those found in Chabrier's *España*, I was wondering if you could describe where on the head you strike and how you position the tambourine.

DL: Well it depends on whether I am using a tambourine flipped over on a rolled towel or just sitting on a rolled towel at an angle with the head up. I mean there are so many different ways of playing that. All I know is that Alan spent a lot of time with us transitioning that gradual crescendo. It keeps growing and growing with that melody as it goes up the scale. He was just brilliant at how to control, when to change from utilizing, you know, the tambourine on the knee and how to transition it to, to how to subtly transition to utilizing the knee fist technique. All I can just say is that we spent a lot of time on that smooth transition. To be able to smoothly transition from fingers on the edge to the idea of the tambourine being rhythmically shaken between the fist and knee. Just that, I guess what I am trying to say is that he is a master at that transitioning and gave us ways of practicing the transition from one technique to another on *España* especially.

TB: He describes how being able to play louder quicker rhythms up is a useful skill on tambourine but it can be more blurry rhythmically, especially in livelier halls than the slightly different sounds achieved using knee to fist technique. He uses either technique, depending on a hall’s clarity throughout quicker passages in pieces such as *Carnival Overture*. I was wondering, through your own experiences, what techniques you prefer to use when playing louder rhythmically quick passages such as those found throughout *Carnival Overture*? Playing it up, similar to pandeiro playing or knee to fist?

DL: I have always marveled at his ability to do the, I don't know whether it is pandeiro style, but that sideways, you know where the wrist is hitting one side and he is utilizing the tambourine, I guess it is kind of an adapted pandeiro style, but it is utilizing the shift of the fist as a means of playing fast sixteenth note patterns. Keeping it all in the air, yet not trying to sweat it out by just seeing, alright how fast can my right hand play on this tambourine, but utilizing that shifting, turning wrist technique as you turn the tambourine to match where the fist hits. There is nobody else doing that, that I know of, unless it was another pandeiro tambourine player that made it into the orchestras in Brazil or something, I don't know. Although Chris Lamb is a guy that utilizes the pandeiro technique a lot. I don't know whether Alan calls it pandeiro technique.

TB: I just said that just to be clear that it was "up." And then for tambourine shake rolls, do you use Mr. Abel's preferred combination technique of twisting the wrist and moving the arm back and forth?
DL: Yes, I remember Alan telling me you have to do a combination of sideways twisting the wrist and up and down wrist motion so that it's the mixture of two motions that create a little mini-mini circle that gives you that shimmer, that kind of non-rhythmic shimmer of a shake roll. He was great at it. Incredible at it. That's because his wrists are so gosh darn fast and strong.

TB: Well that pretty much wraps up the interview if you don't have anything more to add. I thank you so much for participating in it. It is really great information.

DL: The last thing that I could say, I wanted to add that, you know, as far as a teacher is concerned, I have never known somebody so dedicated to just all the details and the joy of sharing his knowledge. He just has a joy about him that is quite quiet but yet very excited. He is so happy, in a way, to share his knowledge. How profound is that? How simple and profound is that?

TB: Yes, it is inspiring.

DL: Thanks, Tom. I hope this is helpful.
SNARE DRUM

TB: I want to focus on the percussion techniques you learned from Mr. Abel that you use in your musical career as support for my dissertation on his methods. In my interview with Mr. Abel this past summer, he described how he can play soft snare drum rolls utilizing his wrist up to \textit{mp} and even \textit{mf}, but once he gets louder he uses the pivot point between the shoulder and the middle of the forearm technique. He added that he also uses the latter technique when soft to provide a bit more “meat” than the wrist allows. Could you describe your take on these techniques for snare drum rolls? And have you further adapted roll techniques Mr. Abel taught you?

AZN: Right, so I think maybe my difference is that I utilize the pivot point between the middle of the arm and the shoulder almost always for rolling. I mean he talks about using wrist for, like you said, the softer, maybe \textit{pianissimo} through \textit{mezzo piano}, whereas, at that dynamic, I’m still using more arm than wrist. And I think that you’ll find through what I’ll tell you over the next questions that you have, is that I’ve further developed using more arm even than Mr. Abel because of my size. Because my wrists are small, much smaller than his, and my arms are a lot smaller. To get that meat that he talks about, I use more arm just to give more weight, even at those softer dynamics. So especially talking about rolls. Now of course I use wrist, and we can talk about that later as far as articulated notes, but for soft rolls into loud rolls, I think it’s mostly utilizing the pivot point between the middle of the arm and the shoulder. And then where the difference occurs, sound wise, is probably how much I fill it in as far as how many beats, how fast or how slow, and how long my stick hangs onto the head.

TB: Mr. Abel describes similar mechanics regarding his soft playing technique during regular strokes as utilizing a finger and wrist pivot when he’s striving for a really light quality. For instance, he says if the music is heavier in orchestration with a big characteristic such as in Russian military music, he will use more pivoting from the middle of the forearm and sometimes pivoting from the elbow to provide more weight. Could you describe how you utilize these techniques when playing soft strokes from \textit{mp} and below, such as in passages of the 3\textsuperscript{rd} and 4\textsuperscript{th} movement of \textit{Scheherazade} or \textit{Lt. Kije}?

AZN: Right, okay, so faster strokes at a softer dynamic, I’m definitely using wrist. Kind of in tandem with using arm. So I guess thinking about something like \textit{Kije}, kind of the basis around the sound is the arm. Thinking about starting the sound with my arm but manipulate the stroke and then using fingers and wrist. So kind of a dropping with the arm and then a lifting with the wrist and the fingers. Something like \textit{Scheherazade}, you’re talking about the third movement?

TB: Yes, the third. Like from letter to D to E.
AZN: Again, my sound begins from the arm but then I manipulate the strokes. It will be a combination of wrist and fingers. Just because it’s a faster passage and it’s impossible to just use arm. Kind of a combination of both.

TB: Moving onto playing general forte and fortissimo strokes, Mr. Abel said,

If it’s going to be a very free flowing kind of pattern that you’re playing, then I’m going to be using much more wrist. If it’s something that needs to have weight and character, then I’m going to use more arm. And if I need to be doing dynamic changes quickly, crescendo, diminuendos, sudden changes, whatever, it’s far easier to control with more skin on the stick and not loose and then some arm.

Could you describe your technique preferences when playing forte and fortissimo strokes in different situations such as from letter P-R from Scheherazade or from passages in Shostakovich’s 10th Symphony?

AZN: So again, kind of thinking about getting a bigger sound from the arm, but because the passages are faster, of course you’re going to use some wrist along with that, just to get the articulated sound and to be able to play fast enough, you have to incorporate wrist as well. Just thinking about the bigger sound makes me kind of focus my sound further back in my body, if that makes sense, instead of all just coming out from your fingers or just your hands. Thinking about using the bigger muscles in the larger part of your arm, like I think about a tree trunk and just growing from the trunk all these branches. So the trunk is the strong part, and that for me is my biceps, from my shoulders and my back and then my branches are my arms and my hands and my fingers and my wrists. If my core is strong along with not only my mid-section of my core, but my back, my shoulders, my biceps. Not that I was saying I’m flexing them, but if I’m thinking about getting that sound from my core then it’s going to be a bigger sound.

BASS DRUM

TB: Moving onto bass drum, when playing soft bass drum rolls from the solo passage from Mahler’s 3rd Symphony, Mr. Abel described how he plays a faster roll in order to get the intensity that needs to be there. His beating spots are closer to the edge than the center. What is your technique for soft bass drum strokes and rolls such as in the solo passage from Mahler's 3rd Symphony?

AZN: As far as rolls go, because the roll sticks, at least the ones that we use here are wooden, the shafts are wooden, you can use wrist and if something is soft but intense, definitely using a faster roll. Soft and less intense, a slower roll. And for articulated notes, moving a little more towards the center and, since we’re generally using those metal beaters, it will always be a lot of arm. There can be a little bit of wrist movement, but since those sticks are so heavy you can’t use a whole lot of wrist. For something like Mahler 3, you wouldn’t necessarily be using metal beaters. So definitely a faster roll for
the softer passages. Granted that the stick is lighter than what a general metal pair would be and using wrist moving a little more towards the center of the drum.

TB: Okay, great, and when playing louder bass drum notes Mr. Abel said he generally plays about 3 inches above the center and then goes higher depending on different situations. He uses a lot of arm. Additionally, he said,

And I usually am thinking about getting the sound out and there are times when I’m coming from pretty far away for big notes, but much of the time I’m thinking about having my hand almost on the head before I play and the end of the handle almost on the head and then rolling it off. And then not doing the same thing every time, trying to get a good sound, but then finishing up in the follow through in a lot of different ways so it’s not exactly the same look every every every time.

What technique do you use for single \(mf\) and above bass drum notes?

AZN: As far as what he’s speaking of starting with your stick close to the head and then kind of playing from there. That just comes from wanting to be prepared to play the note on time. I’m not sure if that’s exactly what he’s speaking of, but I definitely employ that. Unless, because of course, along with our playing, there’s some showmanship. So if you know for sure that you have time to play the note and start further away then you can kind of time your placement of the note and not worry about being late. So like I said, that kind of goes along with if you know you can get a good sound and have a little more showmanship; start a little further away from the drum and then of course ending differently, like he talks about as well. If you wanted to end with your stroke that’s a little more up, a stroke that’s down, you want to end with a stroke that’s into the drum or off of the drum. So those all go. You can shape those sounds and how you’re showing those sounds around what the orchestra is playing. So if it’s a really short note, but loud or at any dynamic, you could start close to the head and then end several inches away. Or a short note as well could start a foot away from the drum and you could play into the head. So really just depending on because the bass drum is just so versatile, you can get so many different sounds from it and just the bass drum sound in the Kimmel Center, I think the bass drum is the best sounding instrument in the whole orchestra. Quite honestly that hall was shaped around the bass drum sound and I have still, students and friends that come and say, “Oh my gosh that bass drum sounds like he’s got like a subwoofer.” It’s just people know this when you’re playing bass drum because it sounds so big in that hall. So I think it kind of helps, you know people listen with their ears, but they also listen with their eyes. So when you’re playing a big bass drum part say in Tchaik 4 or Mahler Symphonies or Prokofiev Symphonies, you really want to shape your sounds around not only what it sounds like, but what you look like as well. So I can further that by also saying that I’ll often change how I’m playing the drum; I’ll play it either horizontally or vertically. Also depending on the sound or depending on the orchestration, if I’m playing with timpani, something like a long roll I’ll often play with the drum flat so that it’s a similar, you know, timpani next to the bass drum, that has a nice set as well sound wise and as far as looking similar.
TB: For louder rolls, such as those later throughout Mahler’s 3rd Symphony, he said he moves more towards the center than when playing softer rolls. His stroke speed is generally faster in louder dynamics than soft.

Could you describe your technique on louder bass drum rolls?

AZN: Yes. Definitely more towards the center. Depending on the orchestration, it wouldn’t be a slow roll, but it can be anywhere from medium speed to fast.

TB: Would you incorporate more arm in a louder roll than a soft roll?

AZN: Yes.

TB: Okay. Let’s move onto timpani.

TIMPANI

TB: In my interview with Mr. Abel, he described several techniques he uses on timpani, which include the Duff technique, turning the hands over to allow more give, and always thinking about coming off the head and not playing into it. What timpani techniques do you keep in your "tool set" that you learned in your lessons with Mr. Abel?

AZN: Well I think the one word I’ll always remember him using over and over was cushion. And always coming off the head and not playing into it, except for in certain situations where maybe you’re playing piano or pianissimo. In that instance, you can play a little more into the head for the more articulated sounds, but definitely coming off the head at various strokes, either full stroke or upstroke, thinking about coming off the head. Not that it’s just one technique that I took away from studying timpani, but I mean that general sound idea, I think, is the best idea of always thinking about cushioning the sound because you never get a harsh sound and then you can shape everything from there. So I think that most importantly is what I learned from him. Cushioning the sound. I remember going over so many stroke types with him. He would just go over and over and of course he would take out his ruler and say “start at 1 inch, 2 inches, 3 inches and go all the way to a foot.” And every single stroke: full stroke, up stroke, down stroke. Then at every single dynamic and so just drilling in all those different stick heights and then the various strokes just gave me a better sense of what kind of sound I could get from the drum. But, he was just being so meticulous about how to teach getting sounds from the timpani. So, just his approach of cushioning and then just really analyzing every single stroke that you’re getting from the drums so that nothing is a guess. But yes, Duff technique is what he teaches and then definitely flipping over the hands for certain passages if you want a darker sound I’ll turn my hands over. We just played Beethoven 5 this morning for a children’s concert and I turned my hands over for the transition from the 3rd movement to the 4th movement and then within the 8th notes I’ll turn my hands from turned over to the more French style to go from a darker to a brighter sound. And then incorporating all sorts of different strokes.
TB: And do you have a warm up of practicing those many different dynamic levels with the different heights? Is that something a player should practice regularly?

AZN: If I were going to teach, just again going back to being meticulous, I would go back to the Knauer *Paukenschule* using easier excerpts and examples to then go forth and try each of those different strokes at different stick heights and different dynamics.

TB: Okay and could you discuss roll speed and how you determine it? For instance, when do you use a faster roll speed vs a slower roll speed? How would you play the roll on the low G before the *Più allegro* at the end of Brahms 1st Symphony?

AZN: Yes, so for that roll I think you can use actually a combination of stroke speeds starting slower at the *piano* at the beginning of the roll and then, as it hairpins growing into a faster roll, also spreading the hands out a bit a few inches onto the drum, and then as it *decrecendos*, bringing your hands closer together and slowing down the roll. So if you use those two things, really just starting a slower roll and then quickening the roll, coupled with starting with your sticks closer together and then moving them at the most 5 or 6 inches apart. And then bringing them back together for the soft part. Between those two things, you almost have a built in roll. Of course you’re going to increase your dynamic as well, but those two things alone will almost give you an automatic roll. Starting with a slower roll and getting into a faster one and then moving your sticks as well.

TB: Okay. How close together would they be at the softer end when you’re rolling?

AZN: Well almost touching. Not only does that give you the hairpin of the decrescendo back down but it also kind of spreads the sound on the drum when you’re spreading your hands. It utilizes more of the head as you get kind of a fuller sound at the very top of the roll.

TB: Mr. Abel described how bigger and heavier timpani mallets work really well in the Academy of Music due to the hall’s lack of support for bass ranged instruments. Furthermore, he discussed how in Verizon Hall, smaller Duff style sticks work now because the bass and mid-range instruments project much better. What are your preferred mallets that sound best in the Philadelphia Orchestra?

AZN: So I still use some of the pairs that I used at the Academy just because the string section is so strong and so lush that there are still times where I feel I can get away with some bigger mallets. It’s not going to be for articulated passages but for big round single notes, I’m still using some of the Carlyss double wrapped mallets. But we can definitely get away with using a lot harder and thinner mallets than we were able to at the Academy. So it’s nice that we have this range, because to fit in with the sound of the orchestra, you can use those large mallets, but because the hall is more responsive to timpani and to those higher ranges, we can definitely get away with using smaller sticks. So I’ve either been using some of the Jason Ginter and the Joe Pereira, the flannel. Those sticks sound great in this hall as well and I’ll use sometimes even some chamois mallets.
or even just wood. So it’s nice to have that range. You can still think about the history of
the timpani with the orchestra going back to the Academy of Music and how those sticks
were used there to just make sure that the bottom was getting out and so I still think about
getting that sound to match the low brass or even lower strings, but then we can just have
that ability to use the harder mallets as well just because those sound good as well in the
hall.

TB: Okay, great, and we can finish up with cymbals and tambourine.

CYMBALS

TB: Mr. Abel described on cymbals how when he plays softer crashes such as in
Rachmaninoff’s 2\textsuperscript{nd} Piano Concerto that he thinks about making very slight increases in
the phrasing in order to take the onus off of having to play every note exactly the same,
which he said is a killer. What technique do you use generally for soft cymbal crashes in
pieces such as Rachmaninoff’s 2nd Piano Concerto? Something he didn’t describe was
the contact time. That would something I’d be curious to find out more about.

AZN: Right, so for me in that piece, I’m thinking about the cymbals slightly offset so
that I’m holding my left steady in this case and my right would be the one moving and
not in circles. And I’ll be slightly offset with my right a little bit under my left. And I
would have the cymbals marked with a pencil marking so I know where the best spot for
playing soft would be and then lining up that exact mark every time that I’m playing the
cymbals. And he’s right thinking about some sort of \textit{crescendo} or at least not thinking
about a \textit{decrescendo}. A \textit{crescendo} is difficult as well. I know what he’s talking about
it’s just not going the other way like I said, not getting quieter. But you also want to
make sure you don’t get too loud. So, for me, it’s just trying to be consistent in thinking
about phrasing is helpful, as well and along with that comes probably some sort of slight,
I won’t say a \textit{crescendo}, but it’s a non-\textit{decrescendo}. And as far as for me, what did you
say the attack?

TB: Yes, like the contact between the two cymbals. How long they touch.

AZN: Right. I think that can really depend on what cymbals you’re using. Since we’re
generally using the old K’s pretty much exclusively, the contact time is going to be short
since they’re so thick. If you were using a thinner newer cymbal you could probably
keep the cymbals together longer to get more of a sizzle. But like I said since we’re
using the old K’s, the sizzle doesn’t exactly work so the contact time is pretty short. I’m
not thinking \textit{staccato}, but I’m also not thinking of keeping them together.

TB: Okay. Is it kind of immediately off each other then?

AZN: Yes, I don’t know if I want to say immediately because then that sounds like I’m
almost pulling them apart quickly. It’s not a staccato stroke, but it’s coming off fairly
quickly.
TB: Okay and then Mr. Abel describes his loud cymbal technique as following the Podemski approach involving circles. Could you describe how you interpret this technique for loud cymbal crashes such as those in Tchaikovsky's 4th Symphony or his Romeo and Juliet Fantasy Overture and when do you use circles vs coming straight off?

AZN: So I definitely use circles for single notes just so I can have a nice big sound coming from using more of your entire body than just your arms. You can vary your sounds better by varying your circles, either your sizes or your angle, or if it’s more of an oval or more of a circle. And where, exactly, the cymbals are contacting if you want a darker sound, using more of a circle. For a lighter sound, using more of an oval. So I use the circles for big notes or even anywhere from probably mezzo forte to the loudest. For more just kind of straight on, it’s definitely for more articulated faster passages such as near the end of Tchaik 4. For any of the 8th notes I’m just going straight on.

**TAMBOURINE**

TB: And then moving onto tambourine. For quick soft tambourine parts such as those found in Chabrier's España, where on the head do you strike and how do you position the tambourine?

AZN: So I’m playing closer to the edge definitely. Just it helps articulate the passage. (For positioning the tambourine) That would be on my leg and depending on, of course, you just want to make sure that the tambourine is stable, so of course the head will be up and really the angle can vary as well for as far as how high you want your leg to be. That will also kind of change the sound because the jingles, if they’re a little more flat and your leg is higher, it might be a wetter sound, whereas if your leg is a little more down and there is more of an angle, then the jingles won’t ring as much so it will be a slightly deader sound. So it probably will be somewhere in between so that the tambourine is not completely flat and I want it to be articulated but also comfortable. I don’t know what angle that would be.

TB: So not too angled, but not too flat either.

AZN: Right.

TB: And then Mr. Abel describes how being able to play louder quicker rhythms up is a useful skill, but it can be more blurry rhythmically especially in livelier halls than the slightly different sounds achieved using knee to fist technique. He uses either technique depending on a hall’s clarity throughout quicker passages in a piece such as Carnival Overture. What techniques do you prefer to use when playing louder rhythmically quick passages such as those found throughout Carnival Overture?

AZN: I would generally play that up besides the last passage, you know, the quarter and eighth note passage where it gets very fast at the end where it’s almost impossible to just play up. And again that’s because it also depends on your tambourine too. I feel the tambourine you use, the Stoessel, generally, it’s pretty articulate and it has the higher
jingles that project a little bit better than say your average Grover or Black Swamp tambourine. So when I’m playing that, I generally play the entire piece up, like I said, until the end where I finally just play knee fist. Just to facilitate the quick tempo. And I think that it projects fine. I think it’s articulated enough playing up. Of course he’s right, that would change depending on your tambourine and depending on your hall and depending on the orchestra. But here, I play it mostly up.

TB: Okay and for the final question for tambourine shake rolls, do you use Mr. Abel’s preferred combination technique of twisting the wrist and moving the arm back and forth?

AZN: I’d say I use more of just a wrist motion. Not a lot of arm. That was a technique that I never grasped. (Laughs) It’s just one of those things that I couldn’t do very well. So my tambourine shake roll is much more of a wrist shake than an arm. Just never got that, you know, pat your head, rub your belly. (Laughs)

TB: Well that pretty much wraps my interview up. Thank you Angie!
Interview with Greg Zuber

SNARE DRUM

TB: I want to focus on the percussion techniques you learned from Mr. Abel that you use in your musical career as support for my dissertation on his methods. In my interview with Mr. Abel this past summer, he described how he can play soft snare drum rolls utilizing his wrist up to *mp* and even *mf*, but once he gets louder he uses the pivot point between the shoulder and the middle of the forearm technique. He added that he also uses the latter technique when soft to provide a bit more “meat” than the wrist allows.

Could you describe your take on these techniques for snare drum rolls? Have you further adapted roll techniques Mr. Abel taught you?

GZ: Yes. I mean for me the thing that he introduced to me in terms of snare drum mechanics that was probably most radical was the use of my arm especially in rolls and sometimes often in slower rhythmic playing. Rhythmic playing that’s not so fast and it makes that less advantageous. And we worked a lot on first off using your arm. My terminology now is a little different, because basically [you’re] using your arm as a lever. So that pivot point is really the fulcrum of the lever and it’s somewhere a little nearer your elbow than your wrist and so your elbow moves in opposition to your hand and in opposition to the tip of the stick. And the real movement, though, is driven from your shoulder. So the angle of the elbow is consistent throughout. It doesn’t change. It doesn’t open and close. And that necessitates for many people an adjustment. Usually higher on the snare drum than you might be used to playing. To put the head sort of just below where the stick is parallel to the ground in the stroke. And the idea of playing the roll has more to do with pushing against the drum than striking the drum. So there’s two advantages to that. One is that pushing against the drum, you can get a more consistent pressure against the head for a longer period of the stroke. Also pushing against the drum, as opposed to hitting the drum, you can to a large extent lessen the impact or de-emphasize the first note of the series of rebounds. So that’s another big advantage in terms of making all the notes of a rebounded stroke the same rather than loud at the beginning and softer as they peter out. I don’t remember him talking much about using the wrist in rolls when I was studying with him. There are things that I’ve encountered over the years that have changed since I’ve studied with him, too, so unfortunately he didn’t send me like a DVD upgrade or anything. So for me, it was all from soft to loud, it was all arm based rolls. But I haven’t found that in anyway lacking. Also there was this idea that because, especially in auditions and then in some performing situations, you feel like you’re performing under greater anxiety and bigger muscles tend to be affected less by your body chemistry in that situation. So the advantage of using your arm vis-à-vis your upper back muscles carries in that situation as well. That can be advantageous. Also, in the roll he talked a lot about initially being able to emphasize and even accent the second stroke of double bounces and then *crescendo* through multiple bounces. What the idea of it is if you can do those things, which are extreme, then you can easily play two notes that are the same or three notes or multiple bounces that are much more evenly the same dynamic and all of that is going to contribute to a more even smooth roll than the contrary. And then, lastly, the idea of two-thirds versus one-third, which when I was
studying with him, what was he saying? He was saying something, it was funny because he would say like “sixty thirty” or something like that and I pointed out to him that it didn’t equal 100 percent, which I don’t know, was just me being annoying, probably. But so it turned into two-thirds, one-third, where you concentrate on having the multiple bounces be two-thirds of the stroke with one-third of the stroke only left to lift the stick and start the next stroke, so that you would have, when you’re using both hands playing your roll, you would overlap the beginning of each hand stroke with the end rebounds of the previous hand stroke. So that’s sort of the bulk of what I remember working on with him.

TB: That’s great information. And going on, Mr. Abel describes the mechanics of his soft playing technique as utilizing a finger and wrist pivot when he’s striving for a really light quality. He says if the music is heavier in orchestration with a big characteristic such as in Russian military music, he will use more pivoting from the middle of the forearm and sometimes pivoting from the elbow to provide more weight. Could you describe how you utilize these techniques when playing soft strokes from mp and below, such as in passages of the 3rd and 4th movement of Scheherazade or Lt. Kije?

GZ: Yes, so again any rebound stroke for me, ideally, is an arm stroke and that sort of comes with what I did with him. And in terms of lighter or heavier, I mean that sort of references what I already said about just employing arm in sort of bigger rhythm. For me it has become more of a speed issue. The faster I play the more wrist and then fingers have to be employed. And it’s a little bit less about weight whether I’m doing that or not. Generally, rhythm will tend to be wrist and fingers until it’s open enough to be arm. And then Kije and Scheherazade the 3rd movement, they’re the same thing in that because the ruff is a rebound stroke, basically. So for me, those are arm based just as the seven stroke roll is in Scheherazade.

TB: He said similar things about his forte and fortissimo strokes. I’m guessing that’s probably similar for you. Would you agree that those strokes work for your forte and fortissimo strokes say from P-R in Scheherazade? Do you use more wrist in those situations?

GZ: So that’s for me, I’m playing the grace notes with my left hand. Generally, it would be fair to say that it starts out all as arm [in] the left, because again it’s a rebound stroke. And the right could either be wrist or arm because it’s a single stroke. I mean, for me, it’s more important just to have the stick comfortably relaxed in my hand so I’m not clenching in any way.

**BASS DRUM**

TB: And then moving onto bass drum. When playing soft bass drum rolls from the solo passage from Mahler’s 3rd Symphony, Mr. Abel described how he plays a faster roll in order to get the intensity that needs to be there. His beating spots are closer to the edge than the center. What is your technique for soft bass drum strokes and rolls such as in Mahler’s 3rd Symphony for example or maybe any other soft rolls in general?
GZ: So when playing bass drum rolls, I’m comfortable with either match grip or traditional grip. It’s just dependent on the angle of the drum. The mallets I’m using, you know, almost always on playing bass drum, are all either mallets that I made when studying with him or an extension of the mallets that I made when studying with him, which is to say that they all tend to have a lot more mass than any of the commercial beaters available, or at least those commercial beaters that are not directly influenced by him and his approach. Generally, what I’m trying to do, and this is partly a necessity of the weight of the beater, is that same arm stroke from rolls on the snare drum. I’m using that a lot when I play bass drum and, in general for me, what I’m always trying to do is treat the head of the mallet as a ball and the shaft as a stick which you use to throw the ball. And it’s always that. It doesn’t matter if I’m playing single notes or if I’m playing rolls; that’s what I’m doing. And for me, absolutely you can get a type of greater intensity if you play with faster strokes, strokes closer together. So that’s a musical decision, but whether I’m playing a faster roll or a slower roll I’m always bouncing the head of the mallet off the bass drum head. And if I don’t do that, then I’m getting a “strokey” sound and if I do do that I can get an incredibly smooth sound. So it’s always trying to have the shaft very relaxed in my hand having the ball essentially without any kind of restriction at the moment it interacts with the head and then just collecting the ball afterwards. And I don’t remember him using any language about that. I remember him talking about using my arm because the beaters are too heavy to play with your wrists and he used to talk about playing with soft hands and I think that that’s a kind of maybe an indirect lead to many of the ways I ended up thinking about it, but he didn’t use a lot of the language that I use when I’m either thinking about it for myself or working with students now.

TB: Do you use a similar technique during your louder bass drum rolls as well?

GZ: Absolutely. Every single instrument that we play, for me the goal is to bounce the ball basically, you know, to use the simplest possible metaphor.

TB: Okay. And when he described just singular louder notes, he described how he’s,

...thinking about getting the sound out and there are times when I’m coming from pretty far away for big notes, but much of the time I’m thinking about having my hand almost on the head before I play and the end of the handle almost on the head and then rolling it off. And then not doing the same thing every time, trying to get a good sound, but then finishing up in the follow through in a lot of different ways so it’s not exactly the same look every every every time.

What technique do you use for single mf and above bass drum notes?

GZ: Well, I mean, so really I already described sort of what I do and so really the actual subtlety involved has to do with compressing the cover on the mallet. So you have a hard core. You have a cover that generally is soft so that it doesn’t have a high pitch contact sound, but is either thinner or thicker, and I mean every time you use a covered mallet
what you’re doing is you’re throwing the ball at a certain velocity and the greater the velocity, the greater the compression of the cover. And if you need more articulation you either need more velocity so that the cover is compressed a lot more and the core interacts with the head through the cover or you need a thinner cover. I mean that’s what’s going on, so the louder you play, the thicker the cover you can have, and maybe even need, but can still get, you know, as long as that cover is an appropriate thickness, you can still get a maximum articulation. The softer you play, the less velocity you’re going to throw the ball, so if you use too thick a cover you get no articulation. So it’s always managing that sliding scale. Those various factors.

**CYMBALS**

**TB:** Okay, great, and moving onto cymbals. Mr. Abel describes his loud cymbal technique as following the Podemski approach involving circles. Could you describe how you interpret this technique for loud cymbal crashes such as those in Tchaikovsky's 4th Symphony or his *Romeo and Juliet Fantasy Overture*? When do you use circles vs straight off?

**GZ:** Okay, so I don’t know if this is just something that evolved, but I would have said, if you asked me what he had taught me, rather than circles I would have said ovals, which just means that your motion is not nearly so lateral as it is vertical and then I suppose my refinement of this is that, while I absolutely teach and use ovals a lot, but what is most important in a big sense is just the elliptical portion of the oval. So the cymbals are going to meet each other on...they are going to travel in opposite directions on elliptical paths that have a tangent, I think is the right word, and they are going to meet at that tangent place, and my goal at that moment is to have, sort of like I was talking about with the ball of the bass drum beater or any other mallet, at the point of impact, you don’t want any pressure on the shaft of the mallet on the ball. At the point of contact with cymbals you want as little pressure or tension or any other influence on the cymbal as possible. As if they are completely unaffected, completely free floating in space, as if they are crashing into each other without being tethered to anything except crashing into each other in this very specific relationship. I don’t know whether that is anything that makes sense or not. Again the factors change depending on if you are playing notes, a number of notes that are close together in time--so faster rhythm, or if you are playing a single note, you know, that is out in space. One thing that Alan always said which I have always found valuable is that height or distance equals dynamics, meaning your stroke height, meaning the distance that the cymbals come together from, that if you are going to play a louder crash, you are going to start with a greater distance, at least as a generality. He would demonstrate this in reverse. He would have me play a *crescendo* on cymbals, something that might happen like on the first page of Tchaikovsky 4th Symphony where you have four *crescendoing* quarter notes into the downbeat fifth quarter note, and if you start with the first crash one inch apart, and the second crash is four inches apart, and the third crash is seven inches apart, and the last crash is twelve inches apart or some version of that, you cannot not crescendo. So it is a very practical way to illustrate that. So it is always some, you know, all of these factors, used and in balance, depending on what the musical context demands.
TB: Mr. Abel described how when he plays softer crashes such as in Rachmaninoff’s 2nd Piano Concerto that he thinks about making very slight increases in the phrasing in order to take the onus off of having to play every note exactly the same, which he said is a killer. What technique do you use generally for soft cymbal crashes in pieces such as Rachmaninoff’s 2nd Piano Concerto?

GZ: For me, it is always better to have a phrasing idea than to try and play, you know, in the abstract. If you are just trying to play a kind of blank accuracy you are likely to fail. But if you are following some idea of phrasing, that usually sort of mentally fills in all the blanks as to what to do. I guess in terms of a piece like that, I am trying to be within a range of very consistent, there is always a sense of four leading to one in the measure, so that is helpful in terms of his very, very subtle inflection. But in terms of consistency, if you can set up every crash from the same position with the cymbals the same distance apart and at the same relative angle, one cymbal to the next, and you can bring them together and apart at the same speed then you can be pretty good about being consistent. If you can break it down into those kind of mechanical components and have everything defined and well practiced, I think you can come really close to being very, very consistent and then you have to have in your back pocket the idea that if something untoward happens, some subtle discrepancy, that much like Miles Davis, you need to make that the music. You can’t react like you made a mistake and try and apologize for it. Whatever happens you have to work with.

TAMBOURINE

TB: Okay, great and moving onto tambourine. For quick soft tambourine parts such as those found in Chabrier’s España, where on the head do you strike and how do you position the tambourine?

GZ: The beginning of that, for sure, is something straight from him, which is that I am likely to have a rolled up bath towel or the equivalent on a snare drum and I will have the tambourine sitting at an angle with one side of it on the rolled up bolster part of the towel, and generally that is facing away from me. It’s angled so the audience would see the head and I’ll start out playing pretty much right over the wood rim on the skin head with two hands with either my first or middle fingers. The place where I diverge from what he would have shown me back then is that I have developed a fairly comfortable pandeiro based technique, so when that particular solo gets louder towards the end, I am going to pick it up and play it all, just up.

TB: Mr. Abel describes how being able to play louder quicker rhythms up is a useful skill, but it can be more blurry rhythmically, especially in livelier halls than the slightly different sounds achieved using knee to fist technique. He uses either technique depending on a hall’s clarity throughout quicker passages in a piece such as Carnival Overture. What techniques do you prefer to use when playing louder rhythmically quick passages such as those found throughout Carnival Overture?
GZ: My bias is always to have the tambourine up, with the tambourine in my left hand, which is my weak hand, so all the shake rolls are left hand. All the manipulation is right hand. I do my best to be really attentive to the positioning of the tambourine angle so that I have gravity controlling the sensitivity of the jingles. Like I said, I will employ a knuckle-to-heel technique from pandeiro approaches and that will get me through really the fastest rhythms that I have encountered. So anything that is too quick to punch out sort of all single stroke, I can jump to that if I need to.

TB: For tambourine shake rolls, do you use Mr. Abel’s preferred combination technique of twisting the wrist and moving the arm back and forth?

GZ: Absolutely.

GENERAL QUESTIONS

TB: What are some adjustments a percussionist must make when playing in an opera orchestra vs a symphony orchestra?

GZ: The biggest adjustment is going to be that opera tends to have way more espressivo rubato phrasing which will affect the time. You always have to assume that at any moment there is going to be speeding up or slowing down. That is not to say that it is in any way random and, as you learn the repertoire, you learn where that happens. But in general, from my experience, if you have played—I don’t want to generalize about every opera company—but if you have played with us for any amount of time whatsoever, often going to a different orchestra playing symphonies, at least that aspect of it seems just incredibly straight ahead. There is way less rubato in the phrasing that you have to keep track of.

TB: Are there any overall changes you recommend percussionists make in their playing when auditioning for an opera orchestra vs a symphony orchestra?

GZ: No. (laughs) Not really. I think the skills are the same. You need to be accurate. You need to be super musical. You need to play always from the context. You need to, within reason, exaggerate certain extremes. An audition is an audition. It is always a fashion show. Unfortunately, it is always a little bit like the swimsuit competition. So certain things including even the phrasing and approach to your expression need to be heightened to stand out in a crowd. It is finding the point at which that is exciting but not turning into a caricature. But that is always true in auditions.
Interview with Matt Strauss

SNARE DRUM

TB: In my interview with Mr. Abel this past summer, he described how he can play soft snare drum rolls utilizing his wrist up to *mp* and even *mf*, but once he gets louder he uses the pivot point between the shoulder and the middle of the forearm technique. He added that he also uses the latter technique, when soft, to provide a bit more “meat” than the wrist allows. Could you describe your take on these techniques for snare drum rolls? Have you further adapted roll techniques Mr. Abel taught you?

MS: For most of my rolls, I pretty much use that pivot technique. The arm. The nudge. At all dynamics. I don’t really use any wrist. For my rolls I use arm plus some finger pressure. And the thing that changes is that, as I get from soft to loud, there are more strokes per given unit of time. But within each stroke, the amount of buzzes within each stroke gets less to the point where, maybe when you’re at a triple *forte* roll, there are only three bounces per stroke. Of course by the time when you’re the exact opposite, I mean you’re really soft, there will be many more. I can’t count them, but many more bounces per stroke to basically compensate for the less amount of strokes given each unit of time.

TB: Mr. Abel describes the mechanics of his soft playing technique as utilizing a finger and wrist pivot when he’s striving for a really light quality. He says if the music is heavier in orchestration with a big characteristic such as in Russian military music, he will use more pivoting from the middle of the forearm and sometimes pivoting from the elbow to provide more weight. Could you describe how you utilize these techniques when playing soft strokes from *mp* and below, such as in passages of the 3rd and 4th movement of *Scheherazade* or *Lt. Kije*?

MS: Okay. I use a similar technique for a lot of my soft playing. I like to think very *legato* when I’m playing softly. First of all, it makes each stroke sound less bright, thereby, it can sound even softer that way. So to do that, I do use an arm stroke; a similar pivot stroke that I would use in the roll, and for me it’s such a slight movement because it’s soft playing that I call it a drop stroke. I’m literally dropping the stick in there and support it by that pivot arm stroke. And when you have a legato stroke it has greater connectivity from each note to the next. And it’s also nice to be able to fall back on your larger muscle groups, especially in high pressure situations. In something like *Scheherazade* there’s basically a double stroke roll at letter D, so it’s going to be pretty much the same technique as if it was a closed buzz roll, except there are only two notes in each stroke instead of multiple.

TB: On playing general *forte* and *fortissimo* strokes, Mr. Abel said,

If it’s going to be a very free flowing kind of pattern that you’re playing, then I’m going to be using much more wrist. If it’s something that needs to have weight and character, then I’m going to use more arm. And if I need to be doing dynamic changes quickly, *crescendo, diminuendo*, sudden changes, whatever,
it’s far easier to control with more skin on the stick and not loose and then some arm.

Could you describe your technique preferences when playing forte and fortissimo strokes in different situations such as from letter P-R from *Scheherazade* or from passages in Shostakovich’s 10th Symphony?

MS: Right, so as I get louder as I play, you know, mezzo piano and above, you’ll start seeing more wrist in the ratio of what part of your apparatus you use. So if I want to have something that’s clear and even above and beyond that, militant, I need more high partials in my sound, so I want the stick to not have the motion that you would use when you’re using your arm. I want to have it more of using your wrist, which is a brighter clearer sound, such as all those 32nds after P. I use pretty much all wrist. Now one thing to mention is my general grip employs my fulcrum, which is between my thumb and my pointer finger and then my middle finger on it as well to act as a catalyst when I want to use my finger. I usually don’t have my fourth and fifth fingers on the sticks. However, when I want to have a militant sound, so not only a clear sound using wrist, but I want to have an even fuller and clear sound, I will put my fourth and fifth fingers on the stick. As long as I don’t need to do any bounces or rolls, I’ll have all the fingers on the stick for that, for those 32nds right after P, the main notes of the ruffs after P, and of course in Shostakovich 10 all those 16th notes. And then, for the rolls, I will quickly go to that pivot stroke with the arm and not really any wrists, or maybe a little bit of wrists, but more arm for the rolls. But I’ve gotten good over the years at being able to go between the two very quickly.

**BASS DRUM**

TB: Okay, great, and going onto bass drum. When playing soft bass drum rolls from the solo passage from Mahler’s 3rd Symphony, Mr. Abel described how he plays a faster roll in order to get the intensity that needs to be there. His beating spots are closer to the edge than the center. What is your technique for soft bass drum strokes and rolls such as in the solo passage from Mahler's 3rd Symphony?

MS: I’ll start with rolls for soft dynamics on bass drum. For soft rolls, I concur completely with Mr. Abel in that you want to play closer to the edge. If you try rolling any way closer to the center, it’s going to be difficult to maintain the consistency from one hand to the next, as well as it’s going to be more articulate, which is obviously not good for a roll. And it’s usually going to be a little bit faster of a roll speed. It depends on the music, so if you want some sense of intensity within the roll, just like a quick vibrato on the violin, you’ll have a quicker roll. Same goes for timpani. Sometimes you have your ideal roll speed, but sometimes you might roll even quicker to generate that intensity within the roll. It depends on the circumstance. It depends on the room you’re playing in, on the drum you’re playing on, and the music you’re playing. Now with regards to softer strokes, single strokes at a soft dynamic, there are a lot of differences in circumstance now. For Mahler 3, for the first rhythm with the four eighth notes and the three quarter note triplets I’m going to play a bit closer to the center, as compared to
where the roll is, because there I want a little more depth of sound and if you play close
to the edge it will be a thinner sound for the single strokes and also the stroke speed
won’t be that quick because those rhythms aren’t that fast. I don’t want that bright sound
there. And then, for the faster single stroke rhythms, meaning the three grace notes into
the main note, at that point I’m going to play even closer to the center. Just off the center
as compared to the other rhythms, and I’ll have a very quick deliberate stroke to get the
clarity. In addition, I will be having lots of muffling with my left arm as well as my right
leg to help out with the clarity of those pretty quick strokes and quick rhythms.

TB: Okay, great, and for playing louder rolls, such as those found later throughout
Mahler’s 3rd Symphony, he said he moves more towards the center than when playing
softer rolls. His stroke speed is generally faster in louder dynamics than soft.

Could you describe your technique on louder bass drum rolls?

MS: Yes, I mean the roll speed of my louder bass drum rolls will generally be faster than
the roll speed of the soft bass drum rolls. I will go a little bit more towards the center, but
again, I only go as far towards the center as the drum will allow me because you can get
to a point where the head starts fighting back with you and it’s difficult to maintain a
consistent even roll. As I get really loud, while I’m using wrist I’m also now using arm.
A little bit of arm stroke to help support the sound so I can get really loud.

TB: When playing louder bass drum notes Mr. Abel said he generally plays about 3
inches above the center and then goes higher depending on different situations. He uses a
lot of arm. Additionally, he said,

And I usually am thinking about getting the sound out and there are times when
I’m coming from pretty far away for big notes, but much of the time I’m thinking
about having my hand almost on the head before I play and the end of the handle
almost on the head and then rolling it off. And then not doing the same thing
every time, trying to get a good sound, but then finishing up in the follow through
in a lot of different ways so it’s not exactly the same look every every every time.

What technique do you use for single \textit{mf} and above bass drum notes?

MS: It completely depends on the context, but for the biggest loudest big notes that are
maybe single notes that are parts of big climaxes maybe, those I’ll be using pretty much
all arm coming from the shoulder, which is different than the snare drum arm stroke and,
as Mr. Abel says, that’s a good way to characterize it, is that the head of the mallet is
literally arriving at the head just about at the same time as the butt end of the mallet,
because that’s going to get a stroke with the least amount of ictus at the front of the sound
and you don’t want it pointed at those places. You want a big full rich attack. Now
sometimes, however, you want more of a sharper attack, and when that happens and I
want that, I’ll use less of an arm stroke and use more wrist in the equation. And there are
many different gradations of that, of, you know, more wrist, less arm; more arm less
wrist. It depends again on the drum you’re playing, the room you’re playing in, and the
repetoire you’re playing. And for sharper sounds, and more rhythmic sounds, or more of a pointed sound, I’ll go closer to the center. Sometimes just right off of center and for again, for a broader sound, a little bit further away from the center, but never too far because you’d lose the depth of sound for those single notes unless there’s some specialty type stroke where you want it to be a little thinner.

CYMBALS

TB: And moving onto cymbals. Mr. Abel described how when he plays softer crashes such as in Rachmaninoff’s 2nd Piano Concerto that he thinks about making very slight increases in the phrasing in order to take the onus off of having to play every note exactly the same, which he said is a killer. What technique do you use generally for soft cymbal crashes in pieces such as Rachmaninoff’s 2nd Piano Concerto?

MS: Well, my choice for that is to have a very clear attack. So where I pull the cymbals away from each other pretty quickly, not an intense way, just quick to make sure the cymbals don’t stay together too long, thereby muffling the very instrument you’re trying to play. So I want a nice bright sound. I want high partials from the cymbals to be prominent. I support the cymbal crashes with my arms as I pull them apart. Not pulling them apart with my arms, but I’m just supporting with my arms and shoulders. Probably those muscle groups are engaged a little bit to help support the smaller muscle groups, which are actually pulling the cymbals apart.

TB: Mr. Abel describes his loud cymbal technique as following the Podemski approach involving circles. Could you describe how you interpret this technique for loud cymbal crashes such as those in Tchaikovsky's 4th Symphony or his Romeo and Juliet Fantasy Overture? When do you use circles vs straight off?

MS: So in general I use the technique that Mr. Abel taught to me for circles when I want those big crashes, where I don’t want a big ictus such as those big bass drum notes I was talking about earlier. So the circles help increase the chances of not getting a sharp attack, which you want when you’re trying to get a big full rich spread on the attack of the crash. Now sometimes I want opposite. Just like any other instrument, sometimes I don’t want a thick beginning to a sound. I want a very acute, very sharp attack, in which case I’ll do less circles and more of a straight line. Now to compensate for that, because it’s easier to get an air pocket, because you’re not doing the circles, you have to have a shock absorption system in your wrists where you almost collapse your wrists and, of course, always pulling the cymbals apart quicker rather than slower, for the same reason in the soft crashes that I described, you don’t want to muffle the cymbals, because when you muffle the cymbals with the very crashes you’re playing by keeping the cymbals together too long, you are going to take out the higher partials of the sound and it won’t sound very clear.
**TAMBOURINE**

TB: Okay, and moving onto tambourine. For quick soft tambourine parts such as those found in Chabrier’s *España*, where on the head do you strike and how do you position the tambourine?

MS: So for the fast rhythms? The 16\(^{th}\) note triplets?

TB: Right.

MS: I have the tambourine resting on my left knee. My left leg is up on some type of stand or usually the base of a snare drum stand and I have it on my knee, the bottom of the head actually touching my knee. Not the shell of the tambourine, but the actual bottom of the head, towards the center of the head, is resting on my knee and my knee, my leg is at a height where the angle of the tambourine is just a few degrees off the horizontal as it would be when I would be playing regular louder notes or softer notes when the tambourine was up so I could have maximum clarity. I have my two heels of my hands, my right hand and left hand pretty much on the center of the head and I’m playing the rhythms with a braced middle finger. I’m bracing the middle finger with my thumb usually. If I want extra clarity, I’ll use my nails. Kind of like a nylon tip drum set stick. And as I get louder, but still playing on my knee, I will use more of a down stroke to ensure that it’s clear enough because if you take off too much pressure and you’re too loose about it, the tambourine will start making extraneous noises and it won’t be as clear.

TB: Okay, and Mr. Abel describes how being able to play louder quicker rhythms up is a useful skill, but it can be more blurry rhythmically especially in livelier halls than the slightly different sounds achieved using knee to fist technique. He uses either technique depending on a hall’s clarity throughout quicker passages in a piece such as *Carnival Overture*. What techniques do you prefer to use when playing louder rhythmically quick passages such as those found throughout *Carnival Overture*?

MS: If I feel like the hall is clear enough for me to play it up, I will play it up, because, visually, it’s a nice effect for the audience to see you playing it up, whereas if you play it hand to knee technique, it’s certainly a great technique, but you might lose the visual because the tambourine is now below the music stands. But if the tempo is too fast or I believe the hall is too live to warrant me playing all those faster rhythms up, I will then indeed use hand to knee technique and I don’t generally use a fist in my hand to knee technique. I use all my fingers coming to a point. Kind of like a beak of a bird. And the knee part of it is the shell contacting with the side of the knee. The bony part on the inside of the side of the knee. And again I position the height and angle of my leg to help the tambourine stay at a fairly similar angle as I would when I’m playing the tambourine up to get clarity. So it’s not too vertical.

TB: For tambourine shake rolls, do you use Mr. Abel’s preferred combination technique of twisting the wrist and moving the arm back and forth?
MS: Yes, most of the time. Sometimes for short duration rolls such as the opening of *Carnival Overture* I will use a regular pronating and supinating stroke shake roll because I feel like it’s too much activity for such a short duration. But for most loud rolls, yes I do use that combination roll.
Rehearsal #6 of Festa Romane I.  Flat Drum (2 Players)
EXAMPLES FROM ESSAY

Example 1. Excerpt from Leonard Bernstein’s *The Age of Anxiety*, “The Masque.”

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Example 2. Leonard Bernstein’s *Overture to “Candide.”*  

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Leonard Bernstein’s *Overture to “Candide”* continued.
Leonard Bernstein’s *Overture to “Candide”* continued.
Leonard Bernstein’s *Overture to “Candide”* continued.
Example 3. Excerpt from Maurice Ravel’s *La Valse*.  

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Example 4. Excerpt from Nikolai Rimsky-Korsakov’s *Scheherazade*, end of Movt. III.\textsuperscript{299}

\textsuperscript{299} Nikolai Rimsky-Korsakov, *Scheherazade* (Scarsdale, NY: Edwin F. Kalmus Publisher of Music, 1950), 151.
Example 5. Excerpt from Antonín Dvořák’s *Carnival Overture*, 6 bars before letter R.\(^{300}\)

Antonín Dvořák’s *Carnival Overture* continued.
Example 6. Excerpt from Nikolai Rimsky Korsakov’s *Capriccio Espagnol*, Movt. V.³⁰¹

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Example A. Excerpt from Pyotr Illyich Tchaikovsky’s *Romeo and Juliet Fantasy Overture*, starting 5 bars after letter N.\(^{302}\)

\(^{302}\) Pyotr Illyich Tchaikovsky, *Romeo and Juliet Ouverture-Fantaisie*, (Berlin: Ed. Bote & G. Bock), 68.
Example B. Rhythm from snare drum part to the trumpet variation of Britten’s *Young Person’s Guide to the Orchestra*.

Example C. Snare drum rhythm from Shostakovich’s 7th Symphony, Movt. I.

Example D.

Example E.


Abel, Alan. Interview by author. Northfield, MA, August 12, 2015, Appendix.

Abel, Alan. Phone interview by author. December 16, 2015, Appendix.


Deviney, Chris. Phone interview by author. February 3, 2016, Appendix.


Liuzzi, Don. Phone interview by author. March 7, 2016, Appendix.


Zator Nelson, Angela. Phone interview by author. February 6, 2016, Appendix.

Zuber, Greg. Phone interview by author. February 8, 2016, Appendix.