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What Made You Hear That? An Examination of the Rehearsal Listening of Accomplished School-Based Music Conductors

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WHAT MADE YOU HEAR THAT?
AN EXAMINATION OF THE REHEARSAL LISTENING OF ACCOMPLISHED
SCHOOL-BASED MUSIC CONDUCTORS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in the

College of Music and Dramatic Arts

by
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B.M.E., Jackson State University, 2007
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August 2016
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ABSTRACT

While there has been much systematic investigation of observable conductor behaviors, little examination has taken place of the listening habits and thought processes of conductors while in the act of evaluative listening. These cognitive elements are critical because they are the impetus for the decision-making that leads to conductor rehearsal behaviors. Therefore, the purpose of this study was to examine the thinking of accomplished school based band conductors. How do they evaluate musical performance—less so the evaluation, more so the thinking that informs the evaluation? A grounded theory-like approach was integrated in cross-case study methodology to answer inquiries about the listening processes of three “levels” of accomplished band conductor—a university conductor, an experienced secondary music conductor, and a young secondary music conductor. A think-aloud protocol generated data across three sets of listening activities designed to stimulate verbal responses to the evaluative listening act. Analysis uncovered three cross-case themes that provide entry points into how accomplished conductors think while listening. More specifically, results expose through self-report the “triggers” for the thoughts or the perceived causes of this or that focus of attention relative to music performance. The three cross-case themes that triggered listening were 1) prior context-neutral knowledge/experience, 2) prior contextualized knowledge/experience, and 3) in-the-moment decision making. Applications of results are discussed in the context of music teacher education.
CHAPTER 1: INTRODUCTION

Listening to music is an art, and like all the arts it requires preparation and discipline. Part of the preparation involves learning what to listen for…(Wright, 2000, pg. 1)

The communication process is multifaceted. It involves reading, writing, speaking, and listening. Of the four factors, listening occupies nearly half of our communication time. However, hearing does not always constitute as listening (Stevens, 1961). Hearing and listening are two separate concepts. Hearing is involuntary and refers to the reception of aural stimuli of the brain. Listening, on the other hand, is a selective activity that involves the reception and the interpretation of aural stimuli. Mutonono (2011) divides listening into two main categories: passive and active. Passive listening occurs when the receiver of the message is not listening with an intended focus. Active listening is listening with an intended purpose and requires the listener to hear, understand, and then verify the meaning of the message. This type, active listening, is imperative for teachers to be effective, in particular music conductors.

The development of discriminant listening skills is vital to any aspect of musical behavior and serves as the primary basis for evaluating a performance and providing feedback (Flowers, 1990; Flowers, 2002). Listening is what grounds the decision making process in how one proceeds from one aspect to another within a rehearsal and/or performance. Aaron Copland (1967) stated that, “if you want to understand music better, you can do nothing more important than to listen to it. Nothing can possibly take the place of listening to music” (p. 15). Corporon (1997) also prioritized listening among essential musical factors stating, “while there are numerous important issues that go into successful musicking, none is more central or crucial than listening” (p. 72).
Performers are tasked with a myriad of responsibilities when it comes to listening. Pasquale (2008) categorizes listening based on three levels: Level 1 listening is when an individual player only listens to oneself, Level 2 listening is when an individual player listens and matches others in the same section or voice color, and Level 3 listening is when the section or voice color listens and matches all other sections within the ensemble (p. 23). Musicians have to be cognizant of all three listening levels when performing. Individually, performers must focus on musical fundamentals like tone, intonation, rhythmic pulse, etc. while simultaneously the same performer within the ensemble must focus on intonation, balance, blend, and other factors within the group.

There have been numerous teaching strategies adopted to aid performers in these areas. McMurray (2008) deals with pitch and intonation by having students listen to one another and make adjustments (p. 59). Kirchhoff uses directed listening strategies to instruct performers where to listen for pulse, pitch, and intonation (TellStarr, 2006). Some educators adopt the McBeth sound pyramid when adjusting balance of an ensemble (Gale, 2010). This sound pyramid is based on the theory that, at any given dynamic level, lower pitched instruments should always play a dynamic level louder than higher pitched instruments (McBeth, 1972). This is contrary to the Ensemble Symmetry concept developed by Pasquale (2008) in which any instrument could be the dominant voice depending on the musical context (p. 60; Pasquale, Hughes, & Golden, 2012).

Untraditional methods for ensemble listening also exist, such as the Orpheus Chamber Orchestra using a method called collaborative listening (Heller, 2005). This ensemble is unique because they perform without a conductor; there is no central person to focus on or to guide the players’ listening. They are solely responsible for listening to and
collaborating with one another. This type of listening is what educators strive for in performers of conductor-led ensembles. In conducted ensembles, the conductor serves as a “listening” catalyst. Arguably, a conductor who is highly interactive with the sound environment of the rehearsal is in position to generate similar levels of aural interaction in ensemble members.

In an essay appropriately titled “The Problems of the Education of Today’s Conductors”, Markevitch (1965) claimed that the first requirement of a conductor is to have the ability to recognize errors and to know how to correct them (p. 268). As a conductor leading a rehearsal, Prausnitz (1983) considered two forms of conductor listening to be the most important part of rehearsing: finely tuned listening and critical listening. A conductor who is a finely tuned listener will solely monitor what is notated in the printed score. A conductor who is a critical listener will reshape the music to be representative of one’s own created mental image (p. 2). The two listening types manifest themselves in the scenario of a conductor rehearsing an advanced ensemble where technical errors are few but the rehearsal time is in abundance. When this happens, the conductor must shift into a critical form of listening because the conductor would be faced with the dilemma of what to rehearse, since no errors are readily detectable while conducting with a finely tuned listening ear (p.79).

Other scholars conceptualize conductor listening in terms of instructor ears versus conductor ears (Feldman & Contzius, 2011, p. 201). Instructor ears allow one to listen for mistakes requiring little or no particular knowledge of a specific score and observe surface-level issues regarding time, pitch, dynamics, expression marks, articulations, balance, blend, and intonation. To have conductor ears is to listen more deliberately and
specifically. This type of listening opens the mind to elements of color, phrasing, weight, character, energy, texture, thematic and tempo relationships. The authors suggest that teachers who possess conductor ears lead more creative and musical performances.

No matter which type or depth of listening a conductor employs, listening is still a complex skill. Understanding how various factors affect music conductors’ skills may lead to developing more effective curricula for preservice students preparing to be effective teachers and conductors. An examination of the empirical research and conducting pedagogy textbooks currently available indicates that when aural analysis or acuity is discussed, it is usually addressed briefly as a method of categories to listen for i.e. tone, intonation, balance, articulations, etc (Garofalo & Battisti, 2005; Williamson, 2008) or often in the form of performance error detection (Byo, 1993; Groulx, 2013), error correction (Cavitt, 2003), or melodic, harmonic, and rhythmic aural skills training (Silvey & Montemayor, 2014). While these skills are important for preservice training, we must also have an understanding of what goes on in the mind of conductors while they are in an evaluative mode of listening. These skills are often overlooked and simply assumed as innate musical knowledge, which is problematic in producing effective conductors (Hasty, 2004).

While the research is limited, Pasquale (2008) created a model for aural-based listening acuity for preservice conducting students. The Directed Listening Hierarchy is a categorized, systematic approach designed to teach undergraduate conducting students aural analysis in the context of a live ensemble performance. The methodology Pasquale proposed coincides with Miles’s (2009) perspective of teaching listening. He suggested in Teaching Music through Performance in Band Vol. 7 that “appreciation and
understanding through ‘listening’ should become primary instructional goals to accompany the performance process. Teaching how to become a good listener is very important in the process of developing musicianship” (p. 47). Even though Pasquale proposes a methodology for conductors to listen critically, it is based on anecdotal knowledge and has not been investigated through an empirically researched process. Given these circumstances, I looked to empirically examine how music conductors evaluatively listen to music in actual listening contexts.

Missing in the listening research literature are answers to the question: How do accomplished music conductors aurally process and evaluate music? When accomplished music conductors evaluate the quality of music performance, what triggers their listening (in other words, how do they listen?) and what is the result of that process (in other words, what decisions do they make about moving forward in the rehearsal process?)? Retrospective accounts by experts (what they say they do) provide some information. However, we lack in-the-moment, while-listening accounts (what they do). It seems only logical that instruction designed to cultivate expertise in conducting should consist of objectives based on what accomplished conductors do — the “habits and concepts that reflect the best contemporary thinking of the domain” (Gardner, 2000, p. 116). Feldman and Contzius (2011) proposed that the main difference between a novice conductor and a seasoned professional is the level of detail in which they listen (p. 201), but other research literature suggests that the skill of active listening can only be acquired through experience (Carse, 1929; Markevitch, 1965; Lumley & Springthorpe, 1989). Lumley and Springthorpe (1989) indicated that experience is required in order to notice the complexities and details in music (p. 115). Carse (1929) and Markevitch (1965) both
asserted that the skill of recognizing faults and providing adequate feedback could only be gained through experience on the podium. It would be of enormous benefit to examine accomplished music conductors to find out exactly how they aurally process music. Writings on expert collegiate wind band conductors provide an abundance of information on technique, tone, rhythm, intonation, rehearsal preparation, rehearsal philosophy, interpretation, and literature but provide little to no information regarding how conductors listen when in an evaluative mode (Williamson, 2008). The same shortcomings occur in books written on expert orchestra conductors as well (Bamberger, 1965; Chesterman, 1976; Chesterman, 1990; Wagar, 1991).

There has also been little empirical study into how novice or expert conductors think about music in an active listening context. Bergee (2005) attempted to have novice, intermediate, and expert orchestral conductors conduct a live ensemble while simultaneously talking about their thought processes into a small microphone attached to the person. The results found that the participants experienced difficulty performing the multiple tasks simultaneously. Hasty’s (2004) study followed a similar protocol and showed that the conductors with more experience were more comfortable with the think-aloud tasks than the others.

The music cognition field would benefit from a greater understanding into the thinking process of accomplished teachers and conductors in how they analyze and process music while listening to a large ensemble performance. This gap in literature illuminates the problem inherent in the training of future music educators, and may indeed point to some directions that teachers may look for answers and methodologies that would nurture the mind and thinking prowess of inexperienced conductors. The
study of accomplished music conductors is vital in allowing the researcher to tap into the listening processes of those who have achieved immense success in the field and use this untapped knowledge towards pedagogical advancement for novices. The results from a study of this nature might lead to strategical listening solutions that can expedite the mental training of conductors, rather than wait for the young conductor to accrue time and experience before develop efficient critical listening skills. No one has examined expressive qualities, interpretation, or the other myriad of musical factors in error detection/correction studies. What is also missing in the research literature are error detection/correction studies geared towards fully contextualized conductor experiences. Generally speaking, what guides the conductor’s ears when listening to music in its full context without any inhibitions or limitations?

**Rationale**

Effective rehearsal conducting is one of the most complex examples of human behavior. While there has been much systematic investigation of observable conductor behaviors, little examination has taken place of the listening habits and thought processes of conductors while in the act of evaluative listening. These cognitive elements are critical because they are the impetus of decision-making, which lead to observable conductor behaviors.

For aspiring music conductors, knowledge is usually gained through observed rehearsals of accomplished conductors, participation in conducting workshops and clinics, graduate study, articles based on expert opinion, and extant systematic research. Missing is a way to “see” how conductors process and listen to music or get inside the mind and thinking of a conductor. How can we gain access into the cognitive basis of
conductor behavior? What frames the unanswered question of how do conductors hear—in-the-moment—and how do they make in-the-moment decisions to gauge how they proceed in giving feedback?

On the front end of an effective music conductor, superior musicianship, a highly discerning ear, knowledge of the score, and a clear internal sound image are touted as the means to set up the conductor to make sense of sounds and make good decisions in a rehearsal setting. On the back end is the effective and musically inspiring rehearsal behaviors. But what happens in between to connect the front and back ends? The path from preparation to effective rehearsal goes through this “invisible” cognitive realm or the decision-making process—whether reactive or proactive. How do accomplished conductors do it? How do aspirants develop it? A similar labyrinth is found in jazz improvisation where researchers have attempted to describe the thinking processes of expert jazz improvisers (Norgaard, 2011).

Similar to an improvised jazz solo, the sophisticated rehearsal conductor is judging music in real time, as the performance evolves. Based on what they hear, conductors critique the performance usually based on preexisting knowledge. In cognitive research this is termed generative processing. This is when people generate ideas or thoughts based on a preexisting knowledge. For example in jazz, the material musicians use during improvised solo usually comes from preexisting melodies or musical ideas (Pressing, 1988). For conductors, this generative process occurs during rehearsal settings. They conduct from a podium, listen to the ensemble, assess sounds, and provide feedback verbally and/or nonverbally. This interruptible associative process is usually based on previous musical experiences and normally generates new
ideas/concepts for feedback, hence the concept of generative processing involved in music making. In many cases, the depth of conductors’ feedback is predicated on experience level and prior knowledge of the subject matter (Hasty, 2004). This is one of the important factors of this study, to gauge how conductors across a wide gamut of experience levels listen and process music with evaluative intent.

In order to effectively examine the listening processes of conductors, we must recognize the cognitive constraints that may exist among the conductors, for example internal and external constraints (Asmus, 1986). Internal constraints would be the knowledge and experiences a person brings innately to the performance context. External constraints would be the demands of the performance context itself and can vary dependent on musical difficulty, musicianship level, multiplicity of “distractors,” and other factors. Cognitive demand, then, varies extensively. It is how internal and external demands interact that determines the conductor’s ability or skill in the rehearsal.

Some might suggest that where internal and external constraints converge for conductors is at the aural-visual skill of error detection (Brand & Burnsed, 1981; Byo, 1993; Gonzo, 1971; Jones, 1990; Larson, 1977; Sidnell, 1971). Stated another way, are generalized knowledge, skill, and experience up for the highly contextualized challenge of evaluative music listening? Others have approached this meeting point as an aural-aural place. Are knowledge, skill, and experience, specific to the task at hand up for the highly contextualized challenge of evaluative music listening (Byo & Sheldon, 2000; Crowe, 1996; Hochkeppel, 1993; Hopkins, 1991)? These studies have provided valuable information into what takes place among listeners when detecting errors, however this study aimed to examine the how part of the equation. Our appreciation of the art and skill
of evaluative listening would be enriched by more closely studying conductors’ listening. Stated plainly, what triggers a conductor to hear and make the decisions they make when analyzing musical performance?

**Purpose and Research Questions**

The overriding goal for this study is to tap into the thinking of accomplished wind band conductors in how they evaluate musical performances—less so the evaluation, more so what triggers the evaluation. A grounded theory-like approach was integrated in case study research to answer inquiries regarding the listening processes among three “levels” of accomplished band directors—a university conductor, an experienced secondary music conductor, and a young secondary music conductor. I accomplished this by using a think aloud protocol (Bergee, 2005; Hasty 2004; Lane, 2006) with the participants over three segments. This protocol allowed participants to verbally communicate any thoughts, comments, and/or ideas that arouse during the listening tasks that were geared toward how they came to that thought.

This study was divided into three segments: (1) A music listening activity by the participant using a think aloud procedure to detail his listening and decision-making across three parts on two music excerpts; (2) a large ensemble rehearsal led by the participant from which his listening and decision-making was analyzed; and (3) a final listening experience in which the participant viewed the video of his own rehearsal (in Segment 2) and think aloud about his listening and decision-making.
Therefore, the purpose of this study was to see how accomplished conductors’ process and think about music when listening to musical performances with evaluative intent. The study was guided by two central research questions:

1. How do accomplished school-based conductors evaluate musical performance?
   More specifically, what triggers their evaluate thoughts?
2. To what degree can their aural processing be described in an organizing framework?
CHAPTER 2: REVIEW OF LITERATURE

The communication process is multilayered, comprising of reading, writing, speaking, and listening. Among the four factors, listening occupies nearly half of our communication time. Brown (1987), one of the pioneers of listening research, specified that there is no meaningful communication without listening (p. 5). According to the International Listening Association (ILA), the definition of listening is the process of receiving, constructing meaning from, and responding to spoken and/or nonverbal messages (Emmert, 1996, p. 2). Listening is often contrasted with hearing. Hearing is involuntary and refers to the reception of aural stimuli of the brain. Listening, on the other hand, is a selective activity that involves the reception and the interpretation of aural stimuli. Mutonono (2011) divides listening into two main categories: passive and active. Passive listening occurs when the receiver of the message is not listening with an intended focus. Active listening is listening with an intended purpose and requires the listener to hear, understand, and then verify the meaning of the message.

Being an active listener is also a multifaceted phenomenon. It entails focusing on nonverbal intentions as well as the verbal. Birdwhistell (1970) argues that the majority of a message derives from the nonverbal dimension. Thus the listener not only focuses on what the speaker says, but also on how the speaker says it (e.g. tone of voice, rate of speaking, pitch, etc.), and to the context in which the message is delivered. The listener who attends to both the verbal and nonverbal communication will likely listen more accurately than the individual who is unaware of these important cues.

The ability to listen effectively is an essential skill for personal and professional success (Purdy, 1997, pg. 3). Medical professionals have stressed the importance of good
listening skills for working with terminally ill patients (Weston & Lipkin, 1989).

Successful lawyers spend more time listening than any other skills and this plays a vital role in legal interviewing, counseling, and in oral argument (Merrill & Borisoff, 1987). People tend to assume that listening is instinctive and needs no special attention. Therefore, many schools do not concern themselves with the study and training in the art of listening (Purdy, p. 6-7).

Former president and CEO of Chrysler and Ford Motor Company Lee Iacocca highlighted in his autobiography the importance of listening in the business sector, “I only wish I could find an institute that teaches people how to listen… Too many people fail to realize that good communication goes in both directions (1984, p.54).” Although listening is our most used skill, rarely do we receive formal listening training in the home or school (Purdy, 1997, p. 4). Listening is not an automatic trait and requires our full and conscious attention. Students in K-12 are expected to listen 65-90 % of the time but language arts instruction is focused mostly on reading and writing (Gilbert, 1988, p. 122). Teachers cannot realistically expect students to innately apply concepts without first understanding how they work—in this case how people listen.

Markevitch (1965) cited in an essay appropriately titled “The Problems of the Education of Today’s Conductors” the importance of listening by indicating the first requirement of a conductor is to have the ability to recognize errors and to know how to correct them (p. 268). As a conductor leading a rehearsal, Prausnitz (1983) considered two forms of listening that are considered the most important part of rehearsing: finely tuned listening and critical listening. A conductor that is a finely tuned listener will monitor what is notated in the printed score solely. A conductor that is a critical listener
will reshape the music to be representative of his own (p. 2). The two listening types manifest themselves in the scenario of a conductor rehearsing an advanced ensemble where technical errors are few but the rehearsal time is in abundance. When this happens, the conductor must shift into a critical form of listening because the conductor would be faced with the dilemma of what to rehearse, since no errors are readily detectable while conducting with a finely tuned listening ear (p.79).

If we acknowledge that conducting is a silent language, then it becomes essential to develop the nonverbal skill to facilitate understanding and hearing (Corporon, 1997, p. 71). In order to develop good musicianship, we must also develop good listenership (p. 76). Corporon noted that it is essential to develop our ability to give clear listening instructions, make astute listening observations, create an understanding of the listening goals, and establish listening priorities. Corporon asserted that “there are a number of important issues which go into successful musicing, none is more central or crucial than listening. The ability to hear what is so is key to learning and teaching a composition (pg.72).” He proposed a procedure called Directed Listening Instructions. It involves who to listen for, what to listen to, where to direct the listening, when to shift the listening, why to listen at all, and how to make sense of what is heard (pg. 73). This guide provides a basic approach to breaking down each listening component into smaller and more focused issues. Corporon suggested there are several different focuses listening can take. For example, listening horizontally allows one to isolate the melody; listening vertically isolates harmony; and listening diagonally isolates texture. This allows the musicians to become aware of the multiple levels of activity in each area and to work with more manageable listening goals. Directed, focused listening allows conductors to develop
perceptions and understandings that facilitate the transfer of the work of art from the page to the listener (p. 79).

Other scholars have termed these listening types as having instructor ears versus conductor ears (Feldman & Contzius, 2011, p. 201). Instructor ears allows one to listen for mistakes that require little or no particular knowledge of a specific score and observe surface-level issues regarding time, pitch, dynamics, expression marks, articulations, balance, blend, and intonation. A conductor ear however allows one to listen more deliberately and specifically. This type of listening allows conductors to listen for color, phrasing, weight, character, energy, texture, thematic and tempo relationships. The authors suggest that teachers who possess conductor ears lead more creative and musical performances (p. 202).

**Focus of Attention in Music Listening**

True conducting is not about the physical movement or gestures but about the ability to listen (Craig Kirchhoff, personal communication, November 21, 2015).

On the surface level, musicians are able to discriminate between low and high quality performances (Geringer & Madsen, 1998). The challenge occurs when listeners are asked to focus more intently to the music, as is the case when conductors are in the act of decision-making during rehearsal. Hasty (2004) suggested that the ability to hear and assess what the ensemble is actually playing is usually neglected among inexperienced conductors because they are so focused on practiced gestures and surface elements of the score that they are simply incapable of giving attention to the other aspects of conducting.

Novice conductors tend to struggle with the listening aspects of conducting. Goolsby (1997) observed three levels of competency in conductors (expert, novice, and
student teachers) and observed their verbal instruction towards the musicians across 60 rehearsals. He found that expert conductors emphasized the overall sound of the ensemble in a rehearsal, and they immediately begin to focus on the expressive aspects of the performance. Also, experts stopped more frequently and in shorter intervals. Goolsby surmised that novice conductors stopped less frequently because they simply did not notice the mistakes or because they had not adequately developed a mental representation of the music being rehearsed. Similar results were found by Byo and Austin (1994). Expert conductors stopped more frequently in rehearsal to provide immediate feedback on the performance while novice conductors allowed large chunks of music to pass without providing substantial feedback. This perhaps could be a sign that novices and experts listen very differently.

Madsen and Geringer (1990) designed one of the first studies to examine music listening using a Continuous Response Digital Interface (CRDI). This research examined music listening patterns of rhythm, dynamics, timbre, and melody among music majors ($n = 60$) and nonmusic majors ($n = 60$). Participants ($N = 120$) listened to ten contrasting excerpts (music by Bartok, Ravel, Tchaikovsky, Rossini, Vaughan Williams, Strauss, Mozart, Beethoven, Brahms, and Subotnik) while using a CRDI dial to gauge the frequency of listening patterns across the designated listening areas. Participants keyed in on the designated musical elements for a majority of the excerpts. Overall, the non-music majors spent the most time listening to dynamics, and then melody and timbre. The music majors listened mostly to melody and then rhythm, dynamics, and timbre. Trained musicians listened to music differently than untrained musicians. Similar results were found in subsequent replication studies (Geringer & Madsen 1995/1996; Madsen &
Geringer, 1995). This raises many interesting issues regarding the differential training needed for greater discriminative listening. People come with natural proclivities to listen in certain ways. To what extent are one’s “natural” listening patterns consistent with the type of listening necessary for effective rehearsal conducting?

Johnson (1996) also utilized the CRDI while investigating the listening patterns of students enrolled in band classes when listening to familiar and unfamiliar band music. Participants (N = 135) consisted of high school band students of two differing performing levels, advanced and intermediate. They listened to three wind band pieces, two unfamiliar and one familiar, and used a CRDI dial to indicate focus on instruments. The dial display was divided into five regions: My section, woodwinds, brass, percussion, and all. Overall, both levels of students mostly listened to their own instrument but the advanced level participants focused on the overall group more than less experienced listeners.

Macleod, Geringer & Scott (2009) examined focus of attention by having high school instrumentalists and university graduate and undergraduate music majors listen to orchestral music examples of contrasting performance levels and tempi. The goal of the study was to examine the listeners’ attention to technical and expressive music elements while rating the performance quality on the orchestral excerpts. Participants rated performances using two 7-point rating scales for technical skill and musicality. The results support the notion that more experienced musicians perceive music differently than those with less experience. University participants selected intonation as the most noticeable musical element followed by tone while high school students selected dynamics as the most noticeable element.
Williams (2005) investigated the relationships between complexity in music and musical training in comparison to focus of attention between melody and harmony. Four groups of participants (university jazz majors, music education majors with no jazz experience, high school instrumentalists, and middle school instrumentalists) listened to a stimulus that consisted of four melodic and four harmonic examples of varying levels of complexity and rated performances using a CRDI. Significant differences were found for focus of attention to melodic complexity and for music training among the groups. The more experienced listeners noticed harmonic complexity more readily than the less experienced listeners. Results suggested that focus of attention and listening patterns continue to develop as musicians' experience and training increase.

Williams (2008) did a follow-up study but examined focus of attention among non-music majors. Participants listened to stimuli designed to isolate melodic and harmonic complexity and used a 10-point Likert scale to indicate the level of focus of attention to melodic or harmonic elements at the end of each listening example. The results indicated no differences among complexity levels but the non-music majors did focus more on melody, likely because they were less familiar with harmonic complexity.

But what happens when people listen to music of an unfamiliar piece? This is usually the case during orchestra and band performance assessments where a panel of judges listens to a group perform unfamiliar music and are asked to provide comments based on what they hear. In cases like this the judge is not able to study the score beforehand but still must provide adequate feedback for the group performing. Regarding music teachers’ focus of listening, Droe (2012) compared the amount and type of band directors’ written comments in two conditions, viewing the score and without the score.
Participants listened to an unfamiliar grade III composition that lacked dynamic variation, balance disparities, and incorrect notes. They listened to the stimulus a second time and wrote comments on a comment sheet. Results revealed that non-score participants wrote more disapproving comments and focused attention mostly on intonation and tone. Those participants who used a score provided more approving comments and focused attention largely on musical expression indicated in the score, for example, dynamics and articulations.

Overall the studies have shown that more experienced conductors listen to music differently than those with less experience. Those with no music training are able to identify dynamic contrast within music (Macleod, Geringer & Scott, 2009; Madsen & Geringer, 1990; Johnson, 1996). With more training/experience, a conductor is able to point out more detailed differences in the music like tone/intonation (Macleod, Geringer & Scott, 2009), melodic content (Madsen and Geringer, 1990), and harmonic complexity (Williams, 2005; Williams, 2008). When faced with familiar and unfamiliar music, young listeners tend to focus on their own instrument (Johnson, 1996). More specifically with a score, listeners focus on technical aspects of a performance when listening to unfamiliar music and focus on expressive qualities without a score (Droe, 2012). As conductors become more experienced, the research has shown that the listening ability changes. To what extent is unknown, but as one gains more experience the level of acuity tends to sharpen as well (Goolsby, 1997). What is missing from this literature is the how. What musical factors trigger conductor to listen in the manner they do or how are they making decisions based on the technical or expressive aspects of the music. Thus far, there has not been any empirical research done on what triggers conductors feedback
while evaluatively listening to music. This question would best be explored using qualitative methodologies. Given these circumstances, there is a great need for the study I am proposing in order to better prepare pre-service and novice conductors and to provide information and understanding into how experienced music conductors listen and make musical decisions.

**Error Detection/Correction Literature**

Music teachers of instrumental conducting and rehearsal techniques would agree that effective conducting requires a multitude of tasks that occur in rapid succession or simultaneously (Sheldon, 2004). Error detection happens to be the ability to detect errors and provide corrections during a multitude of tasks that occur in a multitude of musical and pedagogical contexts. A conductor's effectiveness is largely dependent on the ability to listen to the ensemble and make qualitative judgments against the written score (Byo, 2014; Waggoner, 2011). This is what the error detection/correction literature has attempted to explore and has provided valuable information regarding how listeners evaluate sounds in purposely flawed musical environments. Effective conductors must have the aural diagnostic skills necessary to accurately evaluate when a performance deviates from or concurs with the written notation or aural image of the music. Research on error detection/correction provides supplemental information regarding how listeners perceive mistakes from what they see and hear. In order to meet the demands of experimental control, the sound experience is often decontextualized. Frequently in the research literature departs from an authentic large ensemble experience, that is, the number of parts is reduced, the selection of purposefully inserted performance error types is confined to the more objectively evaluated one (e.g., notes and rhythms), the listener
approaches the task in largely unstudied fashion, the listener responds to a recording, and not a live ensemble. Knowing these factors, I intend to highlight the important outcomes and results of the error detection/correction literature.

By exploring how pre-service institutions train students to listen, we find that majority of the music programs usually rely on aural skill development in the introductory ear training classes that consist of melodic/harmonic dictation and sight-singing along with courses in music theory. It is assumed that aural skills developed from these courses should transfer to the teacher on the podium (Klonoski, 2006). Some researchers have suggested that critical listening skills developed in ear training and music theory courses are effectively transferrable (Gonzo, 1971; Killian, 1991; Larson, 1977; Sheldon, 1998). Other researchers have suggested that those skills are not as easily transferrable and do require more focused attention outside of the ear training and theory courses (Brand & Burnsed, 1981; Byo, 1993; Byo, 1997; Sidnell, 1971).

Brand and Burnsed (1981) examined the different abilities and experiences of undergraduate instrumental music education majors’ (N = 21) to determine the predictability of skill in error detection. Music theory, sight-singing, and ear training academic grades were used as the data source for predictor variables. Results indicated no significant relationships between the predictor variables and a researcher developed error detection measure. Brand and Burnsed contend that error-detection abilities must be addressed separately from ear training and theory courses and treated as a unique skill that should be taught with the specific goal of discriminate hearing. Their study found that achievement in music theory and aural skill courses were not significantly related to ability to error detect.
The research on rhythm and pitch detection reveals that music majors tend to decipher rhythm errors more readily than pitch errors (Byo, 1993; Byo, 1997; Crowe, 1996). Listeners are also able to detect errors better when music is less textually dense and has fewer parts (Byo & Sheldon, 2000; Mount, 1982; Sheldon, 1998). Byo (1993) examined subjects’ responses to pitch and rhythm errors while listening to single and multiple timbres. Undergraduate \((n = 40)\) and graduate students \((n = 20)\) listened to 20 music excerpts, 16 of which containing either rhythm or pitch performance errors across single and multi-timbre examples. Participants detected rhythm errors more accurately than pitch especially in the homophonic textures compared to the polyphonic textures. Interestingly, graduate and undergraduate music majors responded similarly in error detection ability. More specifically, experience did not give graduate students an advantage in detecting pitch or rhythm errors.

Byo (1997) sought to gather data in performance error detection that could lead to information on effective listening practices for prospective music teachers. He examined subjects’ ability to detect pitch and rhythm errors in multiple part settings containing both homorhythmic and polyrhythmic musical examples. Graduate \((n = 45)\) and undergraduates \((n = 105)\) music students listened to a stimulus tape that consisted of purposeful rhythm and pitch errors in one-part monophonic excerpts, two and three part homorhythmic excerpts, and two and three part polyrhythmic excerpts. Results indicate that participants scored diminished as the number of parts increased. Overall, the music students’ overall correct response rates were less than 50%. These results also coincide with other studies (Byo, 1993; Sheldon, 1998) and based on these findings we need to find other methods to
teach acute listening skills because correction rate of 50% is still considered a failing grade among most grading scales.

Crowe (1996) investigated the effects of different modes of score study among preservice students’ ability to detect pitch and rhythm errors. Undergraduate conductor students ($N = 30$) were divided into four groups, no pre-study, study with score alone, study with score and correct aural example, and score study at the keyboard. Participants listened to short musical excerpts containing one to eight parts. Score study with a correct aural example was found to be significantly more effective than study with the score alone. Error detection also became increasingly more difficult as the number of parts in the excerpts rose, regardless of score study style, example set, or session.

Similarly, Mount (1982) investigated the various effects of listening to one voice part, two parts, and all four parts of a Bach chorale on error detection accuracy among vocal undergraduate and graduate music majors. Twenty-five errors were inserted into the chorale, and one phrase was presented at a time. He also found that error detection in less dense textures was more accurate as compared with thicker textures in the Bach excerpts. Specifically, there were significant differences in error-detection test scores between (a) the “one part” and "two parts" listening conditions, (b) the "one part" and "all voices" conditions, and (c) the "two parts" and "all voices" conditions. Sheldon (1998) used band music as musical excerpts and created ear training and sight-singing lessons for undergraduate conducting students ($N = 30$) divided into treatment ($n = 15$) and control groups ($n = 15$). The lessons were incorporated into an instrumental methods course, and results indicated that students participating in the treatment were better able to detect errors in recorded examples than those in the control group. Overall, both
groups were more accurate in detecting rhythm errors compared to pitch errors and when listening to one-voice examples compared to multiple-voice examples. However, the participants gave a slightly above 50% correct response rate in the posttest. Using a larger array of band music, Sheldon (2004) had participants listen to musical excerpts multiple times with a written score to see if repeated listenings could aid in detecting errors over time. Results indicated this was not the case. The response rate for correct and incorrect identification of errors continued to diminish as the listenings were repeated. This could indicate that during the initial listening, participants were relying more on what they heard (aural) versus what they saw with the score (visual).

Byo and Sheldon (2000) examined if singing or humming while listening was an effective practice among music majors to detect errors. Undergraduate music majors (N = 41) were administered a pre- and posttest of listening examples containing one, two-, and three-part chamber music excerpts. Participants were required to pass a singing test of each part of the excerpts before being administered the posttest. This was done for the students to become familiar with the score. Results indicate that singing while listening had an adverse effect to pitch and rhythm accuracy, especially as instrumental textures increased. Singing had little effect on the detecting pitch and rhythm errors in one-part music but had a significantly negative effect in music with more complex texture. This study highlights how novice conductors’ struggle with detecting errors when listening to music with more than one music line in a multi-textural composition. Interestingly, Waggoner (2011) found a significant interaction between error types and ensemble texture. Rhythm errors were detected more often in single sections and pitch errors were detected more in full ensemble textures.
An analysis of the research literature also reveals there is a lack of a methodized system for pre-service teachers to use that could aid in diagnosing issues in a performance. Goolsby’s (1997) study also observed three levels of competency in conductors (expert, novice, and student teachers) and observed their verbal instruction towards the musicians. He found that expert conductors emphasized the overall sound of the ensemble in a rehearsal, and they immediately begin to focus on an expressive performance. Also, experts stopped more frequently and at shorter intervals. Novice conductors stopped less frequently because they simply did not notice the mistakes or because they have not adequately developed a mental representation of the music being rehearsed.

Cavitt (2003) examined the amount of error correction that occurred in rehearsals of expert band directors approximately one to two weeks prior to a spring festival. She surveyed five middle school and five high school band directors. She also examined the nature of the rehearsal based on targeted error types, along with rehearsal pace during target error types through video analysis of the rehearsals. Results indicated that approximately 49% of rehearsal time was spent correcting performance errors and intonation/tone quality errors were the most frequently addressed errors. According to the investigator, “The most important finding in this study was that pace of instruction or level of interaction between teacher and student performance varied with the error correction task” (p. 224).

Doerksen (1999) examined and compare the aural-diagnostic and prescriptive skills of preservice (n = 23) and expert (n = 37) instrumental music teachers. In his study, he tested the abilities of these teachers on specific aural-
prescriptive skills. Participants listened to four contrasting band performances, rated each performance based on nine different musical elements, and also provided feedback on how correct any issues. The findings indicate that there was a difference between the preservice and expert music teachers. Doerksen suggests that the difference between the two groups may accord due to the experience level of the two groups. Also of note when providing feedback, the preservice teachers placed greater emphasis on the conducting/nonverbal aspects of the performance while the expert conductors focused more the teaching and learning process. Doerksen advocates that not everything can be fixed nonverbally, many times verbal explanation is the most effective technique to use.

The training and instruction in error detection has been presented in a variety of formats as a part of a regular class, in a self-instructional format, and combined with conducting experiences. Research studies have examined live, taped, and computer-generated performances (Deal, 1985; Gruner, 1993; Jones, 1990; Jordan-DeCarbo, 1982). Deal (1985) used band literature with a computer-assisted program to see if it would be an effective tool in detecting errors. Deal compared the effects of the computer-assisted program against a programmed instruction approach developed by researcher Ramsey (1979). Deal's program included four-voice excerpts in three contrasting timbres. Both programs resulted in significant gains in error-detection ability but no significant differences were found between the two methods. Also examining computer assisted instruction in error detection training for music majors, (Jones, 1990) revealed a significant increase in pre to posttest gain scores, and concluded that the program, which featured full band excerpts presented in a printed score, was effective in developing the participants’ abilities to detect rhythm, style, pitch, and articulation errors.
Gruner (1993) also investigated the effects of a computer-assisted training program on error detection ability of instrumental preservice students. This program featured synthesized wind instrument timbres in two- to five-part excerpts of contrasting wind band repertoire. He found that participants were better at detecting rhythm errors than pitch errors. Jordan-DeCarbo (1982) investigated the effects conducting and programmed materials in error detection training. He used recorded professional musicians as the stimulus excerpts for the programmed materials group and live musicians were used for the conducting group. Participants ($N = 89$) were divided into two groups. The programmed materials group listened to error filled performances while the conducting group conducted live musicians. Both groups identified errors by type, part, and measure. During the conducting test, participants detected errors while actually conducting a live ensemble. The results indicated that the conducting group scored significantly higher than the programmed materials group, which indicated no significant difference. Results suggest that error detection training with the use of on-podium experiences is viable. This scenario more closely resembles what students would be doing in future teaching/conducting situations. While these studies are not specifically about the teaching of error detection ability, it is concerned with how music conductors’ process and listen to music that could later provide information into how to teach future conductors to listen better. These studies give us insight into how conductors would function in simulated/sterile situations but what do conductors do in actual listening environments?

These studies highlight the necessity to develop critical listening skills for preservice teachers to effectively evaluate ensemble performance with the purpose to
effect change. There is a general consensus among researchers that error detection is an essential skill for conductors (Byo, 1993; Byo, 1997; Byo & Sheldon, 2000; Crowe, 1996; Deal, 1985; Doerksen, 1999; Forsythe & Woods, 1983; Gonzo, 1971; Gruner, 1993; Jones, 1990; Jordan-DeCarbo, 1982; Mount, 1982; Sheldon, 1998; Sheldon, 2004; Sidnell, 1971; Waggoner, 2011), however there is little agreement on the most effective methods for such skill development. Many researchers have concluded that the traditional instruction of ear training within colleges and universities is inadequate in preparing future educators for rehearsal and performance situations in which they must detect and correct errors in music (Brand & Burns, 1981; Byo, 1993; Gonzo, 1970; Jones, 1990; Larson, 1977; Sidnell, 1971). Programmed materials and computer-assisted instruction have been shown to be useful in teaching error detection (Deal, 1985), but it has been suggested that podium-based instruction remains the most contextualized viable means for advancing skills in error detection (Jordan-DeCarbo, 1982).

Whether it is an oversight or assumption, many young conductors do not have the skills required to efficiently and accurately analyze an ensemble performance (Carse, 1929; Corporon, 1997; Lumley & Springthorpe, 1989; Markevitch, 1965; Pasquale, 2008). This is especially evident among novice conductors listening and analyzing music with multiple staves and timbres (Byo & Sheldon, 2000; Crowe, 1996; Mount, 1982; Sheldon, 1998). As the research indicates, there is a need for a pedagogical method that not only improves one’s ability to detect errors but a system that will develop overall aural analysis skills.

The current literature provides information on error detection among pitch and rhythm errors, but what is missing are other the myriad of other listening aspects such as
tone, intonation, articulation, dynamics, phrasing, interpretation, balance, etc. The frequent focus on pitch and rhythm errors can lead one to believe that these are the only ways conductors listen to music, but this is not the case in most practical cases. While the goal of most research studies are limit and isolate variables, we need to look at other factors that lead to error detection/correction outside of rhythm and pitch errors exclusively. The literature tends to lack much of the context that usually accompanies a conductor’s listening such as familiarity with the music, familiarity with the students, the distraction of conducting, the distractions of the visual environment, the variety in the music, etc. Also, these studies leave out the listening processes of how people come to the conclusions they make. This study not only aims to examine the listening processes of music conductors but also evaluate the type of listening among accomplished conductors across multiple levels.

**Conducting-Related Literature**

An examination of conducting pedagogy textbooks exposes the limited amount of published research and pedagogy in teaching listening analysis skills within an undergraduate music-teaching curriculum. The National Association of School of Music (NASM, 2015) indicates the music teachers need to possess the ability to apply complete set of musicianship skills. These competencies are essential for the teaching process for a Bachelor of Music in Pedagogy (pg. 94). According to NASM, students who graduate need to have the ability to hear, identify, and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre, texture (pg. 95). Specifically with listening and ear development, students must acquire the ability to employ an understanding in aural, verbal, and visual analyses, and the ability to take aural dictation
Students need a systematic approach to developing aural acuity skills. Other scholars have attempted to develop models for this. Pasquale (2008) developed a model for aural-based listening acuity for preservice conducting students called the Directed Listening Hierarchy. This approach is a categorized, systematic approach designed to teach aural analysis skills of a live ensemble performance to undergraduate conducting students. While this study is based on anecdotal knowledge, Pasquale does propose a methodology for conductors to listen critically. The Directed Listening Hierarchy is based on a systematic hierarchical order of four diagnostic categories of ensemble pedagogy consisting of pulse, body of sound, symmetry, and musicality (see Figure 1). Pasquale considers pulse a level one listening responsibility that has five subcomponents for aural diagnosis: 1) internalization of subdivision, 2) internalization of subdivision with metered inhalation and exhalation, 3) the start of the note, 4) the release of the note, and 5) the change of the note to the next note (p. 45). The second item on the Directed Listening Hierarchy, body of sound, comprises of twelve subcomponents that aide the conductor and players in aural analysis of characteristic ensemble sound: 1) embouchure, 2) airstream, 3) articulation, 4) vowel shape, 5) characteristic sound quality, 6) resonance, 7) consistent note body, 8) note shape, 9) note length, 10) executive skills, 11) releases, and 12) instrument tendencies.
Ensemble symmetry, the third item in the Directed Listening Hierarchy, is a concept that permits each instrument and/or similar voice color to be audible at a volume appropriate for the musical context and includes balance and color manipulation in regard to composer intent (p. 57). When aurally analyzing ensemble symmetry, the conductor and players should listen for five components within the realm of pulse and body of sound: 1) individual, section, and ensemble tonal strength; 2) volume as a relative property; 3) student execution of the three levels of listening; 4) resemblance of ensemble sound according to his Ensemble Symmetry Chart that indicates equality of upper, middle, and low timbres (see Figure 2); and 5) manipulation of the Ensemble Symmetry Formula as per the musical context and composer intent (p. 58). The musicality category
of the Directed Listening Hierarchy, the final category, consists of five components: 1) forward motion, 2) tonal energy 3) style, 4) dynamics, and 5) cadential clarity.

Figure 2. Ensemble Symmetry Chart
Note: Used with permission, see Appendix I

While Pasquale provides a systematic approach to develop and guide acute listening skills, it is based on anecdotal knowledge and has not been investigated through an empirically researched process. Byo (1997) sought to gather data in performance error detection to provide information on effective listening practices for prospective music teachers, but as noted earlier, having a correct response rate of 50% from undergraduate and graduate music students is not encouraging. Error detection studies are not enough. Students need to have more direct and intentional experiences with ear development geared towards ensemble conducting. Given these circumstances, I look to empirically examine music conductors across various levels to see if their listening skills are similar
to Pasquale’s Directed Listening Hierarchy, Eugene Corporon’s Directed Listening Instructions, or if they implement completely contrasting listening strategies.

Summary

Missing in the literature are studies that examine expressive qualities, interpretation, and various other music elements that are parts of the conductor’s fully contextualized listening experience. Generally speaking, what guides the conductor’s ears when listening to music in its full context without any inhibitions or limitations? Also missing in the listening research literature is what triggers accomplished music conductors’ to listen in the manner they do. It seems only logical that instruction designed to cultivate expertise in conducting should consist of objectives based on what accomplished conductors do — the “habits and concepts that reflect the best contemporary thinking of the domain” (Gardner, 2000, p. 116).

Feldman & Contzius (2011) proposed the main difference between a novice conductor and a seasoned professional is the level of detail with which they listen (p. 201), but the literature suggests that the skill of active listening can only be acquired through experience (Carse, 1929; Corporon, 1997; Lumley & Springthorpe, 1989; Markevitch, 1965). Lumley and Springthorpe (1989) indicate that experience is required in order to notice the complexities and details in music (p. 115). Carse (1929) and Markevitch (1965) both assert that the skill of recognizing faults and providing adequate feedback can only be gained through experience on the podium (Carse, p. 25; Markevitch, p. 268). It would be of enormous benefit to examine accomplished school-based music conductors to find out exactly how they aurally process music. Writings on expert collegiate wind band conductors provide an abundance of information on
technique, tone, rhythm, intonation, rehearsal preparation, rehearsal philosophy, interpretation, and literature but provide little to no information regarding pedagogical listening strategies (Williamson, 2008). The same shortcomings occur in text written on expert orchestra conductors as well (Bamberger, 1965; Chesterman, 1976; Chesterman, 1990; Wagar, 1991). The skill of aural analysis and evaluation is also given little emphasis in conducting pedagogy textbooks. The focus is largely on physical conducting gestures and baton technique with there are little to no mention of developing listening skills (Garofalo & Battisti, 2005; Green, 1992; Hunsberger & Ernst, 1992). Again I will postulate that the authors believe that students should have already developed high critical listening ability before they begin to conduct.

There has also been little empirical investigative study into how novice or expert conductors think about music in an active listening context. Bergee (2005) attempted to have novice, intermediate, and expert orchestral conductors conduct a live ensemble while simultaneously talk about their thought processes into a small microphone attached to the person. The results found that the participants experienced difficulty performing the multiple tasks simultaneously. Hasty’s (2004) study followed a similar protocol and showed that conductors with more experience were more comfortable with the think-aloud tasks than the others, but the results rendered were still not a valid measure into how the conductors actually processed the music due to the unaccustomed nature of talking aloud while simultaneously conducting. Hasty suggest that the skills, emphases, and methodologies currently taught within undergraduate conductor-training programs leave the young conductor with deficiencies in the ability to critically listen and evaluate ensemble performance.
Hasty (2004) continues by stating:

So much space in the conducting literature is devoted to the skill of gesture and score preparation that little is left for the necessary skill of critical listening. This omission is not simply due to the lack of space in the volume, but more due to the universal notions of oversight and assumption. Authors and teachers assume too quickly and readily that the ability to analyze and problem solve in response to hearing a performance while conducting is inherent in all conductors (p. 27).

These studies highlight the necessity to develop critical listening skills for preservice teachers to effectively evaluate ensemble performance with the purpose to effect change. A major deficiency exists in the young conductor’s ability to listen and evaluate ensemble performance. Whether it is an oversight or assumption, many young conductors may not have the skills required to efficiently and accurately analyze an ensemble performance (Carse, 1929; Corporon, 1997; Lumley & Springthorpe, 1989; Markevitch, 1965; Pasquale, 2008). As the research indicates, there is a need for a pedagogical system that develops aural analysis skills.

This is why study in music cognition would benefit from a greater understanding into the thinking processes of accomplished conductors in how they analyze and process music while listening to a large ensemble performance. This gap in literature illuminates the problem inherent in the training of future music conductors, and may indeed point to some directions that teachers may look for answers and methodologies that would nurture the mind and thinking prowess of inexperienced conductors. The study of accomplished conductors is vital in allowing the researcher to tap into the listening processes of those who have achieved immense success in the field and use this untapped knowledge towards pedagogical advancement for novices. The results from a study of this nature may lead to listening strategies that can expedite the training of the conductor.
Qualitative techniques were used to answer inquiries regarding the individual listening hierarchies among the conductors and to compare similarities/differences between a successful young band conductor, an accomplished high school band conductor, and an accomplished university band conductor. I accomplished this by using a think-aloud protocol (Bergee, 2005; Hasty 2004; Lane, 2006) with the three participants while they listened to contrasting two musical excerpts, conducted their respective concert ensemble, and discussed listening strategies of their rehearsal. This protocol allowed participants to verbally communicate any thoughts, comments, and/or ideas that aroused during the listening sessions that were geared toward how they came to that thought. Therefore, the purpose of this study was to examine the thinking of accomplished school based band conductors. How do they evaluate musical performance—less so the evaluation, more so the thinking that informs the evaluation?

This study was guided by two central research questions:

1. How do accomplished school-based conductors evaluate musical performance?

   More specifically, what triggers their evaluate thoughts?

2. To what degree can their aural processing be described in an organizing framework?
CHAPTER 3: METHOD

Participants

As indicated by the Approval Request Form in Appendix A, exemption from institutional oversight was requested and granted. All Institutional Review Board policies were followed. Consent forms from each participant is also included in Appendix B. Participants in this study \((N = 3)\) derived from purposeful sampling (Creswell, 2013; Merriam, 2002). In particular, I used criterion sampling, which involved searching for individuals who met certain criteria (Creswell, p. 158). Because the experiences of participants were used instrumentally to illustrate the accomplished conductors listening evaluatively to music, this phase of the study most resembles a collective, grounded theory multiple case study.

The participants consisted of a successful young band conductor, an accomplished high school band director, and an accomplished college band director. In an effort to protect those who generously contributed their thoughts and opinions, I have chosen to use pseudonyms to represent the participants. To assist with name associations throughout the document, pseudonyms are strategic in providing clues about professional position and status. Ramón C. is an accomplished college band director at a flagship state public university in the southern part of the United States. He is a classically trained pianist and percussionist who has a bachelor’s degree in music education along with a masters and doctorate in instrumental wind conducting. Ramón teaches advanced undergraduate conducting, conducts a collegiate wind-based ensemble, has taught and is certified to teach in K-12 public schools, and has been an adjudicator and clinician at regional, national, and international music events. The C in Ramón C. stands for his
college status. James E. is an experienced and accomplished band director at a performing arts magnet high school. He is a classically trained trumpeter who has a bachelor’s degree from a regional university in the southern part of the United States. James E. has taught for 23 years at the high school level, is a current head director of a class 4A band program, conducts the top school concert ensemble, has a history of consistent superior ratings for marching band, concert band, and chamber ensemble performance, has led group performances to regional/national events (for example, CBDNA, NBA Bands for All, Carnegie Hall, etc.), and has been an adjudicator and clinician at regional and national music events. The E in James E. stands for his experienced teacher, high school status. Evan Y. is an accomplished young band director at a private religious-based high school. He is a classically trained trombonist who has a bachelor’s degree from a flagship state public university in the southern part of the United States. He has taught for six years at the high school level, is the head director of a class 3A band program, conducts the top school concert ensemble, has a record of consistent superior ratings for marching and concert bands, and has been an adjudicator and clinician at regional music events. The Y in Evan Y. stands for his young teacher, high school status.

**Stimulus Recordings**

Recorded wind band performances served as a major source for data collection. Participants listened to two grade 4 wind band excerpts selected from the *Teaching Music Through Performance in Band* catalog, a repository of quality concert literature selected by leading experts in the wind band field (Howard, 2008). The music selected was unfamiliar to the participants. They had not conducted, performed, studied, or listened
comprehensively to the music prior to this listening activity. It was expected that participants’ evaluative responses be based more so on “in-the-moment” listening and decision-making and less on preconceived notions of the music. Performances were carefully selected to prompt participants to talk about the music in an evaluative manner. Participants listened to two contrasting up-tempo, march style music selections, one with noticeable performance errors and one without noticeable performance errors. Performance errors were defined as identifiable mistakes or deficiencies in pitch, tone quality, intonation, rhythm, dynamics, and balance.

Contrasting levels of performance quality were deemed necessary to assess how conductors from a wide gamut of experiences listen to music with evaluative intent. Stimulus audio recordings exposed listeners to performance flaws existing on a range of salience, from easily detectable to nothing detectable, depending on listeners’ aural discrimination. The expectation was that all conductors would able to give abundant insight into their listening process with music containing numerous performance errors. The music containing no noticeable performance errors was of interest to gauge conductors’ decision-making when performance errors are less noticeable. Would they comment on other aspects such as the positive qualities? Even though performance errors are void of pitch and rhythmic discrepancies, conductors should still be able to comment in other areas such as interpretation, balance, articulations, and phrasing. For example, if a conductor were to rehearse a group of professionals, e.g. the Berlin Philharmonic, what would one say to challenge the ensemble? How would a conductor rehearse an ensemble when obvious errors, like incorrect notes and rhythms, are not readily present but subtleties and nuances of expressive performance remain in play?
The music for this study was Robert Jäger’s *Third Suite* and Gordon Jacob’s *An Original Suite*. I used movement one, the “March,” from both pieces as the music listening activity portion. Jäger’s “March” from *Third Suite* has 53 measures, is two minutes and twenty-three seconds in time length, and is scored for the traditional symphonic band instrumentation, containing piccolo, (2) flute, (2) oboe, E-flat clarinet, (3) B-flat clarinet, bass clarinet, contrabass clarinet, (2) bassoon, (2) alto saxophone, tenor saxophone, baritone saxophone, (3) cornet, (2) trumpet, (4) horn, (3) trombone, baritone, tuba, string bass, timpani, snare drum, field drum, bass drum, crash cymbals, bells, xylophone, and gong. This movement is in the key of F major but makes use of chromatic scale fragments at rehearsal letter D. Although the phrases are generally of standard length, the composer uses a variety of alternating time meters throughout the movement: 3/4, 4/4, 5/4, and 6/4. It is marked *Alla Marcia* at quarter note= 120. As a standard performance practice, the typical stylistic implications for a standard march would be expected. For example, quarter notes should be lifted and/or detached to maintain forward motion and appropriate march style. Melodic material is usually stepwise motion throughout with occasional eighth note triplet arpeggios.

During the first strain in measures 1-8, the melody is presented in B-flat clarinet 1 and alto saxophone 1. The accompaniment is homo-rhythmic in clarinet, saxophone, and percussion families. After a repeat the flute and bells play an obbligato figure and trumpet 1 plays a “fanfare” motive. This section is in F major with alternating 4/4 and 3/4 meters. The second strain takes place in measures 9-17. Here the melody is in the oboe, trumpet, cornet, and trombone parts. The accompaniment is in the piccolo, flute, E-flat clarinet, and B-flat clarinet. This section shifts to F major in a 5/4 meter. Measures 18-25
contain a repeat of the first strain melody with full orchestration and added piccolo, e-flat clarinet, and b-flat clarinet to the obbligato figure. The tonality switches back to F major. Measures 26-33 contain a percussion solo interjection that serves as the “dogfight” style call and response between snare drum and field drum. Measures 34-42 consist of the “Trio” section in B flat major with the melody in the clarinet and baritone with contrasting meter shifts of 5/4, 6/4, 3/4, and 4/4. Measures 43-53 contain a repeat of the melodic “fanfare” material in the clarinet and cornet parts with the coda occurring in measures 51-53 to end the piece.

The recording for Jäger was a 2011 performance by a region level high school honor band (Jager, 1928). This recording served as the stimulus for noticeable performance errors. This performance took place after three days of rehearsals in a typical high school honor band setting. The perceived performance errors in this performance included, but are not limited to, balance issues within the brass and woodwind sections, technical deficiencies in the clarinets, clarinet intonation at letter D, lack of defined articulation style across ensemble, and immature tone qualities across ensemble, in particular the clarinets in upper register.

Gordon Jacob’s “March” from An Original Suite has 103 measures, is three minutes and forty seconds in time length, and is scored for standard symphonic band instrumentation as well, containing piccolo, flute, oboe, E-flat clarinet, solo B-flat clarinet, (3) B-flat clarinet, alto clarinet, bass clarinet, contrabass clarinet, (2) bassoon, alto saxophone, tenor saxophone, baritone saxophone, (2) cornet, (2) trumpet, (4) horn, (3) trombone, baritone, tuba, string bass, timpani, snare drum, bass drum, crash cymbals, and triangle. This movement shifts through B flat major, F major, and g minor. The
tempo is marked Allegro di Marcia at quarter note equals 120 with a time signature in 4/4 throughout. There are stylistic changes throughout the movement including legato, staccato, majestic, bold, and lyrical sections. The most mechanically challenging passages are in the upper woodwind lines, especially in the flute, piccolo, and clarinet lines in mm. 17-18, 84-87 and flutes/ E-flat clarinet at mm. 46-49. The first cornet part has a conjunct sixteenth note passage within the key of F major in mm. 88-90. Another tricky spot are the final seven measures mm. 96-112. The sudden dynamic change from pianissimo coming from fortissimo coupled with one group one group that enters either on beats “two-three” or “four-one” versus another group that enters “and-three” or “and-one” that could lead to unclear attacks that interrupt the pulse and can create tone and intonation challenges.

Measures 1-2 serve as the introduction with a snare drum solo at forte diminuendo. Measures 3-11 is in g minor with a legato slurred melody in the upper woodwinds and cornet 1 and accompaniment in low woodwinds, cornet 2, horns, and euphonium. Rehearsal letter A, measures 11-20, the melody is repeated but upper woodwinds up an octave and tutti scoring with a phrasal extension in mm. 19-20. At rehearsal letter B, mm. 21-29, but the music changes into a detached style with the melody in the upper woodwinds and cornet 1. Measures 29-35 serve as a variation of the melodic material from theme 1 in the piccolo, flute, oboe, E-flat clarinet, solo clarinet, and clarinet 1, and cornet parts. There is a two-measure phrase transition, mm. 34-35, in the low woodwinds, baritone, and tuba parts that lead into new melodic material. New melodic material occurs at rehearsal letter C, measures 36-45, with a two-measure introduction followed by the melody in the upper woodwinds with marcato
accompaniment in the brass. Measures 46-49 references previous melodic material but functions as transition material into rehearsal letter D at measure 50. Measures 50-57 serves as a interlude that goes into rehearsal letter E. A new melody occurs in measures 58-71 in the flute, bassoons, all clarinets, and saxophone parts with a solo tuba playing alternating 4-bar phrases with the baritone saxophone and baritone. Rehearsal letter F, measure 76, begins a marcato section in the brass and low woodwinds contrasting the legato melodic material from theme 1 in the upper woodwinds and baritone line. This takes place until rehearsal letter G, measure 84, where the sixteenth note \textit{obbligato} occurs in the piccolo, flute, E-flat clarinet, and solo clarinet lines and transfers to the cornet 1 solo in measure 88-92. The first melody returns at rehearsal letter H, measure 93, for four measures in the upper woodwinds and cornet parts before concluding with a seven-measure coda to conclude the movement on a g minor chord.

The recording for Jacob’s \textit{An Original Suite} was a the reference recording from the \textit{Teaching Music through Performance} Vol. 3 CD series performed by the North Texas Wind Symphony (Corporon & Stamp, 2002). This recording served as the stimulus for music with no noticeable performance errors. This recording, along with other performances on this CD series, are used as reference recordings for the works included in the \textit{Teaching Music through Performance} text which go through a rigorous recording session process. The recording sessions serve as a way to have high quality performing representations of music void of performance and technical errors. Therefore, this recording was chosen to serve as a performance with no noticeable performance errors in hopes the participants would to listen more assiduously in order to provide adequate feedback. Again, the goal of this study was to gain insight into the participants’
listening processes, not to assess how they discriminately differentiate performance errors.

Participants listened to the noticeable performance errors selection first (Jäger-Third Suite) and the error-less selection second (Gordon- An Original Suite). This process lasted approximately 45 minutes for each participant. This was to allot the maximum time for participants to go through the think-aloud procedure with multiple stops and starts. It was expected that participants would stop and start frequently throughout each excerpt, more so during the noticeable performance errors selection.

**Procedures**

Participants were asked to engage in a task and think-aloud as they went through the listening tasks. This protocol analysis was a research procedure used to identify psychological processes through examination of a verbal record (Richardson & Whitaker, 1996) and allowed the participant’s verbalizations to be recorded as data (Ericsson & Simon, 1993). A think-aloud protocol involved participants thinking aloud as they were performing a set of specified tasks. Participants are asked to speak anytime they had a comment-worthy moment. This included what they are thinking, doing, looking at, and/or feeling. This gave the researcher insight into the participant's cognitive processes to make one’s thought processes as explicit as possible during task performance (Merriam, 2002). In this formal research protocol, all verbalizations were transcribed and then analyzed. As presented in Table 1 with each of the participants, this grounded theory-like approach was divided into three segments: (1) A music listening activity by the participant using a think aloud procedure that detailed his listening and decision-making across three parts on two contrasting music excerpts; (2) a large ensemble rehearsal led by the participant
from which his listening and decision-making was analyzed; and (3) a final listening experience in which the participant viewed the video of his own rehearsal (in Segment 2) and think aloud about his listening and decision-making.

Table 1

<table>
<thead>
<tr>
<th>Segments</th>
<th>Segment 1</th>
<th>Segment 2</th>
<th>Segment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>Acclimate to score</td>
<td>Rehearse own band</td>
<td>View video of own band and think aloud</td>
</tr>
<tr>
<td>Part 2</td>
<td>Adjudicate over recorded performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part 3</td>
<td>Listen to recording and think aloud</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This study followed Ericsson & Simon’s three levels of verbalizations for think aloud procedures (1993, p. 79). Level one verbalization occurred when one talked without providing any glimpses into his thought process itself. This took place when participants were asked to talk aloud as if an adjudicator during the first music listening activity. Level two verbalization occurred when one provides a description or explication of a comment or thought. This took place when participants made comments regarding the performance aspects during the music listening activity in Segment 1 and while watching their rehearsal in Segment 3. These verbalizations are the most common according to Ericsson & Simon. Level three verbalization occurred when one explained his thought process. This took place when participants explained where their thoughts originated. Those comments came from either the participants’ own volition or from probing questions by the researcher. Since the purpose of the study was to gauge conductors’ cognitive processes while listening evaluatively to music, it was expected that the think-aloud protocol would answer the research questions in a natural manner, from the participant without prompt. However, in cases where level three verbalizations
did not naturally emerge, I involved myself by asking clarifying questions using the
guidelines of responsive interviewing (Rubin & Rubin, 2005). This type of questioning
allowed the participants to explain their thought process during each listening task. I used
strictly-adhered-to neutral, scripted prompts such as “Tell me more” or “Where did that
thought come from” to avoid any potential threats to internal validity (Ericsson & Simon,
1993, p. 83). I was particularly interested in participant’s level three verbalizations even
though they spoke at will on their cognitive listening processes.

I also utilized concurrent and retrospective verbal protocols (Ericsson & Simon,
1984). Concurrent verbal protocol occurred when a participant was currently engaged in
the task, for example during the music listening activity where they commented as
adjudicators. Retrospective verbal protocol occurred immediately after a task when
participants drew on short- or long-term memory to describe what they remember
thinking while completing a task. This occurred during the participant’s rehearsal activity
when participants commented on their listening processes from the prior rehearsal.

All verbalizations were recorded using digital editing software (Audacity, 1991).
After transcribing the verbalizations of each participant, all verbal data sets were input
and analyzed using qualitative software ATLAS.ti.1.0.36 (Muhr, 2006). ATLAS software
allowed me to manage the large quantity of verbalizations for each participant, code
verbalizations, and link codes into themes based on the framework of my research
questions. This software also made it possible to search for particular words and phrases
in context, thus strengthening the credibility of inferences made by the researcher during
the coding process (Hwang, 2008).
**Segment 1: Music listening activity.** The music chosen was movement one from each piece, in both cases movement one, the March. An MP3 file of each piece was played through a laptop with adjoining external speakers. Participants entered a quiet room, free from any distractions, and were read the instructions for the study, which explained the three parts to Segment 1. (A) Acclimate to the score. Once the participant indicated he understood the instructions, the participant had five minutes to acclimate to the unfamiliar score. After the five minutes, he was asked the following questions, “What do you notice in the score? Did anything stood out?” The purpose was for participants to comment in a general way about noticeable aspects of music from a performance standpoint. This level two, retrospective verbal protocol allowed me to gauge the participants’ plan (if there was one) for making performance judgments, assess where his attention was focused, and determine any pre-set listening protocols. (B) Listen and adjudicate performance. Once the participant finished verbalizing the listening expectations from part one, he then listened to the first music selection from beginning to end while following along with the score and simultaneously providing evaluative commentary to resemble an adjudicator in a performance assessment setting. This level one, concurrent verbal protocol allowed the participant to comment on any thoughts present on the music in-the-moment. The goal of this first listening run through was to make comments as if judging at a music performance assessment (MPA). (C) Listen and think aloud about decision-making. After the participant finished verbalizing on the first listening from step two, he then listened again from the beginning and stopped the music at any point to speak about the aural experience (what he was hearing, how he was coming to the decision to listen to this or that way, and/or where did that thought come
from?). This level two and three, retrospective verbal protocol allowed participants to provide feedback on the thinking processes of the music. Segment 1 in its entirety lasted approximately 45 minutes.

Participants were read instructions, see Appendix C, and listened to the musical excerpts from a MacBook Pro laptop. Music was played through external speakers that connected to the laptop. Follow up questions occurred during stopped music to gain deeper understanding of the listen process of the participant such as, “Tell me more; What do you mean? Could you elaborate?” When completed with the first music selection, we proceeded to the second music selection and followed the same procedures. Segment one of this study concluded when the participant has completed the second music selection of the listening activity. The verbatim verbal transcript of each participant is included in Appendix E.

**Segment 2: Rehearsal activity.** Each participant led one mid-sequence rehearsal of his regular ensemble. Ramón C. led a 30-minute rehearsal on Marice Stith’s transcription of Leonard Bernstein’s *Three Dance Episodes from On The Town* in preparation for his final spring concert. James E. led a 60-minute rehearsal on Eric Whitacre’s *Godzilla eats Las Vegas* in preparation for his school’s spring concert. Evan Y. led a 35-minute rehearsal on Claire Grundman’s arrangement of *Pomp and Circumstance* in preparation for his school’s graduation commencement. A video recorder was set up in an unobtrusive position in the rear of the ensemble but facing directly toward the conductor to capture all verbalizations and movements during the rehearsal. All equipment and materials used for video recording the rehearsals were of sufficient quality to provide clear audio and video signals. From the video, rehearsal
frame analysis was used to catalog and describe the rehearsal footage into workable frames (Duke, 1994; 2000). Rehearsal frames are segments of rehearsals that focus on the achievement of specific and immediate goals. I used the rehearsal frame as the observation unit to determine the type of feedback and to document the topic of participants’ verbalizations during their actual rehearsals, all of which went towards the central research question of how conductors listened when in an evaluative mode. While Segment 1 went into the participants’ cognitive processes of unfamiliar music, by observing their rehearsals I was able to get first-hand accounts into how they listen in a rehearsal environment. This allowed me to gauge what they are thinking based on what took place during the rehearsal. Also, a verbatim transcript of all conductor talk from the rehearsal video was produced and later analyzed using qualitative software ATLAS.ti.1.0.36 (Muhr, 2006) for evidence of the conductor’s listening patterns (Barron & Engle, 2007). The verbatim verbal transcript and rehearsal frame breakdown is included in Appendix F.

**Segment 3: Participant rehearsal activity.** From the video in Segment 2, I selected rehearsal frames that contained substantial content of ensemble performance and conductor feedback to serve as the stimulus for this segment. I aimed for approximately 10-13 minutes of rehearsal footage. The goal was to select video that would stimulate retrospective commentary from participants relative to decision-making. Evan Y.’s video was 11 minutes and 40 seconds, James E.’s was 12 minutes and 26 seconds, and Ramón C.’s was 13 minutes and 25 seconds. See Table 2 for the order and list of categories of the rehearsal frames for each participant.
Table 2
Participant’s Rehearsal Frame Order of Segment 3 video

<table>
<thead>
<tr>
<th>Evan Y.</th>
<th>James E.</th>
<th>Ramón C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF 1 (Tempo)</td>
<td>RF 2 (Balance)</td>
<td>RF 9 (Dynamics)</td>
</tr>
<tr>
<td>RF 2 (Rhythmic Clarity)</td>
<td>RF 3 (Articulations)</td>
<td>RF 10 (Intonation)</td>
</tr>
<tr>
<td>RF 3 (Articulations)</td>
<td>RF 4 (Intonation)</td>
<td>RF 4 (Dynamics)</td>
</tr>
<tr>
<td>RF 4 (Articulations)</td>
<td>RF 5 (Balance)</td>
<td>RF 5 (Articulations)</td>
</tr>
<tr>
<td>RF 5 (Balance)</td>
<td>RF 6 (Rhythmic Accuracy)</td>
<td>RF 6 (Intonation and Balance)</td>
</tr>
<tr>
<td>RF 6 (Intonation)</td>
<td>RF 7 (Balance)</td>
<td>Balance</td>
</tr>
<tr>
<td>RF 7 (Dynamics)</td>
<td>RF 8 (Tempo Dragging)</td>
<td>RF 7 (Dynamics)</td>
</tr>
<tr>
<td>RF 8 (Tempo)</td>
<td>RF 9 (Articulations)</td>
<td>RF 8 (Pitch accuracy)</td>
</tr>
<tr>
<td>RF 9 (Balance)</td>
<td>RF 13 (Rhythmic accuracy)</td>
<td>RF 12 (Articulations and Dynamics)</td>
</tr>
<tr>
<td>RF 10 (Tempo and Balance)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: RF stands for Rehearsal Frame

The video was synced from the video camera to a MacBook Pro, input and edited into iMovie software, and later converted into a mp4 file to be viewed through QuickTime player. Participants were read instructions, see Appendix D, and watched their selected rehearsal footage via a MacBook Pro laptop while implementing the think aloud protocol from Segment 1. Before watching the rehearsal footage, participants were asked to reflect on the prior rehearsal. This retrospective think aloud protocol allowed the participant to draw on short-term memory of the rehearsal so that he would readily recall and describe what he remembers thinking during the rehearsal (Ericsson & Simon, 1993). The following questions were asked during this session: How did the rehearsal go? What went well? What would you go back and change? Participants then responded to rehearsal segments using the think aloud protocol. Participants were able to stop the rehearsal video to comment on the listening process they were going through at any given time. As in Segment 1 when necessary, I asked clarifying questions to the participants using the guidelines of responsive interviewing (Rubin & Rubin, 2005), which allowed for follow-up questions and for probes to keep the conversation on topic to lead to level 3
verbalizations (Ericsson & Simon, 1984). This type of questioning allowed the participants to explain their thought process during the listening task. All verbalizations were recorded using Audacity digital software, transcribed and analyzed using qualitative software ATLAS.ti.1.0.36. The verbatim verbal transcript of each participant is included in appendix G.

**Pilot Testing**

Two accomplished musicians with significant music teaching/conducting experience participated in a pilot study in an effort to see if the music chosen would be appropriate in engaging their cognitive listening processes under separate 30-minute time constraints. The participants went through the procedures identical to Segment 1 while listening to movement one, March, of Robert Jäger’s *Third Suite*. Based on this pilot testing, participant’s instructions were reorganized to provide pertinent information in a logical, sequential manner. Before, all instructions were explained at the beginning, which made for confusion later. Also, an emphasis was inserted for participants to focus solely on performance aspects of the piece. Numerous times participants would comment on the compositional structure of the piece, for example comments like, “I love how the composer wrote contrasting percussion lines” or “This piece is in ABA form separated by the percussion interlude in the middle.” This pilot testing also made evident that external speakers were needed. Originally the music played through the laptop speakers but were inaudible at softer dynamics.

**Analysis**

I used a verbal protocol analysis called think-alouds as the basis for analyzing cognitive aspects the musical experience which is a research procedure used to identify psychological processes through analysis of a verbal record or protocol (Ericsson &
Simon, 1984). Using this technique is one of the most effective ways to assess higher-level thinking processes and can be used to study individual differences in performing the same task (Olson et al., 1984). Verbal reports from think-aloud data are a “thoroughly reliable” source of information about the participant’s cognitive processes (Ericsson & Simon, 1984, p. 247). Participants in this study engaged in multiple tasks and used the think-aloud procedure as they processed information. The resulting verbalizations were recorded, transcribed, and analyzed. For the analysis, I used a grounded theory-like approach which is a qualitative strategy of inquiry that allows for the development of a general, abstract theory of process, action, or interaction grounded in the data (Creswell, 2013). Following the data collection, methodologies of Strauss & Corbin (1990) and Pressley (2000) were adapted to guide data analysis. This research approach allowed me to develop categories from the information (open coding), identify relationship among the open codes (axial coding), and then figure out core themes that includes data of identified category (selective coding). Concerning the level of detail necessary in transcriptions of verbal interviews, Rubin & Rubin (2005) recommend including only the details that are likely to be analyzed. Identification of codes was primarily guided by the framework of the think aloud protocol and research questions. Following identification of codes, within-case themes were developed of each participant. Next, I developed cross-case themes from comparison of each participant and I interpreted and analyzed these cross-case themes, taking into account disconfirming evidence (Fitzpatrick, 2011).

Triangulation served as the principal strategy to ensure trustworthiness by implementing multiple data sources and methods to confirm emerging findings (Denzin, 2008). Being that I served as the primary instrument of data collection and analysis
(Merriam, 2002), triangulation for this study occurred by analyzing and comparing all aspects of the participants’ verbalizations during the music listening activity (Segment 1) and rehearsal activity (Segment 3) along with the verbatim transcripts provided from the participant’s actual rehearsal (Segment 2). I then went through a member checking process with each participant that allowed me to clarify and validate the emergent themes from the multiple data sources. This process allowed me to corroborate evidence from all sources and that eventually shed light on discovered themes (Creswell, 2013). My history as a successful high school music conductor, instructor of university music education courses, and experience conducting university wind bands shaped my interpretation of the data. In the end, I compiled this wide range of data to illustrate in detail the cognitive listening processes of each participant.
CHAPTER FOUR: FINDINGS AND DISCUSSION

The purpose of this study was to examine the thinking of accomplished school based band conductors. How do they evaluate musical performance—less so the evaluation, more so the thinking that informs the evaluation? As presented in Table 1 (in the above Procedures), this grounded theory-like approach was divided into three segments: (1) A music listening activity during which the participants used a think-aloud procedure to detail their listening and decision-making across three parts on two contrasting music excerpts; (2) a large ensemble rehearsal led by the participants from which their listening and decision-making were analyzed; and (3) a final listening experience in which the participants viewed the video of their own rehearsal while thinking aloud about their listening and decision-making. Both Segments 1 and 3 took place in the participant’s office. Segment 1 consisted of 135 minutes (2.25 hrs) of verbalizations, Segment 2 contained 125 minutes (2.08 hrs), and Segment 3 contained 118 minutes (1.97 hrs). In total 378 minutes (6.13 hrs) of transcribed verbalizations produced 77 single-spaced pages of text data. The resulting verbalizations were then analyzed using ATLAS.ti.1.0.36 (Muhr, 2006) software, which allowed me to manage the large quantity of verbalizations for each participant, code verbalizations, and link codes into themes based on the research questions.

Analysis of Segment 1

Segment 1 consisted of three separate parts across two contrasting up-tempo, march style music selections, one with noticeable performance errors and one without noticeable performance errors. Participants were asked to acclimate to the score (part one), listen and adjudicate performance of the score (part two), and listen and think aloud
about their evaluative decision-making (part three). The purpose for acclimating to score was to give participants the ability to comment in a general way about noticeable aspects of music from a performance standpoint. The purpose for adjudicating was to give participants a first listen run through of the music and see what type of comments they would make as if judging at a music performance assessment (MPA). These two parts, acclimate and adjudicate, also allowed the participants to become familiar with the music through a short familiarization of the score (acclimate to score) and an initial listening (adjudicator). These findings were not included in the overall thematic analysis. Instead analysis revealed the musical elements that were verbalized by participants. The data from part three, the think aloud portion, served as the primary source for thematic analysis. During the think-aloud portion, I attempted to uncover, as much as possible through this self-report procedure, what triggered thoughts, that is, what caused the aural focus of attention at this or that given moment in the music.

I used the verbal, think-aloud protocol analysis as the basis for analyzing cognitive aspects of the listening experience among the participants (Ericsson & Simon, 1993). Concerning Ericsson & Simon’s (1993) levels of verbalizations for think aloud procedures, Segment 1 allowed me to assess participants’ level one and two verbalizations across the three parts (Ericsson & Simon, 1993). Level one verbalizations occurred when a participant gave comments without providing glimpses into thought process; for example, “They are sharp.” Level two verbalizations, which are the most common according to Ericsson & Simon, occurred when a participant provided a description of a comment or thought; for example, “The clarinets are going sharp on that high E flat.” This type of verbalization indicated the musical element focused on. Topic
areas verbalized from all three parts of Segment 1 are listed in order from most to least occurring in Table 3. Word counts of category occurrences were made available through ATLAS.ti.1.0.36 (Muhr, 2006).

Level three verbalizations were revealed during the think-aloud portion (part three) of Segment 1. These provided access into what triggered the participants’ listening decisions. This level of verbalization occurred when a participant explained his thought process, for example, “The clarinets are going sharp on that high E flat likely because the E flat has a tendency to be a sharp in that range on the clarinet. I heard that because it was over balanced with the other instruments and seemed high in comparison to the flute part playing the unison line.” This level of verbalization also occurred when I probed for it.

Open and axial coding (Pressley, 2000; Strauss & Corbin, 1990) was done through numerous readings of the text data and later linked with Ericsson and Simon’s (1993) levels of verbalizations. Upon further analysis of axial codes, themes emerged.

**Comparison of verbalizations in contrasting music performances**

The listening experience designed for this study included contrasting levels of performance quality—one involving noticeable performance errors or deficiencies and the other involving no obvious performance errors or deficiencies. As a result of open and axial coding, it was apparent that when listening and verbalizing under these variable performance quality conditions, all three participants demonstrated similar characteristics during Segment 1. When listening to Robert Jäger’s *Third Suite*, the piece with noticeable errors, they all focused more on technical aspects of the performance such as precision, intonation, and style—not musicality/expressivity. On the opposite spectrum, when
<table>
<thead>
<tr>
<th>Participant</th>
<th>When acclimating</th>
<th>When adjudicating</th>
<th>When thinking aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evan Y.</td>
<td>Aspects in score</td>
<td>Musicality</td>
<td>Musicality</td>
</tr>
<tr>
<td></td>
<td>Precision</td>
<td>Style</td>
<td>Style</td>
</tr>
<tr>
<td></td>
<td>Musicality</td>
<td>Precision</td>
<td>Precision</td>
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<tr>
<td></td>
<td>Style</td>
<td>Tone quality</td>
<td>Tone quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Balance</td>
<td>Balance</td>
</tr>
<tr>
<td>James E.</td>
<td>Style</td>
<td>Balance</td>
<td>Style</td>
</tr>
<tr>
<td></td>
<td>Musicality</td>
<td>Musicality</td>
<td>Intonation (Jäger)</td>
</tr>
<tr>
<td></td>
<td>Aspects in score</td>
<td>Tone quality</td>
<td>Precision (Jäger)</td>
</tr>
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<td></td>
<td></td>
<td>Musicality (Jacob)</td>
</tr>
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<td>Ramón C.</td>
<td>Aspects in score</td>
<td>Balance</td>
<td>Balance</td>
</tr>
<tr>
<td></td>
<td>Harmony</td>
<td>Articulations</td>
<td>Intonation</td>
</tr>
<tr>
<td></td>
<td>Musicality</td>
<td>Precision</td>
<td>Musicality</td>
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<tr>
<td></td>
<td></td>
<td>Tone quality</td>
<td>Style</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intonation</td>
<td>Precision</td>
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<tr>
<td></td>
<td></td>
<td>Musicality</td>
<td>Harmony</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Technical issues</td>
</tr>
</tbody>
</table>

*Note 1.* Style comprised comments about articulations and clarity. Musicality comprised comments about dynamics and phrasing. Precision comprised comments on vertical alignment and rhythmic clarity. “Aspects in the score” comprised comments about visual representation in the score, e.g., meter changes, repeats, roadmap, instruments with melody, countermelody, harmony.

*Note 2.* The Column 3 listing does not represent themes, only an account of the topics commented on.

listening to Gordon Jacob’s *An Original Suite*, the piece with no obviously noticeable performance errors, participants talked extensively about musicality/expressivity, not technique. This set of circumstances—the concern for technique in marred music performance and for musicality/expressivity in unmarred music performance was not unexpected (Droe, 2012; Goolsby, 1997). However, during the Jacob performance, the participants had contrasting perspectives about musicality. This is could be because of the “subjective” nature of musicality/expressivity, all contingent on a conductor’s own musicianship. James E. thought the performance was very musical. He remarked: “Yeah. It's all there I mean the group pays very close attention to what's going on dynamically and they play things very musically. Stylistically everything is right where it needs to be.
(measures 21-24).” Evan Y. and Ramón C. both felt the performance was lacking in musicality. While complimentary of the overall qualities of the group, Ramón C. stated:

Great sounding group. A lot of maturity in sound. You can tell there are a lot of mature players by the way [of their] tone color, by how they approach balance to each other, by how great their pitch is, now it just sounds like just their individuals playing really well. Just not any ideas as a whole as far as interpretation… Even with all that stuff there has to be some kind of architecture. You know is it [crescendo] two bars up [decrescendo] two bars down or [crescendo] up one down one up one down one between the trumpet and in the first four bars of G also. You know and the other instruments could help with the definition of that I just don’t think they really are, they just kind of all the same.

Despite the differences in response to the levels of performance quality, I saw no reason to segregate the two pieces in thematic analysis, that which was motivated by the research questions. Therefore, moving forward in analysis, both recordings were treated as if they were the same; the two became “the listening experience” rather than “a differentiated listening experience.” Segment 1 within-case findings comprised both music excerpts across all three segment parts (acclimate to score, adjudicate, and think-aloud).

**Segment 1 Within-case Findings**

**Evan Y. (young, successful band director).** Three themes emerged from Evan Y.’s think-aloud experience in Segment 1. Each theme appears to explain a trigger for this successful, young band director’s evaluative listening. It was most evident that Evan’s listening was guided by an aural-visual perspective, more precisely, by aural-
visual comparison. He noticed discrepancies between the sounds that he heard and the visual representations in the score. Typical among his comments that were indicative of an aural-visual awareness: “I’m noticing in the score . . .”; “I just see all the black [notes] on the page;” “I’m seeing accents on the paper;” or “I’m listening for that all across because I’m seeing slurs and I’m seeing pianos.”

A second theme explaining the source for evaluative listening was a focus on single-elements of music performance. Throughout the segment, when Evan commented on any aspect of the musical performance, it was from a one-element-at-a-time perspective. The following is representative of other comments showing Evan’s single-element focus. In talking about dynamics during an excerpt of Jäger’s Third Suite, notice how his thinking remains on point about dynamics. It does not venture into other elements of music performance.

In the first section, it’s about mezzo forte. I would think to maybe have a bigger contrast. I see this as a big triumphant section here (referring to letter A, measure 9) so I guess going into a different section, like a different strain, I’m listening for something different. I would want a bigger section, especially with the downbeat of dotted half notes in the trombones and the trumpets.

A third theme indicating listening trigger was prior personal experience as a performing musician. Evan was quick to use his experience as a trombone player, especially in the realm of tone quality, to provide context for how he listened. Certain timbres seem to be more salient in his mind than others. This comment from Third Suite represents other comments in how Evan focused on timbres based on his personal experience as a musician.
I think that for balance purposes and just listening throughout the entire band here, I am hearing almost like a bright tone and not really hearing enough of the low voices. I don’t know if that’s just me being a trombone player but I would like to hear, especially with the trumpets having the same things as the trombones, more of the darker sound. It sounds just too bright with the upper woodwinds in the trumpet (referring to measures 9-16).

**James E. (accomplished experienced band director).** Three themes emerged from James E.’s think-aloud experience in Segment 1. Each one appears to explain a trigger for this accomplished, experienced band director’s evaluative listening. The most evident theme was his prior knowledge of expert opinion. This was fostered by an interview he heard of Frederick Fennell, the former conductor of the Eastman Wind Ensemble, during which he discussed how his bands differed from other bands. James E. remembered Fennell stating that the main difference was Fennell’s focus on the inner second and third parts within each section. This approach to balance may explain why James E. emphasized balance throughout each listening. James E. also related how balance affected intonation and dynamics. This could explain why James E. frequently commented as follows: “Make sure all the parts are heard equally.” “It would be nice to hear a little bit more of the middle voices.” “Let’s hear some of the second and third parts on the ringing of that last note.” “Make sure you hear the lower parts more.”

A second theme was James’s ability to hear discrepancies through lack of unity in sound. He would notice inconsistencies in ensemble clarity, articulations, and style changes. Through this aural approach, he would also notice discrepancies in pitch among instruments. This mostly took place through multiple listenings, when instruments played
in the upper register, when there were unison lines, and disparities in tone quality.

This comment from Third Suite represents other comments about lack of unity in sound (in this case rhythmic clarity), which seemed to function as a trigger for focus of aural attention.

I still think that throughout the woodwinds, that beat three, three-and-a-four (sings rhythm) it just doesn't seem like it's playing as accurately from player to player throughout the section. So just making sure that everybody plays on the down-up-a-down to provide more clarity there. It’s the beat three to four [that] is the one that stuck out both times to me and it just seems like it lacks clarity from how each player's approaching the three-and-a-four, so that's why I would just listen to that individual to make sure everybody is approaching it the same way.

A similar comment was made regarding intonation during Third Suite:

First thing I would find out who has the unison lines and make sure that they are playing in tune with each other. Right now between the clarinet and the alto saxophone, there is some discrepancy when they are playing (measures 1-2). Maybe I would have them listen a bit more to each other and make sure they know the pitch tendencies in some of those notes so that they can be more in tune with each other. The second time [through] you always have a better chance to listen to it. The first time you listen to it you [notice] that there are some pitch things and the second time [through] we could really isolate that. We've got the clarinets and the alto sax with the same lines, so it’s just that would be the way to fix the pitch or to make it right there.

A third theme involved James’s prior personal experience as a music teacher.
Evidence indicated that James’s evaluative listening was affected by previous teaching experience that, through repeat experience or sheer magnitude of experience, had become memorable such that it was easily retrievable. It seemed to function as a lens through which James responded when in the listening act. As the example shows, he indicated that he listened to ends of phrases during Gordon Jacob’s *An Original Suite* because that is a concept his third band struggles to do well.

Well as a high school director, there are some things that every person tries to stress with their group and that's one thing that I always try to stress about making sure that those notes, when they go lower just not letting them get lost, and pushing more air to get to the bottom. So when you listen to other groups those [are] the first things that you use and that you push so hard with your group. So when you knew that that was going down and that was going to be a challenge for a less experienced group, [but] this group is so great that they’re just not gonna let that happen so you don't need to see a crescendo here to know that it's going to be harder for those notes but that group knows characteristically, ‘I need to push those notes a bit stronger’ to make sure that we can hear it. And for each of the different groups, the bottom band does the worst job with that so you can really stress those things with them. It's all about breathing and making sure that they push fast air and all that stuff and the rule that the kids know [I would say] ‘what's the rule’ and they always talk about the shorter the note, the louder you play because those things get lost as well.
Ramón C. (accomplished college band director). Six themes emerged from Ramón C.’s think-aloud experience in Segment 1. Each theme appears to explain a trigger for this accomplished, collegiate band director’s evaluative listening. It was most evident that Ramón was guided by his aural-visual comparison. He would compare the sounds he heard (aural) to what he saw (visual) in the music score. This usually occurred with written articulations and note lengths.

A second theme was Ramón’s ability to consider multiple musical elements simultaneously. I will refer to this as a holistic perspective or lens through which to view and approach music performance. While viewing performance this way, he had a tendency to ask himself questions in order to figure out the complexities inherent in flawed music performance. It was apparent that he approached the challenges of rehearsal listening as a problem-solving endeavor, one that sometimes starts with a fair amount of conductor uncertainty—uncertainty that belies easy or immediate answers regarding how to proceed. Notice in this comment from An Original Suite how he took a holistic approach to figuring out phrasing, balance, blend, intonation, and tone quality.

I notice right off the bat, what is the phrasing idea, where are they going towards? Are they lining up towards the end? I'm just not sure of what the phrase idea is. [It’s] beautifully balanced. Trumpet is the lead a little too much. I would like to hear the trumpet blend a little more into a clarinet and flute sound and oboe sound but beautiful sounds. And even the accompanying voices are doing some phrasing ideas, which is nice. I just don’t hear that so much in the melody (measures 1-5) because they are executing nice sounds and good intonation and decent balance. So you know if you listen to the next layer deeper, there's obvious maturity in the
way the groups sounds so you start to listen for what are they doing that's not on the page.

A third theme emergent theme was Ramón’s tendency to listen from the perspective of composer intention. Ramón often spoke about aspects the composer wrote in the score that should inform the interpretation of the performance due to how the composer writes various musical elements. Here is a comment typical of others from An Original Suite where Ramón C. comments from the composer’s perspective. On phrasing and balance, he said:

So interestingly enough, they didn't have the best balance, the trumpets at D on the sixteenth notes but even when it was just in the eighth notes pattern. Something caught my attention I didn't hear all the notes of the different parts balance with each other but then again, there is D again leading into this arrival at the fifth bar and it seems to me like it's not building. It starts off too strong at D (sings cornet line measures 50-52), it’s rising and the rhythm is augmenting so it’s going faster, so he’s [composer] trying to lead to that Sff [but] then the crescendo before starts too strong so it's just almost basically all the same volume and the whole four bar thing. You have to come up with something different to emphasis what the composer was doing.

A fourth theme was his prior knowledge of expressive nuance. This was all informed by his deeper knowledge of stylistic inflection analysis that made discrepancies noticeable. Ramón explained that he does an inflection analysis when listening to music. He described inflection analysis as understanding the style and articulations being played. This type of listening not only made articulation discrepancies and wrong notes obvious
but also allowed Ramón to notice discrepancies within the score itself. This was the case during *An Original Suite* when he noticed an errata in the score based on hearing inconsistencies in articulation among the tuba and bassoon in comparison to everyone else. None of the other participants noticed this. Ramón stated:

Interesting. There's an articulation that's not matching across the board. It's written wrong for the tuba in measure thirty-five. Beat three is written short for tuba but it's written as part of a long slur for everybody else and I heard it just not match. And then I look and bassoons have a different (sings rhythm) so there’re three different articulations in those last two beats before C and then there was this discrepancy on the way I heard it in the recording. Yeah there was something short and someone else was playing long when someone played short.

A fifth theme was Ramón’s prior knowledge of expert opinion. When he was a young high school director preparing for his state’s music performance assessment, Ramón asked his former high school band director, a mentor, “What separates really good groups versus other groups at state?” His director told him one thing, balance. Ramón took this to heart and it is evident in how he listens. The majority of his comments in this segment centered around balance in some capacity. Here is what he had to say about the ending of *An Original Suite* “I love the balance of the last chord. You just hear so much of the bottom and top voices in the one just leading and I love how dark that is.” On the contrary, here are his comments about balance during *Third Suite*:

I’m not sure I hear all of the notes in the chord (measure 43). You hear the lot of the top voice of the first cornet and the first clarinet I don’t hear a lot of them. Like the thickness of a chord and even in the half notes too but in the triplet is
where I kind of expected [it] because it’s hard to hear that, but I still don't even hear on the half notes either.

The sixth theme to emerge was Ramón’s prior knowledge of instrumental techniques. In particular, this applied to his understanding of pitch tendencies when relating to intonation. He possesses a comprehensive knowledge of the pitch tendencies of the instruments as well as the pitch tendencies of the chords. Ramón C. made references to numerous intonation-related concepts like: “pitch on the E flat concert is really high which is a really sharp for them [clarinets].” “Pitch issues in the trumpet.” “They are out of tune with the clarinet and I realized that’s also a sharp note for them.” “They are having issues with D concerts which is the bane of everyone’s existence.”

Table 4 presents the within-case themes from the Segment 1 tasks.

<table>
<thead>
<tr>
<th>Segment 1 Within-case Themes</th>
<th>Evan Y. (young conductor)</th>
<th>James E. (experienced conductor)</th>
<th>Ramón C. (college conductor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aural-visual comparison</td>
<td></td>
<td>Prior knowledge of expert opinion</td>
<td>Aural-visual comparison</td>
</tr>
<tr>
<td>Single element lens</td>
<td></td>
<td>Lack of unity in sound.</td>
<td>Holistic, multiple-elements lens</td>
</tr>
<tr>
<td>Prior personal experience as a performing musician</td>
<td></td>
<td>Prior personal experience as a music teacher</td>
<td>Composer’s intention</td>
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<td></td>
<td></td>
<td></td>
<td>Prior knowledge of expressive nuance</td>
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<td>Prior knowledge of expert opinion</td>
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<td></td>
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<td></td>
<td>Prior knowledge of instrumental techniques</td>
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</tbody>
</table>
Analysis of Segment 2

Segment 2 consisted of a mid-sequence rehearsal of each participant conducting their respective ensemble. The purpose of this task was threefold: 1) To provide a stimulus for conductors to respond to in Segment 3; 2) to determine whether rehearsal verbalizations provided clues about evaluative listening; and 3) to serve as a means for triangulation. I observed only 120 total minutes of rehearsals from all the participants. All conductor verbalizations were transcribed. Evan Y.’s 30-minute rehearsal consisted of Claire Grundman’s arrangement of *Pomp and Circumstance*. It was being rehearsed in preparation for the school’s commencement. James E.’s 60-minute rehearsal consisted of Eric Whitacre’s *Godzilla Eats Las Vegas* to be performed for his spring concert. Ramón’s 30-minute rehearsal comprised all three movements from Marice Stith’s transcription of Leonard Bernstein’s *Three Dance Episodes from On The Town* to be performed for his final spring concert. Similar to the analysis of Segment 1, open and axial coding (Pressley, 2000; Strauss & Corbin, 1990) was done through numerous readings of the text data and later linked with Ericsson and Simon’s (1993) level of verbalizations. Through this coding process, only level one and two verbalizations became evident through analysis. These types of verbalizations, shown in Table 5, made apparent the musical topics focused on by each participant during the rehearsal.
Table 5
Participants’ Level One and Two Verbalized Topics in Segments 2 and 3

<table>
<thead>
<tr>
<th>Participant</th>
<th>Segment 2 (Rehearsal)</th>
<th>Segment 3 (Think aloud of rehearsal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evan Y.</td>
<td>Style</td>
<td>Precision</td>
</tr>
<tr>
<td>James E.</td>
<td>Balance</td>
<td>Precision</td>
</tr>
<tr>
<td>Ramón C.</td>
<td>Style</td>
<td>Intonation</td>
</tr>
</tbody>
</table>

*Note.* Style comprises comments about articulations and clarity. Musicality comprises comments about dynamics and phrasing. Precision comprises comments on vertical alignment, tempo discrepancies, and rhythmic clarity.

**Analysis of Segment 3**

Segment 3 consisted of participants going through the think-aloud protocol while watching selected video from their rehearsal during Segment 2. From the video in Segment 2, I selected rehearsal frames (Duke, 1994; 2000) that contained substantial content of ensemble performance and conductor feedback to serve as the stimulus for this segment. Similar to the prior segments, open and axial coding (Pressley, 2000; Strauss & Corbin, 1990) resulted from numerous readings of the text and later linked with Ericsson and Simon’s (1993) level of verbalizations. See Table 5 for level one and two verbalizations. Level 3 verbalizations were also revealed through reading and rereading text and allowed me to assess what triggered the participants’ evaluative thoughts during the rehearsal and were used for thematic analysis.
Segment 3 Within-case Findings

Evan Y. (young, successful band director). Two themes emerged from Evan Y.’s think-aloud experience in Segment 3. Each theme appears to explain a trigger for this successful, young band director’s evaluative listening. It was most evident that Evan’s listening was guided by an aural image of the music. Evan Y. mentioned the goal for this rehearsal was to solidify tempo, clarity of style, and balance. Evan Y. has done this piece, *Pomp and Circumstance*, for the past five years so he was very familiar with its intricacies and how he wanted the piece to sound. Here is a comment representative of other comments in how Evan focused on stylistic aspects of the piece:

> I just had this one very specific style in my ear that until we get that [correct] we can't move on. And the tempo at that point was starting to get a lot better, so at that point it was just stylistically, everybody being together on that measure. Because it's so hard when everybody's got that in unison with the chromatic scale going up. I really wanted that to be kind of insane because to me that sounds impressive when the entire band’s playing that and it's just a really good strong start to the piece. In the very beginning, I'm thinking very fanfare (sings opening melody with separation). So fanfare to me means very clear as far as the definitions of notes and at that point you need the style to really be in tact. So I wanted to make sure that every time that I heard something I really tried to zero in on exactly who was not playing the exact style.

A second theme explaining the source for evaluative listening was his reaction to lack of unity in sounds. This especially applied to noticing discrepancies in pitch. Nearly all of Evan’s comments about intonation in this rehearsal were geared towards the oboe
players who struggled playing in tune with one another. He would stop rehearsal frequently to give the oboes pitch adjustment advice. At one point Evan stopped rehearsal, pulled out a tuner, and spent five minutes tuning the oboes exclusively. One student was 35 cents sharp according to Evan’s tuner. Evan indicated that one student recently switched to oboe and was still working to establish proper pitch control. While not an emergent theme, Evan’s thinking did show evidence of holistic listening in one moment during this segment. He commented on ‘killing three birds with one stone,’ referring to how performed dynamics impacted balance and precision. While a notable concept, this style of listening was not evident in verbalizations during the think-aloud:

I address[ed] two things at once but I killed three birds with one stone because I was thinking that if the quarter note stayed light the tempo would be fine (sings detached quarter notes). If they stayed long (sings connected quarter notes) they would drag so that's why I said that and the fact that they weren't dragging, I didn't want to put in their heads at the time, ‘Well that's a possibility.’ Somehow I wanted to tell them you did a good job so keep that up and back out of the way as much as we [can] because I figured that with [the] quarter notes, the rhythms and the notes should be easy so let's talk about some other things at the same time besides keeping it light which is pretty easy to do. Just play a little softer so you don't cover up the melody so I guess overall [I tried] to kill it all at the same time.

James E. (accomplished, experienced band director). Three themes emerged from James E.’s think-aloud experience in Segment 3. Each theme appears to explain a trigger for this accomplished, experienced band director’s evaluative listening. It was most evident that James’s listening was guided by his reliance on prior knowledge of
instrumental techniques. During his rehearsal he focused on musical effects and transitions. He indicated that the goal for this rehearsal was to play large chunks and work out transitions throughout the music. The music, *Godzilla Eats Las Vegas*, contained numerous fermatas and style/tempo changes so getting the ensemble comfortable with the stylistic changes was understandable. While watching his rehearsal video, James E. mentioned several times how he wished he would have corrected the clarity issues in the performance but his primary focus was ‘work out’ the transitions:

> These are all the transitions. I know that’s what we were doing for that rehearsal because all of these are tough to work out, all of those transitions that's for sure. When you talk about clarity, man there are clarity issues [everywhere] but right now we're struggling through all of that to get it right for the performance.

Another example of prior knowledge of instrumental technique involved his reactions to pitch tendencies. James addressed the pitch tendencies of the instruments. For example, when muted trumpets played with flute, he stopped and isolated their section and instructed the trumpet section on how to adjust pitch in order to play in tune. This level of listening was likely impacted by his background as a trumpet player. The majority of his comments about intonation during the rehearsal were geared towards the trumpet section, especially when muted.

A second emergent theme functioning as a trigger for evaluative listening was a lack of unity in sound. He noticed discrepancies in rhythmic precision. James would hear inconsistencies in note lengths and vertical alignments by students rushing or dragging. This was an instance where James heard discrepancies while watching the video and not
during the rehearsal itself. Again his focus was on the first theme, establishing musical effects and transitions. While watching his rehearsal, James stated:

[Clarity] was obviously an issue right there on the triplets. So I don't know if that was the focus of that rehearsal but I should have and would have gone back and made sure that they were doing it all the same way because you can hear the brass in the back, especially because that's where you can hear them all doing it differently, rushing and all that stuff.

A third theme did not explain a source for evaluative listening. James demonstrated a tendency to apply a holistic lens (a multiple-element lens) to music at certain points in time. This emerged from James stressing balance and how it affected other issues. He used a system that allowed his students to adjust dynamics depending on what is written in order to have a desired balance effect. For example, when a mezzo forte is indicated in the music, the students know that the first part should play at a mezzo piano, the second part should play the mezzo piano, and the third part should play forte. James mentioned with this type of sectional balance, it remedies pitch issues because students are actively listening and adjusting based on their part and the dynamic written. While this is more of a rehearsal technique, this is how James listened to his ensemble to make sure it had its desired effect.

**Ramón C. (accomplished, college band director).** Four themes emerged from Ramón C.’s think-aloud experience in Segment 3. Each theme appears to explain a trigger for this accomplished, college band director. It was most evident that Ramón’s listening was guided by his aural image of the music. What he heard did not match with his internal aural image of the music. In particular, his aural conception of “pure” sounds
and comparing it to sounds he heard that were not pure. This involved how he is drawn to intonation issues. He mentioned when he hears distortion in sound, this signals that something is awry in the playing. This was a case when his absolute pitch came in handy.

[The] one thing that helps me a lot is perfect pitch. Some people say it's a curse but it’s actually just a really big blessing. But when I can't tell what note it is, [that signals] there's a problem [and then I] stop. And that’s literally what happened there. [Perfect pitch] really helps me identify some of the things I have to pinpoint. Because if I hear something [and] I can't tell what note [it’s] supposed to be [when] I should be able to, something's wrong.

A second theme involved Ramón’s concern for composer intent. He listened from the perspective of the composer. He commented frequently about orchestration, balance, and phrasing of the ensemble based on the composer’s intentions. He regularly said terms like, “Look at what the composer wrote.” “Look at how it’s scored.” “The composer wants this to happen.” He inquired about the composer’s intentions and similar to the other segments, centered majority of comments around balance. He listened for balance across the ensemble and among sections. Here is one example of many in which he spoke about his listening from the composer’s perspective while watching his rehearsal:

It’s good I said that because as I listen to this recording it just sounds very dense. It’s scored that way because the harmonies are thick. And then you have the muted trumpet in the middle of all that. I mean, is that really the best idea? In the scoring from the perspective of Stith who did the arrangement, was it really the best idea of the transcription? So I think that's what I'm looking and listening at. I remember struggling with this section a lot as we were preparing it. Overall, [at]
the time I was just like, ‘I can’t get the right things to be heard’ and it was until I
realized that needed to be thinned out more and people not playing the fortissimo
that’s marked. Again Balance.

A third theme that emerged was his prior personal experience as a performing
musician. Ramón seems to possess an innate sense about hearing harmony and style
innately. (While on the topic of innate sense, Ramón has perfect pitch.) However, there is
much in his background that points to environmental influences. He indicated that he
loves music theory and equates everything he hears to the harmony that is happening. His
background as a pianist compounds this and allowed him to hear harmonic analysis
recognition innately, which is unique because there were times he would notice wrong
notes because it did not sound harmonically correct, as was the case during Segment 1.
The same for identifying stylistic discrepancies that he stated was inspired by his heritage
of dancing. If the music did not make him dance, then something was not correct with the
stylistic inflections:

So for example (sings melody from movement 1) when I hear it in a recording [it]
usually [doesn’t] sound right. It [doesn’t] sound like the inflection that I would
put or one [person] would do it perfect and really have the right style. [So] it
triggers that there’s a style that needs to be here that I don't hear. So there is a
harmonic analysis and style analysis happening that go into all those listenings
that I do, which is why I listen so much.

A fourth theme did not explain a source for evaluative listening. Ramón
demonstrated a habit of applying a holistic lens (a multiple-element lens) across points in
time in music. Ramón listens in a holistic way. He relates multiple music elements into
one central idea—for example, proper style being affected by balance, articulation, dynamics, and intonation. Here is an example of Ramón emphasizing dynamics, articulations, and intonation during his rehearsal.

And the reason I said a delicate note. [There are] a couple things I’m trying to say but the first thing is to get them to play it softer so they can listen better. That’s a way I try to get them to realize [not to] punch [the note] because obviously whenever you accent a note, the pitch is going to be different [than] if they were [playing it] softer. So trying to get [them] to [not] over accent it so that number one, you sound better playing; number two, you can listen better; and [three], it just wouldn’t affect the pitch that much.

Table 6 presents the within-case themes from the Segment 3 tasks.

Table 6
**Segment 3 Within-case Themes**

<table>
<thead>
<tr>
<th>Evan Y. (young conductor)</th>
<th>James E. (experienced conductor)</th>
<th>Ramón C. (college conductor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aural image</td>
<td>Prior knowledge of instrumental techniques</td>
<td>Aural image</td>
</tr>
<tr>
<td>Lack of unity in sound</td>
<td>Lack of unity in sound</td>
<td>Composer intent</td>
</tr>
<tr>
<td></td>
<td>Holistic, multiple-elements lens</td>
<td>Prior personal experience as a performing musician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Holistic multiple-elements lens</td>
</tr>
</tbody>
</table>

Triangulation occurred by comparing results across all data sources beginning with, participants’ verbalizations across activities—music listening activity (Segment 1) and rehearsal activity (Segment 3) along with the verbatim transcripts provided from the participant’s actual rehearsal (Segment 2). I also compared within-participants (e.g.,
James Level 1 to James Level 3) and across-participants (e.g., James’s Level 1 to Ramon’s Level 1). Through this process I found verification for many themes, but not all. The themes that did not triangulate were: aural image, single-element lens, prior knowledge of expressive nuance, and prior personal experience as music teacher. Aural image emerged as a trigger in Segment 3. This is explained by the fact that participants were working with familiar, studied music. Aural image did not emerge in Segment 1, presumably because the music was unfamiliar to the participants, and purposely so. They were not able to bring preconceived ideas to the music. Single-element lens was exclusive to Evan Y., the young conductor. Expressive nuance was exclusive to Ramón C., the college conductor. Prior personal experience as a music teacher was exclusive to James S., the experienced conductor. He was by far the most experienced of all three participants.

For the within-case emergent themes from both Segment 1 and Segment 3, I met with each participant via phone, email, and/or in person and shared my findings, those specific to the individual. In each case, we conversed about the findings. In this process of member checking, I sought their reactions, their thoughts, and their clarifications. In each case, participants confirmed accuracy and completeness in my work (Lincoln & Guba, 1985).

**Cross-case Findings**

I arrived at cross-case themes by looking for commonality among the within-case themes. As is customary for multiple case study analysis, I looked for commonalities and uniqueness among single cases (Stake, 2006) for the purpose of answering two research questions:
1. How do accomplished school-based conductors evaluate musical performance. More specifically, what triggers their evaluate thoughts?

2. To what degree can their aural processing be described in an organizing framework?

Figure 3 presents a theoretical framework underlying rehearsal listening. It provides preliminary answers to what triggers listening when evaluative intent is the aim. Three cross-case themes are presented: Prior context-neutral knowledge/experience; prior contextualized knowledge/experience; and in-the-moment decision making. Each theme comprises a set of corresponding categories provided by the findings of the within-case analysis. The themes taken together represent two before-rehearsal phenomena and one during-rehearsal phenomenon. The before-rehearsal phenomena are differentiated by the nature of their contexts. For one, knowledge/experience is broad and generalized, not necessarily connected in a specific way to a specific rehearsal, specific piece of music, or specific set of ensemble members. For this, I use the term context-neutral. For the other, knowledge/experience is directly connected to a specific rehearsal, piece of music, or set of ensemble members. For this, I use the term contextualized. The during-rehearsal theme accounts for listening triggers that seem to happen in-the-moment.

Listening as triggered by prior context-neutral knowledge/experience was developed by collapsing four types of knowledge/experience evident in participants’ verbalizations into one overarching theme. This is knowledge and/or experiences the participants bring with them to any musical setting. This was evident in the participant’s knowledge of instrumental techniques. For example, Ramón C. had a vast knowledge and understanding of the pitch tendencies of each instrument and used that knowledge to aid
in recognition of pitch errors and provided precise rationales and solutions to remedy the intonation problems. Another type of prior context-neutral knowledge/experience was the participant’s experience as a performing musician. Evan Y.’s experience, for example, as a trombone player shaped how he listened to timbre and tone qualities. Another type was the participant’s experience as a music teacher. Due to the participants previous teaching experience they would focus on aspects they experienced as a teacher themselves. For example, James E. would key on facets that had become memorable either through repeat experiences or sheer magnitude of experience, which made recollection easily retrievable. The final type for listening triggered by prior context-neutral knowledge/experience is of expert opinion. This highly impacted both James E. and Ramón C. in particular regarding aspects of balance were instilled by music mentors at earlier stages in their career.

Listening as triggered by prior contextualized knowledge/experience was developed by collapsing two types of knowledge/experience evident in participants’ verbalizations into one overarching theme. This is knowledge and/or experiences the participants bring with them to any musical setting. These triggers for evaluative listening involve preparation that relates specifically to the music being rehearsed. One type of contextualized knowledge/experience was an aural image of the music. Through score study and preparation, participants would have a specific internal aural image on what they expected to hear during the rehearsal and compare it to the sounds they heard. If the sounds did not match their internal aural image of the music, then they would key in and begin to remedy the situation. Another type was hearing discrepancies due to lack of unity in sounds. This occurred by hearing inconsistencies in note lengths, tempos, articulations, ensemble clarity, style changes, and other performance aspects.
**Framework Underlying Rehearsal Listening**

Listening as Triggered by:

<table>
<thead>
<tr>
<th>Prior context-neutral knowledge/experience</th>
<th>Prior contextualized knowledge/experience</th>
<th>In-the-moment decision making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of instrumental techniques</td>
<td>Of aural image of music</td>
<td>Through aural-visual comparison</td>
</tr>
<tr>
<td>As performing musician</td>
<td>Of lack of unity in sound</td>
<td>Via a lack of unity in sounds</td>
</tr>
<tr>
<td>As experienced music teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With knowledge of expert opinion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**“Floating” theme**

Through a single-element or holistic lens

---

Figure 3. Framework Underlying Rehearsal Listening

Note: One theme did not seem to function as a trigger for evaluative listening. Instead it stood out as a perspective or lens through which listening was situated. This theme is described in the figure as a “floating” theme (Fitzpatrick, 2011), applicable as an “overlay” to any theme or category.

Listening as triggered by in-the-moment decision making was developed by collapsing two types of decision making evident in participants’ verbalizations into one overarching theme. This type of listening dealt with in-the-moment comments generated by spur-of-the-moment musical occurrences. One type of in-the-moment decision making was an aural-visual comparison. Participants reacted to sounds that did not jibe with what
was represented in the printed score. The other in-the-moment trigger was lack of unity in sound. Lack of unity was apparent in any number of musical elements (tone, intonation, rhythm, articulation, balance, blend, tempo, expressive effect). To understand this trigger, it might be best to imagine yourself standing in front of an ensemble with one plan—and that is to simply listen for disunity in sound. Any disunity. Any sounds. For the participants in this study, it appeared that they needed no more than this to begin to make some immediate sense of the sound environment. With no more evaluative listening strategy than this, an approach is jump-started in a setting that often places high demand on one’s ability to make spontaneous aural responses to music performance.

There was one category that did not fit into an overall cross-case theme but provided an often used perspective on the evaluative listening act. In Figure 3, it is referred to as a floating theme, that is a single-element or holistic perspective. This type of aural awareness was not a listening trigger but instead served as a perspective into how participants focused on the music and each differed in their approach. Evan Y. had a singular, specific focus. He would focus on one musical element at a time. James E. had a slightly holistic approach but only dealt with how balance can mitigate intonation and dynamic issues. Ramón C. had a more holistic approach in his listening. He listened in a way that encompassed numerous elements into central concepts. Here is an example of Ramón C. discussing correct articulation, dynamic of volume, and balance all within the concept of correct inflection during his rehearsal.

The pitch thing the inflections aren’t right. Every note is too heavy. The notes aren’t soft enough to get the right inflections. There’s pitch issues on that and (sings rhythm) and then adds another group you know that little figure it needs to
have the right inflection and the other group needs to fit inside that sound rather than just obliterating that.

During the think aloud segments, all participants provided rationales and solutions during their feedback of the performances. However, Ramón C., again, had the most holistic listening approach. He listened in a way that simultaneously related multiple musical elements into one cohesive element. Ramón C. asked questions when trying to figure out performance issues and then provided rationales and solutions. The other participants only identified issues and maybe provided a solution, not necessarily what caused the issue (i.e. the rationale). For example, here is Evan Y. discussing how he heard an articulation discrepancy, “Very nit-picky, minor thing but on the dotted half notes I’m hearing the dotted half note tail off a little bit instead of keeping the energy of the note going.” His comment identified the issue, different note lengths, and briefly provided a solution, keep energy going. Here is an example of how Ramón C. identified an issue, disparity in note lengths; gave a rationale, some have space and some have length; questioned to see which is appropriate; and then provided a rational solution, short because it is a march.

So you know we have a disparity here between the note lengths in the quarters. Some of them have space and some of them are playing them long. So I'm trying to figure out which one they want to have. Seems to me since this is a march they should all have a little space.

In cross-case analysis, a focus on commonalities can obscure important uniqueness among cases (Stake, 2006, pg. 39). In the present study, there were several distinctive qualities that warrant attention. All could quite possibly be explained by the
participants’ differences in years of experience as band conductors and in life experiences as musicians. The single-element lens through which to view rehearsal listening was unique to Evan Y. While a successful conductor, Evan is still a young conductor so his listening may be more narrow compared to his counterparts in the study. A more holistic way of listening, through a multiple-element lens, may develop with experience as was demonstrated to a moderate extent by the more-time-in-service James E. and to a great extent by the more diversified musician Ramon. James E. is the most senior of the participants. His teaching experiences are vast but confined to middle and high school settings. Ramón has a variety of musical experiences—secondary school, college, as conductor, composer, arranger, pianist, percussionist—that seem to provide a diversity of perspective in how he listens.

Another unique characteristic among the participants involved an approach taken by Ramón C. He questioned concepts constantly during his rehearsal (Segment 2) and the think-aloud portion of his rehearsal (Segment 3). This was the case for intonation discrepancies during his rehearsal. When thinking about how to solve the issue, he constantly asked himself, ‘who is the biggest culprit?’ From there he would go through a series of processes to determine who was the ‘culprit.’

Another aspect, unique to Ramón, was his faithfulness to composer’s perspective. He focused on what was not on the printed score, an aural-visual perspective. When listening Ramón would ask himself questions in order to figure out various musical elements, sometimes simultaneously. Ramón’s questions are more holistic comprising several aspects, versus the single approach by the other participants. Here is a comment
typical of others from *An Original Suite* where Ramón C. comments from the composer’s perspective. On articulations and dynamics, he said:

So they did a pretty decent job of that little hair pin two before A but they didn't seem to get soft enough the one before A because the compositional idea that he [the composer] put is ‘really quiet down before and then a strong beat 2 right and there’s an accented long note after’ (sings line in measures 9-10 with emphasis on accented dotted quarter note) so that is something we need to hear the contrasts I just don't hear that little quirk with the composer trying to put in there.

Another unique aspect was Ramón’s way of hearing harmony and style innately. Ramón’s background played a significant role in his listening. He indicated that he loves music theory and equates everything he hears to the harmony that is happening. His background as a pianist compounds this and allowed him to hear harmonic analysis recognition innately. This would allow him to notice wrong notes because it did not sound harmonically correct, as was the case during Segment 1.
CHAPTER FIVE: IMPLICATIONS

Envision you are rehearsing an ensemble for the first time. You finish the first run through and they played all the notes correctly, all rhythms were performed accurately, and every chord is perfectly in tune, what would you do next? How does a conductor improve an ensemble when the basic essentials are in place? These questions served as motivation to design a study that would explore the rehearsal listening of conductors. In the end, I asked different questions that provided insight into the triggers that inform conductors’ evaluative listening. This is what I attempted to answer by examining three accomplished wind band conductors going through a series of listening tasks to see how they process and think about music when listening to musical performances with evaluative intent.

As a study based in qualitative research techniques, results should be generalized with caution. In many respects, the study was exploratory; data were collected from three participants. In this Implications section, I have adopted the attitude that the results are generalizable to the extent any one reader views them as generalizable to other people and settings. As such this think-aloud research study may provide the music education community with evidence of the listening processes of accomplished school-based band conductors and generate ideas about teacher/conductor training, specifically in aural skills development. Music conductors may benefit from understanding the cognitive processes of how effective conductors listen and “make sense” of the aural environments they encounter.
The study was based on two research questions:

1) How do accomplished school-based conductors evaluate musical performance. More specifically, what triggers their evaluate thoughts?

2) To what degree can their aural processing be described in an organizing framework(s)?

I found that the evaluative listening of the accomplished school based conductors examined in this study was triggered by three central themes: 1) Prior context-neutral knowledge/experience, 2) prior contextualized knowledge/experience, and 3) in-the-moment decision making. A key factor in how the participants listened was the perspective of either a single-element or holistic lens. The least experienced conductor listened through a one-element-at-a-time perspective; the most musically diverse conductor listened through a holistic perspective (multiple elements at any one point in time). The result is supported by expert opinion suggesting the main difference between younger conductors and seasoned conductors is the level of detail in which they listen (Feldman & Contzius, 2011). Young conductors normally spend significant time stressing basic level information, tone production and playing in tune—one element at a time. They might be well advised to look for the connections that exist between and among musical elements as was expertly demonstrated by Ramón C. and alluded to by Evan Y. in this study (“kill three birds with one stone”) in this study.

There may be benefit to a conductor’s thinking process by organizing one’s thoughts about rehearsal listening based on the three cross-case findings of the framework underlying rehearsal listening (Figure 3)—context-neutral preparations (those that go to a breadth and depth of life preparation in music); context-specific preparations
(those personal score study aspects that relate to a specific aspect of music); and in-the-moment listening. The best of preparation does not free us of having to be great listeners in-the-moment. We hope that good preparation sets the stage for good in the moment; nevertheless, there is the need to be aurally spontaneous.

This study may help current and aspiring conductors to understand the triggers and/or sources for evaluative listening ranging from listening to unity of sounds to prior experiences that shape aural awareness. Understanding how to listen for unity in note lengths, intonation, phrasing, articulations, balance, etc. can benefit training preservice conductors in listening acutely to an ensemble. This type of focused listening, applied with music theory and aural skills, would benefit a conductor at any level to listen in a multifaceted and holistic manner. The findings from this study, especially Ramón C.’s approach, may serve as a means to aid in the development of undergraduate conducting curricula.

However, some aspects could deter listening. There should be a difference between those that listen in a prescriptive manner versus those that listen “in-the-moment.” In the case of James and Ramón focusing largely on balance due to advice from their music mentors, this type of prescriptive, ‘pre-planned’ listening could get in the way of other pressing issues. For example, if one were to focus solely on balance during a rehearsal but faces drastic intonation issues, then a conductor should be able to adjust to the more pressing need. This study indicates areas the accomplished conductors are well-suited in but aspiring conductors must be flexible as well. This is evident in the case of Hasty’s (2004) findings. He suggested that the skills, emphases, and methodologies currently taught within undergraduate conductor-training programs leave
the young conductor with deficiencies in the ability to critically listen and evaluate ensemble performance.

I propose that we should integrate evaluative listening practices into the curriculum of undergraduate and graduate conducting—create some kind of healthy mix of gesture, score study, and aural development. Many experts and researchers have indicated many young conductors do not have the skills required to efficiently and accurately analyze an ensemble performance (Carse, 1929; Corporon, 1997; Lumley & Springthorpe, 1989; Markevitch, 1965; Pasquale, 2008). Physical mechanics and conducting gestures are important (Green, 1992; Maiello & Bullock, 1987) but developing listening acuity, especially when a group is void of noticeable performance errors, could expedite the training of preservice conductors in their rehearsal pedagogy.

I was not able to pinpoint a specific listening hierarchy, as proposed by Pasquale (2008) and Corporon (1997). Due to the nature of the study, I focused on the participants’ verbalizations about evaluative listening triggers. Based on those, I noticed “layered” listening patterns among all participants, though each did so differently. Evan Y. listened to elements in this order: Tempo, articulations (style), balance, intonation; James E. clarity, balance, intonation; and Ramón C. balance, phrasing (musicality), intonation, articulations (style).

None of the participants mentioned on tone quality extensively. It only came up when they commented as an adjudicator during Segment 1 but did not during any of the think aloud portions or their rehearsal. This could be due the participants listening in layers and the first layer of listening, according to Ramón C. and James E., are surface level aspects like tone and intonation. This could be why they mentioned it during the
adjudicator aspect since it was the first actual listening of each piece. Once they established the first layer of listening they then moved on to deeper aspects. Another explanation could be when I visited their rehearsals, midway in their rehearsal sequence, tonal aspects could have been already established, therefore the conductors focused on other elements.

Also, participants overall listened for stylistic aspects like articulations, clarity, and note lengths. However, various methods were used among the participants. Evan Y. focused on the length notes and how they matched across the section and ensemble. James E. was very detailed when explaining articulation clarity. His approach to style was mostly through articulation tongue placement. The written articulation would dictate the note length and syllable he wanted his students to use. Although this was a specific performing technique to style, this is how he listened to the music which drove how he gave feedback. Ramón C. used the term inflection analysis which was how the intricacies of the articulations align within and across the ensemble. This is a new concept for me but it is how he listens to all genres of music and based on the inflections of the articulations would determine if they are being played accurately or not.

Each participant mentioned balance aspects very extensively. For Ramón C. and James E., aspects of balance were instilled at earlier stages by mentors in their career. Ramón C. by his old band director and James E. by Frederick Fennell. However, the level of sophistication differed among the participants. Evan Y. stressed melodic material not becoming overbalanced by accompanying parts; James E. stressed a particular dynamic volume in relation to balance within the sections; and Ramón C. stressed balanced in how it plays a role with other music elements like articulations, intonation, and dynamics.
While music theory and aural skills are important as a conductor, the way conductors utilize these listening skills is what is vital. Ramón C. had a unique approach in how he listens acutely to the harmonic and stylistic inflections of the music. Ramón has absolute pitch, also known as perfect pitch, which is a rare auditory phenomenon that allows a person to identify and produce the pitch of any musical note (Deutsch, 2013). However, he still had to develop his listening in order to decipher harmonic analysis and pitch tendencies. Absolute pitch only applies to a singular note, not multiple notes simultaneously. Ramón C.’s ability to audiate sounds and explain chord progressions is nothing short of phenomenal. He suggested this skill was fostered through his love for music theory and his background as a pianist playing countless accompaniment parts and always curious to how his part would fit in with the whole picture. Those experiences may have aided in his listening ability as a conductor, especially in how he implements those skills holistically into other musical elements.

It should be noted that the findings from this study are only indicative of the current time I spent with the participants, in particular the latter segments. The data and stimulus from segments 2 and 3 were gathered from one mid-sequence rehearsal of each participant. The conductors had a specific plan for that rehearsal so these results may not be representative of all the conductors’ rehearsals. However, these data along with the think aloud portions helped elucidate the listening processes of each participant, which was the goal of the study.

Also while not the focus of this study, interestingly both Evan Y. and Ramón C. sang a lot to describe and model stylistic elements of the music. When discussing style or musicality aspects of the performance during each segment, they both would sing the part
with specific inflections to get their point across. Here is an example of Evan Y. discussing phrasing during the last two measures of Third Suite, “The solo in the snare drum I’m hearing (sings rhythm with equal volume) but since that is repeated I would go somewhere with it like (sings same rhythm but with crescendo) so that you can create a bit of character.” James E. described stylistic elements as well but did not sing aloud in the same fashion. Instead he explained stylistic elements through specific articulation syllables to convey intended style, for example saying doo, tee, and tah. Here is an example during James E.’s rehearsal referring to the trumpet section, “Put a little more separation guys, use tee fronts and not dee fronts (sings) ‘tee-tee-tah-tee-tah. Tee fronts, a little separation. Quarter note people same thing (sings) ‘tee-tah-tee-tah-tee-tah, put a little bit of a separation there.” This present study focused exclusively on participants’ listening processes but effective rehearsal strategies and techniques from experienced conductors would benefit the music education community (Carse, 1929; Markevitch, 1965). In Appendix H, I have included rehearsal strategies uncovered during this study based on the participants’ verbalizations.

Limitations

Participants in Segment 1, the music listening activity, listened and spoke extensively about unfamiliar music. Normally, conductors would study the music prior to a rehearsal and enter ready to rehearse their internal interpretation of the work. This intentional decontextualized scenario was done so the conductor’s verbalizations would be based on the music itself and not preconceived ideas. I purposely and strategically selected music that was unfamiliar to the participants. They had not conducted, performed, studied, or listened comprehensively to the music prior to this listening
activity. I wanted the participants’ evaluative responses to be based on “in-the-moment”
listening and less on preconceived notions of the music. Therefore, the findings from
Segment 1 do not account for conductor preparation, instead focused on immediate
evaluative decision making.

The protocol adopted for this study worked well for two of the participants.
However, contrary to other studies where experienced conductors were more comfortable
with the think-aloud tasks (Hasty, 2004), the experienced high school conductor in this
study, James E., initially had a challenging time with the protocol. Evan Y. and Ramón
C. were comfortable with the think aloud procedure and adapted to the procedures from
the beginning. Oftentimes, I would stop and ask James E. probing questions in order to
get his thoughts on the performance. During the first think aloud listening James E.
mentioned, “This is tough man; this is not easy.” Although a challenge for him initially,
by the end he felt good about the experience. He said at the end of Segment 1, “Yeah man
this was fun. You got me to think about rethinking stuff and you know oftentimes that's
very refreshing to talk through the process so I really do appreciate it.”

Another limitation was the preparation cycle among the participants. This study
took place in the spring semester after Music Performance Assessments (MPA) for high
school ensembles which is normally the apex during the semester for instrumental
ensembles. James E. was preparing for his spring concert and Evan Y. his school’s
graduation. While I did not get the sense that either participant slacked off during their
rehearsal due to this, James E. did indicate that his priorities were different. He did
comment, “If I had more time like preparing for festival I would have spent more time on
that.”
Also while not a focus in the study, I would have video recorded each think-aloud session to account for the participants’ hand gestures and singing. Not only did Evan Y. and Ramón C. sing a lot during the segments but they also used their hands extensively when verbalizing and describing ideas. For the video recording of the actual rehearsal (Segment 2), I should have placed a microphone directly in front of the participant so that I could catch every verbalization he made to the ensemble. There were times when the conductor would lean over to say something to a member in the front row but it was inaudible to my video camera placed in the back of the room behind the percussion. This also would have helped me decipher what participants said to their ensemble while the group was performing simultaneously instead I had to ask participants what they said after the fact.

**Implications for Future Research**

In the future, researchers should continue to investigate listening strategies. In many ways this was an exploratory study. No one study serves as truth. Only through the accumulation of replication studies can we begin to chart a path into how conductors make sense of the sounds they hear. Other studies could examine conductors from a variety of levels (string, orchestra, and choral). It would also be of significance to replicate this study using only top, well respected conductors in our profession (professional, collegiate, and/or middle school) in order to assess how people at the top of our profession listen, process, and verbalize aural sounds. Future research can also utilize the same think-aloud protocol in a variety of ways. One think-aloud study could involve the physical gestures of expert conductors. Using a similar methodology from this Segments 2 and 3 from this study, a researcher could have the participant watch video
footage from the rehearsal and provide a think-aloud on the intentions of their physical conducting gestures. This is similar to many graduate conducting programs where conducting students watch video of themselves during a rehearsal or performance and receive feedback from the instructor (Johnson, 1993). It would be insightful to do the opposite and have the instructor view video of himself while doing a think-aloud on his gestures.
REFERENCES


APPENDIX A: IRB EXEMPTION APPROVAL

ACTION ON EXEMPTION APPROVAL REQUEST

TO: Kelvin Jones  
Music and Dramatic Arts

FROM: Dennis Landin  
Chair, Institutional Review Board

DATE: May 3, 2016

RE: IRB# E9929

TITLE: An Examination of the Rehearsal Listening Among Accomplished and Second Level Music Conductors


Review Date: 5/2/2016

Approved X Disapproved ________

Approval Date: 5/2/2016 Approval Expiration Date: 5/1/2019

Exemption Category/Paragraph: 2b

Signed Consent Waived?: No

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable):

Protocol Matches Scope of Work in Grant proposal: (if applicable)

By: Dennis Landin, Chairman

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING – Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins), notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
8. SPECIAL NOTE: When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

*All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb
APPENDIX B: SIGNED CONSENT FORMS

Consent Form for Study

1. Study Title: The Rehearsal Listening of Accomplished School-Based Music Conductors

2. Performance Site: Louisiana State University and Agricultural and Mechanical College

3. Investigators: The following investigator, Kelvin Jones, is available for questions about this study at anytime. Kelvin Jones can be reached via cell phone at 662-347-5048 or email at kjon183@lsu.edu. Co-investigator, Dr. James Byo, can be reached at 225-578-2593 or jbyo@lsu.edu.

4. Purpose of the Study: The purpose of this study will be to see how accomplished and young music conductors process and think about music when listening to music in contextual settings.

5. Subject Inclusion: Instrumental music teachers at the university level and high school levels

6. Number of participants: 3

7. Study Procedures: The study will be conducted in three segments. Segment one will consist of participants listening to two music excerpts while using a talk aloud protocol to get participants to speak freely any thoughts they have pertaining to the music. Segment two will consist of the researcher video recording the participants’ music rehearsal and doing a video analysis of the rehearsal. Segment three will consist of the participants doing another talk aloud procedure while watching rehearsal frames from the video footage of their rehearsal taken in segment two. Audio recordings will be made in each segment of this study. After all recordings have been transcribed, all audio recordings will be deleted.

8. Benefits: This study may yield valuable information in how conductors of contrasting experience levels listen and process music.

9. Risks: There will be no risk involved with participation in this study.

10. Right to Refuse: Participants may choose not to participate or to withdraw from the study at any time without penalty or loss of any benefit to which they might otherwise be entitled.

11. Privacy: Results of the study may be published, but no names or identifying information will be included in the publication. Participant identity will remain confidential.
12. Signatures:

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects’ rights or other concerns, I can contact Dennis Landin, Institutional Review Board, 225-378-8692, irb@lsu.edu, www.lsu.edu/irb. I agree to participate in the study described above and acknowledge the investigator’s obligation to provide me with a signed copy of this consent form.

Subject Signature: [Signature]  Date: 5-13-16
Consent Form for Study

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12. Signatures:

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects’ rights or other concerns, I can contact Dennis Landin, Institutional Review Board, 225-578-8692, irb@lsu.edu, www.lsu.edu/irb. I agree to participate in the study described above and acknowledge the investigator’s obligation to provide me with a signed copy of this consent form.

Subject Signature: ____________________ Date: 5/16/16
Consent Form for Study

1. Study Title: The Rehearsal Listening of Accomplished School-Based Music Conductors

2. Performance Site: Louisiana State University and Agricultural and Mechanical College

3. Investigators: The following investigator, Kelvin Jones, is available for questions about this study at anytime. Kelvin Jones can be reached via cell phone at 662-347-5048 or email at kjon183@lsu.edu. Co-investigator, Dr. James Byo, can be reached at 225-578-2593 or jbyo@lsu.edu.

4. Purpose of the Study: The purpose of this study will be to see how accomplished and young music conductors process and think about music when listening to music in contextual settings.

5. Subject Inclusion: Instrumental music teachers at the university level and high school levels

6. Number of participants: 3

7. Study Procedures: The study will be conducted in three segments. Segment one will consist of participants listening to two music excerpts while using a talk aloud protocol to get participants to speak freely any thoughts they have pertaining to the music. Segment two will consist of the researcher video recording the participants' music rehearsal and doing a video analysis of the rehearsal. Segment three will consist of the participants doing another talk aloud procedure while watching rehearsal frames from the video footage of their rehearsal taken in segment two. Audio recordings will be made in each segment of this study. After all recordings have been transcribed, all audio recordings will be deleted.

8. Benefits: This study may yield valuable information in how conductors of contrasting experience levels listen and process music.

9. Risks: There will be no risk involved with participation in this study.

10. Right to Refuse: Participants may choose not to participate or to withdraw from the study at any time without penalty or loss of any benefit to which they might otherwise be entitled.

11. Privacy: Results of the study may be published, but no names or identifying information will be included in the publication. Participant identity will remain confidential.
12. Signatures:

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects' rights or other concerns, I can contact Dennis Landin, Institutional Review Board, 225-578-8692, irb@lsu.edu, www.lsu.edu/irb. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Subject Signature: __________________ Date: 21 May 16
APPENDIX C: SCRIPTED INSTRUCTIONS FOR SEGMENT ONE

Thank you for agreeing to participate in this study. For this study I am interested in learning how you think and verbalize your thoughts while evaluating a band performance. This process involves three parts across two listenings. First, you will look through and become acquainted with an unfamiliar music score. Next, you will listen to a band performance none stop as you when you judge in a Music Performance Assessment setting. While following the score, you will provide comments or feedback as if you are an adjudicator, talking as frequently and freely as you’d like.

In the next part, you will listen again to the performance; however, this time I will stop the recording and allow you to “think aloud” for every comment-worthy moment. My hope is that by stopping the recording, you will have time to be more thoughtful in your commentary. Answering questions like, ‘Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why that your focus of attention? Why not something else?’ I am only interested in your comments about the performance aspects of the ensemble, not the compositional aspects.

Let’s begin, please take five minutes to look through the score and share with me any thoughts you have about the piece. This is Robert Jäger’s Third Suite, we will only focus on movement 1, the March. Again, I am only concerned with the performance aspects, not the compositional aspects. (After 5 minutes or until indicated ready to proceed, whichever comes first. Ask participant) “What did you notice in the score? Anything stand out?

Okay, here is the protocol for this study. When you are ready to speak, just do a slight head nod like this (show gesture) and I will stop the music to allow you to speak.
Once you are finished with speaking your thoughts, just give me a head nod like this (show gesture) and I will continue the excerpt. If you are silent for any long period of time I may stop the music and say, “What are you thinking now?” The musical score is provided for you to use while listening.

Once we complete the first piece, the same procedures will apply for the second excerpt. The time limit for each excerpt should last no longer than 30 minutes. Do you have any questions? (answer any questions)... Now let’s do a practice run. I will play a musical example and I would like for you to demonstrate the start/stop procedures while thinking aloud. (play sample excerpt, participant demonstrates stop gesture to give feedback, and start gesture when ready for music to continue. Complete this process three successful times).

Great! Again, this study is about how you evaluate music performances. Try to focus your comments on aspects of decision making and try to narrate your thinking considering questions like “Where did that thought come from?” I am particularly interested in how you got to the thought-process of your comments. Do you have any final questions (wait for questions)? Okay, let’s begin. The first listening will run beginning to end nonstop, similar to a group performance at MPA. Please provide comments as if you were an adjudicator. (Once finished with comments). Okay here is the second listening, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment. (play excerpt again).
(once Jäger listening complete). Any final comments on this movement? Okay, here is the second piece. This is Gordon Jacob’s *An Original Suite*. We will only focus on movement 1, the March. Please take five minutes to look through the score and share with me any thoughts you have about the piece. Again, I am only concerned with the performance aspects, not the compositional aspects. (After 5 minutes or until indicated ready to proceed, whichever comes first). Ask participant: “What did you notice in the score? Anything stand out?”

Okay, we will use the same think aloud procedures as with the last piece. Would you like to review the protocol? (review if needed). As before, the initial listening will run beginning to end nonstop. Please provide comments as if you were an adjudicator. (Play except, once finished with comments). Here is the second listening, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment. (play excerpt again).
APPENDIX D: SCRIPTED INSTRUCTIONS FOR SEGMENT THREE

Thank you for again for your participation. This is the final portion of this study. During this session we will watch footage from your last rehearsal. You will be asked to verbally talk aloud your evaluative thinking processes during any segment of the rehearsal. Simply put, ‘what were you thinking there and what drew you to that?’ Before we watch your rehearsal, let me ask you a few questions. How did the rehearsal go? What went well? What would you go back and change? (answers questions).

Okay, you are about to watch segments from your past rehearsal. The verbal protocol will be similar to session one. When you are ready to speak, just do a slight head nod like this (show gesture) and I will stop the video to allow you to speak. Once you are done, just give me a head nod like this (show gesture) and I will continue the video. My hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why this focus of your attention? Why not something else? If you are silent for any long period of time I may stop the video and ask, “What are you thinking now?” The time limit for this session should last no longer than 45 minutes. Do you have any questions? (answer any questions)…”

Again, this study is about your evaluative listening processes. I am particularly interested in how you got to the thought-process of the comment you speak about. Do you have any final questions? If not let’s begin.”
APPENDIX E: SEGMENT ONE VERBAL TRANSCRIPTS

KJ= Kelvin Jones (researcher)
EM= Evan Y. (Successful young music conductor)

KJ: Thank you for agreeing to participate in this study. For this study I am interested in learning how you think and verbalize your thoughts while evaluating a band performance. This process involves three parts across two segments. First, you will look through and become acquainted with the music score. Then you will listen to a band performance straight through as you do when you judge in a Music Performance Assessment setting. While following the score, provide comments or feedback as if you are an adjudicator. Talking freely and as frequently as you’d like. In the third step, we will listen again to the performance; however, this time for every comment-worthy moment, we will stop the recording and “think aloud.” My hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Answering questions like, ‘Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why this focus of your attention? Why not something else?’ I am only interested in your comments about the performance aspects of the ensemble, not the compositional aspects. Let’s begin, please take five minutes to look through the score and share with me any thoughts you have about the piece. Again, I am only concerned with the performance aspects, not the compositional aspects.

EM: (looking through score)

KJ: Okay, is there anything that you noticed in the score?

Acclimate to score, 1st listening (noticeable errors)

EM: Yea, I am noticing the alternating 4/4 and 3/4 measures, with the very simple melody in the very beginning a little bit of countermelody second time through the flutes that gives a little bit of color along with the bells. Right at A when the melody changes I’m noticing this kind of counter melody in the higher woodwinds that might be a little difficult to line up, but they can listen to the downbeats in the brasses. I am noticing that after it goes back to the normal melody it integrates a few other instruments. The percussion break at letter C uses the timpani as kind of the melody maker I guess and little bit of the same rhythm from the very beginning, but I like in the percussion break around measure 30 it goes kind of (sings contrasting percussion rhythms at measure 30). It has a bunch of different instruments. I like how it comes in on different parts. It gives everybody a different role to play. Letter D, I am noticing the French horns. I’m guessing it’s kind of a march style where you have the lower voices with the downbeats and the French horns on the upbeats (sings the down and up beats at letter D). Along with the melody going in the background. Lots of time signature changes all the way through. Some interesting rhythms to line up and the time signatures as well. I noticed that almost every time that the melody comes back
into play, there’s either a different countermelody or the same instruments who
were playing a countermelody have something completely different the second
time through, so it kind of randomizes that a little bit through.

KJ: Cool, anything stand out?

EM: Umm, yea on the measure before E, the triplets (sings triplets while snapping
fingers) that 6/4 measure. Lining that up along with the dotted eighth, sixteenth
notes. That kind of stood out to me. It kind of stood out how the percussion break
completely separates the piece where you have the melody in the very beginning
with the alternating 4/4, 3/4 and then a completely different melody starting out at
letter D that kind of finishes out the movement.

KJ: Definitely. Okay, here is the protocol for this study. When you are ready to
speak, just do a slight head nod like this (show gesture) and I will stop the music
to allow you to speak. Once you are finished with speaking your thoughts, just
give me a head nod like this (show gesture) and I will continue the excerpt. If you
are silent for any long period of time I may stop the music and say, “What are you
thinking now?” You may use the musical score while for you are listening. Once
we complete the first piece, the same procedures will apply for the second
excerpt. The time limit for each excerpt should last no longer than 30 minutes. Do
you have any questions? (answer any questions)

EM: Umm, don’t think so just remind me again, just making general
comments when I nod and just comments about what I hear?

KJ: Yea, anything that comes to mind or that you want to speak on regarding your
thinking process, just give me a head nod and talk out loud about it.

EM: Okay, awesome.

KJ: Along those lines let’s do a practice run.

EM: Okay

KJ: I will play a musical example and I would like for you to demonstrate the
start/stop procedures while thinking aloud.

EM: Okay

KJ: (plays sample excerpt).

EM: (nods head) The (sings sample melody) was not clean at all, you couldn’t
really tell what notes were supposed to be played (nods head).

KJ: Okay (continues sample excerpt)
EM: (nods head) The woodwind entrance wasn’t clean on the run (sings run) it was just kind of muddled in the very beginning, sort of heard it coming a little bit afterwards.

KJ: So what made you hear that?

EM: Umm, I kind of heard it from the very end I noticed that there was something that was supposed to come in probably a little bit early because I heard the last few notes before the down beat of probably the next measure and I would… Umm, my ear got drawn to the higher timbre.

KJ: Okay (continues sample excerpt)

EM: (nods head) Not lining up (sings downbeat quarter notes). Not lining up together and also not lining up the melody

KJ: Okay cool, so we just went through that practice process so great do you have any other questions about the procedure or anything related to this study.

EM: Nope, looking forward it.

KJ: Great so this study is about your evaluative listening processes. Try to focus your comments on aspects of decision making and try to narrate your thinking considering questions like “Where did that thought come from?” I am particularly interested in how you got to the thought-process of the comment you speak about. Do you have any final questions?

EM: Nope

KJ: Okay, let’s begin. The first listening will run beginning to end nonstop, similar to a group performance at a Music Performance Assessment setting. Please provide comments as if you were an adjudicator. Here is movement, 1, the March from Robert Jäger’s Third Suite.

**Adjudicator, 1st listening (noticeable errors)**

EM: (commenting simultaneously while music is playing). I kind of would like to hear a little more flute when they come in second time (measure 1-3 after repeat)... Got to make sure that lines up as well at the very end as well with the low instruments (measures 7-8)... I like the accents that I’m hearing in the low brass and trumpet melody (measure 9)... I’d like to hear a little more clarity in the flutes, clarinet (measure 9 after repeat)... Yea, I’m kind of losing the accent need a little more (sings with emphasis on the front end of the quarter note, measure 10)... Yea, that wasn’t necessarily clear either going into B. It has to crescendo going through. I am seeing a crescendo all the way down the page and really
wanted to hear the increase in volume (measure 17)… You know I like the attempt of musicality (sings snare drum sixteenth notes with crescendo in at measure 27)… Good contrast in dynamics (measure 34)... Could use a little more playful style in the horns (sings part with emphasis on upbeats) maybe a little lighter (measure 34)… (sings melody with accent at end) I would accent the first note of the triplets (measure 38)… Not bad, just don’t want to drag at the end of that (measure 42)… Yea, try not to splat the (sings part, measure 46)... Maybe a little lighter on the cymbals (measure 47)... Yea the very end (sings rhythm in the last two measures) didn’t really seem consistent either (sings rhythm again slower) I would probably just take that slower and try to get that a little cleaner with the rhythm.

KJ: Awesome Okay here is the second listening of the same piece, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment.

Think aloud protocol, 1st listening (noticeable errors)
EM: Okay, umm on the triplets (sings triplet figure in m. 1 but intentionally muffles the triplet rhythm). I’d like to hear more consistency in that sound.

KJ: (resumes music)… (stops)

EM: Right there (referring to measure 5)… When the flute and bells entered I did not hear that lining up on the first measure (sings rhythm). I guess I was really just looking for the second time through, knowing that they were going to come in really looking for that melody when I didn’t hear it all the way unified then that kind of threw me off.

KJ: (resumes music)… (stops)

EM: Um I also, now that I am hearing the second time through, the phrase shaping (sing melody at measure 4 with noticeable crescendo) and do something a little bit different since you hear that again.

KJ: (resumes music)… (stops)

EM: In the first section, it’s about mezzo forte. I would think to maybe have a bigger contrast. I see this as a big triumphant section here (referring to letter A, measure 9) so I guess going into a different section like a different strain I’m listening for something different so I would want maybe a bigger section especially with the downbeat of dotted half notes in the trombones and the trumpets.

KJ: (resumes music)… (stops)
EM: (sings upper woodwind part in measures 12-14) I think that needs to be rehearsed slower just for clarity purposes and then naturally the volume is going to increase as they’re going up in pitch (sings upper woodwind part in measures 14 and 15) but I would want them to control it a little bit more so that we can hear clarity more.

KJ: What made that stick out to you? (resumes music)… (stops)

EM: Ahh, just kind of hearing it over and over again and seeing it in the score and hearing the same rhythm over and over again. It made [it] stick out right about the third or fourth measure of hearing it. Just kind of wanting to go back and hearing each and every note and just going back and see it.

KJ: (resumes music)… (stops)

EM: Umm, I think that for balance purposes and just listening throughout the entire band here, I am hearing almost like a bright tone and not really hearing enough of the low voices. I don’t know if that’s just me being a trombone player but I would like to hear especially with the trumpets having the same things as the trombones for the most part, I would like to hear more of the darker sound. It sounds just too bright with the upper woodwinds in the trumpet (referring to measures 9-16).

KJ: (resumes music)… (stops)

EM: In the second measure of A (measure 10), I heard this the first time and now that I am looking at it again, it looks to me that this is a D major chord. I would like to hear more of the people with accidentals because when you’re coming from, this just kind of caught my ear, but when you’re coming from A and you’re moving through that section that’s one of the first spots really in that section where it kind of switches from the key, so I kind of wanted to hear that chord a little more (sings brass part in measures 9-10) so that the accidentals and especially the third of the chord can really come out and those two groups need to come out more.

KJ: (resumes music)… (stops)

EM: Very nit-picky, minor thing but on the dotted half notes I’m kind of hearing the dotted half note tail off a little bit (sings dotted half notes in measure 13 with a noticeable decay on the end) instead of keeping the energy of the note going.

KJ: What made that stand out? (resumes music)… (stops)

EM: Just kind of listening throughout the rest of the melody. I guess quite honestly at that point I was looking at it in the score.
EM: Umm, I guess this just kind of caught my ear, in the second ending (measure 17) the lower voices just kind of splat the quarter notes. I know that there’s an accent there but it just stuck out to me a little too much so maybe a little less accent.

EM: That whole section, the first clarinet staying up in the stratosphere throughout the whole thing (measures 18-25), it’s just kind of sticking out to me and my ear so I just can’t help but listen to it. And I would just say maybe you don’t want to compromise tone quality but at the same time you just try to back it off as much as possible.

EM: Yeah so on the musicality there at measure 30, if you are going to do that (sings field drum/snare sixteenth notes) that the whole measure has to build that’s what I was listening for the second time around and after the whole piece I was just listening for (sings same rhythm again with crescendo added) and right there I just heard (sings same rhythm but soft in the beginning and then loud at end) it just wasn’t consistent. I think just a steady build across the measure would help.

EM: The same thing there (measure 31), I just don’t think the snare drum was consistent on the sixteenth notes and I guess just seeing it in the score for me, I’m looking at it from the standpoint of (sings and taps even sixteenth notes). To me instead of (sings and taps uneven sixteenth notes) it just wasn’t consistent on the second beat.

EM: Yea kind of the same thing I said before, I like that dynamic contrast but on the melody what I was really listening for that time was the musicality of (sings clarinet rhythm at measure 34). Just a little accent and push of the air on the first triplet eighth note.

EM: I would like to hear more of a crescendo throughout those three bars in measures 38, 39, and 40. I did not really hear the build because it’s suppose to go from piano to forte but it just seems it came out of nowhere and especially now that my ear was trained from letter D the second time around when it comes in at measure 38 I really was listening for that again.
EM: That time when everyone came in the overall band sound was pretty good (measure E) but when I am looking at the accents on the melody here, I’m looking at clarinet, tenor sax, bari sax, trumpets, trombone and baritone. I am seeing on the page (sings that groups rhythm at measure 47 with noticeable accent on first eighth note triplet) so I guess just across the entire page I am looking for style and I’m not hearing it across the board.

EM: Can we actually back up a couple of measures please?

EM: This entire section, if I were rehearsing this piece I would play that every single day slowly (measure 46) because it’s just going to sound like a big pile of mush until you get it quicker. When I’m looking across I can see that it’s a really hard rhythm to play and I’m not expecting perfection but at the same time my ear is kind of thinking that’s going to be a hard thing for them to play so what do we have to do in order for it to be the absolute best it can be for the performance.

EM: I don’t [know] if it was just me listening to it this time but the (sings eighth note triplet figures in the brass in measure 48) were better that time and it was really nice and clean on those triplets towards the end of the bar. I’m looking at the entire score and every single person has that rhythm minus the bass drum and cymbal but every single person’s got that rhythm at measure 49 (sings rhythm while snapping).

EM: At that part at the end I think they were probably putting a little too much accent on the first note and when I’m looking at it, I’m seeing you have to accent the first note but hearing (sings eighth notes in measure 51, first note loud but second eighth inaudible) and I think they need to move the air quicker on the sixteenth notes and try not to let the tongue get in the way (measure 51 in low voices)

KJ: Thank you, here is the second piece. Please take five minutes to look through the score and share with me any thoughts you have about the piece. Again, I am only concerned with the performance aspects, not the compositional aspects. This will be movement one only of this piece as well.
KJ: What did you notice in the score?

**Acclimate to score, 2\textsuperscript{nd} listening (no noticeable errors)**

EM: Well actually I got infatuated with the first few pages here, but I am noticing that there is tons of room for musicality to be put in especially in the first few sections (sings melody in measure 3) and just leading into the next measure each time. Also, lots of opportunity, while some are written and some are not, come up in pitch go down in pitch (singing a crescendo and decrescendo) and a lot of times it goes with range. I’m noticing that everything is very very involved from the standpoint of either you have the melody or you really don’t have any to do with the important part at all, like the tubas and bass clarinet or you have this countermelody that’s not really hard as far as the rhythm is concerned but it’s probably good harmonically to go along with the melody. I am also noticing that baritone range throughout this is just incredibly high. I’m noticing lots of dynamic contrast. There are spots where he goes down to piano and then fff so just dynamic ranges are going to be huge. Lots of playful styles and lots of in your face playing. I think just expanding dynamics is going to be huge, just exaggerating those is going to be big. At some points there’s brass parts. Some are playful, some are lyrical and trades off with the woodwinds and goes back into a marcato style. The 32\textsuperscript{nd} notes and 16\textsuperscript{th} notes are going to be very interesting (laughs) in different spots in the way that they line up, really gonna have to listen for easier rhythms to line that up with.

KJ: Anything stand out?

EM: The baritone range really stood out to me a lot. I think the opportunity for musicality in the very beginning really stood out to me. How the movement just really evolves into different sections. And then the form coming back at F stood out to me because a lot more instruments are coming in with the main melody (sings same woodwind melody at letter F) meanwhile while the trumpets and trombones have this (sings part) so we have this countermelody fanfare type of a thing as well so just so many different things going on right now but the musicality is really awesome what you can put in it is what really stood out to me.

KJ: Awesome, okay, we will use the same think aloud procedures as with the last piece. Would you like to review the protocol?

EM: I think I’m alright

KJ: As before, the initial listening will run beginning to end nonstop. Please provide comments as if you were an adjudicator. Here is the March, movement 1 from Gordon Jacob’s *An Original Suite*.

**Act like adjudicator, 2\textsuperscript{nd} listening (no noticeable errors)**
EM: Good diminuendo, I would like to hear the snare drum come down a little softer (measure 1-2)… Pretty good dynamic contrast with the crescendos and decrescendos (measure 9)… I’d like to come down a little softer at the end of that (sings eighth note melody in measure 9)… Nice style at the very end of that (measure 19-20)… Yeah I want that to be together (sings rhythm in measure 23) Really be together and have that internal metronome going… Good job on the grace notes (piccolo and flute in measure 26)… I’d like the low brass to lead the crescendo a little bit more in measure 20 (means measures 28) since everyone got that (inaudible)… I’d like to hear a whole lot more dynamic contrast (measures 34 and 35) it says piano I think as soft as you can play right before C… (sings woodwind quintuplet in measure 40) just a bigger range there. That’s got to be absolutely huge, I would say almost blasting (measure 49)… I would have a little more length to the accented notes (sings quarter notes at measure 50)… I’d try to contrast in style more, make that as lyrical as you could (measures 54-55)… I’m listening for more musicality there (sings melody at measure 58) really exaggerate the dynamics… Yea I still think you could exaggerate that especially if you come out a little before (measures 65-66)… Try to get this a little softer in general (measure 72)… I’d like a little more length to the notes in the trombones and trumpets at F (measure 76)… That was pretty nice (measure 84)… The solo was awesome (cornet in measures 88-90)… I think the eighth notes could be a little lighter instead of (sings eighth notes with a throaty tone) just need to lift off the note… Yea interesting ending, I would just try to start at measure 98 a little softer (sings measure clarinet and oboe rhythm) I would try and grow and little bit more over those two measures. It grew a little too soon.

KJ: Okay, well here’s the second listening, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment.

Think aloud protocol, 2nd listening (no noticeable errors)

EM: I noticed that in measure 2, and it’s just in personal taste it was something that I just noticed actually the way that the rolls were being played on [beats] 2 and 4, it was just eighth notes from the very beginning or sixteenth notes it wasn’t really how it was written but it was fine as far as the interpretation. I just found that interesting.

KJ: (resumes music)… (stops)

EM: Yea so I’m kind of hearing (sings melody in measures 3-4 with crescendo into downbeat of measure 4 with a decrescendo afterwards) really aim for the top note there. I think it is growing but I feel like we can expand it a little further. It seems like it’s over a couple notes instead of the entire phrase.

KJ: (resumes music)… (stops)
EM: Looking at the first trombone, trombone 3, and tubas have it (measure 11) and anybody with quarter notes in that measure (sings rhythm again) should really expand that over those three notes.

KJ: (resumes music)... (stops)

EM: Yea, I’m hearing (sings cornet melody with clipped articulations in measure 15) I think just a little lighter and it may not be as clean when you try it but sounds too (sings melody same way again) for me anyways.

KJ: (resumes music)... (stops)

EM: The woodwinds (sings 16th note runs in measures 17-18) it’s just all over the place. I think they are actually playing it pretty well for the most part. I would say, it starts fortissimo and crescendo, I think they are doing as well as they can with the technique on it but I would try as much as I could to start that a little softer. My mind just went to it because of all the black on the page but just trying to figure out as musical as you could make the first section. I would maybe have people stagger breath where some people play the first note and the other people start a little softer and crescendo so that it’s not the same and not all over the place.

KJ: (resumes music)... (stops)

EM: I feel like the (sings low woodwind rhythm in measure 20) needs to be as creepy and playfully as possible. Just lift off the note a bit more instead of like you’re slapping the note (slaps while saying this).

KJ: (resumes music)... (stops)

EM: I was looking on here because I’m hearing this (sings flam rhythm) like they were flams but looking down the page (measure 23). I was really listening for accuracy all on the downbeats (sings correct rhythm in measure). I know the snare drum has the taps going in but I heard wind instruments also coming in ahead of time.

KJ: (resumes music)... (stops)

EM: Of course there is fine (measure 25).

KJ: (resumes music)... (stops)

EM: Since we have the same thing over and over again, I would say musicality (sings rhythm in measure 26 with a crescendo) you know and try to create a little bit of difference.
KJ: (resumes music)... (stops)

EM: Since that is such a contrast in style from beforehand in the melody (measures 29-30), I’m looking at the quarter notes but listening for the melody and musicality, like I’m looking at the quarter notes thinking okay that should decrescendo a little but I’m hearing (sings quarter notes in same measures equal volume) when it needs to be really cantabile.

KJ: (resumes music)... (stops)

EM: I’m thinking complete contrast in dynamic I mean like (sings loud and then gets softer measures 34-35).

KJ: (resumes music)... (stops)

EM: Also thinking that I really love this baritone player.

KJ: Why do you say that?

EM: Well I’m looking at this and they have the same thing as the woodwinds and I’m hearing the timbre and it sounds just so flawless with the (sings upper woodwind melody in measure 40), just really clean, nice and smooth. Looking at it down here and it looks like it almost doesn’t fit in with what the woodwinds are doing but he’s, or she, is playing it so well that it’s just so good with the timbre of the piece. There’s obvious listening going on back and forth. That’s just obvious practice there. While we’re on the subject just at C (sings trombone rhythm at measure 36) a little nit picky but a little more length to the notes in the brasses since its kind of like their statement.

KJ: (resumes music)... (stops)

EM: (resumes music)... (stops)

KJ: I’m not going to lie, I got kind of lost. Can we go back and do that again?

KJ: Sure (rewinds excerpt)

EM: Yea, that last measure at 43 (sings trombone line), I’m seeing that some people have accents. I guess I was listening for (sings same rhythm but more detached), just a little bit of push on the air on the front of the note but the length of the note I didn’t really hear a connection between all the brasses on that even with the tenuto and the accents we can all do the same thing.

KJ: (resumes music)... (stops)

EM: Here for me again as a low brass player and I see that the low woodwinds have this (sings with heavy articulation on descending eighth notes at measure 48) I would make the conductor back me off every time. I mean just absolutely bring
that out.

KJ: (resumes music)… (stops)

EM: (sings low brass and percussion parts at measure 52 and 53) I would have to listen to that again but I heard a couple people hanging over just a little bit into beat three but I am seeing that everyone down the page has the same exact thing and that really needs to be the percussion moment on that beat. (Resumes music)… Nice (measures 56-57).

KJ: (resumes music)… (stops)

EM: I’m hearing this kind of in a major, it’s not really a sad sounding but a (sings melody at measure 58), I think just more opportunity for musicality since its lyrical that’s what I’m listening to on that.

KJ: (resumes music)… (stops)

EM: I think its fine as far as interpretation but I did hear it clipped a little bit at the end (measure 65). It’s a tuba solo and how often do you get a tuba solo, so bring it.

KJ: (resumes music)… (stops)

EM: Getting lost in the shuffle is the 2nd cornet part. I would bring that out a little bit more. I’d like to hear more of it.

KJ: What made you think of that?

EM: I heard the trumpet playing, I heard the normal melody but then I heard something off in the distance and I kind of liked it so I just wanted more of it.

KJ: (resumes music)… (stops)

EM: Same thing musicality I’m listening for that all across because I’m seeing slurs, I’m seeing piano, so in my head I’m hearing flowing (sings melody at measure 65) you don’t have to come up to forte but come up a lot more so we can hear that contrast.

KJ: (resumes music)… (stops)

EM: I’m noticing just in the score that with the melody already being established already I’m looking at what else there is on the page and I’m noticing that baritone, cornet 2 again, and the baritone (sings rhythm at measure 69 and 70) just these huge jumps and all that kind of stuff but I would just say bringing out just a little bit more or just try to have whenever it’s going down in pitch try to come down in volume as much as you can and same thing going up.
KJ: (resumes music)… (stops)

EM: Looking at the trumpet and trombone thing at the bottom of the marcato (sings rhythm with clipped articulations measure 76) I’m hearing just the eighth notes are just too short for me, especially with the woodwinds having just this lyrical thing and the brasses can be marcato but I just don’t think that they need to be that short on the eighth notes so just a little less separation in between.

KJ: (resumes music)… (stops)

EM: Can we back up just a couple second so I can hear going into that?

KJ: Sure (rewinds excerpt). (Resumes music)…

EM: So at G I am just noticing two things, the obvious thing of course is hearing the flute, piccolo, and solo clarinet and the e flat (measures 84-87) but I’m looking at the call and response between the French horn and alto sax, the clarinets and the people who have eighth notes towards the end of the bar. I’m trying to hear a consistency in style (sings rhythm). I would say that the people who have eighth notes in the back end of the bar can really make something out of that where the people in the front of the bar sets them up, so like the call is saying “Like what can you do” and I would just relate it to a story like what can you do for us, “Oh I can do this.”

KJ: (resumes music)… (stops)

EM: (sings cornet solo in measures 88-90), I think the more you get comfortable with the technique especially in the trumpet I’m looking at the trumpet solo now. What stuck out to me is the second measure in 88, the second beat is a scale (sings rhythm) right there is a perfect opportunity to increase the air speed and try to get more volume.

KJ: (resumes music)… (stops)

EM: Can we go back about 30 seconds?

KJ: Sure (rewinds excerpt)

EM: Awesome.

KJ: (resumes music)… (stops)

EM: My eyes are drawn to the (sings rhythm in measure 97) and just naturally I think they are doing a good job of really leading into that last note.
KJ: (resumes music)… (ends)

EM: On the last two bars, the solo in the snare drum I’m hearing (sings rhythm with equal volume) but since that is repeated to me I would go somewhere with it like (sings same rhythm but with crescendo) so that you can create a bit of character. On the fifth to last measure on the six-let runs (in cornet, flute, piccolo, Eb clarinet, and alto sax) I know it’s going to be hard for the first trumpet but I’m hearing just throwing up that G. I would say just try to play with as much air as you can but try to hold back on it so that you’re not throwing up on that note at the very end. If you can back off the volume just a little bit, again I know with the technique but just a little bit so that you can crescendo throughout that bar because that’s what I’m seeing.

KJ: Any other comments you’d like to make?

EM: Yea, real quick the last measure (paused) it’s always just like it’s supposed to be a joke pieces to me. It sounds like (sings ending) the very end it’s like ‘thanks for listening to me’ type of a thing but I thought that they did a good job. It says to just crescendo the very end but I like the way it was just held so that they didn’t just splat the note. But overall I love the piece, I think just as much time as you can have to create musicality the better.

KJ: Well thank you so much!
JS= James E. (accomplished experienced conductor)
KJ= Kelvin Jones (researcher)

KJ: Thank you for agreeing to participate in this study. For this study I am interested in learning how you think and verbalize your thoughts while evaluating a band performance. This process involves three parts across two segments. First, you will look through and become acquainted with the music score. Next, you will listen to a band performance straight through as you do when you judge in a Music Performance Assessment setting. While following the score, provide comments or feedback as if you are an adjudicator. Talking freely and as frequently as you’d like. In the third step, we will listen again to the performance; however, this time for every comment-worthy moment, we will stop the recording and “think aloud.” My hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Answering questions like, ‘Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why this focus of your attention? Why not something else?’ I am only interested in your comments about the performance aspects of the ensemble, not the compositional aspects. Let’s begin, please take five minutes to look through the score and share with me any thoughts you have about the piece. This is Robert Jäger’s Third Suite, we will only focus on movement one which is the March.

**Acclimate to score, 1st listening (noticeable errors)**

JS: (looks through score). So the first thing I notice is getting the march style down is what I’ll be listening for. Also the time signatures... Okay

KJ: What did you notice?

JS: Just looked for overall style and I was looking over the accented notes mainly and the key change that comes later on. I looked for any repeats or anything like that there was none of that so that's the scanning that I did.

KJ: Anything stick out?

JS: Not particularly I mean there's of course looking Umm-Pahs that come in later on with those people going to listen for that you know. The chromatics that happened with that six four measure before E and the dynamic contrast you know.

KJ: Okay, here is the protocol for this study. When you are ready to speak, just do a slight head nod like this and I will stop the music to allow you to speak. Once you are finished with speaking your thoughts, just give me a head nod like this and I will continue the excerpt. If you are silent for any long period of time I may stop the music and say, “What are you thinking now?” You may use the musical score while for you are listening. Once we complete the first piece, the same procedures will apply for the second excerpt. The time limit for each excerpt should last no longer than 30 minutes. Do you have any questions?
JS: No

KJ: OK, now let’s do a practice run. I will play a musical example and I would like for you to demonstrate the start/stop procedures while thinking aloud. (plays example music)… (stops)

JS: I was primarily listening for clarity in the ensemble.

KJ: (resumes example music)… (stops)

JS: Ask the brass players to use more air where we can get to the end of that phrase.

KJ: (resumes example music)… (stops)

JS: just completing the phrases a lot of times when the notes are going lower they're harder to hear the notes when winds are going down in the low register so just try to talk about breath support and pushing air to the end so that we can hear them better.

KJ: (resumes example music)… (stops)

JS: Seems like they are playing with good style throughout so it's a good performance in the clarity of the trumpets on the chromatics coming down seems to lack a little bit of clarity but overall it's a good style very enjoyable listening to it so far.

KJ: So that is the gist of how the protocol will work. Great so again this study is about your evaluative listening processes. Try to focus your comments on aspects of decision making and try to narrate your thinking considering questions like “Where did that thought come from?” I am particularly interested in how you got to the thought-process of the comment you speak about. Do you have any final questions?

RD: That’s interesting, I never thought about how you get to your comments. So if you were to talk about that, what we just said, how do you mean?

KJ: So you mentioned clarity and I may ask a follow up question to get into your thinking like, ‘what made you mention clarity?’

JS: Okay, so you will ask me questions about that.

KJ: Yes but I will let you speak as freely as possible.
JS: (Gave examples of follow up questions) Okay let’s give it a shot. This is different.
KJ: Okay so the first listening will run beginning to end nonstop, similar to a group performance at a Music Performance Assessment setting. Please provide comments as if you were an adjudicator. Here is movement, 1, the March from Robert Jäger’s Third Suite.

**Adjudicator, 1st listening (noticeable errors)**

JS: I like how the flutes are playing that (measures 1-4 second time)… Everyone must do a true march style… If we can play through the entire note on the dotted half notes that would be great (measure 9-10)… It happens throughout and we would need to match that throughout… Use better balance in that section (measures 18-20)… Percussion playing with good style and matching throughout (measures 26-33)… Very musical (same measures)… Better on the second time (measure 37)… On the louder dynamics it seems that the band understands the march style a little better more so than with the softer dynamics.

KJ: Okay, well here’s the second listening, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment. (begins music)

**Think aloud protocol, 1st listening (noticeable errors)**

JS: First thing I would find out who has the unison lines and make sure that they are playing in tune with each other right now between the clarinet and the alto saxophone there is some discrepancy when they are playing (measures 1-2). Maybe I would have them listen a bit more to each other and make sure they know the pitch tendencies in some of those notes so that they can be more in tune with each other.

KJ: So what made that stick out?

JS: The first time, the second time you always have a better chance to listen to it the first time you listen to it you know that there were some pitch things and the second time that we listen we could really isolate that we've got the clarinets and the alto sax with the same lines so it just that would be the way to fix the pitch or to make it right there.

KJ: (resumes music)… (Stops)

JS: I like the way they are playing that (measures 1-4 on repeat) that would be a positive comment really, I like the way the flutes are playing the style on those eighth notes throughout and I'm just not sure that all of the quarter note people clarinets and saxophones and the French horns are all playing the quarter notes the same style because it doesn't seem like it's unified in the way that it's ending, the way the notes are ending and it's tough to tell when a recording from the speakers you know. This is tough man this is not easy.
KJ: (resumes music)… (Stops)

JS: I like the way they're playing through this section right here. I would just make sure that the dotted half notes that we're pushing all the way to the ends of the notes the same way and not letting them taper off towards the end right there. I still think that throughout the woodwinds I think that beat three, three-and-a-four (sings rhythm) it just doesn't seem like it's playing as accurately from player to player throughout the section. So just making sure that everybody plays on the down-up-a-down to make it provide more clarity there.

KJ: So what made that rhythmic figure stick out there?

JS: It's the beat three to four is the one that stuck out both times to me and it just seems like it just lacks clarity from how each player's approaching the three-and-a-four so that's why I would just listen to that individual to make sure everybody is approaching it the same way.

KJ: So if you had to rehearse that section, what would be your plan of attack?

JS: I would just go down the line to see if they are all doing it the same way and making sure that it's placed in the right going to the two-E-and short and three-E-and-A-four and just subdivision down-up-a-down and all that stuff. Just make sure they're all articulating the same way.

KJ: Gotcha. (resumes music)… (Stops)

JS: Just the shorter the more air you use always so almost like a crescendo up to the top of the woodwind figure (measures 15-17)

KJ: (resumes music)… (Stops)

JS: Trill just push air all the way to the end of the trill just don't drop the phrase in the woodwind section (measure 18).

KJ: (resumes music)… (Stops)

JS: Extreme range is always a challenge for woodwinds as far as pitch wise so I'm just you know making sure that I would encourage them to know the pitch tendencies maybe there's some alternate fingerings that they can use up on the top so many can be closer in pitch with each other.

KJ: Interesting so what made that stand out? Because the high tessitura?
JS: Yea, just the high tessitura that's always the easiest thing that your ear is drawn to of course and then your looking at that line again with the alto saxes and the trumpets and just you know making sure that they're in pitch with each other.

KJ: (resumes music)… (Stops)

JS: Good contrast in the percussion section there. Trying to provide some dynamic contrast there for the listener. I thought that was good (measures 26-33).

KJ: (resumes music)… (Stops)

JS: Pitch right there (measure 34)

KJ: (resumes music)… (Stops)

JS: The pitch things coming out of the people with the dotted half notes throughout right there and just encouraging everyone to listen to each other and it's crucial to know the characteristics of those notes and everything. And you can hear the French horn section is full and making sure that the triads and isolating those triads to make sure that we can hear all those notes and the only way to do that is to get them to play it slowly so you can hear where the notes fit in the triad and all that stuff. And then go from there (measures 38-41).

KJ: (resumes music)… (Stops)

JS: You know from the recording it's hard to tell but I would like to hear more of the lower instruments and again it's hard to tell you here but you would want to hear, I always think of the dynamics as being the person that's playing the top part always plays less than with the dynamic is written and the people playing the lower notes have to play louder than what the dynamic is written. So if it's fortissimo which should be just about the loudest that a band should play in high school I believe so if that would be the case then the thirds would play that part and then the seconds would play forte and the first would play the mezzo forte in that way it would help to be able to achieve true balance of sound and also have a better chance of them playing in tune with each other because they can be able to reach a little bit more so.

KJ: So that’s unique, what led you to think of balance in that way of the thirds more, seconds and then first?

JS: Well because the ear is always drawn to the upper tessitura so it's easier for a listener to hear that so the way to combat that is always to use more air like when lines are going lower and you always want to push more air into the lower notes. So you just want to help to give those notes a little bit more to help them come out a little bit more and the only way to do that is just by having them play loud[er] than those notes on top so dynamics are all relative right. Just so you know when
you see the dynamics there you want that section to be strong but you don't want people to think of this especially the upper parts you don’t want them to play fortissimo. So that’s just what I think of when I hear this or how I would teach this to the band or anything like that I would always tell my first trumpets to take one of the F’s away and I would even probably tell them to put mezzo forte on top so that we can hear those lower notes.

KJ: Interesting cool. (resumes music)… (Ends)

JS: Yea so you can hear some of the second and third parts on the ringing of that last note but you don't always hear that whenever they're playing through it and all that so I think that if they would do that a little more than it would help them a little more to be able to hear all the notes all the time and not have that strident sound.

KJ: Any final comments?

JS: No, I think we touched upon everything through there. It’s a good group.

KJ: Cool, well here is the second piece. This will be movement one, March, An Original Suite by Gordon Jacob. Please take five minutes to look through the score and share with me any thoughts you have about the piece. Again, I am only concerned with the performance aspects, not the compositional aspects.

JS: So same thing we just did?

KJ: Yea

**Acclimate to score, 2nd listening (no noticeable errors)**

JS: (looking through score)… A lot more stuff in this, very thick… Lots of oppurtunities for dynamic contrast… For high school kids I always tell them that dynamic (fff) doesn’t exist… Yea a lot more to this man… OK

KJ: So what did you notice in the score?

JS: That there's a lot more to this than what we just listen to. There's lots of dynamic contrast lots of multiple lines being played at the same time. Different style going on in the middle of it so just a lot of opportunities for a band to be able to show a lot of different aspects of playing.

KJ: Anything stick out?

JS: Just that there’s a lot of stuff on.

KJ: Okay, we will use the same think aloud procedures as with the last piece. Would you like to review the protocol?
JS: No

KJ: As before, the initial listening will run beginning to end nonstop. Please provide comments as if you were an adjudicator. Here is the March, movement 1 from Gordon Jacob’s *An Original Suite*. (plays excerpt)

**Adjudicator, 2nd listening (no noticeable errors)**
JS: Nice movement there (measures 20-21)… Very nice sound… Very nice style (measures 30)… Here at loud dynamics would like to hear to more of the inner voices (measures 42-44)… Nice transition there (measures 54-55)… It’s very tasty. I know we as a judge can’t say tasty but this is very tasty… Good back and forth here (measure 70-71)… Terrific solo (measures 84-91)… Nice change in dynamics (measures 91-92)… Obviously a very fine ensemble, very good characteristic playing throughout all sections. I was more of an admirer and listener throughout the whole thing. Don’t have much to say about that performance that I could hear. And obviously with the speakers there’s always that clause but it was great man.

KJ: Alright, here’s the second listening, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment. (begins excerpt)

**Think aloud protocol, 2nd listening (no noticeable errors)**
JS: From a positive note of how the band plays, I like how the middle lines are being brought out and you can still hear all of those while all of the other lines like we said before it’s so thickly scored that there's lots of things going on and you can hear the quarter notes being played while the eighth notes are being played so that's a tribute to the group it's a fine job so far (measures 11-16).

KJ: Like from a balance perspective you talked about earlier?

JS: Yeah yeah.

KJ: (resumes music)… (stops)

JS: Yeah. It's all there I mean the group pays very close attention to what's going on dynamically and they play things very musically. Stylistically everything is right where it needs to be (measures 21-24).

KJ: (resumes music)… (stops)

JS: Good as the notes were getting lower the low instruments were pushing a little bit more air like we were talking about before so we could hear that really nicely towards the end of that. (measures 34-45)
KJ: So what made that stick out?

JS: Well as a high school director there are some things that you know every person tries to stress with their group and that's one thing that I always try to stress about making sure that those notes when they go lower just not letting them get lost and pushing more air to get to the bottom so when you listen to other groups those [are] the first things that you use and that you push so hard with your group. So when you knew that that was going down and that was going to be a challenge for a less experienced group, [but] this group is so great that they’re just not gonna let that happen so you don't need to see a crescendo here to know that it's going to be harder for those notes but that group knows characteristically ‘I need to push those notes a bit stronger’ to make sure that we can hear it. And for each of the different groups the bottom band does the worst job with that so you can really stress those things with them. It's all about breathing and making sure that they push fast air and all that stuff and the rule that the kids know what's the rule and they always talk about the shorter the note the louder you play a lot of times too because those things get lost as well.

KJ: Interesting point. (resumes music)… (stops).

JS: You just hear all of the notes (measures 42-43) the trumpet parts that have the up beats you know the down Um-Pahs they're all there. You can hear all of the parts, so it's just another complement there.

KJ: (resumes music)... (stops).

JS: From the recording it would be nice to hear a little bit more of the middle voices. The French horn and the saxophones and stuff like that but I'm sure that the group that's not the case when you hear this group live it's just these all the speakers and all that stuff so a lot of those chromaticism is going on in the French Horn section just brought out a little bit more. I’d just like to hear it more there (measures 46-51).

KJ: (resumes music)... (stops).

JS: Very lush (measure 65) loved the change in style here. Very nicely done.

KJ: (resumes music)... (stops).

JS: Counterline going on. Baritone line and all that (measures 72-75). Very good.

KJ: (resumes music)... (stops).

JS: On this full part right here when the speakers are distorting just a little bit. I know that this group is playing it really well to where you hear more of the lows
whenever you have the trombones playing the same line as the trumpets and all that stuff so I know that when you hear it with a better sound system or live that they're going to be addressing all of those issues and it's going to be fine but right here because of the amount of sound through the speakers it doesn't quite come off come across as you know you would with the group (measures 76-83).

KJ: (resumes music)… (stops).

JS: Yeah! That’s smooth playing. I’m a trumpet player so I know how hard it is to get that smooth and that's really nice stuff (measures 88-89).

KJ: (resumes music)… (stops).

JS: Good accents being played right there (measure 92). Different styles with the legato accents. Different styles it's all very good.

KJ: (resumes music)… (ends).

JS: Very nice very enjoyable love the piece

KJ: Awesome so my question based on the things you heard if you had to rehearse what would be some things you would focus on?

JS: I would just you know I mean there's not a whole lot that I would add to that performance. I think it just be a matter of time like I'm at a full part just making sure that all of the parts are heard equally and that you hear the lower parts more like I said before just making sure that was all balanced and all that stuff but I can't I can't add much to that performance it was just a really really nice job.

KJ: Thanks, well that concludes Segment 1

Later conversation after conclusion
JS: (when asked about his inspiration of balance)… When asked what made his groups (Frederick Fennell) sound different from any other groups he said to pay more attention to the middle voices and the low voices and not so much on the top because everyone concentrates so much on the upper voices so when I heard that a long time ago I tried to devote more time on those inner things and alto lines and all that stuff and in trying to bring those parts out so that's part of where that came from.

KJ: So interesting so that Fennell comment about balance, did that inspire how you approached rehearsals or how you listened to certain groups?

JS: Yea, I changed the way that I thought about rehearsing groups and I tried to focus more on those inner voices and lower voices rather than the upper voices because most of the time, especially in high school those upper voices are the
better players so they’re gonna be there. It’s the other ones that you have to spend more time on bringing up and giving them more confidence and instilling the fundamentals of playing and breathing and putting in all that stuff to where that helps the overall get better and better. So when there’s a rehearsal like this you’re going to have fewer comments on tone because hopefully you would have addressed that early on so now at the end of the year you're getting ready for performance and there's going to be less comments on overall tone quality and all that stuff.

JS: (later in the conversation referring to unifying articulations) The trumpet players back here and you will have seven different kinds of articulations the way that they're articulating it and then that oftentimes is the reason why you lack clarity because they’re just not all doing it.

KJ: So is that something you do frequently? Isolations?

JS: Oh yea we go down the line all the time. Yeah kids know that no matter how much you rehearse a group and get a group to a certain level it seems like there's always more that you can do in the way of consistency of approaching the way that kids are articulating because there are so many variations.

KJ: Probably with so many time constraints but you still have to give those “10-second” lessons.

JS: Absolutely man, and a lot of times you just go down the line and you get to the person that you like the way that's being articulated and you just say ‘do that again, do it one more time and everybody match that. All right let's play it’ and then that saves you a little bit of time you know.

KJ: Yea it serves as a model for the students and keeps them on their toes.

JS: Yeah we still do taped tests. You know it's like that's another way that we isolate kids playing and then they have to. I used to do it with cassette tapes man way back in the day. So I remember I'd go to All South and you know listen to tapes and I'd write down and every Monday we would get back in they'd have a sheet of paper that would tell them how to do it or whatever. Now I have kids e-mail it to me you know and a lot of them send it to me through the phone. It’s a way to achieve better clarity in the ensemble, so.
KJ: Thank you for agreeing to participate in this study. For this study I am interested in learning how you think and verbalize your thoughts while evaluating a band performance. This process involves three parts across two segments. First, you will look through and become acquainted with the music score. Next, you will listen to a band performance straight through as you do when you judge in a Music Performance Assessment setting. While following the score, provide comments or feedback as if you are an adjudicator. Talking freely and as frequently as you’d like. In the third step, we will listen again to the performance; however, this time for every comment-worthy moment, we will stop the recording and “think aloud.” My hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Answering questions like, ‘Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why this focus of your attention? Why not something else?’ I am only interested in your comments about the performance aspects of the ensemble, not the compositional aspects. Let’s begin, please take five minutes to look through the score and share with me any thoughts you have about the piece. Again, I am only concerned with the performance aspects, not the compositional aspects.

RD: (looks through score). Well I’ll start by looking at the instrumentation first and familiarizing myself with what’s happening.

KJ: What did you notice in the score?

Acclimate to score, 1st listening (noticeable errors)

RD: First I was looking at instrumentation. It seems pretty standard but you know the cornet, three cornet parts and two trumpet parts is interesting to me. Are you talking about everything or…

KJ: Just in the time you had

RD: Yeah, the first are looking for was instrumentation and how involved the percussion was going to be. The trumpet break down and then I had to familiarize myself with the meter situation you know wanted to make sure that I understood how that worked. Which is the alternating four and three in the roadmap because are several repeats I wanted to be sure that I was prepared for how to turn the pages and all that stuff when this was going on. You know it's, grouped odd in this letter B section I'm trying to figure out how prominent that woodwind part is going to be versus the brass and what really should be heard so I'm interested to hear the piece when I make that assessment. And then I love the fact there's a percussion interlude in the middle. You know and in the blend of how the clarinets is going to work with that euphonium at D was with another thing that was in my head. And then, the low brass parts from forty to the end are really
cool. So I was just thinking to do that and at letter E I just wanted to familiarize myself to what the harmony is at E, it is all triadic harmony. You know so it's tonal mostly you know it's a little bit of chromaticism. So that's what I was looking at.

KJ: Anything stand out?

RD: No, just some of the complexity of some of this but, but just the meter you know just was a little different. You know I'll be curious to see what the feel of the piece is.

KJ: Okay, here is the protocol for this study. When you are ready to speak, just do a slight head nod like this and I will stop the music to allow you to speak. Once you are finished with speaking your thoughts, just give me a head nod like this and I will continue the excerpt. If you are silent for any long period of time I may stop the music and say, “What are you thinking now?” You may use the musical score while for you are listening. Once we complete the first piece, the same procedures will apply for the second excerpt. The time limit for each excerpt should last no longer than 30 minutes. Do you have any questions?

RD: So the first one is just me commenting like I was a judge without stopping and then the second one is one of my not.

KJ: Correct

RD: Ok got it

KJ: OK, now let’s do a practice run. I will play a musical example and I would like for you to demonstrate the start/stop procedures while thinking aloud.

RD: Yea it’s all out of balance, a lot of really highs. A lot of highs in that.

KJ: (resumes music)... (stops)

RD: Trumpets struggling a little bit.

KJ: So what brought that to your attention?

RD: Well as you can tell the player’s young who is trying to play that. And then it's completely under balance the notes aren't speaking as well as others and then all you can hear is just the drone in the low brass.

KJ: (resumes music)... (stops)

RD: Yea so we are having balance issues again. The mid-voices and how the horns relate to the rest of the group. The flutes are doing okay but the pitch on the
C are a little of a concern, but they are not putting all the same inflections in how they are playing that. Yea and there’s tempo with how all of that works. A little bit of a concern.

KJ: Great so this study is about your evaluative listening processes. Try to focus your comments on aspects of decision making and try to narrate your thinking considering questions like “Where did that thought come from?” I am particularly interested in how you got to the thought-process of the comment you speak about. Do you have any final questions?

RD: No

KJ: Okay, let’s begin. The first listening will run beginning to end nonstop, similar to a group performance at a Music Performance Assessment setting. Please provide comments as if you were an adjudicator. Here is movement, 1, the March from Robert Jäger’s Third Suite.

**Adjudicator, 1st listening (noticeable errors)**

RD: Yea, they clip that note four before A…. And I wish some of the accompanying voices would be softer at A the second time…Because when the flutes go to the lower register it’s kind of hard to hear what they are playing… They’re really not just playing together… There not a lot of clarity, everyone is just interpreting forte independently but I can’t hear the woodwind lines… The clarity of the 16th notes… So something different the 2nd time would be nice. A little shift maybe… We are just having balance issues like with the trumpet, cornet, and trombone chords (measures 13-15) it should be an extension of one large instrument… Yeah someone had the wrong rhythm in the woodwinds (measure 18-19)… Watch the pitch on that last F (measure 25)… Yea I like the open rolls with the buzzes there from the snare drum, that’s neat (measures 26-34)… I’m not sure I hear all of the chord tones in the horns (measures 35-36)… Yea I just hear the top horn… Yea tubas you are spreading a little when you are playing the top note (measures 38-40)… Yea the trombones should crescendo (measure 42)… Pitch issues on the A flat (measure 44-45)… More of that low brass counterline (measures 46-48)… Yea I was hoping for more girth on all the chords that happen at 50, something thicker, longer so you can hear more of how these chords work and the chromaticism in that.

KJ: Okay here is the second listening of the same piece, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment. (starts music from beginning)… (stops)

**Think aloud protocol, 1st listening (noticeable errors)**

RD: So we have a disparity here between the note lengths in the quarters (measures 1-2). Some of them have space and some of them are playing them
long. So I'm trying to figure out which one they want to have. Seems to me since this is a march they should all have a little bit of space and then just a little bit more with the first alto and the first clarinet with the triplets.

KJ: What made that stick out to you?

RD: I just couldn't hear it. So I just heard a lot of the progression and not (sings clarinet 1 and alto sax melody in measures 1-2) that line that I had heard in my head before.

KJ: (resumes music)… (stops)

RD: (after the repeat measures 1-3) So flutes when you play a line like this there's a balance that you have to have amongst your own section which is bringing out everything that's in the lower register I just can't hear anything that goes below that D. So the end of that first bar it was inaudible to me and in the middle of that second or third measure. It was that inaudible to me before they jump up and it really caught my attention because how strong the third measure top C was compared to what happened right before

KJ: (resumes music)… (stops)

RD: And right there the bar before A, I heard it the first time too, it's just not lining up vertically between all the voices so the flutes are just trying to hurry to get through that rather than just focusing on every single note it seems it doesn't line up.

KJ: (resumes music)… (stops)

RD: Yea, so the big thing here is balance and so everything that is not these upper woodwinds, I can't hear everything that their playing, I hear a couple little snippets of things. The other thing is the harmony that comprises that melody at A (sings dotted half notes followed by two quarter notes) it's suppose to be a harmony but in a thick thing. I just don't hear all of those notes happening together and each note just equal weight. There's no sense of like a phrase even with the spaces are fine but it's just (sings connected notes, equal volume) just phrase a little bit.

KJ: (resumes music)… (stops)

RD: And then there's obviously technical issues happening with the clarinet there. You know when to get to all the high stuff in the measure fourteen. I just hear issues with response going from that D, which is alternate fingering, to the more natural fingering that happens in the G.

KJ: What made that stick out to you?
RD: The top Ds are like… They sound like sparks so the quality of sound is not as good as the notes that preceded it.

KJ: (resumes music)… (stops)

RD: Yea so the tubas are just really going to town. They really like their quarter notes (measure 9-10). Right not I hear those notes more than everything else that's happening. So that's why I’m bringing that comment out, I just hear those quarter notes kind of powering through versus the other things being the focus.

KJ: (resumes music)… (stops)

RD: Yeah. So you know right now it's just there's issues with how the parts line up the measure before B. They need to extend all those quarters so that each line can toss in between groups so there is some kind of a connection. Same thing with the second eighth note in the lower brass has to be extended longer so there's communication doing the two voices that they tie each other together. It’s just too much space. The different voices are not balanced so that's what gets my attention.

KJ: (resumes music)… (stops)

RD: So the upper woodwinds are rushing through all the triplets. So calling a vertical alignment in addition to them just not being clear on the sixteenth and the triplet figures. It's not aligning with everybody else because they are moving too fast.

KJ: (resumes music)… (stops)

RD: And the same thing I said in the very beginning I just don't hear that (sings cornet melody at 18-19) the triplets that happen in that melody and it's in the lower register and I'm looking at that now and that's probably why it is that we can't hear it, it’s doubled with enough people that it should be heard but that is something that needs to be brought out.

KJ: (resumes music)… (stops)

RD: Yea and that last chord before going on (measure 25) the pitch is just tough to tune that F major chord. Just making sure that everything is centered, longer, get them a chance to hear more and then just get off a little bit on the top voices and just fill out on the bottom and the mid voices and so you can hear and have a lot more depth.

KJ: (resumes music)… (stops)
RD: So with that, so every percussion group it was actually prepared pretty nice but every person is accenting the first note of every group rather than just thinking things across the measure. Even from the timpani player and the snare drum player and field drum same type of idea. Even (sings parts in measures 27-29) everything is just hammering too much instead of (singing 16th notes with crescendo) just thinking more of the last one so you connect between voices.

KJ: (resumes music)… (stops)

RD: Yea, so the horn player b natural, second bar of D and then they figured out that it should have been flat. I guess, oh yea it’s a key change so they just missed a key change the first time and they got back into it.

KJ: What made that stick out to you?

RD: I just heard that I didn't hear that five seven. I just heard that major seven, that E natural just sounds out of place. Sounds like an incorrect note. And there is something with this phrasing that I'm not crazy about but it's going by a little quick.

KJ: (resumes music)… (stops)

RD: Yeah, They do a nice job of hitting the downbeat of thirty-seven but they don't set it up like I don't hear the crescendo that it says before to set that up and I don't hear the diminuendo either so there is an explosion of sound the downbeat of thirty seven that wasn't preceded by the last sound. Setting it up and then I don't hear a difference getting down from there.

KJ: (resumes music)… (stops)

RD: Each of these long notes should be getting progressively getting bigger using that to really springboard the long crescendo that happens.

KJ: (resumes music)… (stops)

RD: Pitch on the E flat concert is really high on the very top. It caught my attention for being high, it wasn’t matching what the clarinet did and then I realized that it's an E flat, which is a really sharp note for them (measure 41).

KJ: When you say high you mean high in pitch or tessitura?

RD: Sharp which in that register is a sharp note. And it’s also overbalancing everything else because their hitting it's so hard. It's all kind of playing more into the group and you can make it better and pull in that pitch down.

KJ: (resumes music)… (stops)
RD: (Measure 43) I’m not sure I hear all of the notes in the chord. You hear the lot of the top voice of the first cornet and the first clarinet I don’t hear a lot of them like the thickness of the chord and even in the half notes too but in the triplet is where I kind of expected because it’s hard to hear that but I still don't even hear on the half notes either.

KJ: (resumes music)… (stops)

RD: There’s pitch issues in the E flat concerts consequentially in the clarinet and trumpet at forty five. They are out of tune and then I realized that's also a sharp note for those other instruments as well.

KJ: (resumes music)… (stops)

RD: So the low brass, I just don’t hear the very end of that (sings low brass rhythm in measure 46) You know the last two or three notes I just don’t hear them as prominent as everything else and it should be a crescendo and I never heard the trumpets come in at all. Or the cornet’s with that triplet if they did play I just can't tell.

KJ: (resumes music)… (stops)

RD: So right now measure fifty is the same volume if not softer than forty nine, but it's three quarter notes that all accented so there should be bigger and fuller.

KJ: (resumes music)… (ends)

RD: Yea the low brass there (measure 52-53) when they get those notes groups of three. They hit that first note so hard that you just don't hear the end of it. Those kind of things the inflections are already there by hitting the first one. So you just pushing towards the last one (sings 16th note rhythm at measure 52) so that you get that better balance between the groups and you hear all three notes.

KJ: What made that stand out?

RD: I just heard (sings quarter note, quarter rest, quarter note) I never heard the E and the F after, so I just heard like a blur of sound versus the true rhythm in all the notes.

KJ: Any final comments?

RD: Yea I think the group sounds ok. There’s some preparation stuff. You know. I should say that because everything I said was negative. But there are some good things there are some attempts at being balanced which is the big thing is just balance as a whole is just a big deal I think that always stands out to me as a
group with has maturity across the section versus a young group that has a decent player on the top and then a lot of people on the bottom that just don’t really play. There are some pitch issues, but that’s not the biggest deal, the biggest deal was balance of things you know whether it’s just one instrument playing the melody and everyone has to be quiet or something like that. And then when you get wrong notes in a performance and it's probably something that they need to get ironed out.

KJ: Cool, well here is the second piece. This will be movement one, March, An Original Suite by Gordon Jacob. Please take five minutes to look through the score and share with me any thoughts you have about the piece. Again, I am only concerned with the performance aspects, not the compositional aspects.

Acclimate to score, 2nd listening (no noticeable errors)

RD: (while looking at score) Oh my gosh the Euphonium part good lord… Look at Flute and Piccolo 8va, that’s going to be interesting tuning… (whistles different melodic material while simulating playing a piano on the desk).

KJ: Okay what did you notice?

RD: It’s a lot more difficult for some individual people. Like your first cornet and euphonium have some really high playing pretty close in the beginning so you need some, you know, some people that have some pretty good facility and maturity in their playing and then the flute and piccolo play along with them. They're pretty high also. So it's a difficult piece to tune because of that you know but there's a lot of tutti scoring in this piece. A lot of block scoring so it should sound pretty dense with the way everything is scored especially in comparison with the last piece that we looked at. There's a lot of nice little nuances with dynamics in this so I'm pretty interested to see how the ensemble handles those. I didn’t get to get to the end. I just got about half way through but there's some pretty fun little turns here and everything just gets progressively more difficult with rhythm here. You know with these five-lets and the euphonium parts are just a little bit of a work out.

KJ: Anything stand out?

RD: Just those things, just some of the complexity in the individual parts.

KJ: Okay, we will use the same think aloud procedures as with the last piece. Would you like to review the protocol?

RD: I got it

KJ: As before, the initial listening will run beginning to end nonstop. Please provide comments as if you were an adjudicator. Here is the March, movement 1 from Gordon Jacob’s An Original Suite. (plays excerpt)
Adjudicator, 2nd listening (no noticeable errors)

RD: (while music is playing) Nice maturity in sound… Nice blend and thick clarinet sound (measures 7-9)… Yes would be nice to hear more of the accent in the bar before A… I appreciate the fact that they are not hitting the accents too heavy (measures 11-13)… Nice attention (measures 19-20) Trumpet took over on the volume a little too much there should blend a little more into the section with the others… I love the grace notes so crisp (measures 25-26)… Beautiful balance in the crescendos (measure 28)… Nice little inflections there (measures 34-35)… Yea it’s nice playing but those four bars before D something could happen there but nothing really happened… That was paced really well (measures 56-58)… A little bit of a pitch issue two before E on the and of 4 but I love the pacing of the diminuendo… And there maturity there at 60 on beat 2 just not clipping that note too short… Just missing the phrasing (measures 61-64) like what they want to do, they play beautifully balanced and in tune, there’s no musical idea… Interesting, they put space after some of those long notes before (measures 76-83)… Yea that’s great, great player (cornet solo measures 88-91), nice ideas… Hmph, that’s a cool last little chord there.

KJ: Okay, well here’s the second listening, we will begin from the beginning and will stop anytime you have thought-worthy comment. This excerpt can be repeated as many times as you’d prefer. Remember to give me a head nod anytime you have a thought-worthy comment. (begins excerpt)

Think aloud protocol, 2nd listening (no noticeable errors)

RD: I notice right off the bat, what is the phrasing idea, where are they going towards? Are they lining up towards the end? I'm just not sure of what the phrase an idea is. Beautifully balanced. Trumpet is the lead a little too much. I would like to hear the trumpet blend a little more into a clarinet and flute sound and oboe sound but beautiful sounds. And even the accompanying voices are doing some phrasing ideas, which is nice. I just don’t hear that so much in the melody (measures 1-5).

KJ: What made that stick out? The phrasing aspect?

RD: Because they are executing nice sounds and good intonation and decent balance. So you know you listen to the next layer deeper. There's obvious maturity in the way the groups sounds so now you start to listen for what are they doing that's not on the page.

KJ: (resumes music)… (stops)

RD: So they did a pretty decent job of that little hair pin two before A but they didn't seem to get soft enough the one before A because the compositional idea that he put is ‘really quiet down before and then a strong beat 2 right and there’s an accented long note after’ (sings line in measures 9-10 with emphasis on
accented dotted quarter note) so that is something we need to hear the contrasts I just don't hear that little quirk with the composer trying to put in there.

KJ: (resumes music)... (stops)

RD: I LOVE (emphasis intended) how they don't hit the accent too hard on the third bar of A. You know it's always a note that starts softer. And it grows a little bit actually there they phrased it pretty nice and not (sings line in measures 11-12), there’s maturity in the way they just lean into that more with air rather than with hard tongue.

KJ: (resumes music)... (stops)

RD: The length of the staccato notes. The two notes before B and the first two notes of B are not exactly the same. Clarinets have a little and saxophones have a little more girth (sings line at measure 21 with length to eighth notes). And then the brass comes in with (sings eighth notes really short) so they should match across those two.

KJ: What made that stick out?

RD: The resonance of the woodwind instruments at B. They were resonating over how short the brass notes were being played.

KJ: (resumes music)... (stops)

RD: That’s another place where you know the composer has this little idea that repeats three times and in third time there's a little extra iteration. At twenty four and I just don't hear what the phrasing is or they gonna bring out to the top note but what are they going to do with the fact the composer added one extra measure. That stuck out to me because I heard it, I’m like ‘oh my god it's an extra measure in the phrase’ and I didn't hear them doing anything with it (measure 21-25).

KJ: (resumes music)... (stops)

RD: Yeah. It's really nice and balance and how they get all the quarter notes to sound at 28 and get bigger. It’s really nice.

KJ: (resumes music)... (stops)

RD: I really appreciate the difference in the articulations of the horns and the saxophones and the low clarinet with the tenuto markings and the accent markings in how they make that different. I wish that would have led into the fortissimo instead it being just an all of a sudden blast at the beginning of fortissimo (measure 31).
RD: Interesting. There's an articulation that's not matching across the board it's written wrong for the tuba in measure thirty five. Beat three is written short for a tuba but it's written as part of a long slur for everybody else and I heard it just not match. And then I look and bassoons have a different (sings rhythm) so there’s three different articulations in those last two beats before C and then there was this discrepancy on the way I heard it in the recording.

KJ: What made that stick out? Based on what you heard?

RD: Yeah there was something short and someone else was playing long when someone played short. I wish I had a better answer than but that’s what I heard.

KJ: (resumes music)… (stops)

RD: Yea for a group that plays so well, in tune, and balanced, they are having issues with D concert on that third bar of C, which is bane of every ones existence. D concerts just seem to be an issue, but they're not quite in tune between saxophone and clarinet and flute. It stuck out to me because it was out of tune (measure 39).

KJ: (resumes music)… (stops)

RD: There's a crispness that the trumpet plays at 42 with, there is a very crisp approach to that, and I didn't quite hear when the woodwinds played it at 38. It sounds to me like it's because they clipped the end of the short and the grace notes were faster. Or thirty second notes faster when the trumpets played as well which is why it stuck out to me.

KJ: (resumes music)… (stops)

RD: Yeah, so this section I mean they sound great but I just wish that four bars before D (measure 46) there was this just really long build of this repetitive thing that's happening and even puts accents in the last two only which means he wants something to continuously build, composer’s trying to give it but we're just starting to strong on the four bars before D to have a place to build.

KJ: (resumes music)… (stops)

RD: So interestingly enough they didn't have the best balance, the trumpets at D on the 16th notes but even when it was just in the eight notes pattern. Something caught my attention I didn't hear all the notes of the different parts balance with each other but then again, there is D again leading into this arrival at the fifth bar of it and it seems to me like it's not building. You know it start off too strong at D (sings cornet line measures 50-52) it’s rising and the rhythm is augmenting so it’s
going faster so he’s trying to lead to that SFF and then the crescendo before starts too strong so it's just almost basically all the same volume and the whole four bar thing that you have to come up with something different to emphasis what the composer was doing.

KJ: (resumes music)… (stops)

RD: So they are struggling on the pitch on that C concert two before E the and-of-two it’s just difficult pitch there otherwise it was beautiful.

KJ: (resumes music)… (stops)

RD: (measures 58-59) I hear some phrasing that's nice it's nice to hear. I love the way the in the last note of every group though there's a lot of length and dissipates into silence, that’s nice.

KJ: (resumes music)… (stops)

RD: Yeah so the second trumpet/cornet part doesn't quite have the same idea of trying to make a phrase right these long those are just being played strong versus starting them softer so you can hear the other line and then growing after (measures 55-58).

KJ: (resumes music)… (stops)

RD: So you know it's interesting how a composer writes two quarter notes that are under a slur and these two staccato ones. I would think you have to lengthen those more so that those two styles blend a little better because you just hear (sings pop pop po) and it's just too much of a contrast (measures 61-64) versus these guys being informed with what’s happening.

KJ: (resumes music)… (stops)

RD: So right there it just seems that the trumpets are coming in a little bit too heavy for what happened before them (measures 74-75). I know it's says piano for the other group but if you look at the woodwind parts it says piano never says get stronger then all of a sudden it says forte. It seems to me like he just wants this natural build all the way through this and that should be stronger here to set up this entrance a little better because they have to come in high and it’s hard for them to play that softer.

KJ: (resumes music)… (stops)

RD: What we’re missing is just like that little rhythm and happens at 83, that's a cool little difference. That we don't really hear a lot of I wish we could have
brought that out a little bit more, make that a little more crisp but I couldn't hear it.

KJ: (resumes music)… (stops)

RD: Obviously there are pitch issues, like in the top part there (measure 84).

KJ: (resumes music)… (stops)

RD: Even with all that stuff there has to be some kind of architecture. You know it is two bars up two bars down or up one down one up down one between the trumpet and in the first four bars of G also. You know and the other groups the others instruments could help with the definition of that add something different rather than just kind of all the same. Just more focus on being correct.

KJ: (resumes music)… (stops)

RD: I love the balance of the last chord. You just hear so much of the bottom and top voices in the one just leading it and I how dark that is. Yeah there's a little pitch issue happening in the downbeat of 98. You know, just that G. I actually like on this one how aggressive trumpet comes in into 99 because that’s how it’s written. It’s kind of cool to hear it that way. Snare drum, I wish the snare drum would do some kind of fluctuation of volume. You know just kind of building to the end, instead of playing it all the same volume.

KJ: Any final thoughts?

RD: Great sounding group. A lot of maturity in sound. You can tell there are a lot of mature players by the way [of their] tone color, by how they approach balance to each other, by how great their pitch is, now it just sounds like just their individuals playing really well. Just not any ideas as a whole as far as interpretation.

KJ: Well thank you so much!
APPENDIX F: SEGMENT TWO VERBAL TRANSCRIPTS

Evan Y. Rehearsal Frame Verbalizations
(35-minute rehearsal on *Pomp and Circumstance* arr. Clare Grundman)

…= group (or individual) plays then stops
Count off= Ready, and
RF= Rehearsal frame

RF 1 (Tempo): Alright, biggest thing is tempo (sings melody while snapping finger). If we play it too fast then I get fired but if we play it at a moderate tempo then people seem to get done with graduation quicker (brief laughter) so here we go. (counts off and group plays)… (stops). Good, tempo the first two measures was really good but tempo in the third measure, what happened? (students give responses) Yes it dragged, somebody tell me why you think that happened? (female student raises hand, he points and says) Mmam? (student speaks). Because people are not making their notes short. It sounded like this (sings long eighth notes) instead of (sings short eighth notes). Alright let’s try it again (counts off and group plays)… (stops). Better thank you, saxophones play them a little more shorter, you guys are holding them out a little bit longer.

RF 2 (Rhythmic clarity): Before we go on, trumpets the beginning. I’m listening for clarity (sings intended rhythm, counts off, trumpets play). So what I’m hearing on the second time is (sings with muffled 16\textsuperscript{th} note rhythm) instead of (sings with emphasis on the 16\textsuperscript{th} note rhythm). Let’s try it slower, (counts off and trumpets play). Okay it is the F that is getting lost, we are going to go back and hit that.

RF 3 (Articulations): Also, someone over here is going (points to 3\textsuperscript{rd} trumpets and sings with harsh, throaty articulation on the 16\textsuperscript{th} notes) instead of lifting off the notes. Try again (counts off, trumpets play). Ok, second time I heard (sings lifted 16\textsuperscript{th} notes) instead of what I heard before so that F needs to be heard and not too short on that note. Try it again trumpets (counts off, trumpets play). Actually what I’m seeing is some of yall are skipping the 1\textsuperscript{st} valve for that first F. I know that the 3rds have that skip with the eighth notes but the rest have that rhythm we are skipping that eighth note. Alright everyone, the beginning (counts off and group plays)… (stops).

Third measure please, third measure only, short (counts off and group plays)… (stops). Better, do it again (counts off and group plays)… (stops). I know I said third, but I meant third and fourth measure (counts off and group plays)… (stops).

RF 4 (Articulations) Someone over here (pointing to his left) is playing too long, we need to be the same throughout. Again (counts off and group plays)… (stops). So the longer that was, the longer the notes tend to get so just listen for that.
RF 5 (Balance) In the very beginning, raise your hand if you think the melody is (sings quarter rest and dotted half note, then looks at tubas) thanks for not raising your hands this time. That’s not the melody, the melody is the trumpet section I think trombones have it as well so we have to just listen for that. Beginning, only if this is a complete disaster will we stop this time (counts off and group plays)... (stops).

RF 6 (Intonation): Alright, thank you. Percussion are you having fun yet? (laughs) Not bad, may I please hear melody back at measure 5, I want to see if we are close to being in tune. Measure 5 melody (counts off and group plays)... (stops). Not too bad, oboes we need to tune you very badly (walks off podium and takes out a tuner from his cellular device). Do you guys have a tuner there? Okay let’s see if this matches up. Go ahead, play an A (one player sustains concert A). You’re about 10 cents sharp (other player sustains concert A) That would be 33 cents sharp (walks back onto podium).

Okay, while we are stopped tempo was very good especially from quarter note people so thanks for that. Quarter note people remember nice and light and just back out of the way just (pauses) picture happy thoughts. Alright measure 5 (counts off and group plays)... (mouths to oboe player) Sharp (group continues)... (stops). Thanks, melody a little lighter and you’ll be fine, pitch is still an issue (points at oboes) we’re little sharp.

RF 7 (Dynamics): May I please hear melody at 13, and here’s the reason why. Measure 17 we have a crescendo and I really want to hear that over those three notes. Alright melody at 13 listening for that crescendo at 17 (counts off and melody group plays)... Crescendo coming up (stops). Good that way it will help your air get up to that top E flat concert at the top of 19.

Alright 13 please, if you have notes at 25 you should go ahead and play 25. 13 (counts off and group plays)... (stops).

RF 8 (Tempo): This is where we tend to slow down (says in singing manner). Yea so we will try to keep up tempo. 25 with the pick up, I’ll give you three (counts off and group plays)... (stops). What happens is that first note hangs on too long (sings examples) try it again, same thing (counts off and group plays)... (stops). People at 25 with the melody, so much better with that one tiny little fix, thank you. Same thing needs to happen with the people that enter with pick-ups into 33 so make sure that happens.

RF 9 (Balance): Now at 25, if you (sings melody) raise your hand. Let me hear you, everyone else listen to this (counts off and that group plays)... (stops). Yea, so baritones a little behind but if you do not have that part, you need to hear that part. If you can’t you are playing too loud so just back off okay. Same thing with the trumpets, horns, and trombone when you come in at 33. Let’s start at 25 with a pick-up (counts off and group plays)... (stops).
RF 10 (Tempo and Balance): Yea, a few people are behind but the melody was better there. Tubas just behind on your descending quarter notes. 33 raise your hand if you have (sings a rhythm) let me hear you people, 33 with a pickup (counts off and that group plays)... (stops). Very important part so if you can’t hear it then back it off. Hear we go, 33 with a pick up everybody (counts off and group plays)... (stops). Percussion volume was very good that time. Quarter note people we’re just too loud. Saxophones we’re just too loud so we need to back it off as much as possible.

RF 11 (Dynamics): Melody people we need to play off especially at (sings melodic line) with a crescendo. Here we go, pickups to 40 (counts off and group plays)... Need crescendo right here... (stops).

Nice thank you, so much better on the tempo.

RF 12 (Rhythmic accuracy): Can I please hear (brief pause) clarinets at 40 (counts off and clarinets play)... (stops). Yea, that’s why I wanted to hear you the rhythms are different that time, so make sure we play the rhythm differently and crescendo through the eighth with eighth quarter. Okay, again (counts off and clarinets play)... Here... (stops). Thank you and of course the rhythm is different the second time around. (pauses) Let’s go back to [measure] 48, everybody’s in (counts off and group plays)... (stops).

RF 13 (Dynamics): Trombones and anybody else with a half note at the end of bar 12. Can we crescendo that trombones (sings rhythm with a crescendo) okay really bringing that out. Five please, (counts off and group plays)... Crescendo... (stops).

RF 14 (Balance) Thank you, it was getting a little bit better as far as balance at 25 but the more people entered the heavier that it got so if you can’t hear the melody then you have to back it off, especially right before 33. Melody people 25, we have quarter note right before 25, it can’t hang over the barline so we have to keep it moving. 25 with a pickup (counts off and group plays)... (stops).

Tempo let’s make sure we are not rushing. Once we get to 60 obviously the sound is going to be more full so we really got to watch our tone qualities. Measure 67, if you have a crescendo raise your hand. Yea we need to hear that. 60 (counts off and group plays)... (stops). Overall not a bad job of watching me though, one thing that really caught my attention was at 78 trumpets, when all of yall come in on the melody this is what I heard (sings with clipped ending) note lengths, we have to go all the way through the measure okay.

RF 15 (Tempo): May I hear everyone measure 68. Quarter notes and note lengths in the melody (counts off and group plays)... (stops). I couldn’t help but hear the rushing, let’s keep it right here (counts off and group plays)... (stops). Have to
make sure your stands are high enough to see me. Very good job on the accents in the second ending just make sure that we are not slowing them down. Trumpets thank you much better on the note lengths.

RF 16 (Rhythmic accuracy): Melody people measure 74, it’s written as a different rhythm, we are changing it to the normal rhythm (sings rhythm). Okay, let’s hear it. 68 (counts off and group plays)... (stops). Melody at 68 (counts off and melody group plays)... (stops). Somebody is still playing the old rhythm there (sings intended rhythm). Everybody 68, listening for that (counts off and group plays)... (stops).

(Looking at front row) Yes that is going to go very very sharp so just (puts hand on corners of his mouth). Alright nice. Time for everyone’s favorite moment of the year (begins to play metronome through speakers). From the beginning (counts off and group plays)... (stops). My hope is to run through that next week, get up our next piece.
James E. Rehearsal Frame Verbalizations
(60-minute rehearsal on Godzilla Eats Las Vegas by Eric Whitacre)

…= group (or individual) plays then stops
Count off= Ready, and
RF= Rehearsal frame

I only concentrated on verbalizations within the context of the ensemble. Percussion had numerous instrumental issues (i.e. setting up instruments, no instruments, percussion placement, missing players, etc.). Being this was outside the scope of this study, I chose not to transcribe those verbalizations since the purpose of this study is how the conductor listens when in an evaluative mode.

Trumpets, trombones do we have written in the music where we do that slow four up four? We all didn’t do it together so on beat one of that measure I want you to pick up those instruments slow because we have to be all together when we do it. It’s as much visual as it is anything else. Hey your about ready (talks to percussion about instruments) Okay, let’s start again… Trumpets somebody hung over just a little bit right there, there has to be an accented eighth note, a clear Dah. You can’t hang on to that eighth note there.

RF 1 (Playing Technique): You play those congas, go… So start slow and then (looks to student teacher and says) it’s on a table and the sound how would you manipulate that? (they talk [inaudible] then looks back at student) where’s the stand? Yea it doesn’t work like that. We either need to get a stand for it or you need to sit in a chair. Put it in between your legs and play it that way so is there a chair back there real quick? (students gets a chair) Okay, now play it… As you can see it starts off like eighth notes and then gets faster and you do a roll on it. It has to progressively get faster. Alright everybody, here is measure 7 (count off)… Play it (looking at conga player)… Start louder so that we can hear you. You are way back there, don’t worry about playing soft because we need to be able to hear you so go head and do it… Technique, should be in the finger tips (student teacher demonstrates on the conga for student). Don’t feel like you have to rush it has to be (sings rhythm slowly and then speeds up). Don’t feel like you have to rush okay. One last time everybody, 7 let’s have a nice fall trumpets (count off)…

At measure 19, put a decrescendo right there trumpets, saxophones. Decrescendo down to mezzo piano really soft in that next measure. When do we put the bells down trumpets? (student responds) okay good. Alright, here is letter A (count off)… So who is our mallet player right there? Is the motor on? (student plays) Yea there should be a slow motor going on right there. Just randomly play those notes right there. Ok everybody, here is the 4/4 after 24. Forte piano in the clarinets. (count off)… So everyone with the voices you should go to count three with the Aahhs. Trumpets come in a bit softer and crescendo throughout there.
Alright let’s do it one more time same place 4/4 forte piano and clarinets it’s weighing down.

RF 2 (Balance): You want to be able to hear this over here (points to his left)… Alright so let’s see, who’s on the bongos there at B? Yea so its all about an improvised feel there. Claves same thing. You know with our auditorium because you guys are behind that curtain and everything, for all the softer things you have to increase the volume. So if it says mezzo piano you have to play mezzo forte plus because we couldn’t even hear the bongos there so go over to letter B. That is the bongo part there.

RF 3 (Articulations): Let me hear clarinet and saxophone at B… Yea we talked about this earlier today that it’s an accented dotted quarter note, so its true definition it’s going to be half the value. So you have to play it detached, long, and separated. Here we go again, it has to be separated… Now let’s look at the second note it should be (sings rhythm). Again (count off)… That’s better so these guys on the triplets (looks to left [inaudible]).

RF 4 (Intonation): Trumpets here we go. Let me hear you guys right at B (count off)… Stop here we go again (count off)… 1st trumpets (count off)… Almost again… So you’re the main deal there. Play it as loud as you can. All trumpets (count off)… Watch your pitch right there guys. Whenever you put that mute in there what is that going to make you do, go sharp or flat? (students say sharp). Okay so you’re gonna have to adjust either here (points to lips) or slides but make sure you adjust. Look at your tuner right now. Alright so thirds. Play the whole note… Hold it (goes down line)… That was the cow affect. Play your note… Alright so let’s hear the A and the E, 1st and the 3rd… Let’s try to think about the pitch before we play it. Let’s be set firm and ready the A and the E… Who’s playing the E over here? What are you playing? Okay again, just the A and the E…

RF 5 (Balance): Can we try to balance a little bit? How many As are there? How many Es? So can we balance a bit since its three against one (count off)… Alright, lets add the 3rd in, balance the chord, listen to one another… Altos and Horn join them right there. You know what the chord is right?...

RF 6 (Rhythmic Accuracy): You and you ready play (flute and trumpet)… Again… (hits baton on stand to signal tempo).. You’re dragging the eighth notes (flute)… Can we do more with the grace note? Don’t play it so quickly. It’s almost if you’re not playing a grace note. We have to open it up (sings melody)… That’s better, check pitch on that (flute). Everybody there…
RF 7 (Balance): This we have to hear that so everyone else has to back off because that’s the feature part. Muted trumpet and flute so everyone else back off just a little bit. Make sure you can hear that (count off)… So it’s the same idea back there (talking to percussion) it’s this dreamy thing that’s happening coming off the ground. You’re playing that part and then you start that so let him play that thing before you start and I’ll give you that cue. This is measure 39. You have the same thing with the clarinets forte piano. Really soft (count off)…

What’s happening here. That’s my fault I should’ve done a better cue. Again… So play your part right there… It’s an improvised solo so make something up… Measure before 36, we are still Ah-ing right?… Applause goes all the way to downbeat of C… (while playing) Tam tam part right there… It’s on the fourth measure of C, it’s important to have that… Bass drum again you are Godzilla walking through the streets of Las Vegas, you have to sound like Godzilla. It has to be much heavier throughout that part. We’re at D (count off)… Some stuff happening on the trap set? Yea we need more cowbell. Strong hold it up… It can’t drag right there because if it does then we are struggling to do all this screaming stuff. We have to make sure that you and I are together. Get that stand a little bit higher so that you are not looking down. Ok dog bark starts on clarinet. Let’s do E again. Flutes we talked about fast air when you’re playing, same thing with your screaming. When we get to that down beat, let it out. Here’s letter E (count off)… Bass clarinets be ready. Where’s our mallet player? Our triangle there. Much better job on the screams, stagger screaming. Do we have the triangle? Everybody starting at 107 (count off)…

RF 8 (Tempo dragging): Bass clarinets are dragging right there, we got to move. Here’s G… So bass clarinets we need to [inaudible].

RF 9 (Articulations): Let’s see H, who’s playing first? Who’s playing second? Thirds? Alright go, at H (points at trumpets)… Ok play first right now… Put a little more separation guys, use Tee fronts and not Dee fronts (sings) Tee-Tee-Tah-Tee-Tah. Tee fronts, a little separation. Quarter note people same thing (sings) Tee-Tah-Tee-Tah-Tee-Tah, put a little bit of separation. That’s all trumpet. Here’s everyone at H.

So here’s where we go into the different Las Vegas performers and these transitions are very crucial and the thing that drive it is the low reeds doing all of those things. You guys right now sound like you are struggling and we have to be solid on all of those eighth notes, all of those chromatic runs and all that stuff. Let’s see, let’s do measure 131 everybody…

RF 10 (Tempo and balance): So the tempo instantly slows down right there. Let’s do it one more time. Everybody a little bit too loud too soon, softer wait for the crescendos until later in the measure, don’t do it so early in the measure… Yep that’s all you (looking at mallet percussion).
RF 11 (Rhythmic accuracy): Okay, trumpets play it, count it for me first (hits baton on stand to indicate pulse) (count off)... Again... Here we go again... Alright now play it. Look at the articulation. It should be (sings rhythm), ok again... That’s better, the second measure we are still playing that a little too late we have to play that a little closer to the beat (sings rhythm again)...

That’s it good, saxes make sure you can hear that. Everybody at I. Three instruments playing right now, can get the A for the day if you can be the first person to tell me who is the other group besides the trumpets and saxophones is playing there besides percussion... So who is it? Yes, play it by yourself. Go... Cool part. Alright here’s I everybody. So the arch of importance. Who can tell me? It is the saxophones... So watch the new key. (turns to string bass player but inaudible), dragging a little bit. Okay I again everyone... How do we do a rip, growl, flutter on the clarinet? (looks at student, student plays it)...

RF 12 (Dynamics and Balance): Alright so, this would be measure 160. Hey can we do a better job on the forte pianos? Yes we can so let’s do it. Here we go again... We need the snare to be louder. The feet are drowning out the snares. Come up just a little more there. Here is where we are starting the marching at letter L. Start off soft because we don’t want the audience to realize we are marching on the stage. It should get louder and louder so march really softly right now... (explains to students a vocal part in the piece, ‘Viva Las Vegas’) Okay here is 181, snare drum needs to be louder. That to be much louder (points at snare drum)...

Okay so tempo is going to slow down a bit right there (sings rhythm). Everybody let’s go two before 190. Here we go (count off)... Where is my marching whistle? Let’s do 4 before 190 (count off)... So we need a flexatone here too. So flutes be ready for the quick [inaudible]. Everyone two before 204 (count off)...

RF 13 (Rhythmic accuracy): Flutes let me hear you (count off)... Yea, I’m counting you off like this and you’re coming in like this (sings slower tempo), let’s try it again... So for the ritard you are suppose to get longer so you’re going to go (sings elongated rhythm).

Everyone in two before 204 with piano as well...

RF 14 (Music effects): Okay flexatone makes that part there right now there’s a hole. It makes it more understandable. For you (trombone) it’s supposed to be like a wolf whistle. Here is 207... Do the wolf whistle again... Yea it has to get lower on the second note (sings rhythm) as if you are whistling to a girl (student does the whistle), yea like that. (student plays again). Something like that, just play the end of it louder as you are going down.

RF 15 (Tempo): Everyone in (count off)... It’s a little slow for the seductive dance right now. It has to be a little quicker.
RF 16 (Music effects): Play it (talking to trumpet)… Can you do a wah-wah… Do you have a plunger? Yea get one so you can do some (demonstrates wah wah) that kind of a thing.

RF 17 (Rhythmic accuracy): Here is measure before N, tom toms ready? Better forte piano… Alright here we go (pointing at percussion) (count off)… Good play it… Should be a tie there. That’s how I want you to do it (sings rhythm)… This is N everybody… Ok so count man (talking to percussion).

Again… So that’s O. I’m going to let you do that as long as you want (talking to clarinet). Here is 219, on the crescendo don’t swell so much… We are missing a snare from the trap. You need to be louder because you’re way back there. We need to hear you man. Again… Flute and saxophones (count off)… Everybody make sure you can hear that… Alright, percussion make up a lot of stuff here. Accented notes at P, some of us are playing long accents we have to make sure everything is nice and detached throughout that. Percussion let me hear you guys at 260 (count off)… Who’s percussion 3, much more from you. Again… Alright, [toms] let me hear you at 264… Everybody’s at P… So timpani more before your release. 4 before Q… So you’re still playing right there (talking to piano). I’ll give you a cue… Continue with the clapping but it has to get softer. Again (count off)… That’s you man (timpani). Big time timpani stuff. Everybody three measures before. It has to be huge… Alright so what happens at beat 4, there’s a pedal thing. Help him out (student teacher). Just do something right now. Here we go, same place… Big fall off from everybody. So that’s all the way through it. Tomorrow we will clean up some things. Get out the next piece.
Ramón C. Rehearsal Frame Analysis
(30-minute rehearsal on Three Dance Episodes from On The Town
by Leonard Bernstein/ arr. Marice Stith)

…= group (or individual) plays then stops
Count off= Ready, and
RF= Rehearsal frame

Here 33, ready. Movement 1, we will touch on a few section and then jump around okay…

RF 1 (Articulations): Good, it’s fine but can we just exaggerate the enunciations of the articulations right. Right from the beginning (sings rhythm) enunciate the front ends of all that stuff and the [inaudible] with the brass is great just (sings rhythm) just some accents we have to highlight. One more time…

Brass I’m going to listen to you play in a second but I want you to focus on (sings rhythm) the last four notes. Can you just check that out real quick?

RF 2 (Balance and Articulations): For the beginning of this clarinet balance is actually a little bit heavy. I want you to blend a little more. Can I just have the first part of this with flutes (count out)… Can you just make sure, I think it’s the bass clarinet just clip a little bit shorter on the last note of all the slurred movement and that balance works better and maybe use less clarinet overall so we can just blend a little better. Can we go on this time, same place? And just make sure the accuracy of the E flat is established (counts off)… Yea we have a lot of cobwebs the articulation (sings rhythms) clear articulations.

Let’s make sure we get a C there (point to timpani). Can we start at 41 please?... One thing I was listening to, we are just not finishing.

RF 3 (Dynamics and Phrasing): You know fast music all about exclamation points and the last two or three bars before exclamation points and arrivals have to push into them and now not doing a good job of 47 and 48 (sings rhythm while getting louder) so can we just start that bar maybe just a hair softer (sings rhythm) get us to that arrival? Try it again at 41 please. Better on the articulations please, thank you… So trumpets are doing a great job starting that crescendo but can we get the rest of the ensemble with the pulse downbeats to help us get to that next exclamation point that happens at 73. So we can (sings with crescendo) hit that a little bit better.

Downbeats, it seems that we are a little long and not as crisp as we usually are. Just exaggerate that please. We don’t have to go all the way back so 56… We do have a forte downbeat right? Yea, I didn’t make that up that big gesture wasn’t just, 56 with everyone playing that downbeat… 55 sorry… (while playing) Use a little more separation and accent there…
RF 4 (Dynamics): So horns don’t try to plummet the dynamics. Can we start at 75 please? (count off)...

RF 5 (Articulations): Careful clarinet (sings rhythm) short short, again… It’s just better playing when just a little lighter its better, the articulations are much clearer that’s great. Can we start at two bars earlier than that, 73 please…

RF 6 (Intonation and Balance): Good, can I hear measure 90 beat 2 sustain please, we have pitch issues on concert B flats, measure 90 beat 2 everyone please (count off)… Can I hear B flat concerts only… Just (student name) first… Most of that is riding really high. Do we have a B flat in a lower octave? That works, go head… We have a tendency for everything to be on the high side. Can we make sure the 1\textsuperscript{st} alto sax is the listening point and we just keep it down. Can we have that major 7\textsuperscript{th} chord right there please at 90 beat 2?… So now pitch is better but it does sound odd because we have that minor 2\textsuperscript{nd} but the pitch is better. Now I don’t hear any other note in the chord besides B, B flat, so can we get the note that’s a little bit more strident just a little more in control so that we all the other notes in that chord. Can I hear that chord without B flat concert… How many of you have a C sharp there? Let me hear you guys play that (count off)… That was a beautiful adjustment. Can we do that again to make sure it wasn’t luck. You guys listen back to trumpets really good… Can you mark whatever you’re doing there because we are much closer. If we can start there I think we will be in good shape. Can we get everybody that’s in the chord except B flat this time. Listening for all the notes we need in that triad… B flats we want to fit inside of that and not just (slaps hand) even though it is a high leap. Let’s put that in context and control those chords when they happen? Can we start at 89 and keep going (count off)…

RF 7 (Dynamics): Much more crescendo to propel us to the end, can we start at 103… Can we make sure that the downbeat people watch (sings) that there’s a trajectory to that and then (sings a melody) didn’t work out as well. Can we start there 3\textsuperscript{rd} and 4\textsuperscript{th} bar of that line please…

RF 8 (Pitch accuracy): Trombones beat 3 of the first thing you played wasn’t quite centered. I can’t tell what that is. Can we make sure that that note is centered. One more time… Good that’s close, can we get faster slides? The articulation is great it’s very connected just the slides are a little slow so the notes are kind of sliding in between. One more time… Much better, just center that B flat [inaudible], everyone 103 please…

Ok, anybody need to hit that movement? You guys hear a lot of stuff. Tell me something that you’d need to hit (group pause) Beginning here we go…

RF 9 (Dynamics): Good, so after we hit that forte with the accompaniment at measure 11 it does have to get softer still right? There’s a second diminuendo that
has to lead us into the clarinet so after we hit that forte at 11 it does need to continue to move down…

(while playing) little more tongue on the trombone…

RF 10 (Intonation): Thank you, let me hear the pitch on the F concerts I didn’t address that earlier but it’s a little bit sour. 33 just the melody please. It’s the F concert, in particular the clarinet… That’s a little better. Let me hear that last D concert everyone sustain that note… It’s a delicate note (sings melody) there’s always going to be a lift… [inaudible].

Okay can we go movement 2. Here we go beginning… So I’m going to give them a big diminuendo but you keep singing out (speaking to solo trumpet). Don’t fall underneath them. Clarinets, really really nice sensitivity.

RF 11 (Conducting tempo change): Once you get to measure 7, I’m not going to give you the eighth notes that will stay in time (sings while conducting with right hand). This is a little more steady so the only spot where we will take time is when he writes tenuto on the eighth note. It’s the only time we will take a little time. Otherwise we are [inaudible]. You guys are blending really well… So I confuse some people there. Everything at 11 (sings while conducting). I will do a prep in the new tempo and make sure everything is clear. Does that make sense? Let’s start at 10…

(while playing) Keep the D down… (while playing) inside the sound… Pretty good, let’s work this out.

RF 12 (Articulations and Dynamics): Euphoniums you guys usually play this better. Can we start at 12 please? I can say I love the volume it fit into the sound much better… So let’s refresh our memory here. We’ve worked on 18. 18-21 is just a hard section and the way it’s scored doesn’t help us and it’s tough with the way all the harmonies work so it’s a tough section. So, remember we’ve talked about different lines you have to bring out the stuff that moves. When you get to the top notes you have to delicately tamper okay so make little musical phrases even though it say fortissimo it is not quite all fortissimo. Let’s start at 18 please… That works out very nice. Let’s get the most out of that low octave [inaudible]. Does that make sense to everybody? Any questions on that section? I will feel comfortable if we can do 18 one more time just getting into it.

(student asks questions, ‘Would it help for clarity if we went one on a part at 18-22?’)

RF 13 (Balance): Maybe, let’s try it. Everyone one on a part 18-21 and then everyone in at 22. Pickups into 22. Let’s do 16 please, everyone is in… It works, yea that will work, thanks for the suggestion. Does that make sense?
Ok, movement 3 please… The really high D at the end, yea leave those out. Let’s start where everyone comes in. Can we get more bass drum?...

RF 14 (Intonation): There’s, I think it’s just euphonium do you guys have (sings sustained B concert), we are having a pitch issue. Does anyone have that as well, this is measure 32 if you have (sings rhythm again). Can I hear you guys that just play that? The first is on beat two right? Kind of hard to tell in my score… So all of those start sharp and then go down so just try to keep those down as we go through, try again… We started much better than we ended okay. So right at the beginning was the right adjustment so right at the end it started to inch up a little so just try to keep those accents down. It’s very noticeable.

Can we get everybody at 26 please… (while playing) we are going to laid this back… (while playing instructing snare drummer how to play with the brushes)… So let’s make sure we get all those things in for pitch. Can we start at 128… Can I hear the ump-pahs, crap I am out of time.
APPENDIX G: SEGMENT THREE VERBAL TRANSCRIPTS

Evan Y. ’s Rehearsal Listening Activity
KJ= Kelvin Jones
EM= Evan Y.

KJ: Thank you for again for your participation. This is the final portion of this study. During this session we will watch footage from your last rehearsal session. You will be asked to verbally talk out loud your evaluative thinking processes during any segment of the rehearsal. Simply put. What were you thinking there and what drew you to that? Before we watch your rehearsal, let me ask you a few questions. How did that rehearsal go.

EM: This is from Wednesday?

KJ: Yes

EM: It went ok. Typical graduation rehearsal for us is really.. just trying to kind of quite honestly play through it and get it. Sounding as good as we can with all of the all of the kids. Yeah but I think I knew that we were going to have intonation issues we always do every year. But the main thing was just to play together and get the timing down and not be overpowering the melody.

KJ: What went well?

EM: Yeah. I actually, I don't know if it was me saying the same class of thousand times about how many issues we have tempo wise. Every year with this but I thought that overall tempos were actually really good. I didn't have nearly as many problems as I've had in the past with it. I mean we still had to get the metronome going and whatnot but I thought overall I learned pretty well. Talked about it a little bit of dynamics with the crescendo. Throughout the middle of it, just got a couple balance issues here and there but. But overall it went pretty well.

KJ: What would you go back and change?

EM: Just thinking about it I would probably spend a lot more time tuning the oboes. We got a top oboe player who better make all state this year. He made all district last year and then we got another kid who we just switched to oboe in January so we want him to play with other kids so that he can really gain the experience but just been a tuning nightmare and so I would probably tune them more.

KJ: Cool, well you are about to watch segments from your past rehearsal. The verbal protocol will be similar to session one. When you are ready to speak, just do a slight head nod like this and I will stop the video to allow you to speak. Once you are done, just give me a head nod like this and I will continue the video. My
hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why was this focus of your attention? Why not something else? If you are silent for any long period of time I may stop the video and ask, “What are you thinking now?” The time limit for this session should last no longer than 45 minutes. Do you have any questions?

EM: Nope

KJ: Okay again this study is about your evaluative listening processes. I am particularly interested in how you got to the thought-process of the comment you speak about. Do you don’t have any final questions, let’s begin (plays video)…(stops)

EM: I remember at that point I don't even know what I set out to [do] but I remember at that point kind of thinking back to the first time that I ran this with the new kids and their class. And just thinking about the style actually for that matter since it's a chromatic scale going up and part of the reason that it drags is because they always play it too long. That wasn’t one on my radar actually beforehand because I was worried about the quarter notes being in line and keep tempo right when the normal melody starts at five. But at that point I remember thinking I really need to hit on that because that's a key point in the introduction.

KJ: (resumes video)…(stops). What made you sing it that way?

EM: I wanted to get the style across without saying it. Without saying, ‘lift off the notes.’ I wanted to see if they were listening to me and just kind of watching my hand lift (sings lifted eighth notes), instead of saying, ‘hey lift off the notes.’ I wanted to see if they would respond just by hearing the style.

KJ: (resumes video)…(stops)

EM: While it was better in some sections it wasn't better in other sections going back to listen to it and I might be talking about it now but that's a huge point in the introduction that hopefully I spent a lot more time on that because I need the entire band to really play the same style.

KJ: (resumes video)…(stops)

EM: Yeah on the same thing I wanted to let them know that I'm listening for clarity here and hopefully they understood. When I went (sings rhythm) that I wanted space in between the first two notes.

KJ: What made you focus on the trumpets right there versus another instrument?
EM: I think on that point. I heard from the trumpets. I think I kind of zeroed in a little bit more on the third trumpets that it was to (sings rhythm connected) it just wasn't matching up and I think my left ear really heard and from the first two measures. In my head. I kind of had the I thought of (sings rhythm). And conducting it for my fifth year I think conducting it I've got it so much in my head now that when I don't hear that something's really off.

KJ: (resumes video)...(stops)

EM: Yeah. It's interesting. Seeing it back now because from the podium I didn't hear (sings rhythm) and I actually wasn't even focusing on that until I heard it that time through that. Through this action so that's a good thing I've said that it and I singled them out for something else. Even though that was ok and now we're fixing something else.

KJ: (resumes video)...(stops)

EM: Yeah, from that point I felt that it was better because that D flat that their hitting. I'm sorry the E flat that their hitting is good and then the F was the problem so I just wanted the clarity of each note to come through because that's the melody in the very beginning so that's kind of what I was listening for.

KJ: (resumes video)...(stops)

EM: Interesting. I guess, it kind of the same thing as later on in the third measure when I was telling everybody else about (sings rhythm) and lifting off the notes. I've been on them especially this year about their staccatos being way too short and trying to lift off of them so I guess in my ear I've been thinking a lot more over the past couple months you know. Really trying to get that going throughout the entire band. And so I guess that's always kind of in the back of my mind so just when I heard (sings rhythm) and didn't want to get that bad habits.

KJ: (resumes video)...(stops)

EM: Yes good, I'm glad that I gave them feedback on that one because it was a little bit clear. So hopefully later on they will play the whole thing over with the entire ensemble.

KJ: (resumes video)...(stops)

EM:
That time I remember actually watching, because the first couple times I was just watching but I was more listening than anything else and then I remember watching because I kept hearing individuals not play that F. So I was just trying to see who like what's going on why are they not and then I wound up seeing E flat, G, E flat, G. F concert yeah. I think somebody had even said ‘oh you do know
that the third part doesn't have that they just have (sings eighth notes) and I knew that but I still was hearing something from the first and second part so I really was just zeroing in on that because we've really got to get that clear because it's a big part of the melody.

KJ: (resumes video)…(stops)

EM: Okay good I'm glad that I stopped here because that third measure still wasn't very clear as far as the style was concerned and I really didn't plan on spending this much time on the first four measures but I really want to good start to this because in my mind with pomp and circumstance I mean if they if they play the first four measures really well then their liable to play the rest of it pretty insane because it's a piece that really felt like in the first four measures if it. If we really got to go there then the rest of piece and probably kind of fall into place so on the podium I was thinking if we get these first four down and they really understand I'm really trying to get the style going from the very beginning then hopefully the rest of piece will be will be ok.

KJ: (resumes video)…(stops)

EM: Yeah, and lately I didn't even realize first time I just asked them for the third measure but I thought that the second time was a little bit better than the first time so I think at that point I was just saying in my head, ‘Hey that was better so let's repeat.’ You know.

KJ: (resumes video)…(stops)

EM: What I should have said there was that they were just letting the tongue get in the way too much because I was really kind of affecting the style because I just heard the big lavish (mouths tonguing) instead of really the definition of the actual meeting

KJ: So what made that stick out to you?

EM:
I think I just had this one very specific style in my ear that I was saying until we get that we can't move on. You know. And the tempo at that point was starting to get a whole lot better, so at that point it was just stylistically just everybody being together on that measure because it's so hard when everybody's got that kind of in unison with the chromatic scale going up. I really wanted that to be kind of insane because to me that sounds impressive. You know when the entire band’s playing that and it's just a really good strong start to the piece.

KJ: So how did you get to the point where you had this aural image of how you wanted it to sound?
EM: In the very beginning in my mind I'm thinking very fanfare (sings opening melody with separation). So fanfare to me means very clear as far as the definitions of notes and all that kind of stuff and at that point you need the style to really be in tact. If everything's going to be very clear across the entire ensemble so I wanted to make sure that every time that I heard something I really tried to zero in on exactly who was not playing the exact style so I think. Earlier I'd said saxophones and whatnot so hopefully I took it a little slower so we could get. We could get the really clear.

KJ: (resumes video)...(stops)

EM: Yeah ok so that was another thing that I was really trying to zero in on exactly. Even more. What was going on in that measure and what I had heard was (sing eighth note rhythm getting longer with each note) so at that point I think I was just listening for consistency of style all across all across the measures.

KJ: (resumes video)...(stops)

EM: So at that point tubas because usually raise your hands and think that they have the melody sound, but yeah at that point I think style was getting pretty good so my last thing just kind of in order for me was tempo, clarity with style, and then balance for the first four measures so that's kind of the direction that I was going because I'd heard the big chords and it was kind of during that last run with the full ensemble that I really started to listen for balance and that's when I'd heard the melody kind of getting covered up so I wanted to address it there.

KJ: (resumes video)...(stops)

EM: I can already tell in this run through that the balance was so much better because the chords weren't overpowering the melody and I thought the balance overall was pretty good so I'm glad that I got fixed.

KJ: What made you identify that just now?

EM: Just now. I was just listening to what I had said and then when I was on the podium. I remember at that point thinking so if balance is good here, I trust the style now if balance is good then we're going to move on.

KJ: (resumes video)...(stops)

EM: Yeah that was the first time, I don't know if I heard it on the podium that's the first time that I really heard the oboe intonation. Really really out of tune and I know that I addressed it later not as much as I really should have but that right there right on that last half note was kind of where I went are where I'd heard that intonation get really really bad and it's really just kind of on the longer notes because the quarter notes I wasn't worried about that intonation wise. I was just
worried about mainly melody up front and then especially coming from that second row with them so I get that point. I think in my head I had already established the tempo because that was my main priority. Tempo’s ok so let me just listen for anything else that I could try to fix to make this really good.

KJ: (resumes video)…(stops)

EM: So at that point and sometimes I'll do this especially with the flutes and the clarinets up front. I was listening for intonation because of the oboes and then the clarinets go up to that really high C really kind of in the stratosphere and when I heard that it was really sharp because I think that they were pinching a good bit on the mouthpiece but at the same time we're used to having problems up in that higher register with pitch so at that point I just leaned over while I was conducting and said go ahead and pull out the horn a little bit because I knew it was going to help.

KJ: (resumes video)…(stops)

EM: So besides tempo throughout this section when I’m listening on Pomp and Circumstance which by the way tempo started to drag and I should have stopped them but the side have this part right here is the only time during quarter notes when I think the trombones and some a baritones and maybe the bassoons have (sings long quarter notes) and that's always a big thing because those three notes are the long ones. Like nobody else has that and that's supposed to be a big so I was listening for that to come out and a couple notes I pointed that out beforehand. I think they responded pretty well so. That's just kind of what I was listening for in that section.

KJ: (resumes video)…(stops)

EM: I know I didn't address trumpets at the end but somebody in the trumpets went (makes a screeching sound).

KJ: So what brought that to your attention?

EM: I'm just now hearing it on the video I didn't hear it on the podium but I think just now I was listening for a nice chord and then instead I heard screeching cat.

KJ: So how would you approach that if brought to your attention on the podium?

EM: On the podium if I would have heard it I would have stopped and said, ‘Trumpets last note. Ready and hold.’ And then I would to stop them and say if it was good I would've said, ‘That's the way you need to play it because just now I heard your air just kind of going in a cone shape instead of being centered into the horn.'
EM:
So close to being in tune at that point I think. I remember hearing the tempo was ok. You know and I knew that we were going to hit the metronome later so as long as it wasn't really dragging big time then I was going to move on to other things and I remember hearing the oboe so badly on that one. I was trying to listen and I didn't really get a good sound in my ear to see if they were in tune with the melody with everybody else kind of playing at the same time so I wanted to zero in on them and really see how well they were playing in tune.

EM:
And just looking back on it now it was definitely oboe and I'd probably address and say I think I even tune them. Somebody was about thirty cents sharp I think it was that kid that we just switched over which he's taking lessons and you know improve but it was that. That is really sticking out to my ear now and on the podium and I just remember thinking if it's sticking out to me now here I just can't imagine when we actually perform this. How it's going to sound so I really want to try to address as much as I could.

EM:
Yeah the C-F (singing descending) it's really. One was sharp one was really flat so I really should have addressed the tuning there a little bit more. Overall everybody else I thought it was mostly ok.

EM:
I address[ed] two things at once but I killed three birds with one stone because I was thinking that if the quarter note stayed light the tempo would be fine (sings detached quarter notes). If they stayed long (sings connected quarter notes) they would drag so that's kind of why I said that and the fact that they weren't dragging I didn't want to put in their heads at the time, ‘Oh well you know that's a possibility.’ Somehow I wanted to tell them you did a good job so keep that up and back out of the way. As much as we could because I figured that with quarter notes the rhythms and the notes should be easy so let's talk about some other things at the same time besides keeping it light which is pretty easy to do. Just play a little softer so you don't cover up the melody so I guess overall my brain which is working really really quickly trying to kill it all at the same time.
EM: I can already tell that. The first measure the balance was kind of off and in the second measure and I was listening for just now to see if they backed out the way to keep it light now though the second measure they really got in the groove with it so I'm glad that I didn't address the way that I did.

KJ: (resumes video)…(stops)

EM: Just now, I had tuned the oboes and everything but I had leaned over and said you're still sharp. So at that point I'd heard balance was better. Now back to the tuning. You're still sharp. So just trying to kind of keep it moving and whatnot just trying to put out the small fires while I could.

KJ: (resumes video)…(stops)

EM: At that point I felt that we were getting in the groove. And everything was going ok. Just now. My brain was. Ok. That's pretty good. What else can we do so I’m looking at the score and I see a crescendo (sings rhythm) and so at that point I showed it in my conducting just to say hey will they respond to it but I didn’t really hear it that time so hopefully I addressed it a little bit later so now we're kind of get into the musicality part and just doing whatever we can to make it not so “Pomp and circumstance” like.

KJ: (resumes video)…(stops)

EM: I must've said yea here is the reason why because you have a crescendo coming up. I felt that we were ok. I wanted the oboes to understand and I see them right now still trying to adjust, I want them to understand this is still a problem and I’ve singled it out three times so really listen for that but at that point you know like I said I should have spent a little bit more time on it. Generally considering for kind of our purpose and everything we were doing ok.

KJ: (resumes video)…(stops)

EM: I’m glad I addressed it that right there that way it'll help your air get up to that top C concert. See I should have said C concert instead of a B flat instead but because it was going to help with a pitch I knew it would help with pitch but what I should have said going back on it is start that a lot softer because it was just a little bit too loud just now and I wasn't really listening for that it just kind of I came to me when I heard (singing rhythm with over exaggerated crescendo) with was just a little bit too loud.

KJ: (resumes video)…(stops)

EM: What I should have done here because this is a big of course Pomp and Circumstance with the quarter notes and everything the quarter notes were not together and I really should've stopped because that was a priority that I had going
into it so that if I were to change again adding on to what I said earlier than I would stop there as well just to make sure that it was in line.

KJ: What brought that to your attention?

EM: I heard it in one measure so I said, let me listen for a little bit more. Second measure was still the same, third measure was still the same so consistency so we needed to stop.

KJ: (resumes video)...(stops)

EM: So right here in this section I was listening because when it changes style. From like a march style with the quarter notes it does it changes to everybody's nice and lyrical and the problem that I had in the first rehearsal with the new member class with this is that the pickups to measure twenty five (sings) and what kept happening was that quarter note they were holding on too long (sings and snaps) so everything was getting behind so I was really listening in the full band set up to see if that was happening and I'd shown that just now in my conducting gestures where I went one and two off. Really kind of showing, ‘come on keep it moving keep it moving’ because I wanted to see if they would keep rolling.

KJ: (resumes video)...(stops)

EM: So that's why I stopped because it really dragged in that first and second measure so it's interesting to see if they fix things.

KJ: (resumes video)...(stops)

EM: That was better. Already I think on the podium, listening to it now it was better on the podium. I didn't trust them to the point and so I went. “Keep going get it going” (moving arms rapidly) because I was expecting it to slow down at that point. Hopefully the next time I'll be able to trust them more because it sounded better.

KJ: (resumes video)...(stops)

EM: I really was just listening for tempo in this section eventually I think I probably heard melody play because I wanted especially the more that we add instruments in the section the more that those background instruments tend to cover up the melody. Just in my experience in the past with this so that's kind of what I was listening for at that point was you know if melody can start keeping tempo in the same style I didn't notice that. I was also listening for since it was a lyrical section. (sings rhythm) separation in between the notes. And I didn't hear that which was good because it was supposed to be connected. So next thing was if they can keep tempo going then where they’re being heard over the parts that weren't as important.
EM: This whole part is kind of in two section where that first melody is clarinet and I think oboes have it as well, baritones and then it goes into the trumpets so it's a different kind of a melody where they kind of just hand it off. So I wanted to take this in two sections to kind of handle the first melody and the second melody kind of with the same issues for both.

EM: I'm just glad to get that feedback on the first note because that's the important thing to keep the tempo moving and really the whole in three and with tempo first of all, it's important but secondly is it kind of one of the jokes that I have with them is that you know I think I said it before and before I started the rehearsal, we can manipulate the way that people walk at graduation because if we don't want to be there forever we're not going to play this slowly we're going to play at a moderate tempo so that's because even not musical people just tend to walk faster when the tempos a little quicker so I wanted a consistent tempo and this piece tends to drag. You know. The more that we play so if we get in the habit of keeping it moving and really I got to kind of play a game with them. You know. We don't want to rush by any means but I kind of play a game with them. How many times do we have to repeat the whole piece before the administration reaches the stage at graduation, just when we stop so that's kind of almost in a way their quote unquote incentive to really keep up tempo.

EM: That was another spot I was listening for tempo (sings melody) it was kind of dragging on that part so I should've stopped there but at that point I remember on the podium just thinking this is all about balance because I felt the tempo was good but I should have had tempo like as the first priority because that's what I was listening for just now you know but I'm sure the balance got better which is good.

EM: All right sure enough I just did say baritones were a little bit behind it. They were not the only ones but I'm glad that I did address it but for the rest I think here comes the balanced parts.

EM: At that point it might have just been me but I think I was snapping the tempo with my left hand because every once they're going to drag. I wanted them to know yeah we’re dragging, we’re dragging you know so tempos always kind of
on the mind and that's the way that I was conducting too, you know tempo tempo tempo even though I was kind of at the same time listening for balance so I guess my brain was working in two different spots on that one but. But for a special for these kids it's effective.

KJ: (resumes video)…(stops)

EM: At that point I remember this is always a problem and I was especially listening for the tempo and just trying to zero in without stopping and where the actual problems were and then I remember the tubas had this descending scale (sings rhythm) and that tends to drag all the time and then at that point it kind of just hit my mind oh yeah the tuba is that part it’s dragging so that's why I faced them and said come on keep moving.

KJ: (resumes video)…(stops)

EM: Yea same thing a few people behind here. I should've said exactly who but at least they're getting the idea that tempo is the biggest issue if I address it first.

KJ: (resumes video)…(stops)

EM: Here's the second section so my hope was that if people were listening the first time what I was saying about melody you know covering it up hopefully this time it won't happen again in the in the different sections but I wanted to sing it so that people understood, that's the melody you know, so I was listening for balance most at that point.

KJ: (resumes video)…(stops)

EM: So here I was listening in a way I was trying to have everybody listen to that because it was melody so they were listening to understand where they fit in balance wise, but I was also snapping the tempo so that melody was able to keep up tempo the same time.

KJ: (resumes video)…(stops)

EM: I should [have] stop because melody was being covered up a little bit from people who didn't have even third trumpets at that point. That's when I put my hand up and said you got a backing off because I’m hearing way too much of you. At that point I was snapping tempo, which got a little bit better but then balance was just kind of really in my head at that point and then sure enough I backed them off.

KJ: (resumes video)…(video stops) That is it, any final comments or anything?
EM: Quite honestly it’s a little better sounding than I thought it was from the podium at least from the back side. We have another rehearsal on Wednesday and I'm glad that we did this so I could hear from the back half of the ensemble too but I thought overall tempo was ok. Later on I know we had it with the metronome so the next rehearsal that we have, I'm just going to say beforehand ‘alright tempo is pretty good, I want to see what you do the first time without a metronome’ and then just remind them about some of the balance things that we that we did and then and then just kind of go from there.

KJ: Well thank you so much again, I really appreciate it.

EM: Yeah it's awesome.
KJ: Well this is segment three, thank you for again for your participation. This is the final portion of this study. During this session we will watch footage from your last rehearsal session. You will be asked to verbally talk out loud your evaluative thinking processes during any segment of the rehearsal. Simply put. What were you thinking there and what drew you to that? Before we watch your rehearsal, let me ask you a few questions. How did that rehearsal go.

JS: It went well. I remember because of more time constraints with the concert we were getting ready to put on. It was a lot more Macro things so whereas if this were something for district festival we would have taken more time to clean things. Now we were just trying to make sure it was presentable enough to be able to perform for the audience.

KJ: What things went well?

JS: I think they got the style of the piece I think they were playing with good style throughout the whole thing.

KJ: Anything you would go back and change?

JS: Just if you had more time you would just make sure that the balance was better and you know those are always things that take the most time the balance and the tuning and you know making sure the major chords of the third you know your address all those things but for the amount of time there was just no way to be able to get to that so you just hope that their ears are advanced enough to be able to fix things on their own.

KJ: Okay, so you're about to watch the segments of your past reversal. The verbal protocol will be similar to session one. When you are ready to speak, just do a slight head nod like this and I will stop the video to allow you to speak. Once you are done, just give me a head nod like this and I will continue the video. My hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why was this focus of your attention? Why not something else? If you are silent for any long period of time I may stop the video and ask, “What are you thinking now?” The time limit for this session should last no longer than 45 minutes. Do you have any questions?

JS: No questions
KJ: Okay again this study is about your evaluative listening processes. I am particularly interested in how you got to the thought-process of the comment you speak about. Do you don't have any final questions, let’s begin (plays video)...(stops)

JS: This was all about trying to create a mood right here so we're trying to get all of the different parts that add to the mood to either come out a little bit stronger or be softer so the first thing that I was listening to was the vibes to make sure that that was coming out because I don't think he was at the previous rehearsal so I was just making sure that he was getting that. And once we had that then we were trying to get the trill to be softer so that it wouldn't you know it was just create more of the mood and not covering up this thing over here

KJ: (resumes video)...(stops)

JS: That was a process because it's new and you know there's lots of fermatas in there so the flute was playing right there and just want to make sure that the kids know what's going on and where we are so that's why we were saying rehearsal 31 or whatever it was because it's hard for them with fermatas unless you rehearsal lot of times you know. We’re just trying to get through the road map.

KJ: (resumes video)...(stops)

JS: The major part of doing this rehearsal was because we had kind of going through the big sections before and know it was those transistors trying to get them more comfortable with the transitions.

KJ: (resumes video)...(stops)

JS: If we would have more time, would have stopped and got the trumpets with the mutes in to tune that a bit better because it obviously pitch things there.

KJ: (resumes video)...(stops)

JS: Yeah, I'm just listening to hear what they're doing so that they don't miss any opportunities to make music out of what they're doing right now so listening to the line and making sure we hear the rises and falls

KJ: (resumes video)...(stops)

JS: Clarity was obviously an issue right there on the triplets. You know so I don't know if that was the focus of that rehearsal but I should have and would have gone back and made sure that they were doing it all the same way because you can hear the brass in the back especially because that's where you where you can hear them all doing it differently rushing and all that stuff.
KJ: So you had to rehearse that, how would you approach the triplet?

JS: We would make sure you know you break it down with the eighth note triplet and then you just make sure that kids are counting it. We go through a variety of things first we have to make sure that they know how to count and in the second thing is a lot of times we use different syllables so like quarter notes get TOO, eighth notes get TAH and 16th get TEE. First is they count it, so it would be (sings rhythm) a lot of times it gets them to think of it in a different way and in the next thing we do is we air and valve it to make sure that they're pushing it through the horn and then they played it. So that's kind of the process of going through articulations and making sure that they're all playing the same way.

KJ: (resumes video)...(stops)

JS: (Talks about inadequate building facilities).

KJ: (resumes video)...(stops)

JS: So we always talk about this. In the sections they know that if it says mezzo forte that first part plays softer than that and the third part plays louder than that. We always stress that kind of stuff so.

KJ: (resumes video)...(stops)

JS: We have an articulation studies sheet that the kids get first day of really band camp and it goes through all of the articulations. So it's on a concert F it comes from I'm sure the Eddie Green School or something like that to where they have the legato or the legato staccato and the staccato so they know from then that how to articulate all that stuff so hopefully they'll be doing it the right way but you have to remind them sometimes. But kids always want to play staccato short no matter what.

KJ: Very true, even the college level. (resumes video)...(stops)

JS: This is a time I would make sure that the pitch right there, now it's just a matter of identifying lines and making sure everybody understands who we need to hear.

KJ: So right there do you remember what you were listening for?

JS: I think the lower parts were confused by the different rhythm of the upper part so we want to make sure that they understood what the upper part was and that was the important line nobody else supported that upper line. The first trumpet player it very timidly so he needed to know that bring that part out.

KJ: (resumes video)...(stops)
JS: They should know what to do when the mute is in there, the pitch tendency of what happens of course they actually have to do it.

KJ: (resumes video)...(stops)

JS: That percussion room, that's really distracting back there. I didn't hear it much out there but I'm just wondering how much it effects the kids are sitting back there as well listening to all that mess.

KJ: (resumes video)...(stops)

JS: We took way too much time with this but when you hearing things and you’re just get bogged down sometimes.

KJ: Sometimes its needed. (resumes video)...(stops)

JS: This too because sometimes you may have an over abundance of one part and less of one part so you want them to realize there’s a lot of [inaudible].

KJ: Yea it goes back to what you said earlier about balance. (resumes video)...(stops)

JS: Just the pitch between the muted trumpet and flute. Obviously there’s the rote teaching going on right there. If you had more time you would go through the process to make sure they know how to count it because the flute player. And my flute player, she struggles with that aspect of sight reading.

KJ: (resumes video)...(stops)

JS: I encourage students to have a tuner with them at rehearsals because it saves a bunch of time. We you want to spot check students can just pull it out and check. Because if they don’t know what’s it’s supposed to sound then you can say like ‘listen’ all you want but unless they know where it fits then... Anyway that's just me and my school of thought.

KJ: I totally get it. So that was a spot where you told her to pull out the tuner?

JS: Yea, I told her to play it and look at the tuner. I don’t know if she did. Looks like I went right into it. Maybe she didn’t have her tuner. I don’t know.

KJ: (resumes video)...(stops)

JS: It’s not what it needs to be but again it maybe just one of those things where to be. But again it may be just one of those things where it’s a spring concert and just trying to get through this piece.
KJ: (resumes video)...(stops)

JS: These are all the transitions. I know that’s what we were doing for that rehearsal because all of these are tough to work out all of those transitions that's for sure. When you talk about clarity man there are clarity issues and everything but right now I mean we're struggling through all of that stuff in order to get it right for the performance.

KJ: (resumes video)...(stops) Just curious, what are you listening for right there?

JS: Style from trying to find the person playing it with the right style so I can get everyone else to imitate him.

KJ: (resumes video)...(stops) What made you use that distinction? Tees instead of Dee articulations?

JS: That’s the articulation studies again. They know that when it’s the legato front that they use the Dee, Doo and when its accented or staccato they use Tee fronts so a lot of times if they're trying to play you know an accented part but they're using the legato beginning of the note then that's when you go down the line you see this playing with the right style in that way you can say that’s the one.

KJ: (resumes video)...(stops) Well this concludes segment three.

JS: Yea man this was fun. You got me to think about rethinking stuff and you know oftentimes that you know that's very refreshing to talk through the process so I really do appreciate it.

KJ: Oh no I thank you.

JS: Also with balance groups that play with better balance then that oftentimes fixes pitch problems and things like that too because they're listening. I mean by that the simple fact of them listening it makes them make things better.

KJ: Thank you so much man
Ramón C.’s Rehearsal Listening Activity

RD= Ramón C. (accomplished college conductor)
KJ= Kelvin Jones (researcher)

KJ: Thank you for again for your participation. This is the final portion of this study. During this session we will watch footage from your last rehearsal session. You will be asked to verbally talk out loud your evaluative thinking processes during any segment of the rehearsal. Simply put. What were you thinking there and what drew you to that? Before we watch your rehearsal, let me ask you a few questions. How did that rehearsal go to your recollection?

RD: Honestly, I don’t remember at all but I can say that you know near the end of the cycle before the concert I felt the group was pretty well prepared.

KJ: Anything in particular that went well?

RD: I do remember there were a lot of details that were working out OK and a lot of the big picture things were going. There's probably a few details on things that I wanted to work out. I’m not sure if we started integrating the dancers at that point or not.

KJ: This rehearsal just Bernstein, no dancers

RD: OK great so then there's probably a few details that we wanted to get at within the ensemble. You know there’s an accelerando at the end and there were a few little things we kept working on in other the sections that we needed to hit.

KJ: Anything you go back and change?

RD: No I actually I think the prep for that went well because we did a lot of sectionals at the beginning of that cycle and I think that really pays dividends. You know towards the end and I keep always kind of reference that in the end because I have to miss a lot of school in March so we do a lot of Sectionals and I always notice that the last concert always goes a little better so think about adjusting my rehearsal schedule for next year a little bit.

KJ: OK, well you are about to watch segments from your past rehearsal. The verbal protocol will be similar to session one. When you are ready to speak, just do a slight head nod like this and I will stop the video to allow you to speak. Once you are done, just give me a head nod like this and I will continue the video. My hope is that by stopping the recording, you will have time to be more thoughtful about this comment-worthy moment. Why did you stop? What did you hear? Why is it important? Did you stop to talk about a strength? A weakness? Why was this focus of your attention? Why not something else? If you are silent for any long period of time I may stop the video and ask, “What are you thinking now?”
time limit for this session should last no longer than 45 minutes. Do you have any questions?

RD: So you want me to comment more on what I was hearing or on my actual rehearsal and how I approached it?

KJ: A mixture of both. If you see yourself stop for something then what made you hear that and your thought process of targeting those kind of things.

RD: OK

KJ: Okay again this study is about your evaluative listening processes. I am particularly interested in how you got to the thought-process of the comment you speak about. Do you don’t have any final questions, let’s begin (plays video)…(stops)

RD: I was thinking the exact same thing. There’s supposed to be a diminuendo that happens right after that forte. Because you know it's interesting Bernstein puts in this subito forte right when the trombone solo comes in so it needs to hand off to a very small group so I was listening to [that] and those volumes just didn’t match. So I'm glad to hear that I decided to do that.

KJ: What brought your attention to that, because it’s in the score?

RD: Actually it's not in the score but it the dynamic of the forte and the following piano, they weren’t linking. There was something in the way that the music was progressing it just didn't connect them enough. There wasn’t enough connective tissue with volume. And I showed it, I don’t know why they didn’t do it.

KJ: (resumes video)…(stops) Do you remember what you were saying right there?

RD: A little more tongue there (referring to trombones) because they were playing it too long. It was too bodying and so what happens is the reason [I’m] realizing it's everybody else on the upbeats and Um-Paps are playing short and the trumpets and so when they play (sings long) it just didn't have the definition that the rest of the ensemble had.

KJ: (resumes video)…(stops)

RD: Pitch is a mess on those C concerts

KJ: Curious, what made that stick out. The C concerts? You just hear it now?

RD: No, it just sounded out of tune and just the note it is. It’s just a C. It’s just that there are so many Cs in a row, when there is a big passage where there [are]
pitch issues and it varies between a lot of notes there usually is one note that something centers around you know the passage or section centers around a note and if you fix one pitch you fixed pitch for about twenty notes and right there fixing the C concert would fix about 20 notes.

KJ: So question, what training have you done to help prepare you to hear things like that? The C concerts? People may watch this and notice other things but you notice the Cs are out of tune. Do you practice aural skills everyday or from playing piano?

RD: That’s a good question because the answer to that question is, has to go back to wherever I started and my whole progression of developing my ears ever since I was a kid. I didn’t know what pitch was until my junior year of high school that’s the first time I was ever in a concert band and someone started talking about things being out of tune and I just didn’t understand how that worked because I was a piano player so everything was always in tune. You just plunk and so I really didn’t understand how that worked and so then I struggle with it as a high school I didn't realize what was in tune or out of tune and I didn’t realize why it and didn’t know if it was high or low. I had perfect pitch, I knew what all the notes were but I didn’t know what was wrong and that was the thing. Over time I just spent more time like listening to rehearsals and good bands and bad bands and getting people to point out like pitch issues and trying to realize and start to develop my ear that way.

KJ: So like taking something that was in tune and out of tune and try to figure it out?

RD: Yea my answer is not good I know. I don't know how but by the time I started teaching high school I was better at it but I think where I taught high school is really when I got really good at it because I would identify [that] I'll notice something just didn’t sound right. There was a sound that was distorted and I'll go one by one and realize there (are] all these pitch discrepancies so I started to associate that distortion in the sound when I hear it means it's out of tune and so that's where I got a lot of practice, there and student teaching I got a little bit too but when I was a high school teacher [it] really was a lab for me to understand what sounds were and I had really weak players. I had to teach people like everything and so I had to figure out things with them and I think that really helped me develop my ears getting a small group and going, 'so good now you come down you go up’ and doing all that eventually you started to get less distorted like so it was completely a pitch issue. And so when I hear that now at the distortion in the way that sounds is all pitch. I could tell that it's just pitch that is bothering me and the reason I said C is because there like twenty C in a row there so if I fix that one that would fix the whole passage.
KJ: So it's just so awesome. So if you hear distortion is a certain type of distortion you know the difference between sharp flat or you just kind of with your perfect pitch you can know it's a C and it kind of high or low?

RD: Well with a section like that where there’s so much unison I know that it's going to be a lot of different people you know there [are] a lot of people that do rehearsals and they are like ‘be careful you don’t go sharp on that one note’ you know [giving] general comments to everybody but you can't really say that because one person might be sharp but the next one might be flat. So you can't really say one general comment to everyone unless you say you have the third of the chord you want to try to keep it down. General rule like that but in unison like that I can't really say something that's general like that if you're getting high because right there is just a mix of some people high some people low or some people right in the middle. And I think it's because of all those Cs don't sound pure that’s why its all those distortion I hear.

KJ: (resumes video)…(stops)

RD: Right now before even seeing anything (sings rhythm) didn't have enough articulation that's the first thing that I'm thinking about. I don't know what I’m going to talk about there but there are a lot of things to talk about there but.

KJ: (resumes video)…(stops)

RD: Actually the Cs got better too, that second time

KJ: (resumes video)…(stops)

RD: And the reason I said a delicate note. That’s a couple things I’m trying to say but the first thing is to get them to play it softer so they can listen better. That’s a way I try to get them to realize don’t punch out because obviously whenever you accent a note the pitch is going to be different and if they were being played softer. So trying to get ‘em to don’t over accent it so that number one you sound better playing, number two you can listen better and it would just wouldn’t affect the pitch that much

KJ: (resumes video)…(stops)

RD: I noticed it starting pushing ahead a little bit. I didn’t say anything about it there, just another reason why I don’t conduct so I can just kind of get used to playing on their own.

KJ: Something I just noticed, you were moving your head now just how you were in the video.

RD: Really?
KJ: I can rewind so you can see.

RD: I like to dance to the music.

KJ: I know you’re listening, but does that have any affect with your listening. In a different way?

RD: I think goes to my heritage and how I grew up. We grew up dancing to everything and so it's really hard for me to go you know to just kind of go along and listen without being able to move a little bit. And I'm not doing this to keep them in tempo I'm never affecting their tempo even when I’m conducting with my hand unless I’m trying to fix that but they’re not focusing on that they are focusing on pitch and I’m focusing on pitch to but I’m also listening for a second and third layer like are the inflections there. Are they making me want to dance (sings rhythm) and how does it relate to that downbeat. I think that's a percussion side of me having to play so many complicated weird rudiments that span across time and like when I was drum corps in a drum line that you spend all these weird rudiments and figuring out how does it tie in with my foot and so you know you relate every complicated rhythm to how it lands with the beat and we have to like analyze that to a T. And so I think that’s just an inherit thing that’s always inside me because of my drum corps, drum line background.

KJ: So you think if you didn’t have that drum corps background, that part wouldn’t have been harvested?

RD: I think it would’ve been different. I would be a completely different musician and teacher today. You know and for me I can only see the benefits of it. I haven't seen anything of a detriment from when I did drum corps. I've only seen things that really developed me big time.

KJ: (resumes video)…(stops)

RD: Well there's a lot of things you know. The pitch thing the inflections aren’t right. Every note is too heavy. The notes aren’t soft enough to get the right inflections. There's pitch issues on that and then of course it's a trumpet note that never really happened which is something that I don't really address because I just knew that she was never going to be able to get. And (sings rhythm) and then adds another group you know that little figure it needs to have the right inflection and the other group needs to fit inside that sound rather than just obliterating that.

KJ: (resumes video)…(stops)

RD: The G concert, the note lengths

KJ: (resumes video)…(stops)
RD: It wasn’t great but was much better. It’s different with the camera back instead of what I was hearing up front. Horns are just too heavy there.

KJ: (resumes video)…(stops) Do you remember what you were thinking there because your face just looks like it’s in analyze mode.

RD: It’s probably, I don’t remember. I’ll be curious to see what the next thing I stop for because as I’m listening I’m hearing something here and I know what I would say if I heard that but it’s such a different listening environment. Which is another reason why I like to use a video recorder because you hear a whole new set of things then the front microphone does.

KJ: (resumes video)…(stops)

RD: When I get uninvolved in my conducting, I know I am about to stop. I just let them finish the phrase before I cut off.

KJ: (resumes video)…(stops)

RD: I remember having to tune this chord, this is a tough chord to tune so much dissonance in this chord. I remember this day.

KJ: (resumes video)…(stops) So in that kind of moment, what are you listening for?

RD: I’m listening for how well is the pitch. How far off is the distortion in the pitch. Is it something that is really severe or am I hearing that there’s another note in the chord that is really the problem. The B flat, I just picked it out because it was suffering as a result of something else. I was trying to analyze is this note the biggest problem and if it is then who's the biggest culprit? I'm trying to find every color. That’s why I would look around because as I look the color of that instrument gets stronger to me you know and then I would look to another and I want to survey who’s playing. Especially with this score because it's a condensed score, I don’t know who plays anything. So I’m kind of looking around to survey who it is that is playing the note and who's the one the most out. And I realized it was first trumpet playing really high and I’m like, ‘That's going to be a problem.’

KJ: (resumes video)…(stops)

RD: Yeah yeah it's just everything's on the high side and that's what I want to do there is number one teach him this is what the problem is with your note. With normally they should be doing in a practice room, their tendency. And who they can be listening in for but so some reason everyone was riding high on that note instead of him.
KJ: What made you use the saxophone player as the reference point?

RD: Because number one the instrument is really loud and number two it is centered in the middle the ensemble and it's a really good range for that note. So everybody that has it can hear that one person and they can get that reference in their head. Normally I would say trumpet because it is the furthest point back but there's no way that that note for that person could be anything any reliable source for anyone.

KJ: (resumes video)...(stops)

RD: I looked at trumpets there because I hear a G concert and I didn’t know it was suppose to even be in there because it wasn’t in my score.

KJ: (resumes video)...(stops)

RD: That last comment I said there. I remember when I first started teaching I was going to State my third year with my concert band. That was the only year I tried to go to State with my concert band. The other years I took them to another festival and I asked my old high school band director who has had a lot of success at State and is a great director. I asked him what were some of the biggest thing that separates mature groups from the young groups and he says BALANCE (emphasis intended). I started harping on balance a lot and the longer I do this the more I harp on balance and I realize that balance, I mean obviously everybody is supposed to have a good sound and they have to have decent pitch but balance I think fixes a lot of things that really could make a great [difference] whether it’s just balance of the chord or balance of a section or balance of a melody versa accompaniment. Balance really makes a big difference and you realize when you hear like a North Texas recording everything is perfectly balanced and there's a beauty in that you don't hear in any other recording. So there I realize that B flat, I tuned it sort of but when they played it wasn’t perfect still you know and the rest of the ensemble was still was doing OK on the chord but when I added in I realize that it needs to get in balance and not so strident pointing out that the flat nine or major seven or whatever.

KJ: So how did you get to a point where you can tune something like that? Or to balance it? Like how did you go from the comment your high school band teacher told you to working towards getting that skill down?

RD: Listening to recordings a lot, like North Texas recordings and then going in and rehearsing my group and realizing it’s something don’t sound the same. I’ve always been a mimicker ever since a little kid. I was great at copying people making fun of them and so I do that well in how I moved and how I can hear things and make sure that they match. And it was always a game when I was a little kid but as I get older I realize that's a good thing I kind of had that little gimmick is one as a conductor I was able to steal a lot of things but two like I can
really tell this doesn’t sound the same specifically because of this. This is not balanced so I work with one section and I get them to play stronger and balance them out and realize that sounds much better. You know I think this is how we take steps to sound like a recording of Dallas Wind Symphony or whatever. That’s how I started, now it’s just to the way I want to hear it but it’s that practice of my first job. Those weak players where I really had to get inside and fix every problem. They didn't fix a thing by themselves I had to fix every single thing and I think that made my ears a lot better because I had to work so damn hard. And so how did I get to that point, there I go through the pitch thing and once I get to the end of it I realize I think it’s pitch but it’s also balance. And that’s when I got it down.

KJ: (resumes video)…(stops) You made a sound

RD: Yea it’s cut time so beat three that note is just a wrong note and then things just didn’t move together. The style isn’t the same so nothing is a match. Sounds like they just weren’t ready to play.

KJ: (resumes video)…(stops)

RD: That is one thing that helps me a lot the perfect pitch. Some people say it's a curse but it’s actually just a really big blessing. But like when I can't tell what note it is, there's a problem that's another thing if I hear something like I can't tell what note that is was, stop. And that’s literally what happened there like that really helps me identify like some of the things I have to pinpoint because if I hear something I can't tell what note that's supposed to be and I should be able to tell what note so something's wrong.

KJ: So when you hear melodies like that are you hearing actual notes or you just register sounds?

RD: I hear the sounds, I just know all the notes and the moment I try to put notes to them but they’re all there anytime I hear any music I just know the notes that are sounding but I’m not trying to figure out actual note names and I don’t see a stream of letters.

KJ: (resumes video)…(stops)

RD: Almost everything. The tempo of the oboe isn’t the same as the group. There’s just not communication between that oboe and the trumpet tempo and the trumpet is just sharp on everything you can tell she put her mute in [but] didn't pull out her main tuner slide so it’s not with that bass those pitch things aren’t lining up with those space and chordal fundamentals that are happening in the clarinet.
RD: The pitch of the C sharp in those front voices. It just wasn’t in tune [but] they fixed it.

RD: It’s good I said that because as I listen to this recording it just sounds very dense. It’s scored that way because the harmonies are thick. And then you have the muted trumpet in the middle of all that. I mean it's like is that really the best idea. In the scoring you know from the perspective of Stith who did the arrangement, was it really the best idea of the transcription? So I think that's what I'm looking and listening at. I remember struggling with this section a lot as we were preparing it like overall the time I was just like, ‘I can't get the right things to be heard’ you know and it was until I realized that needed to be thinned out more, less and people not playing the fortissimo that’s marked. Again Balance

RD: Balance issues a reason why I like actually setting up the group facing another way, but I want to try to get back further away from them so that I can be more of an audience member with some distance. When I’m on top of them you hear something very distinct you hear something more when you take a few steps back then you can start to hear how everything blends a little better and I'm looking for the blend of the different instruments and of the lines and the balance of the lines as I step back.

RD: I do that a couple of times one of the big things is leading into this section it has to get so quiet and I’m showing it really quiet and I just hear like brass players going (sings loudly) and I’m like get softer. It's going to just like a little clarinet group there and then like the horns they're trying to stagger this thing and then you know they're obliterating this entrance by tonguing too hard.

RD: I will say there [are] a couple things that I liked about the video I think I hear more things. I got better and my ears are getting better in that piece than some of the other things I rehearsed and I think that has a lot to do with I knew the piece better. I had more time to study it and I was more prepared for it and I like the fact that I conduct a little less a lot of times. So you could hear better versus trying to conduct so much and not being able to hear as much. I like that I think that's why
the rehearsals were so productive on that piece. I think that helps with how they sound in the end.

KJ: So you said you knew that piece well… What approaches did you take that impacted how you listen in a rehearsal?

RD: OK yeah I think number one for me this is probably a process that might be different for other people and some people might think I'm completely wrong but I listen to several recordings a million times. For me the majority of score study isn't so much with the score, it's with a lot of recordings and then figure out the one I like and then just really internalizing that one. And that gets me the understanding of a lot of the notes and all the notes are there I can decipher them in my head but a lot of it has to do with sound I think so many times we get bogged down with what things look like in the score study and we forget to look at it and equate the sound that produces you know. And so I couple the two a lot but the majority of it is before I try to get in for the score I like to sit and listen to a lot of recordings and this one it was backwards. I learned this piece a lot through just listening and then going in the score and in seeing it for the first time and trying to understand it and that's how I did the score study for this piece. Some of the pieces I don't do I spend a lot of time looking but I think ultimately no matter what it's a lot of listening for me.

KJ: Is there a method to how you listen to a piece or study a score or you just go along?

RD: I just want to understand the groove of the piece. Every piece grooves in a different way and so the groove of this piece you know was like interjections and accents that I didn't hear in any other recordings. Nobody ever did it like I thought it should be played. I think it's one of those that you know some people say don't listen to recordings because then you just try to do someone else's interpretation. That never really happens to me but I listen to a lot of recordings to hear like the balance of the instruments and how they blend in with the sonic scape and how everything is supposed to work. So I can get the form in my head you know a lot of people like to look at form and write down numbers and stuff like that but I think that's a waste of time. I can look at all these numbers and analyze to death but if I don't really know what the piece sounds like, I think that's the number one the most importantly thing. I think that's another reason why you know my arranging I think helps my ears a lot to. And a midi on a computer could teach you a few things about listening like a wrong note and the identification. It's perfect because on a computer there would be one little note for the tenor sax that I have unbalanced when it equates to what the real group is and I could pick it up really fast. You know because I've gotten used to so many listening things and you can’t just see everything all the time and I think that and maybe just the way I learn is really an aural type thing you know and then I have to look at don't get me wrong, I spend a lot of time studying the score by looking at it but before I do that I really want to have an internal process of the way a piece works and then I'll
change things you know I'm not married to just the way I've been hearing but I go through and I analyze myself and say this is going to be so cool, no one has ever done this, why are they doing this, okay I like this or they brought that out. I would have never even noticed that that should've been brought out. That kind of stuff but for me it's a lot of listening before I try to really start breaking things down.

KJ: Along those same lines, how are you able to break down theoretical things like the chord progressions you pick out? Because I know people who have perfect pitch but still struggle to identify chords without hearing each note and figuring out the chord that way.

RD: You’re right. I think it’s because my piano background. I played piano so I play a lot of chords and you’re right a lot of people with perfect pitch that I have met do fine with melodic dictation but with chord dictation they can’t pick anything out they just identify notes and theory and I just love theory. And because I like theory so much I always equate everything to like the harmony that's happening. I think about it all the marching band arrangement I do is a lot of choral dictation. I remember the first time I wrote a show, I couldn't understand the harmonies but the more time I did it, I mean I was eighteen, but the more time I spent doing that my ears just understood harmony a lot better. I hear like all these things are happening I just know what the chords are and when I hear it on the radio and I'm doing that score study part I am doing harmonic analysis while I'm listening and I am doing inflection analysis I am doing.

KJ: You say inflection analysis, what is that?

RD: How to get the right style. You know so for example (sings melody from movement 1) when I hear it in a recording they usually don’t sound right. They don’t sound like the inflection that I would put or one would do it perfect and one person really have the right style you know it triggers that there’s a style that needs to be here that I don't hear. So there is a harmonic analysis and style analysis happening and a lot of things that go into all those listenings that I do, which is why I listen so much.

KJ: Well thank you so much!

RD: No problem, happy to do it
APPENDIX H: PARTICIPANT'S REHEARSAL TECHNIQUES

Tone quality
- (Evan Y.): On the podium if I would have heard it I would have stopped and said, 'Trumpets last note. Ready and hold.' And then I would to stop them and say if it was good I would've said, 'That's the way you need to play it because just now I heard your air just kind of going in a cone shape instead of being centered into the horn.'

Intonation
- (James E.): I encourage students to have a tuner with them at rehearsals because it saves a bunch of time. We you want to spot check students can just pull it out and check. Because if they don’t know what’s it’s supposed to sound then you can say like ‘listen’ all you want but unless they know where it fits then... Anyway that's just me and my school of thought.

Style
- (Evan Y.): I wanted to get the style across without saying it. Without saying, ‘lift off the notes.’ I wanted to see if they were listening to me and just kind of watching my hand lift (sings lifted eighth notes), instead of saying, ‘hey lift off the notes.’ I wanted to see if they would respond just by hearing the style.

Precision, Clarity:
- (Evan Y.): I think that needs to be rehearsed slower just for clarity purposes and then naturally the volume is going to increase as they’re going up in pitch (sings upper woodwind part in measures 14 and 15) but I would want them to control it a little bit more so that we can hear clarity more.
- (James E.): I would just go down the line to see if they are all doing it the same way and making sure that it’s placed in the right going to the two-E-and short and three-E-and-A-four and just subdivision down-up-a-down and all that stuff. Just make sure they're all articulating the same way.
- (James E.): The trumpet players back here and you will have seven different kinds of articulations the way that they're articulating it and then that oftentimes is the reason why you lack clarity because they’re just not all doing it.
- (James E.): Oh yea we go down the line all the time. Yeah kids know that no matter how much you rehearse a group and get a group to a certain level it seems like there's always more that you can do in the way of consistency of approaching the way that kids are articulating because there are so many variations.
- (James E.): Absolutely man, and a lot of times you just go down the line and you get to the person that you like the way that's being articulated and you just say ‘do that again, do it one more time and everybody match that. All right let's play it’ and then that saves you a little bit of time you know.

Articulation Clarity
- (James E.): We would make sure you know you break it down with the eighth note triplet and then you just make sure that kids are counting it. We go through a
variety of things first we have to make sure that they know how to count and in the second thing is a lot of times we use different syllables so like quarter notes get TOO, eighth notes get TAH and 16th get TEE. First is they count it, so it would be (sings rhythm) a lot of times it gets them to think of it in a different way and in the next thing we do is we air and valve it to make sure that they're pushing it through the horn and then they played it. So that's kind of the process of going through articulations and making sure that they're all playing the same way.

- (James E.): We have an articulation studies sheet that the kids get first day of really band camp and it goes through all of the articulations. So it's on a concert F it comes from I'm sure the Eddie Green School or something like that to where they have the legato or the legato staccato and the staccato so they know from then that how to articulate all that stuff so hopefully they'll be doing it the right way but you have to remind them sometimes. But kids always want to play staccato short no matter what.

- (James E.): That's the articulation studies again. They know that when it's the legato front that they use the DEE, DOO and when its accented or staccato they use TEE fronts so a lot of times if they're trying to play you know an accented part but they're using the legato beginning of the note then that's when you go down the line you see this playing with the right style in that way you can say that's the one.

Developing pitch awareness

- (Ramón C.): Over time I just spent more time like listening to rehearsals and good bands and bad bands and getting people to point out like pitch issues and trying to realize and start to develop my ear that way... I think where I taught high school is really when I got really good at it because I would identify [that] I'll notice something just didn't sound right. There was a sound that was distorted and I'll go one by one and realize there (are) all these pitch discrepancies so I started to associate that distortion in the sound when I hear it means it's out of tune and so that's where I got a lot of practice, there and student teaching I got a little bit too but when I was a high school teacher [it] really was a lab for me to understand what sounds were and I had really weak players. I had to teach people like everything and so I had to figure out things with them and I think that really helped me develop my ears getting a small group and going, ‘so good now you come down you go up’ and doing all that eventually you started to get less distorted like so it was completely a pitch issue. And so when I hear that now at the distortion in the way that sounds is all pitch. I could tell that it's just pitch that is bothering me and the reason I said C is because there like twenty C in a row there so if I fix that one that would fix the whole passage... And I think it's because of all those Cs don't sound pure that's why its all those distortion I hear.

How developed ear for balance

- (Ramón C.): Listening to recordings a lot, like North Texas recordings and then going in and rehearsing my group and realizing it’s something don’t sound the same. I’ve always been a mimicker ever since a little kid. I was great at copying people making fun of them and so I do that well in how I moved and how I can
hear things and make sure that they match. And it was always a game when I was a little kid but as I get older I realize that's a good thing I kind of had that little gimmick is one as a conductor I was able to steal a lot of things but two like I can really tell this doesn’t sound the same specifically because of this. This is not balanced so I work with one section and I get them to play stronger and balance them out and realize that sounds much better. You know I think this is how we take steps to sound like a recording of Dallas Wind Symphony or whatever. That’s how I started, now it’s just to the way I want to hear it but it’s that practice of my first job. Those weak players where I really had to get inside and fix every problem. They didn't fix a thing by themselves I had to fix every single thing and I think that made my ears a lot better because I had to work so damn hard. And so how did I get to that point, there I go through the pitch thing and once I get to the end of it I realize I think it’s pitch but it’s also balance. And that’s when I got it down.

- (James E.): (when asked about his inspiration of balance)… When asked what made his groups (Frederick Fennell) sound different from any other groups he said to pay more attention to the middle voices and the low voices and not so much on the top because everyone concentrates so much on the upper voices so when I heard that a long time ago I tried to devote more time on those inner things and alto lines and all that stuff and in trying to bring those parts out so that's part of where that came from.

- (James E.): Yea, I changed the way that I thought about rehearsing groups and I tried to focus more on those inner voices and lower voices rather than the upper voices because most of the time, especially in high school those upper voices are the better players so they’re gonna be there. It’s the other ones that you have to spend more time on bringing up and giving them more confidence and instilling the fundamentals of playing and breathing and putting in all that stuff to where that helps the overall get better and better. So when there’s a rehearsal like this you’re going to have fewer comments on tone because hopefully you would have addressed that early on so now at the end of the year you you're getting ready for performance and there's going to be less comments on overall tone quality and all that stuff.

Score study that affects listening

- (Ramón C.): OK yeah I think number one for me this is probably a process that might be different for other people and some people might think I'm completely wrong but I listen to several recordings a million times. For me the majority of score study isn't so much with the score, it's with a lot of recordings and then figure out the one I like and then just really internalizing that one. And that gets me the understanding of a lot of the notes and all the notes are there I can decipher them in my head but a lot of it has to do with sound I think so many times we get bogged down with what things look like in the score study and we forget to look at it and equate the sound that produces you know. And so I couple the two a lot but the majority of it is before I try to get in for the score I like to sit and listen to a lot of recordings and this one it was backwards. I learned this piece a lot through just listening and then going in the score and in seeing it for
the first time and trying to understand it and that's how I did the score study for this piece. Some of the pieces I don't do I spend a lot of time looking but I think ultimately no matter what it's a lot of listening for me.

- (Ramón C.): I just want to understand the groove of the piece. Every piece grooves in a different way and so the groove of this piece you know was like interjections and accents that I didn't hear in any other recordings. Nobody ever did it like I thought it should be played. I think it's one of those that you know some people say don't listen to recordings because then you just try to do someone else's interpretation. That never really happens to me but I listen to a lot of recordings to hear like the balance of the instruments and how they blend in with the sonic scape is and how everything is supposed to work. So I can get the form in my head you know a lot of people like to look at form and write down numbers and stuff like that but I think that's a waste of time. I can look at all these numbers and analyze to death but if I don't really know what the piece sounds like, I think that's the number one the most importantly thing. I think that's another reason why you know my arranging I think helps my ears a lot to. And a midi on a computer could teach you a few things about listening like a wrong note and the identification. It's perfect because on a computer there would be one little note for the tenor sax that I have unbalanced when it equates to what the real group is and I could pick it up really fast. You know because I've gotten used to so many listening things and you can't just see everything all the time and I think that and maybe just the way I learn is really an aural type thing you know and then I have to look at don't get me wrong, I spend a lot of time studying the score by looking at it but before I do that I really want to have an internal process of the way a piece works and then I'll change things you know I'm not married to just the way I've been hearing but I go through and I analyze myself and say this is going to be so cool, no one has ever done this, why are they doing this, okay I like this or they brought that out. I would have never even noticed that that should've been brought out. That kind of stuff but for me it's a lot of listening before I try to really start breaking things down.
APPENDIX I: CONSENT TO USE FIGURE FROM PREVIOUS PUBLISHED WORK

From: John D. Pasquale jdpas@umich.edu
Subject: Re: Permission from your dissertation
Date: June 19, 2016 at 2:39 PM
To: Kelvin D Jones kjon183@lsu.edu

Hi Kelvin—

Good afternoon! Hope you are well. Thanks for asking. Of course, please use anything you want.

Have a great day and good luck! I’d LOVE to read your paper when it’s done—as this is the primary focus of my research and work.

J

John D. Pasquale, D.M.A.
University of Michigan
Associate Director of Bands
Director, Michigan Marching and Athletic Bands
Donald R. Shepherd Assistant Professor of Conducting

On Jun 19, 2016, at 2:53 PM, Kelvin D Jones <kjon183@lsu.edu> wrote:

Hello John,

I am currently finishing my dissertation about ‘how accomplished conductors listen.’ I would love to use aspects from your dissertation about your ensemble symmetry chart and your directed listening hierarchy, but must ask permission in order to do so. Would this possible for me to do with your consent? This dissertation is only for educational purposes, there will be not monetary gain from this project.

Kelvin Jones
Assistant Director of Bands
Louisiana State University
225-578-2294
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VITA

Kelvin Jones holds a Bachelor of Music Education degree from Jackson State University (2007) and a Master of Music from Louisiana State University (2009). He is a doctoral graduate teaching assistant with both music education and band departments at LSU. His responsibilities include serving as a graduate conductor with all symphonic ensembles, assisting with the Bengal Brass Band and the “Golden Band from Tigerland.” Jones is a 2011 recipient of the Louisiana Music Educators Association’s Young Music Educator of the Year, the 2013 recipient of the Baton Rouge Symphony Orchestra’s Teacher of Distinction, and the 2014 LSU A.P. Tureaud award recipient for significant contributions to the university.

He is the former band director at West Feliciana High School in St. Francisville, Louisiana. At WFHS, he led an active, comprehensive music program that produced numerous award-winning performances at state and national events, including the 2013 United States National Presidential Inauguration Music Festival in Washington DC. Jones has presented at state music education conferences across the United States, published in the Instrumentalist magazine (Jan. 2014 and Dec. 2015), an active clinician, and has travelled internationally working with music programs in South America (Chile) and with the LSU marching band in Dublin, Ireland.

He is a member of the National Association for Music Education, College Band Directors National Association, Louisiana Music Educators Association, Louisiana Association of Jazz Educators, HBCU Band Directors Consortium, and Alpha Phi Alpha Fraternity Inc. Following graduation in August 2016, Mr. Jones will assume the position of Assistant Director of Bands at Louisiana State University.